

GENERAL LIMITING CONDITIONS

This report is based on information collected from direct National Golf Foundation Consulting, Inc. ("NGF") research completed for the Commonwealth of Massachusetts in 2023 for the data year of 2022.

General

Every reasonable effort has been exerted in order that the data contained in the written report reflects the most accurate and timely information possible, and is believed to be reliable. However, no responsibility will be assumed for inaccuracies in reporting by sources used to collect data from golf facilities, associations and other data source used in preparing the report.

Custom NGF Facility Survey - 2023

NGF conducted a survey among golf facility operators in Massachusetts in an effort to gather inputs that would assist in the quantification of golf's economic impact in the state. Key survey questions centered around operational data like rounds played, revenues and expenses, as well as capital expenditures, information on employment/staffing and charitable events.

With the support of the cooperative effort between the Alliance of Massachusetts Golf Organizations (AMGO), and its affiliated umbrella organizations, data collection took place in January – March of 2023. Of the 342 golf facilities in Massachusetts, a total of 59 completed the survey for a response rate of 17.3%. Survey responses were reviewed and weighted by type (public/private, number of holes, etc.) to properly match and be representative of the mix of golf facilities in Massachusetts.

IMPLAN Economic Modeling

The IMPLAN economic modeling system was used to derive estimates of several direct and secondary economic impacts (including value added, employment, and labor income). The methodology and calculations were prepared and reviewed for soundness and accuracy by Dr. Terry L. Clower, the Northern Virginia Chair and Professor of Public Policy at George Mason University.

Acknowledgments

This report was prepared by National Golf Foundation Consulting, Inc. in agreement with the Alliance of Massachusetts Golf Organizations (AMGO), and its affiliated umbrella organizations – Mass Golf, New England Golf Course Owners Association, Golf Course Superintendents Association of New England, Golf Course Superintendents Association of Cape Cod, New England Golf Association, Inc., The PGA of America New England Chapter, Club Management Association of America New England Chapter, and Francis Ouimet Scholarship Fund. The study was conducted by David Lorentz, Richard Singer, Clark Brown, Ed Getherall and Jodi Reilly at NGF, with support from Dr. Terry L. Clower.

Thank you to all the Massachusetts golf courses and organizations that contributed pictures for this report. A special thanks to Newton Commonwealth Golf Course, featured on the cover of this book, and Mass Golf who provided numerous pictures throughout the report.

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AMGO

Alliance of Massachusetts Golf Organizations

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RESEARCH & REPORTING



COVER PHOTOGRAPH

Newton Commonwealth Golf Course, Newton, MA

INTRODUCTION AND SUMMARY

Massachusetts is home to 342 golf facilities (225 with public access), including famous courses like The Country Club in Brookline and the George Wright Golf Course in Hyde Park. The Commonwealth is also home to many golf businesses and important golf industry manufacturers with worldwide appeal like Acushnet, Ahead, Puma North America, Callaway and Snell Golf. Golfers use golf balls manufactured at one of several plants owned by Acushnet and the soles of many golf shoes are designed at Klone Labs. Massachusetts is also home to numerous golf industry consultants, architects and developers. Golf is more than just an enjoyable pastime in Massachusetts, it is a key industry contributing to the overall economy and quality of life. Colfs footprint in Massachusetts is vast and includes several world-famous facilities, including six on the Golf Digest America's 100 Greatest Golf Courses list: The Country Club, Myopia Hunt Club, Old Sandwich GC, Essex CC, The Kittansett Club, and Boston Golf Club.

The game of golf drives significant economic activity across the Commonwealth of Massachusetts through direct operational expenditures and capital investment, as well as the attraction of golf tourism, golf-related retail spending and new home construction in golf communities. Golf is an important part of the Massachusetts experience and a defining component in many cities and towns. Golf indirectly supports other Massachusetts businesses that serve and supply golf courses, drive tourist spending and support sales by retailers. Important professional and amateur golf tournaments that are held in Massachusetts generate direct economic impact and add to the state's profile and overall appeal, including the defining event of the United States Golf Association (USGA) calendar - the U.S. Open held in Brookline in June 2022. Other events held at the State's 342 golf facilities serve as valuable fundraising vehicles for a wide array of charities and foundations.

Golf has a long and storied history in Massachusetts, with a collection of some of the oldest golf courses in the country that are still in operation. Golf in Massachusetts dates to the opening of The Country Club in 1882 - one of the oldest golf courses in the country. By 1899, there was already a total of 42 separate golf facilities in Massachusetts, including several of the earliest municipal golf courses in the country (Siasconset, Bass River and William J. Devine GCs).

Massachuesetts competitive golf events date all the way back to the 1913 U.S. Open at The Country Club in Brookline. This storied event was won by American Francis Ouimet who became the "father of amateur golf" in the U.S. from this victory. Through the years, Massachusetts has hosted a variety of other amateur and professional golf events, including several major championships and regular stops on the PGA, LPGA and Champions Tours. The PGA Tour played the New England Classic (later known as the CVS Championship) at Pleasant Valley CC in Sutton from 1969-1998, and the Dell Technologies Championship (formerly the Deutsche Bank Championship) at TPC Boston from 2003-2020. Massachusetts has hosted 10 U.S. Opens (7 before 1926), including three post-war events at The Country Club in Brookline (1963, 1988, 2022), and one PGA Championship (1956 at Blue Hill CC in Canton). On other tours, Massachusetts has hosted four U.S. Women's Opens (Salem Country Club - 1954 & 1984, Worcester Country Club -1960, and The Orchards Golf Club - 2004), and was a regular host of the LPGA Championship at Pleasant Valley CC in Sutton between 1967 and 1974. The LPGA Ping/Welch's Championship, founded in 1980 as the Boston Five Classic, was played in the Greater Boston area from 1980-1997 (Fencroft CC 1980-1990 and Blue Hill CC from 1991-1997) and the LPGA Friendly's Classic was played from 1995-1998 at Crestview CC in Agawam, MA and LPGA's Legends Tour has been playing in MA for years at Granite Links and will return in September 2023 to play the BJ's Charity Championship at The Ridge Club. The U.S. Senior Open was played at Salem CC in Peabody in 2001 and 2017, and the Senior Players Championship was held at Belmont CC in 2015.

Golf in Massachusetts is supported by a co-operative effort between multiple MA state golf organizations, unified under AMGO, the Alliance of Massachusetts Golf Organizations.

Massachusetts has one of the most active junior golf programs in the nation, with 55 separate locations of the First Tee in 18 separate metro areas hosting over 3,000 students in the state. The 2022 NGF survey showed upwards of 93% of all Massachusetts golf facilities have active junior golf programs, and 87% offer a women's golf program.

^{1.} GolfDigest. (2023) America's 100 Greatest Golf Courses., retrieved March 2023 from http://golfdigest.com



EXECUTIVE SUMMARY

ECONOMIC CONTRIBUTION HIGHLIGHTS

Golf is an incredibly popular recreational activity (roughly 1 in every 7 people participated in 2022) with an economic footprint comprising multiple sub-industries (golf facilities, consumer retail, construction, tourism, real estate, charity, etc.).

The game of golf drove \$2.06 billion in direct economic activity throughout Massachusetts in 2022, an increase of 19% over its \$1.74 billion impact in 2012. But there's a significant ripple effect, too. Golf stimulates a deeper layer of economic activity in other complementary industries - a lifestyle that spurs thousands to travel, make purchases, and build and buy homes. The industry's indirect and induced effects stimulate an additional \$1.32 billion in economic impact, meaning golf's complete economic portrait in Massachusetts total over \$3.38 billion and enabling over 35,000 jobs, \$1.9 billion in wage income and \$225.8 million in state and local taxes.



Direct Impact

Golf Economy Total Direct Expenditures



Total Contribution



Economic Output

\$3.378B



Employment

35,115 JOBS



Wages and Benefits

\$1.900B



State & Local Taxes

\$.226B



CORE INDUSTRIES

A summary of the direct economic impact of golf on the Commonwealth of Massachusetts is shown below:



638,500

Individual Golfers



342

Golf Facilities

Golf is enjoyed by approximately **638,500** individual golfers over the age of 6, and there were **8.4 million rounds played** by resident golfers and an additional **1.2 million+ rounds played by visiting golfers** in 2022 (9.6 million total). These additional visiting golfers come from a wide area that includes large out-of-state cities that neighbor Massachusetts, like Providence, Manchester, Hartford and even New York.

The State has a **total of 342 golf facilities** (225 public and 117 private), plus 37 standalone driving ranges and 16 other "golf entertainment" venues (mostly indoor simulators). There are 39 golf facilities connected to residential real estate and/or resorts with real estate in the state.



