



# THE ECONOMIC CONTRIBUTION OF THE GOLF INDUSTRY TO CAPE COD

Prepared by rbouvier consulting for the Golf Course Superintendents Association of Cape Cod July, 2018











# **Acknowledgments**

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Cover photos: Top left: Hyannis Golf Course, top right: Hall's Creek, Hyannisport Club, bottom: Hyannisport Club

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# **About the Golf Course Superintendents Association of America**

The Golf Course Superintendents Association of America (GCSAA) is the professional association for the men and women who manage and maintain the game's most valuable resource — the golf course. The golf industry recognizes the association as a key contributor in elevating the game and business.

Since 1926, with a focus on golf course management, GCSAA has been the top professional association in the United States and worldwide. Headquartered in Lawrence, Kansas it provides education, information and representation to more than 18,000 members in more than 78 countries. Its mission is to serve its members, advance the profession and enhance the vitality of the game of golf.

The Golf Course Superintendents Association of Cape Cod is the local chapter of the GSCAA.

# Preface: The Past 30 Years of Golf on Cape Cod

In the 1990s, the Golf Course Managers Association of Cape Cod commissioned a study by the St. Andrews Corporation on the economic impact of the golf industry on Cape Cod. Nearly 30 years later, we present an updated look. Much has changed in the intervening years: more golf courses have been built, more people are employed in the industry, and golf tourists are spending more in the local economy when they visit.

However, the 1990s report on the economic contribution of the golf industry to Cape Cod differed in several important respects from this report. Most importantly, the 1990s report included employment in food and beverage, while this report does not. The reason is straightforward: most clubhouse restaurants cater to golfer and non-golfers alike. In fact, in many areas, the best meals to be had are at country clubs! However, in order to not overestimate the impact of the golf industry on the Cape Cod economy, only golf-related employment was included in this report. Moreover, economic impact studies today mainly rely on sophisticated input-output models of a regional economy, whereas such software was not available in the 1990s. These two important methodological differences mean that any direct comparisons between this report and the previous report should be undertaken with caution.

### **Employment and expenses**

Keeping this caveat in mind, some interesting implications arise when considering the two reports. The first is that the number of golf facilities represented by GCSACC has increased from 35 to 42, an increase of 20%. Accompanying this rise in golf facilities is an increase in employment. The 1990s report estimated that more than 2,010 jobs were directly linked to Cape Cod's golf industry. That report determined that approximately 28% of those employees were employed in food and beverage, leaving 1,447 employees in golf-related activities. Nearly 25 years later, this report gives that same number at 2,580, an increase of over 78%.

Not surprisingly, direct golf-related expenditures (not including food and beverage) have increased nearly 42 percent. Those expenditures were approximately \$56.4 million (in 2016 dollars) in the 1990s report. In 2016, golf-related expenditures were approximately \$79.9 million. The average expenditure per golf facility in the 1990s report stood at \$2.5 million in 2016 dollars - including payroll, administrative expenses, the cost of food and beverages, golf course merchandise, advertising, utilities, course maintenance supplies and services, facility insurance, lease or rent expenses, payments on debt, or other expenses. Average expenditure per facility in 2016 was much higher at \$3.97 million, but that number was heavily skewed. Unfortunately, we cannot test to see if that difference is statistically significant, as the expenses of the full sample in the 1990s are not available.

### Number of rounds of golf played

In the 1990s, the number of rounds of golf played by Cape Cod residents was estimated to be 850,780, whereas non-residents were estimated to have played 657,875, bringing the total to approximately 1.5 million. According to the results of this survey, over a million rounds of golf were played by Cape Cod residents in 2016, while nearly 318,000 rounds were played by non-Cape residents, totaling just over 1.3 million. This of course presents a puzzle: although there are more golf facilities now than 25 years ago, the total number of rounds of golf played has seemingly decreased by almost 200,000.

What can account for this decline? The first answer may have to do with the declining number of golfers at traditional golf courses nationwide. The National Golf Foundation estimates that the number of golfers has declined by nearly 20 percent from 2003 to 2014 (Eubanks, 2016); other studies show that there was a peak in golf participation in the 1990s, meaning that all other years would pale in comparison (Beditz & Kass, 2010). The second answer may be that the 1990s survey included summer residents as non-residents. Or, it could simply be that the observed decline is not actually a decline at all, but merely an artefact of the difference in responses to the 1990s survey and to the 2016 survey. Without access to the 1990s sample, there is no way to tell for sure.

