



# THE NEW HAMPSHIRE GOLF ECONOMY

## FULL REPORT

This report was commissioned by  
GOLF 20/20 for the  
New Hampshire Golf Alliance  
and prepared by SRI International.





# The New Hampshire Golf Economy

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## ACRONYMS

|        |  |
|--------|--|
| CMAA   | Club Managers Association of America                                   |
| GCBA   | Golf Course Builders Association of America                            |
| GCSAA  | Golf Course Superintendents Association of America                     |
| GRAA   | Golf Range Association of America                                      |
| LPGA   | Ladies Professional Golf Association                                   |
| NECMA  | New England Club Managers Association                                  |
| NGCOA  | National Golf Course Owners Association                                |
| NHGCSA | New Hampshire Golf Course Superintendents Association                  |
| NHCPGA | New Hampshire Chapter of the New England Section of The PGA of America |
| NHGA   | New Hampshire Golf Association   |
| NHWGA  | New Hampshire Women's Golf Association                                 |
| PGA    | The Professional Golfers' Association of America                       |
| USGA   | United States Golf Association   |
| WGF    | World Golf Foundation  |

## STUDY OVERVIEW

Best known for its spectacular fall foliage, New Hampshire is the idyllic golf destination with its temperate summers and natural beauty, including its many golf courses that edge the White Mountains, numerous lakes and seaside. Beyond its recreational value, however, golf is a key industry contributing to the vitality of New Hampshire's economy. In 2010, the size of New Hampshire's direct golf economy was approximately \$289.8 million. Golf brings visitors to the state, drives new construction and residential development, generates retail sales, and creates demand for a myriad of goods and services. When the total economic impact of New Hampshire's golf-related activities is considered, the golf industry generated approximately \$525.1 million of direct, indirect and induced economic output, \$151.2 million of wage income, and nearly 6,200 jobs in 2010.

The golf industry's \$289.8 million in direct revenues supports economic activity comparable to several other important industries in the state: boating (\$296.2 million) and skiing facilities (\$317.5 million).<sup>1</sup>

Historically, many state-level economic studies surrounding the game of golf have been conducted across the country. However, no comprehensive, standardized framework was employed in these prior studies. This made it difficult to monitor a state's industry growth over time and to make state-to-state or regional comparisons. To ameliorate this problem, SRI International and GOLF 20/20 are currently working with key golf stakeholders in several states, including New Hampshire, to bring consistency to the industry measurement and reporting process. This report describes and analyzes New Hampshire's golf industry including the revenues and economic impact generated by the industry. Such analysis will assist New Hampshire's industry stakeholders<sup>2</sup> in raising awareness of the impact of golf to state and local policymakers.

There are many potential uses for such an analysis:

- Defining the range of core and enabled industries associated with the game of golf;
- Clearly articulating, for policymakers and regulatory agencies, the employment and revenue-generating contributions of the golf industry to the state economy; and

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<sup>1</sup> New Hampshire Lakes Association (prepared by Gallagher, Callahan & Gartrell) (2003), *Estimates of Select Economic Values of New Hampshire Lakes, Rivers, Streams and Ponds: Phase II Report*, p. 5. 2002 revenues adjusted to 2010 dollars using the GDP deflator. Plymouth State University Institute of New Hampshire Studies (2011), *The New Hampshire Ski Industry, 2009-2010: Its Contribution to the State Economy*, p. 2.

<sup>2</sup> Key industry stakeholders comprising the New Hampshire Golf Alliance include representatives from the New Hampshire Golf Association, The First Tee of New Hampshire, the McDonough Scholarship Foundation, the New England Club Managers Association, the New Hampshire Chapter of the New England Section of The PGA of America, the New Hampshire Golf Course Superintendents Association, and the New Hampshire Women's Golf Association.

- Building credibility and recognition of the golf industry as a significant business sector and a driver of economic activity in the state.