\$961.5M

Total Consumer Spending

Total consumer spending at golf facilities for items including initiation fees, member/passholder dues, green fees, cart fees, range fees, golf shop merchandise and food/beverage sales, exceeded \$961.5 million in 2022, an amount that is about 17% higher than the estimate in 2012 (\$793.2 million), despite there being 34 fewer golf facilities (342 vs. 376 in the 2012 report). Golf facility operations supported more than 19,200 jobs (both part-time and full-time).



\$70.6M

Capital Investments

In 2022, Massachusetts golf facilities invested more than \$70.6 million in capital improvements for golf course renovations/ enhancements and improving or replacing structures, supporting close to 635 additional iobs. An estimated 60% of Massachusetts golf facilities began or continued large-scale capital projects in 2022 that were not included in regular operating expenses.



72.1M 321

Golf-related Companies

Massachusetts retailers earned a \$75.0 million margin on \$172.1 million of gross retail sales of golf balls, bags, gloves, clubs, shoes, apparel and other equipment in 2022. Of this retail volume, \$119.9 million came from off-course retail outlets (including online). The remaining \$52.2+/million came from on-course pro shops (included in total golf consumer facility spending noted above).

Massachusetts is also home to 321 other companies who provide golf products and services including development, turf, golf cart distribution, manufacturing, and other general services. Several of the most important brands in golf have significant operations in the Commonwealth, including highly recognizable brands like Acushnet, Callaway, Puma and Ahead. The direct economic contribution attributable to golf from these companies totaled nearly \$505 million in 2022.

These sales and companies support 8,454 jobs in the state.



Consumer Spending

Associations

\$14.7 million in 2022.

Massachusetts is home to 45 separate golf associations, including the large golf non-profits like Golf Fights Cancer, the Francis Ouimet Scholarship Fund and Mass Golf. The total revenue generated from these Massachusetts golf associations and foundations was

Massachusetts hosted the U.S. Open Championship and the new LIV Golf Invitational in 2022, which were significant events hosting large numbers of fans at The Country Club and International Golf Club and generating an estimated \$87.5 million in direct consumer spending. There were additional pro and large amateur events held throughout the Commonwealth in 2022 that attracted visitors and resulted in additional economic impact. Combined, associations and tournaments support over 101 permanent jobs in the State.



Charitable golf events hosted at golf facilities in Massachusetts serve as important fundraisers for many state and local charitable organizations. The most significant of these includes the more than \$4.5 million raised by events at Pinehills GC and Easton CC. The two professional golf events held in the State in 2022 also had significant charitable impact. In total, NGF estimates that golf facilities in Massachusetts hosted approximately 2,704 separate charitable golf events and combined with professional tournaments to raise as much as \$70.1 million for various charities in Massachusetts. Golf charities support 266 additional jobs

Total Direct Economic Contribution of the Golf Sector -Commonwealth of Massachusetts (\$ Millions) in 2022 and 2012

	Direct Impact 2022	Direct Impact 2012*
Golf Facility Operations**	\$961.5	\$793.2
Capital Investments	\$70.6	\$66.9
Golf-Related Supplies***	\$524.9	\$461.9
Tournaments & Associations	\$102.2	\$18.6
Charitable Events	\$72.2	\$74.3
TOTAL CORE INDUSTRIES	\$1,731.3	\$1,340.6

^{*} From The Massachusetts Golf Economy by SRI International, 2010.

^{**}Revenue from golf facility operations including on-course merchandise sold.

^{***}Golf-Related Supplies includes total retail sales, but excludes merchandise sold at on-course pro shops (incl. in golf operations). SRI did not include Charitable Giving in the economic impact estimations because they stated it is a direct transfer of income.

ENABLED INDUSTRIES

In addition to the above, there are other golf-related economic impacts, including:



NGF research indicates that about 126,000 overnight trips were made to Massachusetts in 2022 by visitors seeking to participate in golf, plus an additional 1.2 million day trips of more than 50 miles made during the year. These visiting golfers are estimated to have contributed \$304.0 million to the Massachusetts economy (excluding direct spending at golf facilities - already counted). These visitors added **2,167 jobs** from induced and indirect activity such as transportation, lodging, meals and other entertainment.



\$15.7M

Golf-related Residential Construction



\$11.4M

Property Tax

The presence of golf courses located within, or in immediate proximity to, residential communities adds value to real estate in Massachusetts. The economic impact of golf real estate in Massachusetts encompasses two components: (1) Golf-related residential construction/renovation; and (2) Net gain to local tax jurisdictions from value premiums associated with golf course real estate:

- The NGF estimates that there are eight (8) separate golf communities in Massachusetts that had new residential units under development in 2022, plus additional renovations, yielding a total 2022 golf-related residential construction figure of \$15.7 million, and supporting at least 164 jobs.
- → The presence of a golf course with direct frontage on, or in immediate proximity to, a residential unit will provide an added value to the residential property known as the "golf premium." NGF estimated the "golf premium" associated with these developments to be upwards of \$1.18 billion, with a 2022 property tax impact of \$11.4 million in net gain for local taxing authorities to be used for education and other local initiatives funded by property tax revenue.



SUMMARY OF DIRECT ECONOMIC IMPACT



*** Property tax impact of \$11.4 million is the net gain for local taxing authorities

NON-ECONOMIC CONTRIBUTION HIGHLIGHTS

Golf continues to be in a leadership position compared to many recreational activities in Massachusetts. In addition to the economic contribution noted above, there are other impacts that golf has on the Commonwealth of Massachusetts, including:

- Oolf provides upwards of 52,000 acres of green space within the State, and provides affordable outdoor recreation to over 2.7 million Massachusettsan households¹. Nearly all (93%) of Massachusetts golf facilities offer a junior golf program, while 87% report hosting a women's golf program, 62% offer scholastic golf, and 33% have a specialized beginner program like WELCOME2GOLF or Get Golf Ready.
- Golf courses can elevate the quality of life in communities in which they are present by helping to improve the health and well-being of citizens and by providing additional social, youth/family activities and programming. As traditional golf is not an option for some, golf facilities have introduced other amenities and activities to their offerings, such as driving ranges, practice facilities, golf simulators, cornhole, lawn bowling, bocce ball, shuffleboard, swimming, gym access, tennis/pickleball courts, curling, etc.



Affordable outdoor recreation to over

2.7 million households

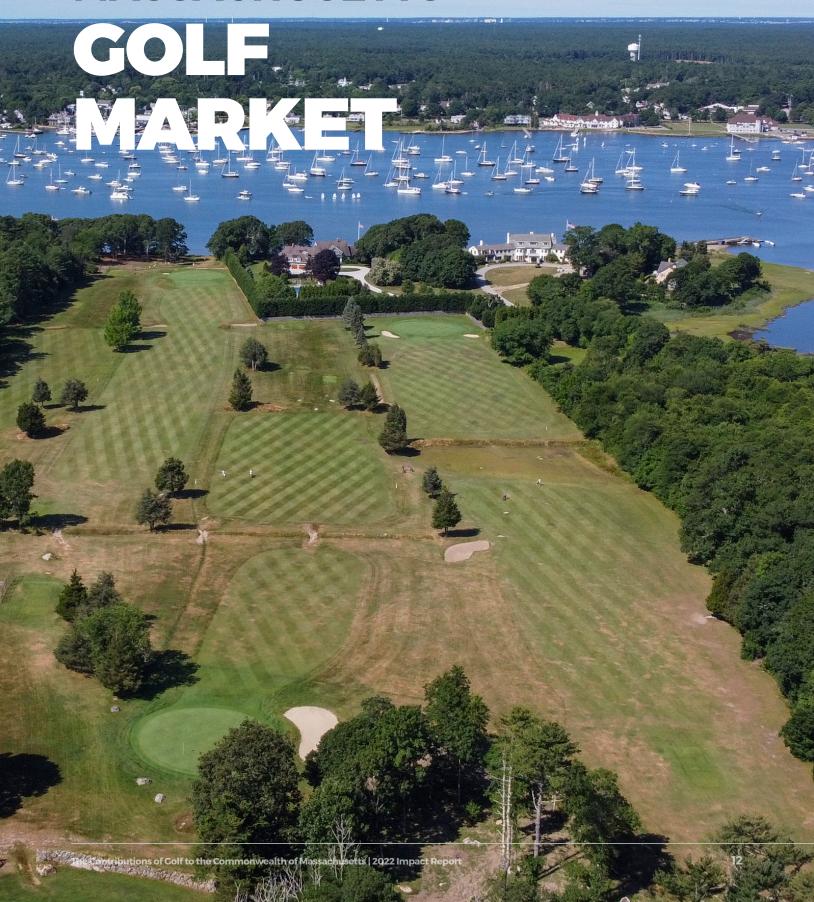
Golf courses can

elevate the quality of life in communities

Golf courses can

improve the health and well-being of citizens

MASSACHUSETTS



Massachusetts is in the northeast United States, covers a land area of 10,565 square miles, and is home to an estimated population of 7.008 million people in 2022¹. The largest City and metro area in the State is Boston, with more than 4.92 million residents (7th largest in U.S.). Massachusetts has had modest growth, with a 7.03% increase in population between the 2010 and 2022 U.S. Census, compared to 8.05% for the total U.S.².