What does seem to be the case is the spending by the average golf tourist has increased dramatically over the intervening years, even accounting for inflation. In the 1990s report, visitor spending was estimated to be \$64.8 million, which is equal to approximately \$102 million in 2016 dollars. An estimated \$139.7 million was spent in 2016, an increase of 37 percent. Again, these results must be taken with a grain of salt, as methodology differed between the reports.

As for the total economic impact of the golf industry, making direct comparisons would be unwise. It is evident that the impact of the golf industry in Cape Cod continues to grow, despite the decline in traditional golfers nationwide.

# **Executive Summary**

The golf industry is of great importance to the Cape Cod economy, both economically and socially. It supports thousands of jobs, provides millions of dollars in labor income, and supports additional hundreds of millions of dollars in sales. It provides well-paying, year-round employment in a seasonal, tourist-based economy. This report describes the results of a county-wide survey of golf facilities, estimates the number of tourists and their local spending, and evaluates the economic contribution of golf-related businesses in Barnstable County. Results are derived from IMPLAN, an economic impact software that relies on an input-output model of the Barnstable County economy.

### Highlights of this report include:

- In 2016, the golf industry (not including restaurants located in golf facilities) directly employed over 2,575 individuals in the Cape Cod region. Coupled with indirect and induced effects (see full report for details), total employment was an estimated 3,433.
- Golf industry employees took home an estimated \$36.6 million in 2016. With direct and induced effects, the golf industry supported over \$71 million in income in the local economy.
- The value added of the golf industry in 2016 was over \$183 million.
- The golf facilities themselves reported over \$222 million in golf-related revenue in 2016.
   Coupled with indirect and induced effects, the golf industry supported over \$338 million in revenue in Barnstable County.
- The golf industry and its related industries paid \$4.8 million in state and local taxes in 2016.
- Nearly 240,000 rounds of golf were played by non-Cape residents in 2016, spending over \$125 million in the local economy.

# Introduction

Barnstable County, Massachusetts, better known to outsiders as Cape Cod, is many things to many people. Stretching out into the Atlantic Ocean, it is perhaps best known for its expanses of sandy beaches, its fascinating history, and its tourist attractions. To golfers, it is paradise, and offers something to everyone. Cape Cod, sometimes called the "Golf Coast," is home to more than 40 golf facilities – more than 1 for every 30 square miles. Opportunities to play golf on the Cape range from the small, public golf course at Cotuit Highground in Cotuit, to the exclusive private Hyannisport Club, adjacent to the Kennedy Compound and part of the storied Kennedy legend.

### History of Golf on the Cape Cod Peninsula

The game of golf has a long history in the United States - the first golf clubs in the nation were established in the late 1700s (either in Savannah, Georgia or Charlestown, South Carolina, depending on whom you ask). The United States Golf Association, or USGA, was organized in 1894 – two years after Highland Links, the oldest golf course in Cape Cod, was formed (CapeCod.com, 2017). By 1900, there were already 7 golf courses on the Cape Cod peninsula (Time, Inc. Sports Illustrated Group, 2017).

### **Economic Importance of the Golf Industry to Massachusetts and Cape Cod**

The golf industry itself can be thought of as a cluster, comprising several different sectors: the "core" sector, and "enabled" sectors. The core sector includes the golf facilities themselves, as well as those industries that manufacture golf equipment and apparel, golf course architects and builders, and the like. Enabled sectors include golf-related tourism, real estate, and others (Alliance of Golf Organizations, 2014). The Alliance of Golf Organizations estimates that the core sector generated approximately \$1.7 billion in Massachusetts during 2012. If the enabled sectors are included, the economic contribution rises to "approximately \$2.7 billion of total economic activity, over 25,000 jobs, and \$796.8 million of wage income in 2012" (Alliance of Golf Organizations, 2014, p. 1).

However, the last time that the economic contribution of the Cape Cod golf industry itself was studied was in the 1990s. At that time, the Golf Course Managers Association of Cape Cod (now the Golf Course Superintendents Association of Cape Cod, or GCSACC) identified 35 golf facilities in the region. The GCSACC is the local chapter of the Golf Course Superintendents Association – an international organization. A survey was sent to all existing golf facilities. Fifteen golf facilities responded, a response rate of 43%. Extrapolating from the results of that survey, and combined with economic multipliers, the authors found that the golf industry either directly employed or supported 3,010 jobs in the Cape Cod economy, as well as contributed \$142 million in economic activity when tourist activity is included (St. Andrews Corporation, nd). (All figures in 1990 dollars.)