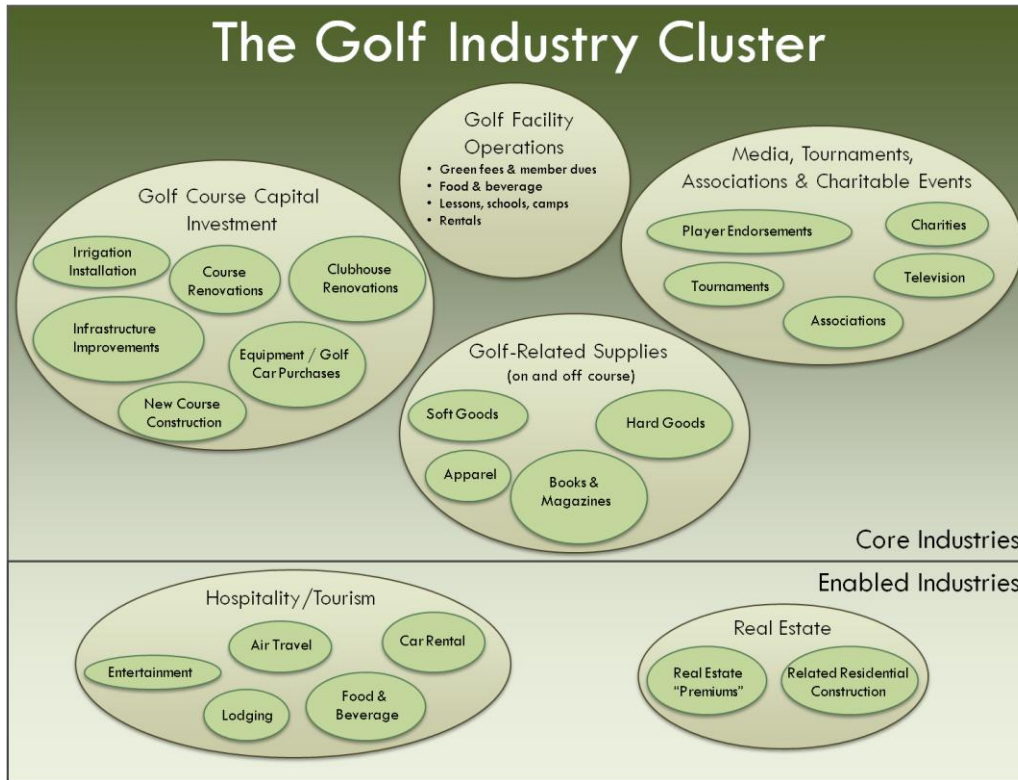
## **ANALYTICAL FRAMEWORK**

Current economic studies of the golf industry in different states emphasize various factors and outcomes. For example, one may focus largely on the turf industry, while another might examine the impact of sports and recreation-related tourism more broadly. Ideally, one would want to include all the key activities and industries that are enabled by and benefit from the game of golf. To meet this goal, SRI has developed a standardized, economic impact framework that can be employed to measure a comprehensive set of golf-driven industry components. This state-level framework draws on the conceptual model of the golf economy developed in SRI's 2000 national-level *The Golf Economy Report* and the 2005 state-level *The Virginia Golf Economy Report*.

### **A. GOLF INDUSTRY CLUSTER DEFINITION**

To arrive at economic impact, one must first estimate the size of the golf economy in the state. This entails mapping out where the golf industry begins and ends, and then estimating the size of each of these industry segments. We divide the golf industry cluster into two main categories: (1) core industries and (2) enabled industries (see figure on next page). The golf industry cluster begins with the golf facilities themselves and with those other core industries that produce goods and services used to operate facilities and to play the game: golf equipment and golf apparel manufacturers, golf course architects and course builders, turf maintenance equipment and service providers, and club management services. The game of golf further enables a number of other industries, such as golf-related tourism and real estate development.

We detail these industry segments and estimate their size in the following section. Having defined the core and enabled golf industries, it is possible to estimate the size of each industry segment and to total them for an overall estimate of the size of the golf economy. Multipliers can then be applied to calculate the ripple effects of these economic activities in terms of: (1) impact on total state economic output and (2) impact on total state employment. However, this process is complicated by the fact that, while most of these industries produce golf-related goods and services, the firms themselves may not limit their activities exclusively to the golf industry. For example, Nike produces golf shoes, but also running, tennis, basketball, and other shoes. Therefore, in general, our approach is to include only those firms and sales that are directly attributable to the game of golf. In so doing, we use a number of different estimation techniques to ensure that our final estimates are reasonable and robust.



Moreover, additional data challenges and location factors make estimation more difficult at the state level than the national level. For example, many of the major golf equipment manufacturers have production facilities in just a few states. Similarly, several of the major golf association headquarters are located in Florida. The presence of such firms, associations, or a number of well-known courses will change the size of golf's economic impact in the state considerably. Therefore, one should consider the size of the golf economy and the game's economic impact in the state in relation to the size of the overall economy and other major industries in that state.

## B. DATA SOURCES

SRI developed its framework for measuring state golf economies based on a broad set of existing sources and data. Although there have been several state-level impact studies conducted in the past, by numerous golf constituencies, few have used a similar methodology, resulting in very different estimates depending on the golf economy elements included. A great deal of data is collected on the golf economy by many organizations on a regular basis. For example, government agencies, national golf associations, and national associations in the enabled industries collect data on different industry elements periodically—annually, every few years, or every five years. In addition, these data are based on a relatively consistent set of inputs by large numbers of constituents. Therefore, the principal challenges involve acquiring the data, inflating or deflating the estimates for the proper target year, and

then combining them to represent the entire golf economy in the target year. The core and enabled industry indicators and data sources we have identified are as follows:

| State Golf Economy Indicators and Data Sources            |   |   |
|---|---|---|
| Indicator   | Primary source  | Cross-validation source   |
| <b>Golf Facility Operations</b>                           |   |   |
| # of golf course facilities by type                       | PGA Facility Database, multiple years ( 2006-2010 data)   | NGF Facility Database, multiple years; state golf associations; 2007 Economic Census                    |
| Avg. revenues by type of facility                         | PGA Facility Operations Survey, multiple years (2006-2010 data)   | 2007 Economic Census; National Golf Foundation; state task force  |
| # of rounds by facility type                              | 2006 PGA Compensation Survey (2005 data)  | National Golf Foundation  |
| <b>Golf Course Capital Investments</b>                    |   |   |
| Avg. capital investment by type of facility               | GCSAA Compensation Survey (2005, 2007, 2009 data)   | National Golf Foundation; state task force  |
| Number of golf courses under construction in current year | National Golf Foundation (2007-2010 data)   | NGF Construction database; state task force   |
| Avg. cost of construction per new course                  | Golf Course Builders Association of America   | State task force; interviews with golf course builders in state   |
| <b>Golf-Related Supplies</b>                              |   |   |
| Golf-related manufacturing exports                        | Company annual reports; SEC filings; interviews   | Company interviews; state task force  |
| Golf equipment  | National Sporting Goods Association (2007-2010 data)  | 2006 PGA Compensation Survey (2005 data)  |
| Golf apparel  | National Sporting Goods Association (2007-2010 data)  | 2006 PGA Compensation Survey (2005 data)  |
| Golf media  | Magazine Publishers of America for golf magazine sales; <i>Bowker Annual of Library and Book Trade Information</i> (2007-2010 data) | Amazon and Barnes & Noble for top golf book sales   |
| <b>Major Tournaments</b>                                  |   |   |
| # of major tournaments held in state                      | State task force  | PGA TOUR, LPGA  |
| Visitor attendance at tournaments, tournament revenues    | Major golf associations   | State tourism agency; national golf associations; state golf associations                               |
| <b>Associations &amp; Charitable Events</b>               |   |   |
| # of major state-level golf associations                  | State counterparts of national golf associations  | State task force  |
| Annual expenditures/budgets                               | State golf associations   | IRS Form 990  |
| Revenues raised through charitable golf events            | National Golf Foundation  | Sampling of golf professionals and club managers to identify # of tournaments and average amount raised |
| <b>Real Estate</b>  |   |   |
| # of residential golf courses under construction          | National Golf Foundation  | Online research   |
| # of lots per course                                      | Real estate development site plans; interviews with real estate developers  | Real estate agents  |



|   |  |  |
|---|--|--|
| Avg. construction costs per home and real estate premium    | Interviews with real estate developers               | Real estate agents   |
| <b>Hospitality/Tourism</b>                                  |  |  |
| # of golf travelers or # of golf-related trips to the state | TNS Travel America or TIA/D.K. Shifflet & Associates | State department of tourism/recent surveys/studies                           |
| Avg. spending per traveler or per trip                      | TNS Travel America or TIA/D.K. Shifflet & Associates | State department of tourism/recent surveys/studies; National Golf Foundation |

## THE SIZE OF NEW HAMPSHIRE’S GOLF ECONOMY

SRI estimates the total size of New Hampshire’s golf economy in 2010 was approximately \$289.8 million. This estimate is comprised of \$195.4 million in core industries and an additional \$94.4 million in enabled industries, as illustrated in the table below.

| Size of New Hampshire’s Golf Economy in 2010<br>by Industry Segment (\$ millions) |                |
|---|----------------|
| <b>CORE INDUSTRIES</b>  |                |
| Golf Facility Operations  | \$157.4        |
| Golf Course Construction and Capital Investment                                   | \$9.7          |
| Golf-Related Supplies (retail margin and manufacturing exports)                   | \$26.8         |
| Major Golf Tournaments and Associations   | \$1.5          |
| <b>Total Core Industries</b>  | <b>\$195.4</b> |
| <b>ENABLED INDUSTRIES</b>   |                |
| Real Estate   | \$3.6          |
| Hospitality/Tourism   | \$90.8         |
| <b>Total Enabled Industries</b>   | <b>\$94.4</b>  |
| <b>TOTAL GOLF ECONOMY</b>   | <b>\$289.8</b> |

### A. CORE INDUSTRIES

#### Golf Facility Operations

At the center of any golf economy lie the golf facilities—the largest component in terms of revenues. The revenue that flows through a golf facility comes primarily from green fees, membership fees, golf cart rentals, lessons, and associated spending on food and beverages. This revenue, in turn, supports a host of supply sectors including golf equipment manufacturers, food and beverage providers, and turfgrass equipment and maintenance service providers. New Hampshire’s 113 golf courses, 14 stand-alone ranges, and 10 miniature golf facilities generated \$157.4 million of revenue in 2010.

| New Hampshire Golf Facility Revenues in 2010 (\$ millions) |                |
|--|----------------|
| <b>Golf Facilities</b>                                     | <b>\$150.6</b> |
| <b>Practice Ranges &amp; Alternative Facilities</b>        | <b>\$6.8</b>   |
| <b>TOTAL<sup>1</sup></b>                                   | <b>\$157.4</b> |

Note: <sup>1</sup> Golf facility revenues exclude on-course merchandise sales, which are included in the Golfer Supplies industry segment.

This is a sizeable industry, but even more significant when compared to other popular revenue-generating sports. For example, New Hampshire’s golf facilities generate revenues that exceed the combined revenue of all other spectator sports in the state—including hockey, soccer, auto racing, and other popular spectator sports. Spectator sports excluding golf generated revenues of \$118.6 million in 2007, or \$123.5 million in 2010 inflation-adjusted dollars.<sup>3</sup>

### **Golf Facility Capital Investments**

Golf facilities generate economic impacts beyond operational revenues through investments to upgrade and maintain facilities and infrastructure, and through the construction, expansion and renovation of courses. These investments create employment in the construction and maintenance industries and often involve the purchase of significant amounts of equipment and supplies from companies within the state. SRI’s estimate of golf course capital investment is typically divided into two segments: (1) capital investment at existing facilities and (2) new course construction. In the case of New Hampshire, there was no new golf course construction activity in 2010, and as such the state’s total golf course capital investment of \$9.7 million in 2010 was made at existing golf facilities.

| <b>New Hampshire Golf Course Construction and Capital Investment in 2010 (\$ millions)</b> |              |
|--|--------------|
| <b>Golf Course Capital Investment<sup>1</sup></b>  | <b>\$9.7</b> |
| <b>New Course Construction</b>   | <b>\$0</b>   |
| <b>TOTAL</b>   | <b>\$9.7</b> |

Note: <sup>1</sup> Only the New Course Construction category is included in the economic impact analysis, because it represents new economic output or activity. Golf course capital investment is typically financed through golf facility revenues, so including both Golf Course Capital Investment and Golf Facility Operations in economic impact analysis would result in double counting.