Most of Massachusetts has a humid continental climate, with cold winters and warm summers. The coastal areas in the southeast of the state form the northernmost boundaries of transition to humid subtropical climates. The climate of Boston is representative for the Commonwealth, with temperatures ranging from highs around 35-degrees in the winter and 81-degrees in summer. Massachusetts is a seasonal golf market, with a large portion of golf facilities closing entirely for the winter.

MASSACHUSETTS ECONOMIC OVERVIEW

Demographic Overview

Summary Demographics	Massachusetts	U.S.
Population 2000	6,349,050	281,398,967
Population 2010	6,547,636	308,745,560
Compound Annual Growth % (2000-2010)	0.31%	0.93%
Population 2022	7,008,115	333,609,568
Compound Annual Growth % (2010-2022)	0.57%	0.65%
Population 2027 Projected	7,161,623	342,845,536
Median Household Income (2022)	\$96,866	\$72,225
Median Age (2022)	38.9	37.9

Source: Applied Geographic Systems (AGS)/GbBIS

Economic Highlights

Massachusetts has a diverse economy with a gross state product of \$584 billion in 2020. It has several metropolitan areas with populations greater than 100,000 and many other smaller cities and towns. Sectors vital to the Massachusetts economy include higher education, information technology, biotechnology, finance, health care, tourism, manufacturing, and defense. In recent years tourism has played an ever-important role in the state's economy, with Boston and Cape Cod being the leading destinations. Massachusetts is the sixthmost popular U.S. tourist destination for foreign travelers.

In 2016, Massachusetts was home to 12 Fortune 500 companies, including insurance giants Liberty Mutual and Mass Mutual, as well as Raytheon, General Electric, Biogen and Boston Scientific. Fairhaven-based Acushnet Company is a leading golf equipment, apparel and accessory manufacturer that employs over 1,800 workers in six separate locations within the Commonwealth. Acushnet brands include some of the most important in golf such as Titleist, Footjoy, Scotty Cameron, Vokey, Union Green and Pinnacle. Other important golf companies with significant impact in Massachusetts include Ahead, Puma North America, Callaway, Klone Labs and Snell Golf.

¹ United States Census (2022)

² Applied Geographic Systems (AGS) via GbBIS. "Demographics Profile output report". April 2022, ngfgolfmap.com

Golf in The Commonwealth of Massachusetts

Golf is an important component to the overall Massachusetts experience, and while the golf courses in the State are predominantly open and available to the public, there are proportionally more private clubs in the Commonwealth of Massachusetts compared to the U.S. private club average (MA 35.2% vs. U.S. 26.4%). Over 65% of all Massachusetts golf courses are public, compared to 74% for the total U.S.¹ In recent years, golf has become increasingly tied to residential and resort developments in and around the major metro centers of the state, with new golf development in the state driven mostly by new residential or resort communities.

Massachusetts Golf Market¹

- Massachusetts's public access golf courses represent a mix of affordability with 77% of all MA (170 of the 221 public golf facilities) as either "Value" or "Standard" facilities, meaning peak season weekend green fees with cart are under \$80. Many of these public facilities are considered small business operations and/or family owned businesses.
- → There are 39 golf facilities connected to residential real estate in the Commonwealth, four facilities are resorts with also residential real estate Ocean Edge Resort & Club, The Pinehills, The Club at New Seabury and Quail Ridge Country Club. There are an additional 10 resort golf facilities in Massachusetts without residential real estate. Golf's connection to real estate is a relatively new phenomenon in Massachusetts with 21 of the 39 facilities developed in 1990 or later.
- (4 additional private clubs offer limited public access) and 121 private golf clubs in operation in Massachusetts, for a total of 342 facilities. In addition, there were 37 stand-alone driving ranges in the Commonwealth and an additional 43 off-course specialty golf entertainment establishments with some type of golf simulator technology. Golf simulator establishments are an emerging market that offer golfers year-round entertainment in both rural and urban markets. New golf course construction has come in several "waves" of development in the State's history, with 148 facilities (43.3% of the total golf facility inventory in the state) developed before 1939, 77 developed in the 1960s and 1970s (22.5%), and 71 (20.8%) built after 1990 (compared to 26% for the total U.S. built after 1990).

GOLF FACILITY INVENTORY - COMMONWEALTH OF MASSACHUSETTS

109 9-Hole Facilities

214 18-Hole Facilities

12 27-Hole Facilities

7 36-Hole Facilities

O 45+-Hole Facilities

342 +
Total Golf Facility

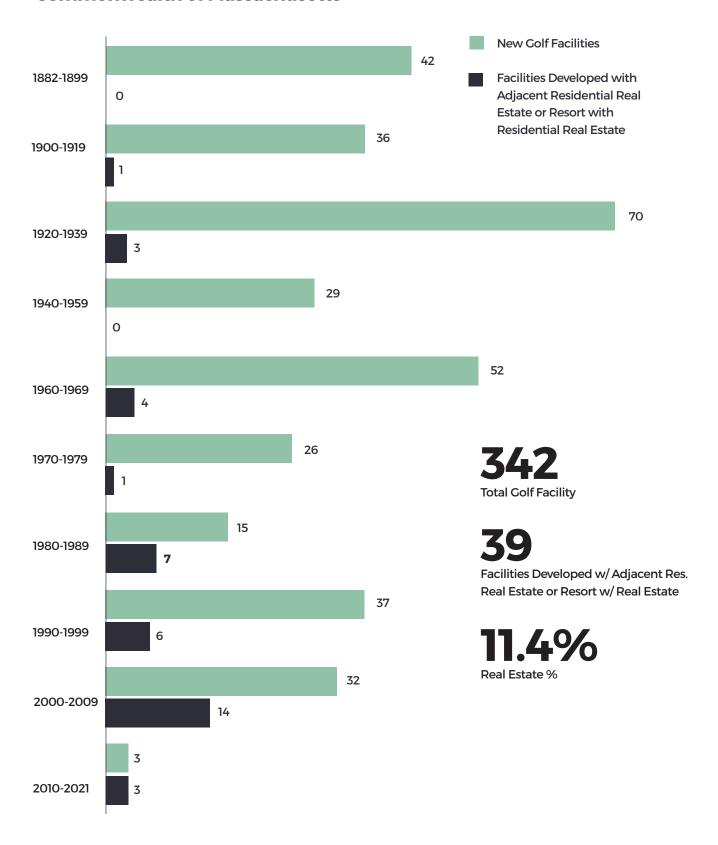
37Stand-Alone Driving Ranges

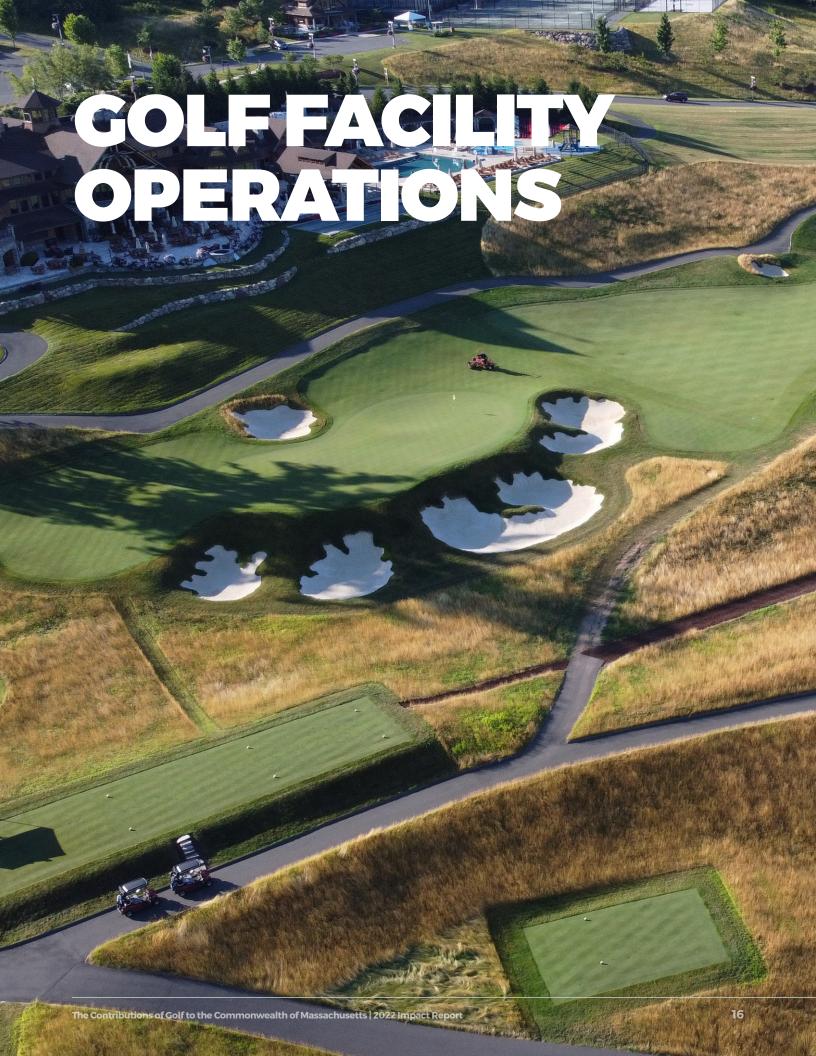
43 Off-Cours

Off-Course Specialty
Golf Entertainment
Establishments (simulators)