The purpose of the current report is to update that report from the 1990s, and to demonstrate the importance of the golf and related industries to the Cape Cod economy.

# **Golf Facilities in Cape Cod**

Forty-two golf facilities were identified as members of the Golf Course Association of Cape Cod in Barnstable County. A full list of those facilities can be found in Appendix A. Twenty-two of those are private golf facilities, 8 are public, 7 are municipal, and the remaining are semi-private. They range from small municipal golf facilities to large, sprawling resorts where golf is

just one of the many amenities available.

# **Golf Facility Survey**

### **Description of the survey**

An on-line survey was sent to all golf facilities, with instructions to forward the survey to the person at the facility with the greatest familiarity with the facility's financial information. The president of the GCSSACC then followed up with emails and phone calls. The survey requested golf

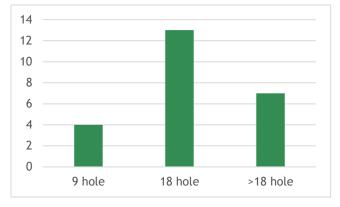


Figure 1: Respondents' Courses, by number of holes (n=24)

facility characteristics, revenue and expenses, and employment, among other things. 24 golf facilities responded to the survey, yielding a response rate of 57.1%.

# **Summary statistics**

Figure 1 shows the breakdown of respondents by the number of holes, while figure 2 shows the distribution of the respondents by ownership type. By far the most dominant was the 18-hole golf course. Figure 2 shows the type of facility that responded to the survey: private, municipal, semi-private, or public.

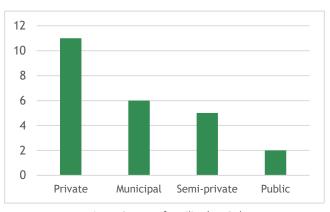


Figure 2:Type of Facility (n = 24)

Figure 3 shows the age breakdown of the responses. Interestingly, while 16 golf courses are less than 59 years old and 12 are more than 80 years old, there are none between 60 and 79 years old, most likely due to the Great Depression and World War II. Numbers do not sum to the number of respondents because some respondents had more than one golf course.

Figure 4 shows the breakdown of respondents by the month they are open. Most facilities are open year round, while some close during the winter months. The majority of rounds played (617,877) were played during peak season, while the rest were evenly split between the off-season and the shoulder season.

Figure 5 shows the breakdown of rounds played per season.

Figure 6 (on the next page) shows the answer to the question, "To the best of your ability, please indicate the percentage of visitors to your golf facility that were Cape Cod permanent residents, Cape Cod summer residents, or from elsewhere in the US or international."

While the results are the perceptions of the survey respondents, and may not

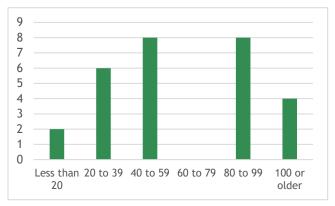


Figure 3: Age of Golf Courses (n = 24)

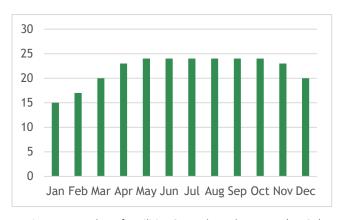


Figure 4: Number of Facilities Open Throughout Year (n = 24)

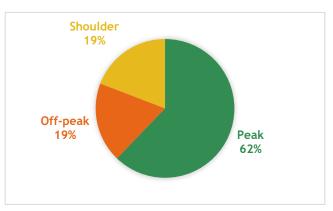


Figure 5:Breakdown of Paid Rounds by Season (n = 19)

accurately reflect the origins of the golfers, Figure 6 shows that the majority of visitors to the responding facilities were perceived to be Cape Cod residents, either summer residents or permanent residents. However, almost a quarter of the visitors were perceived to be from

elsewhere in the US or international visitors, indicating the substantial importance of the golf industry to Cape Cod tourism.

Finally, 20 out of the 24 facilities had held golf tournaments in 2016. Several of these raised money for charity. In all, the golf facilities responding to the survey raised over \$1 million for charity during 2016.