### **Golf-Related Supplies**

New Hampshire golfers spend significant sums on golf balls, golf clubs, golf apparel, and golf media (books, magazines, DVDs). The economic value that accrues to a state comes from the production of these golf-related goods, as well as retail sales of such items. New Hampshire is home to a small number of companies that manufacture golf shoes, golf accessories and golf personal transporters, e.g., ECCO USA, Segway, Denco, etc. In 2010, New Hampshire manufacturers’ total value-added shipment of golf-related products was approximately \$15.3 million. New Hampshire retailers and golf facilities earned approximately \$11.6 million on the sale of \$29.7 million of golf equipment, apparel, and media in 2010.

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<sup>3</sup> U.S. Census Bureau (2010). *New Hampshire: 2007 Economic Census, Arts, Entertainment & Recreation Geographic Series*, July 2010.

In total, the Golf-Related Supplies segment contributed \$26.8 million in revenues to the New Hampshire economy.

| New Hampshire Manufacturers' Value-Added Exports<br>of Golf-Related Products in 2010 (\$ millions) |               |
|--|---------------|
| <b>TOTAL</b>   | <b>\$15.3</b> |

| New Hampshire Retailers' Net Revenues on Consumer Purchases<br>of Golf-Related Supplies in 2010 (\$ millions) |                    |                        |
|---|--------------------|------------------------|
|   | Total<br>purchases | Retail sales<br>margin |
| Golf Equipment (retail margin)  | \$23.3             | \$9.1                  |
| Golf Apparel (retail margin)  | \$5.9              | \$2.3                  |
| Golf Media (retail margin)  | \$0.6              | \$0.2                  |
| <b>TOTAL</b>  | <b>\$29.7</b>      | <b>\$11.6</b>          |

Note: This includes on-course and off-course purchases of golf equipment, apparel and media. Column does not sum due to rounding.

## **Associations, Tournaments & Charitable Giving**

### Associations and Major Tournaments

Numerous associations represent the game of golf in New Hampshire. The largest golf associations include the New Hampshire Golf Association, the New Hampshire Women's Golf Association, the New Hampshire Chapter of the New England Section of the PGA, the New Hampshire Golf Course Superintendents Association, and the New England Club Managers Association. Also very active are the Executive Women's Golf Association Southern New Hampshire Chapter, and senior, junior, and regional member golf associations, such as the New Hampshire Senior Golfer's Association. The First Tee of New Hampshire, which aims to introduce youth to the game and values of golf, also has a very strong presence in the state through its educational programs and other activities. Another organization with a mission to support young people is the Richard D. McDonough Scholarship Foundation, which provides financial assistance to New Hampshire golf course employees so they may pursue post-secondary education. The Foundation has awarded over \$1.7 million in scholarship grants since its inception in 1955, and more than \$108,000 to over 100 recipients in 2010.<sup>4</sup>

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<sup>4</sup> "McDonough Foundation supporting NH scholars," May 8, 2011, <http://www.nashuatelegraph.com/sportsothersports/918563-222/mcdonough-foundation-supporting-nh-scholars.html>.

No major professional golf championships were held in 2010. However, an LPGA developmental tour event and an LPGA seniors tour event were hosted in New Hampshire in 2010. They include: the Duramed FUTURES Tour’s “The International at Concord” tournament (now referred to as “The Northeast Delta Dental New Hampshire International,” which is part of what is now the Symetra Tour) held at Beaver Meadow Golf Course in Concord, NH; and the LPGA Legends Tour Handa Cup, which was hosted by Wentworth by the Sea Country Club in Rye, NH. The Handa Cup is comparable to the Ryder Cup for PGA players and the Solheim Cup for the LPGA, and features members of the LPGA Legends Tour in two teams (U.S. and World). In 2010, these two LPGA events combined with New Hampshire golf associations generated \$1.5 million of expenditures.

| New Hampshire’s Golf Association & Tournament Revenues<br>in 2010 (\$ millions) |              |
|---|--------------|
| <b>TOTAL<sup>1</sup></b>  | <b>\$1.5</b> |

### Charitable Giving

New Hampshire’s golf industry makes substantial contributions to a variety of charities. The Handa Cup, an LPGA Legends Tour event, was held at the Wentworth By The Sea Country Club in Rye, NH, and netted \$22,000 for The First Tee of New Hampshire in 2010. The First Tee of New Hampshire also has its own annual benefit golf tournament, which raised over \$15,000 when it was hosted at Abeniqui Country Club in Rye, NH, in 2010.