^{1.} Proprietary Research, National Golf Foundation 2022

Golf Facility Development by Decade and by Type - Commonwealth of Massachusetts





FINDING



Direct NGF research into the actual performance at Massachusetts golf facilities in 2023 shows average revenue in 2022 by type of facility as follows:

Average Golf Facility Revenue by Facility Type - Commonwealth of Massachusetts (2022)

Facility Type	No. of Facilities	2022 Total Average Revenue*
9-Hole Courses	109	\$1,500,850
18-Hole Public (Value/Std.)	65	\$925,050
18-Hole Public (Premium)	65	\$2,381,100
Public 27+ Holes	13	\$4,284,500
18-Hole Private	84	\$5,771,700
Private 27+ Holes	6	\$5,771,700**
Total No. of Facilities	342	

^{*}Source: NGF survey of Massachusetts facilities 2023 (n=59)¹

The NGF also finds that 182 of the 342 golf facilities (53.2%) have a driving range with at least 10 tee stations, and Massachusetts also has 37 stand-alone driving range facilities that are a mix of large and small operations with an average of \$50,000 in revenue per location, and the 16 golf simulators with an average of \$76,500 per location. Utilizing these findings, the Statewide revenue from direct golf facility operations is estimated as follows:

In Massachusetts and elsewhere, the golf facility is at the core of the overall golf economy.

^{**}NGF used 18-hole private estimate as proxy due to lack of survey participation from 27+ private facilities

 $^{{\}it I. Facility Operators. (2023, March). Commonwealth of Massachusetts Golf Operations Survey. (National Golf Foundation, Interviewer)}$

Total Golf Facility Revenue Summary - Commonwealth of Massachusetts (2022)

Type of Revenue	Total (\$ Millions)	% of Total
Golf Playing Fees	\$269.5	28.0%
Membership Dues	\$403.1	41.9%
Retail Sales	\$52.2	5.4%
Restaurant	\$210.8	21.9%
Lessons	\$10.2	1.1%
Other (clubhouse, banquets, etc.)	\$7.8	0.8%
Driving Ranges*	\$7.9	0.8%
TOTAL REVENUES	\$961.5	100.0%

^{*}Includes revenue from stand-alone ranges.

Notes:

- The \$961.5 million in total golf facility revenue in 2022 is higher than the \$793.2 million estimated in 2012 (21.2% increase).
- There were 376 golf facilities and 56 stand-alone ranges in 2012.
- Decline of 9.0% in golf facilities and 33.9% fewer ranges.
- → Total average revenue per golf facility is \$2.8 million in 2022 / compared to \$2.1 million estimated in 2012 (33.3% increase in revenue per facility).
- It seems as though the removal of 34 golf facilities in Massachusetts has helped the remaining courses improve economic performance and increase total revenue generated on a per-facility basis.
- MA has many strong performing 9-hole courses. NGF's 2023 survey had 36% of 9-hole courses with over \$2.0 million in revenue (more than 2x the national average).
- The golf courses in Massachusetts hosted a total of 9.63 million rounds of golf, or approximately 32,046 rounds per 18 holes. This volume of golf activity is relatively strong for Massachusetts given the State's climate and relatively short golf season. The total U.S. averages 36,012 rounds per 18 holes in 2022 across all climates. The facilities estimated that approximately 87.4% of these rounds emanated from inside Massachusetts, while the remaining 12.6% came from outside the Commonwealth (tourists and visitors).
- The average revenue from green, cart and membership fees in the State was \$69.85 per round of golf, plus additional revenue from ancillary items such as driving range (\$0.82), total F&B (\$21.89), pro shop merchandise (\$5.42) and other items/lessons (\$1.86). Massachusetts golf facilities show stronger revenue per round than the total U.S., which showed \$49.45 per round in golf fees, \$5.78 retail, \$16.84 F&B, \$3.47 other and \$2.66 in ranges (includes golf entertainment establishments).

APPROACH

What is Measured

Golf Facility revenue includes all receipts generated from green fees, cart fees, membership fees and initiation fees, as well as ancillary purchases at the golf course facility such as merchandise, food and beverage, banquets and other items. The revenue collected from all of these sources is assumed to be the basis for all expenditures required to operate the facility.

How it's Measured

Golf facility revenue data comes from the 2023 Massachusetts golf facility survey conducted by NGF, which collected data on reported revenues by type for each of the six classes of golf facilities (n=59). The revenues generated from driving ranges was applied to only those golf facilities that had a driving range with at least 10 tee stations on site (182 of the 342 facilities), plus additional revenue assumed for 37 stand-alone ranges in the State.





In 2022, Massachusetts golf facilities invested nearly \$70.6 million in capital improvements for new facilities and renovations to greens, fairways, bunkers, infrastructure, equipment, and structures. This included several large-scale capital projects at Massachusetts golf facilities like the major bridge replacement at Vesper Country Club, the bunker and tee enhancement at Pine Brook CC, a golf and clubhouse renovation at Kittansett Club, an irrigation replacement at Bass Rocks GC, the clubhouse renovation at Pinehills Golf Club and an irrigation improvement at Easton CC. In all, NGF research found that 60% of Massachusetts golf facilities began or continued capital projects in 2022 (defined as new construction or major renovation to the course and/or related facilities) that were not funded directly from operating expenses.

The most significant golf facility capital expenditures undertaken in Massachusetts in 2022 and reported to NGF via survey (and additional research) were significant enough to review separately, and included:

- Vesper Country Club a major facility upgrade that included a new vehicular bridge, improved fire safety system in the main clubhouse and a full repaying of all driveways and parking lots.
- Pine Brook Country Club bunker and tee improvements, plus new carts and other irrigation upgrades.
- Bass Rocks Golf Club a club enhancement in 2022 that included an irrigation system replacement and a tee refurbishing and some clubhouse enhancement.
- Pinehills Golf Club invested in a clubhouse renovation that included renovation of four restrooms/lockers, foyer improvements and a re-imagining of the grille room with wall removal that doubled the size of the bar.
- Easton Country Club reported a large-scale facility upgrade in 2022, including new golf course irrigation and other drainage repairs. The club also invested in some clubhouse repairs and a new walk-in cooler.
- Kittansett Club undertook a golf and clubhouse renovations in 2022.

APPROACH

What is Measured

Capital investments are major improvements outside of normal maintenance and operating expenditures by golf facilities for turf maintenance and grounds upkeep. Golf facilities periodically make major investments to improve greens and tees, renovate clubhouses and other buildings, and purchase turf maintenance equipment and irrigation systems. In addition to capital investments by existing facilities, construction of new golf courses constitutes the other major type of capital investment.

How it's Measured

Golf facility capital investment data comes from the 2023 Massachusetts golf facility survey conducted by NGF (n=59), which included a question about specific large-scale capital projects undertaken in 2021 outside of normal operating expense. For this study, NGF used reported average capital investment by facility type, with outliers removed, and applied the appropriate averages to the total golf facility census for the State. The unique outliers were then added back in as they represented significant individual projects as noted above.