The next section discusses respondents' revenue and expenses for 2016.

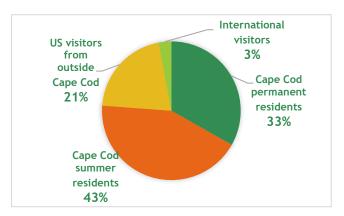


Figure 6: Origin of Visitors to Cape Cod Golf Courses (n=19)

### Revenue

Altogether, the facilities responding to the survey and answering the questions about revenue (n=17) brought in almost 93.5 million dollars during 2016. This includes revenue from restaurants as well. Answers indicate that, on average, golf-related revenue made up about 85% of a facility's revenue (lowest percentage was 26%; highest was 100%). Once non-golf related revenue (restaurant revenue, for example) was eliminated, that number comes down to almost \$42 million. Figure 7 shows a breakdown of that golf-related revenue.

### **Golf-Related Operating Expenses**

Figure 8 shows the breakdown of non-payroll expenses by category. While only nine golf facilities responded to this question, results show that at least a third of the reported non-payroll expenses went to debt payments, while the next highest category was course maintenance supplies and services.

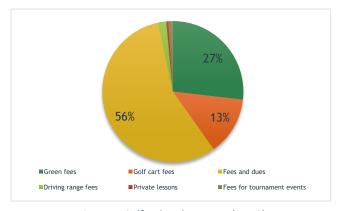


Figure 7: Golf-Related Revenue (n =18)

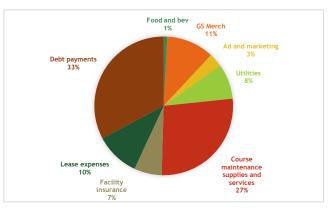


Figure 8: Respondents' Non-payroll Expenses (n = 9)

### **Employment and wages**

Wage and salary data reported by golf facilities was aggregated to preserve anonymity. Salary data included benefits. The average annual salary for full time, year-round employees was \$79,382 in 2016. This compares well with the average salary for the highest paid industry in the country, Utilities, with a an average of \$79,348 (Data USA, 2018). For hourly full time and temporary employees the average wage was nearly \$15 an hour, well above the state minimum (\$11). These numbers demonstrate that, despite the tourism and recreation industry's reputation as low paying jobs, those in the golf industry pay better than average.

18 facilities responded to the questions about employment data and salaries. Those facilities reported employing a total of 862 people. On average, 16 people were employed each in course maintenance and the golf shop, an average of 20 people were employed in food and beverage (although that number was heavily skewed by one respondent), and an average of 2 people were employed in administration. An additional 72 people in total were employed in "other" areas.

# **Economic Contribution of Cape Cod's Golf Facilities**

# Methodology

The results of the survey were used to estimate the direct economic contribution of the golf industry to the Cape Cod economy during 2016. We calculated the average expenditure per hole for all facilities who responded to these questions, then estimated total golf course expenditure by applying those results to the total number of golf facilities in our sample. This follows a methodology used by the College of Life Sciences and Agriculture at the University of Arizona, in their analysis of the economic contribution of the golf industry to the Arizona economy (Duval, Kerna, Umeda, & Runfeng, 2014). Expenditures were broken out into ongoing operations and maintenance expenditures and one-time capital expenditures. A similar methodology was used to estimate labor and employment. These direct contributions were then entered into IMPLAN, a software used to model the economic contribution or impact of a particular industry or event.

# **Measuring Indirect and Induced Effects**

While the direct contributions of an industry are determined through surveying the businesses in the industry themselves, the indirect and induced effects must be estimated, usually by an economic model that traces the connections between industries in a particular region. These types of models are called input-output models. This report uses IMPLAN, a software tool developed in order to estimate the contribution of an industry to a regional economy, or to estimate the economic impact of a one-time event on a particular region (IMPLAN, 2018).

We look at three types of activities undertaken by the golf facilities: labor and income, operations and maintenance expenditures, and capital expenditures. We also look at the impact of golf tourism to the Cape Cod economy.

### Direct effects

Direct effects are those generated in a regional economy by direct purchases of goods and services, or by direct hiring of labor. For example, the golf industry in Cape Cod purchases course maintenance supplies from local retailers. It also employs a certain number of golf course maintenance personnel. Direct effects are estimated from the survey results.