The New Hampshire Credit Union League sponsored the annual Richard D. Mahoney Charity Golf Tournament in 2010, which was played at Candia Woods Golf Links in Candia, NH, and netted \$60,000 for the Make-A-Wish Foundation of New Hampshire, a charity that strives to grant wishes of children with life-threatening medical conditions. The Nick Golf Classic, played at Lake Winnepesaukee Golf Club, generated \$25,000 in 2010 towards the Wolfeboro Area Recreation Association, a nonprofit organization which plans, constructs and oversees for public use the Nicholas J. Pernokas Recreation Park, known as “The Nick”, located in the New Hampshire’s Lakes Region.<sup>5</sup> Golf course owners, operators, and golf professionals are happy to serve as access points for annual fundraising by local service organizations. In total, SRI estimates that the amount of charitable giving attributed to the game of golf in New Hampshire to be \$9.65 million in 2010.

| Charitable Giving by New Hampshire Golf Industry in 2010<br>(\$ millions) |
|---|
|---|

<sup>5</sup> “Nick Golf Classic,” [http://www.thenick.org/The\\_Nick/Golf\\_Tournament.html](http://www.thenick.org/The_Nick/Golf_Tournament.html).

**TOTAL**

**\$9.65**

## **B. ENABLED INDUSTRIES**

### **Real Estate**

Real estate developers use amenities to attract new homebuyers, and golf courses are a key amenity in many parts of the country. One of the original 13 states, New Hampshire has some of the country's oldest courses and a smaller number of total golf communities given the shorter playing season and the absence of large developments in the original design of many existing golf courses. On the other hand, new home development has occurred at New Hampshire resorts, such as Owl's Nest and Mount Washington, as well as at golf courses, such as Hale's Location and Eastman Golf Links. Given the subdued state of the overall real estate market in 2010, only a few houses were built at a small number of courses in New Hampshire. This new golf-related residential construction generated approximately \$1.53 million in expenditures in 2010. Furthermore, there were approximately 9 existing golf communities in New Hampshire, and we estimate the "golf" premium associated with the sale of real estate in these developments in 2010 to be \$2.09 million. The premium is the additional amount a buyer is willing to pay for a home or property located on a golf course or within a golf community.

| <b>New Hampshire's Golf Real Estate Revenues in 2010 (\$ millions)</b> |               |
|--|---------------|
| <b>Golf-Related Residential Construction</b>                           | <b>\$1.53</b> |
| <b>Realized Golf Premium</b>   | <b>\$2.09</b> |
| <b>TOTAL</b>   | <b>\$3.62</b> |

Note: The sale of existing homes is considered a transfer of assets rather than new economic output, so the golf premium that is realized in the sale of an existing home is not included in the economic impact analysis.

### **Hospitality/Tourism**

Across the country, golf has enjoyed increasing popularity among travelers, whether it is the primary motivation for a trip or is connected to other recreational time spent with friends and family, or business colleagues. In New Hampshire, golf is an important tourism segment, alongside the state's other outdoor and recreational activities such as skiing, snowboarding, boating, fishing, and hiking, as well as trips to enjoy the state's fall foliage, historic sites, covered bridges, waterfalls, and beaches. New Hampshire's golf resorts help the state attract conferences and business meetings, and both amateur and professional golf tournaments draw people to courses in different parts of the state. The state's tourism website features golf as a key sport activity (<http://www.VisitNH.gov/>). In 2010, SRI estimates golf-related tourism spending in New Hampshire was \$90.8 million. This is based on the following estimates of golf trips and associated expenditures by New Hampshire residents and non-residents: (1)

an estimated 290,661 *day* trips with average golf trip spending of \$71, and (2) an estimated 107,310 *overnight* trips with average trip spending of \$652.

| <b>New Hampshire's Golf-Related Travel Expenditures in 2010</b> |                       |
|---|-----------------------|
| # of day trips  | 290,661               |
| Average travel \$ per day trip                                  | \$71.45               |
| # of overnight trips  | 107,310               |
| Average travel \$ per overnight trip                            | \$652.37              |
| <b>Total</b>  | <b>\$90.8 million</b> |

Note: Numbers do not sum due to rounding.

## **GOLF'S ECONOMIC IMPACT IN NEW HAMPSHIRE**

Golf's impact on New Hampshire's economy includes both the direct effects of economic activity in the core and enabled golf industries, as well as the indirect and induced (or multiplier) effects on other industries in the state economy. In economics, the idea of the multiplier is that changes in the level of economic activity in one industry impacts other industries throughout the economy. For example, a fraction of each dollar spent at a golf course is, in turn, spent by the golf course to purchase goods and services for golf course operation—these are indirect effects. In addition, golf course employees spend their disposable income on personal goods and services, and this stimulates economic activity in a myriad of other industries—these are induced effects.

Therefore, golf's total (direct plus multiplier) economic impact includes both the direct employment and wage income of those employed in golf-related industries, as well as the secondary employment and wages supported in other sectors of the economy through subsequent purchases of goods and services by golf industry employees.