ECONOMIC IMPACT ESTIMATE CALCULATION

Massachusetts Golf Facility Capital Investment

Facility Type	No.	Total	
9-Hole Courses	109	\$11,800,000	ch.
18H Pub (V/S)	65	\$8,550,000	
18H Pub (Pre)	65	\$7,550,000	
Pub 27+	13	\$2,750,000	
18H Prvt	84	\$37,921,000	3
27+ Prvt	6	\$1,980,000	
Total	342	\$70,551,000	



Photo provided by Sean P. Hanley, On-Course Golf, Acton, MA

Summary of Massachusetts Golf Facility Capital Investment

Туре	Expenses
Total On-Course Capital Expenditures (Incl Irrigation)	\$37,951,000
Total Clubhouse + Structures	\$20,790,000
Total Carts & Equipment	\$11,810,000
Total Capital Expenditures in MA - 2022	\$70,551,000



Golf retail sales comprises golf balls, bags, gloves, clubs, shoes, apparel and other equipment. NGF estimates that golfers spent \$172.14 million on consumer purchases used primarily for golf in Massachusetts in 2022. These items were purchased at golf courses and other golf retail outlets, including specialty stores, sporting goods stores, mass merchants and online. An estimated 30% of these purchases are presumed to be made at on-course retail outlets (pro shops) that were counted previously in the economic estimate from golf course operations.

The economic value created by golfer supplies consists of three components: (1) manufacturing cost of materials; (2) manufacturing value added; and (3) retailer's net revenue from sales. Massachusetts includes significant manufacturers of golf-related supplies in the Commonwealth, leading to important contributions from items #1 and #2 above.

GOLF RETAIL IMPACT

Consumer purchases of golf apparel, equipment, and shoes drive significant economic activity. Massachusetts off-course retailers earned a \$52.29 million margin on \$119.92 million of off-course gross retail sales of golf retail in 2022 (NGF previously estimated \$52.2 million in on-course retail).

Total Retail Sales*	Total U.S. Sales Volume (\$ Millions)	Value Attributed to Massachusetts (\$ Millions)
Clubs	\$2,993.30	\$67.14
Balls	\$1,250.70	\$28.05
Bags/Gloves/Shoes	\$1,369.50	\$30.72
Other Equipment	\$561.30	\$12.59
Apparel	\$1,500.00	\$33.64
Total	\$7,674.80	\$172.14
% Attributed to On-Course Retail	33%	30%
Net Total Off-Course Retail	\$4,213.47	\$119.92
Retail Sales Margin %"	43.6%	43.6%
Off-Course Retail Sales Total (Margin) Manufacturing Out of State Shipments (Value Added)	\$1,837.07	\$52.29

^{*}National Sporting Goods Association - 2019 Report¹

APPROACH

What is Measured

This segment captures the net revenue (known as retail margin) that accrues to Massachusetts retailers from spending by golfers on golf equipment, golf shoes, and golf apparel. Like golfers, golf facilities also make purchases of goods to facilitate the game and facility operations.

How it's Measured

Data to calculate on-course and off-course retail spending on golf equipment, golf shoes, and golf apparel comes from the National Sporting Goods Association. The NSGA conducts an annual survey of 100,000 households. NSGA has collected this data since 2002. Sales for different categories of purchases are broken down by geographic region, and NGF estimated statelevel sales to be 2.24% of the national total, based on Massachusetts's share of total golf holes in the U.S. (5,409 / 241,155 = 2.24%).

The estimation of economic impact is based upon the retail margin that accrues to Massachusetts companies that sell golf equipment and apparel. The U.S. Census Bureau's Annual Retail Trade Survey reports the retail margin for different industry sectors. NGF used the most recent retail margin available for sporting goods stores (43.6% in 2021) to estimate the retail margin accruing to Massachusetts companies. The retail margin is the net revenue accruing to the business after paying for the cost of goods from the wholesaler or manufacturer.

^{**}U.S. Census Annual Retail Trade Survey 2

I. Irwin Broh Research. The Sporting Goods Market: 2019 Edition. NSA - National Sporting Association. 2019

^{2.} https://www.census.gov/programs-surveys/arts.html

MANUFACTURING AND SERVICES IMPACT

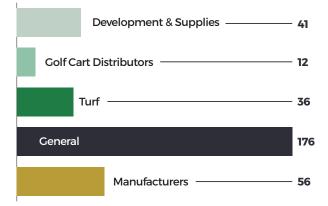


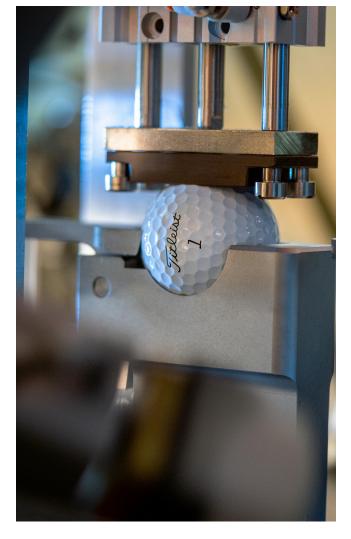
The second type of activity captured is golf-related manufacturing and services activity—companies that produce golf equipment, apparel, golf carts, sod, turf maintenance supplies, and golf accessories, as well as those companies that provide direct golf-related services like golf cart distribution, construction and/or other consulting services.

To identify golf-related manufacturers and service providers, NGF utilized our proprietary database of golf businesses in Massachusetts along with input from NAICS codes, the Internal Revenue Service and the U.S. Census.¹ The NGF counted 321 companies that identified themselves as being providers of golf products and services, including several major manufacturing companies with considerable activity in Massachusetts. Fairhaven-based Acushnet Company is a leading golf equipment, apparel and accessory manufacturer that employs over 1,800 workers in six separate locations within the Commonwealth. Acushnet brands include some of the most important in golf such as Titleist, Footjoy, Scotty Cameron, Vokey, Union Green and Pinnacle. Other important golf companies with significant impact in Massachusetts include Ahead, Puma North America, Callaway, Klone Labs and Snell Golf. In addition, there are a significant number of smaller "mom and pop" companies that produce a wide assortment of golf accessories and services.

321

Total Golf-Related Manufacturers & Service Providers in Massachusetts





I. Data axle reference solutions. "Reference Solutions (formerly ReferenceUSA) U.S. Business Database/ Advanced Search". February 2023. (2022 Data) http://referencesolutions.data-axle.com/

Annual revenue and employment numbers for these companies come from data axle - reference solutions (formerly *Reference USA*)⁹ information and data accessible through local public libraries. The IMPLAN data and modeling software calculates economic impact based on the value added for manufacturing, i.e., the company's wholesale revenue minus the cost of production inputs.

TOTAL COMBINED GOLF-RELATED SUPPLIES IMPACT

Revenue Source	Revenue (\$ Millions)
Total Off-Course Golf Retail (on-course counted in operations)	\$119.9
Manufacturing & Services	\$404.9
Total Golf Related Supplies	\$524.8





APPROACH

What is Measured

This segment captures both: (1) the net revenue (known as retail margin) that accrues to Massachusetts retailers from spending by golfers on golf equipment, golf shoes, and golf apparel; and (2) the business-to-business spending related to the manufacture of these goods by Massachusetts companies. In addition to the manufacture of golf-related consumer goods, this segment captures all good and services in support of the manufacture and distribution of golf cars, golf course accessories, and turf maintenance equipment, as well as professional services provided to golf courses and other golf-related companies (legal, accounting, architect, engineers, travel, etc.). Like golfers, golf facilities also make purchases of goods to facilitate the game and facility operations.



Massachusetts has several member-driven golf associations that support a variety of educational and training opportunities, tournaments, meetings, and workshops. In addition, the Commonwealth has hosted various professional golf tournaments at all levels of competition, including the Unites States Open Championship (U.S. Open) in Brookline in June 2022 and the new LIV Invitational Boston event held in Bolton in September 2022. The major state golf associations include the Mass Golf, the Francis Ouimet Scholarship Fund, the New England PGA and the Golf Fights Cancer charity. Also active are many smaller statewide golf associations and several women's and seniors golf associations active at courses and country clubs throughout the Commonwealth.

Golf Fights Cancer (GFC) is a non-profit organization headquartered in Norton that is "dedicated to raising funds for cancer-related charities and research organizations with the goal of fighting cancer and making financial contributions that can make immediate, tangible differences." GFC taps into the passion and generosity of all golfers to raise much needed funds for cancer related organizations and families living with the disease. The Francis Ouimet Scholarship Fund awards millions in need-based college scholarships each year to deserving young men and women who have worked at Massachusetts golf courses. Mass Golf is a national leader in advancing golf through engaged and inclusive community support. Mass Golf promotes junior golf, allowing thousands of Massachusetts youth an opportunity to experience the numerous benefits that come from playing the game of golf. All programs under the Foundation umbrella are funded through the generosity of golfers from throughout the state and minimal program fees to participants. New England PGA (NEPGA) Foundation, founded in 2016 and also known as PGA REACH New England works to promote the game and improve the lives of thousands of children, military veterans and their families, as well as diverse populations through golf programs throughtout New England.