### Indirect effects

Indirect effects are the effects of the golf industry's purchases on their suppliers. For example, by purchasing course maintenance supplies from a local retailer, not only does the local retailer experience an increase in demand, but that supplier also purchases goods and services to support its own business. This is called a multiplier effect. Indirect effects are derived from direct effects by using IMPLAN's input-output model for the Barnstable County region. The amount of a purchase that ultimately stays within a local economy is derived from survey data where available, or from estimates within IMPLAN.

### *Induced effects*

Finally, induced effects are those that are generated by the employees of the golf facilities. For example, an individual is employed at the golf shop at a particular facility. That person takes his or her income and spends it on groceries, car payments, etcetera. This leads to increased economic growth throughout the economy. Induced effects are derived by using IMPLAN's modeling capability.

### **Assumptions and Limitations**

As stated above, this study relies on the IMPLAN software to estimate the economic contribution of the golf industry to Cape Cod. IMPLAN software itself relies on input-output (I-O) analysis, a model of the interactions of the different industries that make up a region's economy. The I-O model makes a number of assumptions, including: constant returns to scale (i.e., the ratio of inputs to outputs does not change, regardless of the quantity of output); no supply constraints (that is, there are no restrictions on employment or raw materials); fixed input structure (i.e., that although expenditures may affect the output of an industry, they do not affect the structure of that industry); and fixed technology (that is, the industry will rely on the same underlying technology over the period studied, regardless of the level of output produced) (Cheney, 2018). While these assumptions may seem restrictive, all save the first (constant returns to scale) are likely to hold over the one-year time period studied. While the constant returns to scale assumption may be violated (in other words, a doubling of output –

rounds of golf played – is unlikely to require a doubling of variable inputs), it is made for the sake of simplicity, and because there have been virtually no studies looking at the production function of the golf industry.

The above assumptions apply to all I-O models. Some further limitations to this particular study are the potential for bias in the responses to the survey and the fact that data on proprietors' income was not available. Although the survey itself yielded a response rate of 57.1%, which is quite high for surveys of this type, not all facilities answered all questions, and there may have been some undetermined bias in the facilities that chose to answer the questions versus those that did not.

There are two further limitations of the data. While this study provides direct, indirect, and induced impacts of both golf course expenditure and golf-related tourism, it does not include real estate premiums attributed to the Cape Cod golf industry. The employment data, moreover, does not include employees at restaurants located at the golf facilities. While an argument certainly can be made that employees at those restaurants are indeed part of the golf industry, the restaurants themselves do not serve exclusively golfers, and it would be impossible to sort out what percentage of the restaurants' output is due to golf versus due to other sources. These two data limitations imply that the study's conclusions are a conservative estimate.

# **Results: Golf Facility Operations**

The economic contribution of the golf facilities' operation is found in Table 1.

Labor Income\* Value Added\*\* **Impact Type Employment** Sales (GDP) **Direct Effect** 2,070 \$21,700,463 \$ 98,833,907 \$190,924,365 435 \$14,063,443 \$ 30,230,288 \$ 56,533,563 **Indirect Effect** 269 \$11,312,885 \$ 19,671,808 \$ 33,993,191 **Induced Effect Total Effect** 2,774 \$47,076,791 \$148,736,003 \$281,451,119

**Table 1: Economic Impact of Golf Facility Operation** 

As can be seen from the table, the golf facilities in Barnstable County directly employ approximately 2,070 individuals. These numbers are likely conservative; they do not include individuals employed in food and beverage, as it was impossible to determine whether the food and beverage was devoted exclusively to golfers or open to non-golfers. Rather than overestimate the numbers, the decision was made to focus only on specifically golf-related

<sup>\*</sup>Employment includes both full and part-time staff for directly golf-related activities (golf course maintenance, pro shop, and administration). These numbers do NOT include food and beverage employment.

<sup>\*\*</sup>These numbers do not include proprietors' income, as that information was not available from the survey. The actual contribution is likely somewhat greater. Source: IMPLAN

activities. Coupled with the multiplier effect, these jobs supported an additional 704 jobs in the local economy, leading to a total of 2,774 jobs created. Employees at the golf courses took home approximately \$21.7 million in 2016, leading to a cumulative impact of \$47 million generated. Nearly \$150 million in value added and over \$280 million in sales were generated or supported by the golf industry in that time.