In 2010, the \$289.8 million New Hampshire golf industry supported:

- A total economic impact of \$525.1 million for the state of New Hampshire including the indirect and induced economic impacts stimulated by golf sector activity;
- A total employment impact of almost 6,200 jobs; and
- Total wage income of \$151.2 million.

| <b>Golf's Impact on New Hampshire's Economy (2010)</b> |                |                 |                |                                   |                   |  |
|--|----------------|-----------------|----------------|-----------------------------------|-------------------|--|
| <b>INDUSTRY</b>  | <b>DIRECT</b>  | <b>INDIRECT</b> | <b>INDUCED</b> | <b>TOTAL OUTPUT (\$ millions)</b> | <b>TOTAL JOBS</b> | <b>TOTAL WAGE INCOME (\$ millions)</b> |
| Golf Facility Operations                               | \$157.4        | →               |                | \$295.9                           | 3,879             | \$87.8                                 |
| Golf Course Capital Investment*                        | \$9.7          | →               |                | \$0                               | 0                 | \$0                                    |
| Golf-Related Supplies                                  | \$26.8         | →               |                | \$49.8                            | 384               | \$12.7                                 |
| Tournaments & Associations                             | \$1.5          | →               |                | \$3.2                             | 32                | \$0.9                                  |
| Real Estate **   | \$3.6          | →               |                | \$3.2                             | 25                | \$1.0                                  |
| Hospitality/Tourism                                    | \$90.8         | →               |                | \$172.9                           | 1,867             | \$48.7                                 |
| <b>TOTAL</b>   | <b>\$289.8</b> | <b>→</b>        |                | <b>\$525.1</b>                    | <b>6,187</b>      | <b>\$151.2</b>                         |

Note: Columns may not sum due to rounding. To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of \$289.8 million the portion of capital investment that is investment in existing facilities (in this case the entire \$9.7 million because there was no new course construction in 2010) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$2.1 million of \$3.6 million). This is because:

\*Golf course capital investments—Only new course construction has an indirect and induced economic impact. Other types of facility capital investment are typically financed through facility revenues and, therefore, are omitted to avoid double-counting.

\*\*Real Estate—Only golf residential construction has an indirect and induced impact. The golf premium associated with golf real estate is considered a transfer of assets rather than new economic activity.

Numbers in columns may not sum due to rounding.



## DETAILED METHODOLOGY & DATA SOURCES

A key challenge in this study was to identify reliable state-level data sources and to develop methodologies for measuring the size of industry components for which cross-state estimates do not exist in straightforward metrics, e.g., golf real estate and off-course purchases of golf apparel and equipment. This section describes each of the core and enabled industries included in the golf economy and SRI's approach to measuring each of these segments.

### A. GOLF FACILITY OPERATIONS

For this industry segment, we analyzed the number of golf facilities and average facility revenue data to derive a total facility operations estimate. Revenues for this segment include: annual or monthly membership fees, green fees, range fees, and cart rental fees; purchases of golf apparel and equipment in pro shops; golf lessons; tournament entry fees; consumption of food and beverages; etc.

**Number of golf course facilities.** Many golf organizations track the number of golf facilities in a state: the National Golf Foundation (NGF), The PGA of America, and state/regional golf associations, among others. The U.S. Census Bureau also surveys golf course facilities as business establishments in its Economic Census every five years. However, these organizations' calculations of the total numbers of golf courses in each state, by type of facility, are not always consistent with each other due to: (1) absence of data for courses which are not members (e.g., The PGA tracks those courses with a PGA member) or for particular subsets of courses (e.g., municipal facilities and golf resorts are not tracked by the Census), (2) facility closures and openings, and (3) inconsistency in the classification of courses, especially resorts.

In some surveys, golf facilities are allowed to self-classify themselves. In others, the surveying organization classifies the facility based on specific criteria. This can mean the difference between a small number of resorts (e.g., a figure that includes five-star accommodation located on or adjacent to an 18-hole course) or a much larger number of resorts (e.g., three-star hotel accommodation located near a daily fee golf course). Similarly, a resort with two 18-hole golf courses could be counted as two golf facilities or as one depending on the reporting organization. Fortunately, the variances caused by these data collection issues are very small, and thus do not materially impact the overall analysis. The table below presents slightly differing estimates for the number of golf course facilities in New Hampshire in 2010 or the latest available year.

**Estimates of New Hampshire Golf Facilities from Various Sources, 2007-2010**

|                            | 2007 Economic Census (# of facilities, excl resorts & municipal) <sup>1</sup> | 2010 PGA (# of facilities) <sup>2</sup> | 2010 PGA Adjusted (# of facilities) <sup>3</sup> | 2010 NGF (# of facilities) <sup>4</sup> | 2010 NGF (# of 18-hole equivalent courses) <sup>4</sup> |
|----------------------------|---|---|--|---|---|
| <b>PRIVATE</b>             | 10  | 23                                      | 18   | 19                                      | 17  |
| <b>PUBLIC</b>              | 73  | 86                                      | 89   | 78                                      | 65.5  |
| Daily fee/<br>semi-private |   | 80                                      | 83   |   |   |
| Municipal                  |   | 6                                       | 6  |   |   |
| Military                   |   |   |  |   |   |
| University                 |   |   |  |   |   |
| <b>RESORT</b>              |   | 9                                       | 6  | 16                                      | 13  |
| <b>TOTAL</b>               | 83  | 118                                     | 113  | 113                                     | 95.5  |

Sources: <sup>1</sup> U.S. Census Bureau, *2007 Economic Census*.

<sup>2</sup> Professional Golfers' Association of America (2011). *Facility Database*.

<sup>3</sup> Adjustment to PGA figures based on golf facility lists from New Hampshire Golf Association (NHGA) and New Hampshire Women's Golf Association (NHWGA), as well as consultation with the golf task force (2011).