IMPACT

Professional and Amateur Golf Tournaments and Events: The most significant golf event held in Massachusetts in 2022 was the U.S. Open staged at the historic Country Club in Brookline in June 2022, and won by Englishman Matt Fitzpatrick. Massachusetts was also host to one of the inaugural events on the new LIV Golf tour, with a 3-day event at the International Golf Club in Bolton in September 2022. Massachusetts did not host any PGA, LPGA or Champions Tour events in 2022, but has hosted events on all three tours in the past, including the Dell Technologies Championship (formerly Deutsche Bank) at TPC Boston from 2003-2018 and the former New England Classic at Pleasant Valley CC in Sutton from 1969-1998. The 2004 U.S. Women's Open was held at Orchards CC in S. Hadley (won by Meg Mallon), and Salem CC hosted six major championships including three U.S. Senior Opens (1977, 2001, & 2017) and three U.S. Women's Opens (1932, 1954, & 1984).

The U.S. Open Championship is a major event on the professional golf calendar and had substantial impact in Massachusetts in 2022. This major tournament is an international event and attracted a gallery of around 20,000+/- patrons per day over the 4-day event (80,000+ patrons). The event's host, the USGA, reports an estimated \$76.8 million in direct consumer spending and raised over \$2,000,000 for local charities. The LIV Golf tour reports a gallery that was capped at 6,500 patrons per day, an amount that is confirmed by local authorities in Bolton (Bolton Police confirmed at least 15,000 total attendees over three days). The event's host, LIV Golf, did not report an economic impact estimate, but NGF estimates around \$10.7 million in impact based on attendance. The Town of Bolton did confirm a \$1.0 million donation from LIV to the local schools and other local charities.

1. Beth Treffeisen, ``Locals remain hopeful that the U.S. Open will boost sales'', https://www.bizjournals.com/boston/news/2022/06/12/us-open-to-boost-sales-locally.html, June 12, 2022



→ 126separate important

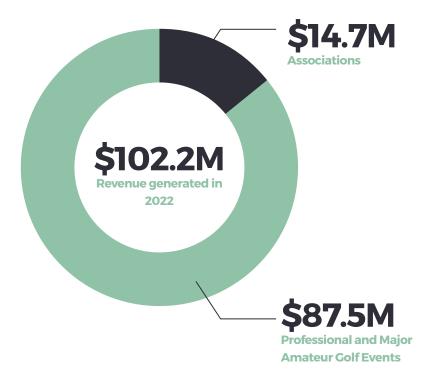
events

separate important amateur golf events

In addition to the above-noted high-level professional golf events, Massachusetts was host to as many as 35 other professional golf events through the New England PGA (NEPGA), hosting over 2,500 participants with total prize money exceeding \$248,000. There were also 126 separate important amateur golf events held in Massachusetts in 2022, attracting over 11,400 participants to golf facilities throughout the Commonwealth.

ASSOCIATIONS

Massachusetts is home to 45 separate golf associations that are large enough to file tax information with the Internal Revenue Service (IRS). This includes four large foundations - Golf Fights Cancer, Francis Ouimet Scholarship Fund, NEPGA and Mass Golf. NGF research from IRS documents¹ shows the total revenue generated from these Massachusetts golf associations and foundations was \$14.67 million in 2022.



APPROACH

What is Measured

Direct expenditures related to hosting professional events, total expenditures on tournaments and other activities by state golf associations, and charitable monies raised via golf events. The PGA TOUR. the PGA of America, the USGA, and the LPGA organize professional golf championship events across the country. Mass Golf organizes amateur events for men and women of all ages, including juniors, seniors, and open events. The PGA Section organizes a series of events for juniors, as well as professional events for their members.

How it's Measured

The Tournaments estimate is derived from the total reported economic impact of the U.S. Open in Brookline in June 2022, plus estimates of economic activity associated with the LIV Golf event in Bolton in September 2022. The Associations estimate is the sum of major state golf association revenues. These are reported on profit and loss (P&L) statements provided by the state golf associations to NGF and/or via tax filings.

1. Internal Revenue Service. 2022 Annual files. Retrieved between January 2023-February 2023 fromhttps://apps.irs.gove/app/eos/





Charitable golf events hosted at golf facilities in Massachusetts serve as important fundraisers for many state and local charitable organizations. A national study by NGF in 2017 showed the average amount raised at a charitable golf event was around \$10,000. Based on our 2023 survey of Massachusetts golf facilities, the NGF has estimated that golf facilities in this state hosted 2,704 charitable golf events (82% of facilities reported hosting events), with an average of \$24,482 raised for charity at each event.

In addition, the two professional golf events also generated contributions to charity, with the LIV Invitational Boston event held in Bolton in September 2022 reporting \$500,000 for charity and the U.S. Open in Brookline impact estimated at close to \$2.0 million. The NGF has also estimated a total of \$3.5 million raised by golf charities at other events and fundraisers not directly affiliated with golf facilities (e.g. Ouimet Golf Sprint, Ouimet Bag Tag Program, GFC Marathon, and others). The Ouimet programs alone raised \$3.0+ million with 100% of the Ouimet Bag Tag program proceeds going directly to providing scholarships to young golf employees.

Among the more newsworthy events in Massachusetts in 2022:

- Pinehills GC estimated that combined they raised over \$4,000,000 for charity in 2022 from events. Beneficiaries include Wounded Warriors, Jimmy Fund, Partners Healthcare, and Children's Hospital.
- Juniper Hill Golf Course estimated they raised over \$1,500,000, benefiting the Jimmy Fund, Dana Farber, Golf Fights Cancer, Veterans, Inc, Worcester County Food Bank, and Folds of Honor Foundation (Patriot Golf Day).
- Sacconnesset Golf Club estimated they raised over \$750,000, benefiting Francis Ouimet Scholarship Fund, Wide Horizons for Children, Bulfinch Charities, and Genesis Fund.
- Swansea Country Club estimated they raised over \$725,000 benefiting charities like Elisha Project, Make a Wish Foundation, and the Lymphoma Society,
- Easton CC estimated they raised over \$500,000 for charity in 2022 from events, benefiting Father Bill's Mainspring House, Lori's Breast Friends raising money to find a cure for breast cancer; and the Bill Lawrence Memorial Scholarship.

IMPACT

The estimated **2,704 charitable golf events** held at golf course facilities in Massachusetts has raised an estimated **\$66.2 million in charitable proceeds** for beneficiary organizations, plus the **\$2.5 million from pro** golf events and **\$3.5 million from other off-course events/fundraisers.** The total impact on charities from golf in Massachusetts totaled just under **\$72.2 million in 2022 and supports 266 jobs.** In addition to the monetary giving, organizations like First Tee and PGA professionals donate time and products (i.e. free clubs, lessons, etc.) that kids benefit from each year.

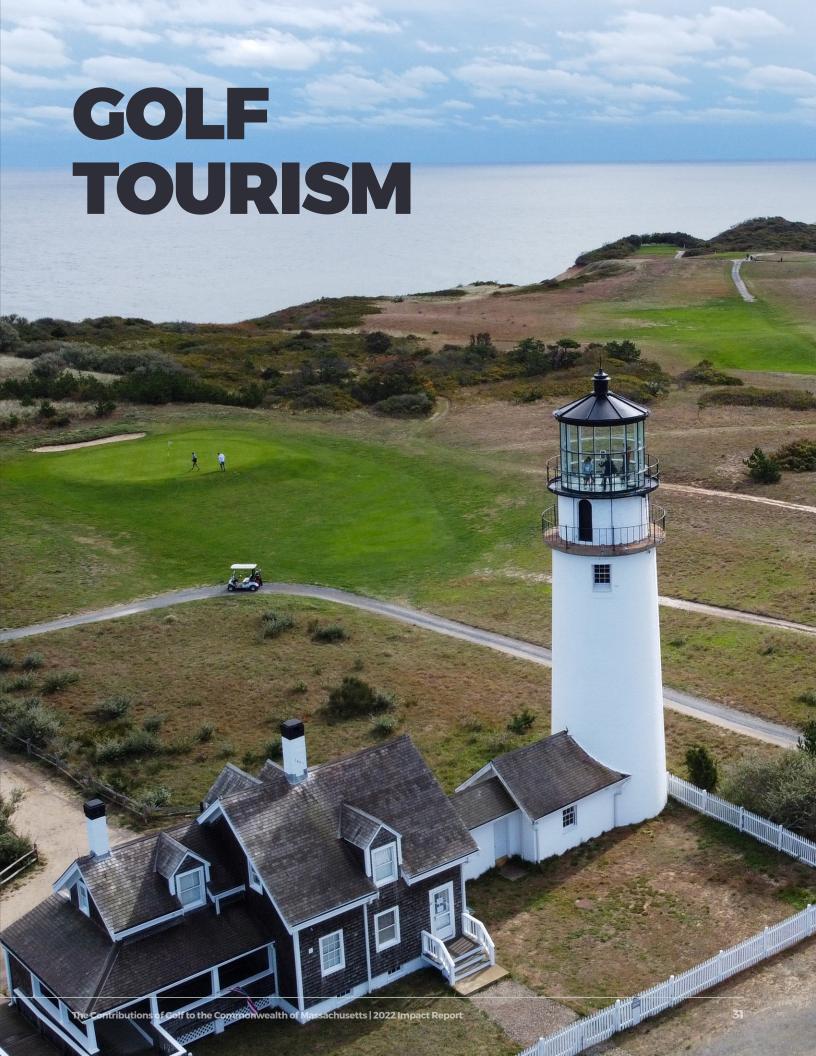
APPROACH

What is Measured

Charitable giving captures both the in-kind contributions and the net proceeds resulting from charitable golf events that are hosted by Massachusetts golf facilities and professional golf tournament events.