These numbers were used to estimate the tax contribution of the golf facilities to the state of Massachusetts and the local municipalities. Results are shown in Table 2.

Table 2: State and Local Taxes from Golf Facilities' Operation

State and Local Taxes	Amount	
Property Tax	\$	3,037,195
Sales Tax	\$	1,728,515
<b>Corporate Taxes and Dividends</b>	\$	1,182,930
Income Taxes	\$	3,017,818
Other Taxes and Fees	\$	524,498
Total State and Local Taxes	\$	9,490,957

Source: IMPLAN and authors' calculations

# **Economic Contribution of Golf Tourists to Cape Cod's Economy**

According to survey results, over 1.3 million rounds of golf were played at Cape Cod facilities during 2016. Figure 6 on page 4 shows that almost a quarter of the visitors to the golf facilities on Cape Cod were either U.S. residents from outside Cape Cod or international visitors. We can therefore estimate that 320,531 rounds of golf were played by non-Cape Cod residents during 2016. We assume that 36% of those non-Cape residents were day visitors. Using results reported in a recent report on the Massachusetts golf economy that 36% of non-resident golf tourists were day visitors as opposed to overnight visitors, we assume that 115,391 individual day trips were taken to Cape Cod golf facilities, and 205,140 overnight trips were taken from out of the region (Alliance of Golf Organizations, 2014). At an average daily spending of \$80.49 for day trippers and \$445.91 for overnight visitors (again, using the data from the Massachusetts report and updating it to 2016 dollars), we estimate that day visitors to Cape Cod golf facilities spent approximately \$7,875,594 in 2016 and overnight visitors spent \$131,792,849 in the region.

Coupled with the spending pattern for golf tourists (located in Appendix B), this spending rippled throughout the local economy and generated an additional 674 jobs, over \$ 26.5 million in labor income, over \$38 million in value added, and nearly \$81 million in direct sales. See Table 3.

Table 3: Effects of Golf-Related Tourism on the Cape Cod Economy

Impact Type	Employment	Labor Income	Value Added (GDP)	Sales
Direct Effect	484	\$14,358,288	\$17,722,786	\$187,479,415
Indirect Effect	82	\$ 5,920,368	\$10,249,339	\$ 16,496,103
Induced Effect	108	\$ 6,233,056	\$10,307,218	\$ 16,533,914
Total Effect	674	\$26,511,712	\$38,279,343	\$220,509,432

Source: IMPLAN

This tourist driven economic activity resulted in over \$3.9 million in additional tax revenue to the state and local governments, as shown in Table 4.

Table 4: State and Local Tax Receipts from Golf-Related Tourism

State and Local Tax Receipts	Amount
Property Tax	\$1,764,737
Sales Tax	\$1,020,832
Corporate Taxes and Dividends	\$ 143,026
Income Taxes	\$ 738,965
Other Taxes and Fees	\$ 252,190
Total State and Local Taxes	\$3,919,748

Source: IMPLAN and authors' calculations

It is important to recognize that the results presented here do not reflect the fact that much of Cape Cod's economic base is generated by retirees and second-home owners. The income that those individuals bring into the Cape Cod area from elsewhere in Massachusetts and in the country is very important to the region. The results presented in this section focuses on non-Cape Cod residents, but an argument could be made that the impact of Cape Cod summer residents should be included as well. However, such a distinction is impossible to make given the available data.

# **Economic Contribution of Golf-Related Businesses to the Cape Cod Economy**

There are several golf-related businesses in Barnstable County. These include mainly specialty retail clothing and equipment stores. We include these in the analysis because these industries would not exist, were it not for the prevalence of golf courses in the area. (We do not include businesses that supply equipment to the golf facilities, as those sales would have been included in the activities of the facilities in table 1.) Taken together, these establishments directly employ between 20 and 30 people in the region and have sales of over \$3 million in 2016.

Table 5 shows the contribution of these facilities to the regional economy in 2016 while table 6 shows the tax contribution.