<sup>4</sup> NGF (2011). Total Facility Supply Tables 6-14, *Golf Facilities in the U.S., 2011 edition*, pp.6-14.

The PGA of America and NGF's total facility numbers fall within a narrow range, 113 to 118 in total. SRI conducted further research to validate this total and the classification of individual facilities by type, especially golf resorts, and arrived at the following estimates: 18 private facilities, 89 public facilities (83 daily fee facilities and 6 municipal/military/university facilities), and 6 golf resort facilities, comprising a total of 113 golf facilities.<sup>6</sup>

**Average revenues per facility.** The SRI team collected average revenue data from a variety of sources. Here again, the data challenge was that average facility revenues will vary significantly depending on: (1) the number of holes (e.g., a 9-hole course versus a 18-hole course) and (2) the type of facility—whether a golf course facility is private, daily fee, resort, municipal, etc.

The U.S. Census Bureau collects revenue data for golf course facilities as part of its Economic Census of all U.S. establishments every five years. Whereas facility surveys conducted by private sector organizations are often based on low response rates (less than 30 percent), all establishments are

<sup>6</sup> For the purposes of this study, a golf resort facility is defined as a golf facility that is on or adjacent to a resort hotel that is rated over 3 stars. The golf resorts identified by SRI include Omni Mount Washington Resort, Balsams Grand Resort Hotel, Atkinson Resort & Country Club, Mountain View Grand Resort & Spa, The Wentworth, and White Mountain Hotel & Resort.

required by law to respond to the Census Bureau survey. However, the Census Bureau data has several limitations. Many types of facilities are not included in the survey: (1) resort facilities, (2) municipal and military facilities, (3) stand-alone driving ranges and (4) golf course facilities without payroll. In addition, in 2002 the national economy was just emerging from an economic recession, which is likely to have negatively impacted the golf industry. The latest 2007 Economic Census contains revenue, payroll, and employment data on 12,193 golf facilities broken down by state. This provides a robust estimate with which to compare other available golf facility revenue data.

The PGA recently began collecting revenue data for all 50 states on an annual basis through its Annual Operations Survey. The latest available data are from 2010, but the PGA has annual data going back to 2005. In addition, PGA revenue data are broken down by type of facility for categories for which Census data are not available—resorts, municipal courses, and military courses.

As an additional validity check, we also examined NGF revenue data. However, it is important to note that NGF does not provide state-level facility data. It presents average revenue data at the national level for: (1) private 18-hole facilities, (2) daily fee 18-hole facilities, and (3) municipal 18-hole facilities.

**Estimates of New Hampshire Average Revenue per Facility Data  
From Different Sources, 2007-2010**

|  | Census<br>(2007) <sup>1</sup> | PGA<br>(2007) <sup>2</sup> | PGA<br>(2008) <sup>3</sup> | PGA<br>(2009) <sup>4</sup> | PGA<br>(2010) <sup>5</sup> | NGF (2009) <sup>6</sup><br><sup>7</sup> |
|--|-------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---|
| Private facility                           | \$2,169,300                   | <b>\$2,927,853</b>         | \$4,055,288                | <b>\$3,197,803</b>         | \$3,462,978                | \$3,277,000                             |
| Daily fee facility                         | \$1,292,425                   | <b>\$1,023,133</b>         | <b>\$1,017,250</b>         | <b>\$930,500</b>           | <b>\$970,600</b>           | \$1,457,700                             |
| Resort facility                            | X                             | <b>\$855,264</b>           | X                          | X                          | X                          | X                                       |
| Municipal/military/<br>university facility | X                             | X                          | \$1,201,667                | <b>\$912,500</b>           | <b>\$1,338,333</b>         | \$1,269,100                             |
| Driving range                              | X                             | X                          | X                          | X                          | X                          | \$350,000                               |
| Miniature golf                             | \$181,800                     | X                          | X                          | X                          | X                          | X                                       |

Note: Bolded values are an average of New Hampshire and neighboring states.

Sources: <sup>1</sup> U.S. Census Bureau, *2007 Economic Census*.

<sup>2</sup> Professional Golfers' Association of America (2008). *2007 Operations Survey*.

<sup>3</sup> Professional Golfers' Association of America (2009). *2008 Operations Survey*.

<sup>4</sup> Professional Golfers' Association of America (2010). *2009 Operations Survey*.

<sup>5</sup> Professional Golfers' Association of America (2011). *2010 Operations Survey*.

<sup>6</sup> NGF (2010). *Operating & Financial Performance Profiles of 18-hole Golf Facilities in the U.S., 2009 edition*.

<sup>7</sup> Golf Range Association of America (2006).

Average revenue data from the Census (2007), The PGA (2007-2010) and NGF (2009) are presented in the table above. For the private facilities, the revenue estimates varied widely. Through primary research of golf facilities, as well as through viewing private facility tax returns on Guidestar, SRI determined that the average private golf facility revenue was \$2.838M in 2010. In consultation with the golf task force, SRI used the average daily fee facility revenue estimate of \$1.292M (\$1.345M when adjusted for inflation) from the 2007 Economic Census, which was based on a high number of responses (73). The 2007-2010 PGA daily fee estimates (in bold) are regional averages, rather than New Hampshire averages because the response rates were too low to yield valid state estimates. For golf resorts, the golf resort response rate to the PGA survey data was also very low. Therefore, SRI conducted primary research, resulting in a revised average golf resort facility revenue figure of \$650K (largely due to the very short playing season). For the municipal/military/university facilities, SRI used the 2008 PGA average revenue estimate of \$1.202M (\$1.251M when adjusted for inflation); this was the only year where the response rate was high enough to report a New Hampshire average, instead of a regional average. Driving range revenues were calculated using the Golf Range Association of America’s estimate of average revenue figure for golf ranges in 2006 (the latest available data), and average miniature golf facility revenue was calculated using the 2007 Census data.