How it's Measured

The charitable giving estimate draws on the National Golf Foundation's direct survey of Massachusetts golf facilities in 2023. This survey provided detailed information on the number of golf facilities that hold charitable golf events, the average number of events held by each facility, and the net proceeds raised. The NGF survey of Massachusetts golf facilities in 2023 shows that approximately 82% of Massachusetts golf facilities reported hosting a charitable golf event in 2022, and the average number of charitable events held each year was 11 events. A national study by NGF in 2017 showed the average amount raised at a charitable golf event was around \$10,000 in net proceeds per event for charitable and nonprofit organizations for private and premium public facilities, with Massachusetts golf facilities reporting an average of \$24,482 raised per event in the NGF 2023 survey.



Golf is a popular outdoor recreational activity that helps enhance Massachusetts's tourism industry through day and business trips, as well as extended vacations. NGF has identified a significant golf-travel industry – those people traveling to the state with the intention that golf will be a major part of the trip in Massachusetts. This finding was not at all surprising, as several locations in Massachusetts, most notably Cape Cod, are known for attracting tourist / seasonal golfers. Massachusetts does offer a few top-quality golf resorts (Massachusetts has 10 resort-related golf facilities), including well-known facilities like The Pinehills in Plymouth, Wyndhurst Golf & Club in Lenox, plus Ocean Edge Resort & Golf Club and Cape Cod National in Brewster. In addition, Massachusetts attracts a significant share of golfers who live in nearby metro areas and travel to this state for golf activity. The key out-of-state metro areas that NGF identified as feeding golf activity include Providence, Manchester, Hartford and even New York and Toronto metro areas.



IMPACT

Tourism is one of the strongest economic drivers of Massachusetts, providing a valuable source of revenue and jobs. In its 2021 Annual Report¹, the Massachusetts Office of Travel and Tourism (MOTT) estimated there would be 64 million total visitors to Massachusetts in 2021, spending over \$9.9 billion across the Commonwealth. Of these visitors, facts presented by MOTT indicate there were 28 million "overnight" trips and 36 million "day" trips to Massachusetts in 2021. The MOTT annual report indicated a significant blow to Massachusetts tourism in the wake of the Covid-19 pandemic in 2020, with travel estimates falling dramatically, with recovery in 2021 and 2022. As 2022 showed clear recovery for golf facilities in Massachusetts, the NGF team has determined that the 2021 tourism estimation was appropriate to estimate golf tourism activity in Massachusetts for 2022.

According to NGF, traveling golfers spent \$129 per trip for day-trippers and \$1,184 per trip for overnight visitors (excluding golf fees - already counted in golf facility revenue). For 2022, NGF estimates that tourism expenditures stemming from travelers who traveled to Massachusetts specifically to play golf generated \$304.0 million.



1. Massachusetts Office of Travel and Tourism (2021 Annual Report)

Massachusetts Golf-Related Tourism Expenditures - 2022

	Day Trips	Overnight	Total
Total Visitors	36,000,000	28,000,000	64,000,000
Golf Trip %	3.33%	0.45%	
Total Golf Trips	1,200,000	126,000	1,326,000
Average Spending per Trip (less Golf Fees)*	\$129	\$1,184	
Total Impact (\$Millions)	\$154.8	\$149.2	\$304.0

^{*}Average spending excluding \$142 for golf spending (to avoid double counting).

Average spending per golf trip

The NGF provided estimates of total spending per trip by golfers of \$129 for day trips and \$1,184 for overnight trips. The NGF has assumed that these amounts exclude spending at the golf facilities (green fees, cart fees, F&B, etc.) that has already been counted in golf facility operations. The intent was to include spending on accommodation, local transportation, food and beverage, entertainment, gifts, and so on.





APPROACH

What is Measured

The golf tourism industry segment estimates the golf-related travel expenditures in which a person travels 50-plus miles and plays golf as a key recreational activity while on business or leisure travel. Golf-related trips include both overnight and day trips. This figure includes trips to Massachusetts golf destinations, golf outings while on vacation or business travel, visits to Massachusetts golf courses from golfers residing outside the state, as well as trips by Massachusetts residents to play golf at courses in other parts of the state. People also travel to watch amateur and professional golfers compete in tournaments played in Massachusetts.

How it's Measured

Data for this calculation comes from surveys and studies of visitors and visitor spending conducted or commissioned by the Commonwealth of Massachusetts and the NGF. The 2021 Annual Report (Massachusetts Office of Travel and Tourism) was a key resource and detailed total visitors counts (by length of trip), activities undertaken while in Massachusetts and average spending per trip.



The walkable open spaces and recreational opportunities provided by golf courses make them a key amenity in many residential communities. There are 39 golf facilities in Massachusetts that are connected to residential real estate and resorts that have some residential component associated with them, such as single family homes, apartments, condos, villas, or lodges. In total, the NGF estimates upwards of 11,800 total residential units in Massachusetts that are part of defined golf communities, or are immediately adjacent to golf courses.

In addition, there are several golf communities in Massachusetts that were still active in 2022 with new residential construction, adding an estimated 33 new single-family homes, townhouses and condominiums to the market. The ongoing residential construction produces real economic output that is enhanced by the presence of a golf course within the community.

IMPACT

The economic impact of golf real estate in Massachusetts encompasses two components: (1) Golf-related residential construction; and (2) Net gain to local tax jurisdictions from value premiums associated with golf course real estate.

The NGF estimates that there are a few golf communities in Massachusetts that had new residential units under development, to varying degrees, plus additional existing units under renovation in 2022. Willowbend Country Club is constructing a new development named Cranberry Point which will include 14 single-family residences, and surrounding The Pinehills in Plymouth, the residential development will include a mix of custom homes, cottage homes, townhomes, luxury apartments, independent and assisted living, and memory care apartments. In addition, Shining Rock Golf Club, in Northbridge, continues to build townhouses and condo style housing east of the golf course. Multiplying the estimated number of units under construction at each location by their average 2022 cost of construction (\$475,000 per unit) and summing all of these values yielded a total 2022 golf-related residential construction figure of \$15.7 million.

The presence of a golf course with direct frontage on, or in immediate proximity to, a residential unit will provide an added value to the residential property known as the "golf premium" (estimated previously by NGF to be 15%). This golf premium is manifested by the extra value a homeowner can expect to receive on the sale of a housing unit located on a golf course, or within a defined golf community. As this sale is considered a transfer of assets rather than economic output, this is not included in the economic output analysis. However, the enhanced value of golf residential real estate does impact the total amount of property taxes collected by local authorities. NGF estimated the "golf premium" associated with these developments to be upwards of \$1.18 billion, with a property tax impact of \$11.45 million in net gain for local taxing authorities to be used for education and other local initiatives funded by property tax revenue.

\$27.1M

Massachusetts Golf Real Estate Impact





*Assumes 33 new homes under construction in golf communities in 2022 at \$475,000 per unit.

**Assumes a 15% "golf premium" on residential values of 11,822 golf residential units in Massachusetts multiplied by the 0.00971 average effective property tax rate of market value in Massachusetts (sources: Wall St. 24/7+ Tax-Rates.org/Massachusetts²).

- 1. 24/7 Wall St. (2022) https://247wallst.com
- $2. Tax-Rates.org/Massachusetts (2022) \ Retrieved in January 2023 \ from \ http://www.tax-rates.org/Massachusetts/property-tax$

APPROACH

What is Measured

New golf home construction generates significant regional economic activity and impact. For this segment, NGF measures expenditures related to new golf home construction, as well as economic activity associated with the property tax assessment valuation of golf homes and the premium associated with these homes. The "golf premium" is the extra amount of property taxes collected by local authorities.