Table 5: Economic Contribution of Golf-Related Businesses

Impact Type	Employment	Labor Income	Value Added (GDP)	Sales
Direct Effect	26	\$ 733,827	\$ 869,169	\$1,383,961
Indirect Effect	3	\$ 95,130	\$ 206,209	\$ 391,322
Induced Effect	4	\$ 172,069	\$ 299,412	\$ 517,613
Total Effect	33	\$1,001,026	\$1,374,791	\$2,292,895

Source: IMPLAN

**Table 6: State and Local Tax Receipts from Golf-Related Businesses** 

State and Local Tax Receipts	Amount
Property Tax	\$ 67,913
Sales Tax	\$ 39,208
Corporate Taxes and Dividends	\$ 3,072
Income Taxes	\$ 29,135
Other Taxes and Fees	\$ 8,444
Total State and Local Taxes	\$147,772

Source: IMPLAN and authors' calculations

While the impacts of these businesses are relatively small, they nonetheless contribute to the region. Moreover, these results likely underestimate the contribution of golf-related businesses, as we do not include general sporting goods stores.

# **Total Economic Contribution of the Golf Industry to the Cape Cod Economy**

Table 7 shows the total economic contribution of all activities: the golf facilities' operation, golf-related tourism, and golf-related businesses on the Cape Cod economy. These activities together support over 3,400 jobs, over \$70 million in income, over \$180 million in value added, and over \$338 million in sales.

Table 7: Total Economic Contribution of Golf Industry to Cape Cod

Impact Type	Employment	Labor Income	Value Added (GDP)	Sales
Direct Effect	2,580	\$ 36,792,578	\$117,425,862	\$240,119,298
Indirect Effect	520	\$ 20,078,941	\$ 40,685,836	\$ 73,420,988
Induced Effect	381	\$ 17,718,010	\$ 30,278,438	\$ 51,044,718
Total Economic Effect	3,481	\$ 74,589,529	\$188,390,137	\$364,585,003

Source: IMPLAN and authors' calculations

Table 8 shows the total state and local tax receipts from the golf industry.

Table 8: Total State and Local Tax Receipts from the Golf Industry in Cape Cod

State and Local Tax Receipts	Amount
Property Tax	\$ 4,869,845
Sales Tax	\$ 2,788,555
Corporate Taxes and Dividends	\$ 1,329,028
Income Taxes	\$ 3,785,918
Other Taxes and Fees	\$ 785,132
Total State and Local Taxes	\$13,618,803

Source: IMPLAN and authors' calculations

# **Other Impacts**

Although non-golfers may think of the sport as a summertime activity, devotees know that it can be played virtually year round. As seen in figure 4, while the majority of golf rounds are played during the peak season, a good 38% of the rounds are played during the off-season and the shoulder season, and the majority of the golf facilities are open year round. The prevalence

of year round activities is important for the economic development of the region (Center for Policy Analysis (now the Public Policy Center), 2000).

Moreover, golf is well-known for its networking and "social bonding" aspect. Deals are made on the golf course, friendships cemented, and communities formed. A 2007 article in the Wall Street Journal, for example, wrote that, "The game's main benefit in business is to those whose jobs require social bonding with clients and customers. It can be used as a draw to get people to attend conferences or seminars where companies are showcasing products or services. Charity golf tournaments, which double as business networking events, are aimed at getting people to open their pocketbooks to worthy causes. Golf can also serve as a reward or incentive for employees" (Newport & Adams, 2007).

And while golf has historically gotten a bad rap for its impact on groundwater, that is changing. In 2003, the Environmental Institute for Golf was founded, which "fosters sustainability by providing funding for research grants, education programs, scholarships and awareness of golf's environmental efforts" (Golf Course Superintendents Association of America, Environmental Institute for Golf, nd). The Environmental Institute for Golf, a philanthropic arm of the GCSAA, is a collaborative effort of the environmental and golf communities, dedicated to strengthening the compatibility of golf with the natural environment. The EIFG concentrates on delivering programs and services that communicate best management practices of environmental stewardship on the golf course. In addition, two of Cape Cod's golf clubs (Falmouth Country Club and Hyannisport Club) are members of the Audubon Cooperative Sanctuary Program for Golf, a program that "helps golf courses protect our environment and preserve the natural heritage of the game of golf" (Audubon International, nd). The nation's first "organic golf course" is in nearby Martha's Vineyard (Solomont, 2010).

# **Comparison to State**

In 2014, the Massachusetts Golf Association, in collaboration with several other organizations, published a report on the Massachusetts golf economy (SRI International, 2014). They collected both primary and secondary data on facility operations, core and enabled sectors, and golf tourism. Although the methodology used varied somewhat from the current study (for example, their study included employment at restaurants associated with the golf facility, whereas the current study does not), some rough comparisons can be made.

The Massachusetts golf economy supported, either directly or indirectly, approximately \$2.7 billion in 2012, 25,480 jobs, and \$769 million in wage income. Even though the results are not directly comparable, a conservative estimate reveals that the Cape Cod golf economy makes up nearly 12 percent of the output, at least 13.4% of the employment (likely more were the restaurant employees included), and 8.8% of the total wage income of the entire

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Massachusetts golf economy. These findings underscore the importance of the Cape Cod golf industry to the state, as well as to the county.

### Conclusion

This report highlights the contribution of the golf industry to the Cape Cod economy. Results demonstrate that golf facility operations alone supported over 2,700 jobs in Barnstable County in 2016, more than \$47 million in wage income, and over \$281 million in sales. Moreover, the industry likely attracted more than 240,000 golfers from outside the county and the state, whose off-course spending supported over 600 additional jobs and \$23.4 million dollars in wage income. Finally, golf-related businesses, such as specialty sporting goods stores, had a small but not negligible contribution as well. All these activities, moreover, generated additional state and local tax revenues, adding up to \$4.8 million in 2016.

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# **Appendix A: List of GSACC Member Facilities**

Golf Club or Business			
Blue Rock Golf Course	Paul Harney Golf Club		
Brookside Club	Quashnet Valley Country Club		
Cape Cod Country Club	Sankaty Head		
Cape Cod National Golf Club	Southport		
Chequessett Yacht & Country Club	The Cape Club		
Cotuit Highground Country Club	The Golf Club at Sacconnesset		
Country Club at New Seabury	The Golf Club at Yarmouthport		
Cummaquid Golf Club	The Ridge Club		
Eastward Ho!	The Westmoor Club		
Edgartown	Town of Barnstable:		
	Hyannis Golf Course		
	Olde Barnstable Fairgrounds		
Falmouth Country Club	Town of Brewster:		
	The Captains Golf Course Port		
	The Captains Golf Course Starboard		
Farm Neck Golf Club	Town of Dennis:		
	Dennis Highlands		
	Dennis Pines		
Harwich Port Golf Club	Town of Falmouth:		
	Falmouth Country Club		
Holly Ridge Golf Club	Town of Harwich:		
	Cranberry Valley Golf Course		
Hyannisport	Town of Nantucket:		
	Miacomet Golf Course		
Little Harbor Country Club	Town of Sandwich:		
	Sandwich Hollows Golf Club		
Miacomet Golf Course	Town of Yarmouth:		
	Bass River Golf Course		
	Bayberry Hills Golf Course		
	The Links Golf Course		
Mink Meadows Golf Club	Twin Brooks Golf Club		
Nantucket Golf Club	USA National Parks Service		
N. Will I I I G If 9 CC	Highland Links Golf Course		
New Willowbend Golf & CC	Vineyard Golf Club		
Ocean Edge Resort & Golf Club	Wianno Club		
Oyster Harbors Club	Woods Hole Golf Club		

# **Appendix B: Tourist Spending Data**

In 2012, the Massachusetts Office of Tourism estimated that the average day visitor to a golf course spent approximately \$77 per day, while the average overnight visitor to a golf course spent approximately \$737 per person (Massachusetts Office of Travel and Tourism, 2013). A day visitor is defined as someone who travels at least 50 miles one way to reach a particular destination.

In order to allocate the tourism expenditures to their appropriate industries, we applied expenditure patterns found by a 2000 survey of golfers to several different facilities in Michigan (Stynes, Sun, & Talhelm, 2000). The survey described both on-course and off-course spending. We applied the percentage of off-course expenditures to the average spending in the above paragraph, updated to 2016 dollars. We did not use on-course expenditures, as that would have been "double counting" (our data already include revenue from the golf facility).

**Table B1: Visitor Spending Pattern** 

	Day Trip	Overnight
Auto Transportation	23.8%	8.5%
Restaurants and bars	30.1% (split evenly between on-course and off-course)	44.7% (split 29% on course, 71% off-course)
Entertainment and recreation	20.5%	3.2%
Groceries	10.9%	5.0%
General retail trade	14.2% (26% on course, 74% off course)	9.7% (26% on course, 74% off course)
Lodging	NA	44.8%

(Stynes, Sun, & Talhelm, 2000) and author's calculations. Numbers do not sum to 100 due to rounding.