How it's Measured

NGF conducted online research to identify new golf community developments and new phases of development at existing golf communities. NGF then contacted real estate developers, builders, and real estate agents to identify the number of new homes under construction in the base year and the average construction cost of these homes.

The calculation of the golf premium impact on local property taxes involves two parts: (1) the "premium" associated with proximity to a golf course was estimated based on previous NGF research on golf-residential communities at 15% premium; and (2) Identified the total inventory of residential units (by type) inside golf communities in the State multiplied by the average sale value (by type) of these units and then applying the 15% golf premium and the estimated 0.971% (statewide 1.04%) effective property tax to market value estimate. The calculation is summarized below:

Estimated Impact of Colf Value Premium of Local Property Taxes – Massachusetts 2022

	No. of Residential Units in Golf Communities	Avg. \$ Value Residential Units in Golf Communities	Total (\$ Millions)
Base	11,822 total Units (7,899 SF + 3,923 TH)	\$664,925***	\$7 ,861
"Golf Premium"			15%*
Total Golf Premium			\$1,179.2
Massachusetts Effective Property Tax Rate			0.00971**
Net Gain for Local	Tax Jurisdictions		\$11.45

^{*}Source NGF Analysis - 2022.

^{**}Tax-Rates.org/Massachusetts1

^{***}From Massachusetts Realtors.com²

SF=Single Family; TH=Townhouse

^{1.} Tax-Rates.org/Massachusetts (2022) Retrieved in January 2023 from http://www.tax-rates.org/Massachusetts/property-tax

^{2.} Realtor.com. [taking the average house value per neighborhoo, around each golf course within a residental and residental golf resort community]. Retrieved info from year end 2022 from https://www.realtor.com/



Within the scope of considering golfs impact on the Commonwealth of Massachusetts, the NGF has provided a summary review of the impact golf has on facets of Massachusetts society that cannot be measured in terms of dollars and cents. To assess the costs and benefits of golf, one must include the social costs and benefits, as well as consideration of how these elements are expected to evolve over time. In addition to the direct economic benefit derived from fees and charges, the presence of golf courses in Massachusetts also provides open spaces, a healthy recreational outlet for residents and visitors, a venue to attract visitors and a good reflection on the image and/or brand of the

GOLF'S IMPACT ON THE QUALITY OF LIFE IN MASSACHUSETTS

Golf is not only good for a state economy, but also good for the physical and social health of its residents by providing an outlet for youth and family activities and programming. 65% of the State's 342 golf facilities are open to the public and provide affordable outdoor recreation as well as additional non-golf activities to more than seven million Massachusettsans. Traditional golf is not always an option for some. Over time, facilities have introduced other amenities/activities that add to an individual's quality of life and provide other enjoyments besides traditional golf. Massachusetts golf facilities reported that in addition to on-course golf play they also offer driving ranges (73%), practice facilities (79%), golf simulator use (21%) and 50% reported offering other non-golf sport activities, such as, cornhole, lawn bowling, bocce ball, shuffleboard, swimming, gym access, tennis/pickleball courts, curling, etc. Golf facilities also mentioned they offer public access to their property for biking, walking, fishing, bird watching, snow/winter sports, yoga, exercise activities and public and/or non-profit meeting space events.

MASSACHUSETTS GOLF FACILITY OFFERINGS ALSO INCLUDE

 Public meeting space availability 	52 %
Snow/winter sports	38%
Bike/walking trails	34%
Bird Watching	14%
→ Fishing	10%
Yoga/exercise activities	7 %



Fostering the Game

Almost every facility surveyed by NGF in 2023 (97%) participated in at least one program for fostering the growth of the game in 2022. Results estimated that 93% of Massachusetts golf facilities offer a junior golf program, while 87% offer a women's golf program. Other offerings included PGA Junior League (55%), scholastic golf teams (62%), specialized beginner programs such as Get Ready Golf or WELCOME2GOLF (33%), military and veteran programs (18%), Youth on Course (12%), First Tee (3%), and GCSAA First Green (2%). Facilities also mentioned offering free golf to kids on the weekends and hosting Drive, Chip & Putt qualifying events.

First Green, a GCSAA Foundation initiative, is an environmental and STEM education outreach program using golf courses as environmental learning labs for young students. Participants test water quality, collect soil samples, identify plants, design plantings, assist in stream bed restoration and are involved in the ecology and environmental aspects of the golf course.



Living

While golf is an industry with economic importance, the game also supports the health and well-being of roughly one in thirteen Americans. A study released in June of 2019 concluded that spending 120 minutes or more per week in nature is positively correlated with well-being¹. Walking 18 holes of golf also burns between 531-2467 calories. Golf provides an activity for the improved physical and mental well-being of the more than seven million Massachusettsans who participate.



Environmental

The NGF review shows that Massachusetts golf courses provide the following key environmental takeaways:

- Golf Facilities in MA total approximately 52,000 acres of open space within the Commonwealth of Massachusetts. (~ 44,000 golf course acreage)
- 11% of the MA facilities have replaced some turfgrass in the past 5 years using native vegetation, trees & shrubs, and/or other turfgrass varieties.
- MA golf courses reported that 40% of their course water usage comes from ground water, while 36% comes from surface water, 9% comes from reclaimed water and 14% comes from other sources.
- MA facilities were asked to indicate which GCSAA's Best Management Practices (BMP) they have adopted (or plan to adopt in the next year) as a result of reading the GCSAA's BMP for MA GC Planning Guide. The top four adopted practices were related to Irrigation (34%), golf turf fertilization and nutrient (32%), cultural practices (32%), and Pesticide Management (30%).
- The top four environmental impact programs facilities have implemented include: sprinkler head upgrades to reduce water use (56%), installation of bat boxes, bird houses, etc. (50%), provide natural areas with dead trees, undisturbed brush piles and "no-mow" areas (44%), and adding annual and perennial garden beds designed to provide food for wildlife and attract butterflies and bees (41%).

Irrigation Audits:

Over half (53%) of the facilities who took the 2023 survey reported that they have done an irrigation audit in the past five years with 67% of them making adjustments/ corrections to their irrigation system after the audit and saving them on average 18% of water savings per year.

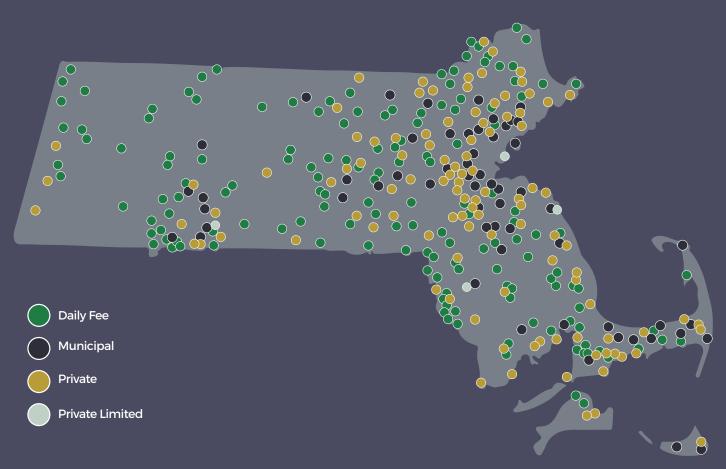
Energy Audits:

37% of MA facilities reported having done an energy audit in the past five years with 90% adopting energy-saving practices, resulting in 10% of energy saving per year on average.

1. Mathew P. White, I. A. (June 13 2019). Spending at least 120 minutes a week in nature is associated with good health and wellbeing. Scientific Reports.



SUMMARY



Map produced by NGF's Licensed Mapping Platform www.MapBusinessOnline.com

SUMMARY OF TOTAL ECONOMIC IMPACT

\$1.150B

Golf-related Supplies **Direct Indirect/Induced**\$524.9M \$624.8M

\$101.2M

Capital Investments

Direct Indirect/Induced

\$70.6M \$30.7M



\$120.8M

Direct

\$72.2M

Tournaments & Associations

Direct Indirect/Induced

\$100.4M

\$28.2

Indirect/Induced

Charitable Giving

\$102.2M \$18.7M

\$1.477B

Golf Facility Operations

Direct Indirect/ Induced \$961.5M \$515.7M

\$515.7M

THE ECONOMIC CONTRIBUTION OF GOLF TO THE COMMONWEALTH OF MASSACHUSETTS

\$3,378,334,000

Total Economic Impact - 2022



\$11.4M

Property Tax Impact

Colf Tourism

Direct Indirect/Induced

\$304.0M \$89.7M



\$23.8M

Golf-Related Residential

Construction

Direct Indirect/Induced

\$15.7M \$8.1M



Priceless

Golf's Non-Economic Benefits