To calculate golf facility operations revenues, SRI subtracted on-course merchandise sales from the average golf facility revenue estimates, because on-course merchandise sales are included in the Golf-Related Supplies industry segment. SRI then multiplied these adjusted average golf facility operations revenue estimates by the respective number of golf facilities. Overall, SRI estimates that New Hampshire’s 113 golf courses, 14 stand-alone ranges, and 10 miniature golf facilities generated \$157.4 million of revenue in 2010.

## B. GOLF COURSE CAPITAL INVESTMENT

To calculate golf course capital investments, SRI collected data on two major types of investment: (1) capital investment at existing facilities and (2) new course construction.

| New Hampshire Golf Facility Capital Investment and<br>New Course Construction in 2010 (\$ millions) |              |
|---|--------------|
| <b>Golf Course Capital Investment<sup>1</sup></b>   | <b>\$9.7</b> |
| <b>New Course Construction</b>  | <b>\$0</b>   |
| <b>TOTAL</b>  | <b>\$9.7</b> |

Note: <sup>1</sup> Only the New Course Construction category is included in the economic impact analysis, because it represents new economic output or activity. Golf facility capital investment is typically financed through golf facility revenues, so including both Golf Facility Capital Investment and Golf Facility Operations in economic impact analysis would result in double counting.

**Investment at existing courses.** Golf facility capital investment includes improvements to greens and tees, repaving of cart paths, purchases of new turf maintenance equipment and irrigations systems, and renovations of the clubhouse, proshop and maintenance buildings. Ordinary maintenance expenses are not included. SRI examined golf facility capital investment data from two sources: NGF and the GCSAA. The GCSAA data comes from golf facility capital budget questions included in its 2009 Compensation Survey. The data is state-level and includes the mean, median and standard deviation of capital expenditures (not maintenance expenses). The NGF's *2010 Operating and Financial Performance Profile* presents national estimates of capital expenditures (and also breaks out maintenance expenses separately) at: (1) daily fee facilities (average revenue of \$1.458M, with 69.6% of daily fee facilities making average capital improvement investments of \$131,700); (2) municipal facilities (average revenues of \$1.269M, with 70.2% of municipal facilities making average capital investments of \$189,300); and (3) private facilities (average revenues of \$3.277M, with 82% of private facilities making capital investments of \$410,400).

After review of both the state-level and national data sets, SRI used the GCSAA's data for New Hampshire in our capital investment calculations. The data indicate that, on average, a New Hampshire golf facility invested approximately \$67,914, for a total capital investment of \$8.0 million. Both data sets indicate that capital investments were down significantly from 2006 (the year preceding the economic recession that began in 2007 and ended in 2009). The GCSAA data indicate a large standard deviation (\$52,114) reflecting the fact that some facilities undertook no capital investments, others scaled back investment, and some continued to make large investments, taking advantage of market conditions to undertake big projects at a lower cost than before the recession.

In addition, Manchester Country Club in Bedford underwent a major \$1 million two-year renovation from 2010 to 2011,<sup>7</sup> and Pease Golf Course in Portsmouth invested \$2.3 million in the construction of a new clubhouse which began in 2009 and opened in 2010.<sup>8</sup> SRI added half of the total renovation/construction costs of these two projects (\$1.7 million) to its estimate of golf course capital investment in New Hampshire in 2010, resulting in a total of \$9.7 million.

**New course construction.** The NGF's *Golf Facilities in the U.S.* series is the only national source for estimates of the number of new golf courses under construction in each state. In 2010, NGF estimated that there were no new 18-hole equivalent golf course openings in New Hampshire and that none were under construction. Therefore, in 2010, there was no investment in new course construction in New Hampshire.

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<sup>7</sup> *Bedford Journal*, "Manchester Country Club to invest in renovations," April 23, 2010.

<http://www.cabinet.com/bedfordjournal/bedfordnews/713883-308/manchester-country-club-to-invest-in-renovations.html>

<sup>8</sup> Pease Development Authority, *FY 2009 Annual Report*.

<http://www.peasedev.org/documents/FY09AnnualReport.pdf>

## C. GOLF-RELATED SUPPLIES

This section explains our methodology for calculating New Hampshire manufacturers' exports (out-of-state and overseas shipments) of golf apparel, golf equipment, and accessories. We also detail our methodology for calculating the retail margin for on-course and off-course purchases of golf equipment, golf apparel, and golf media.

**Manufacturing Exports.** The economic value created by golf-related supplies consists of two components: (1) value-added production and (2) the retail sales margin. On the manufacturing, or production side, we are concerned with the value-added production of golf equipment, golf apparel, and golf accessories. This is the value of the company's wholesale revenues minus the cost of production inputs, and this value-added production is attributable to the state in which the golf club or golf ball is manufactured.

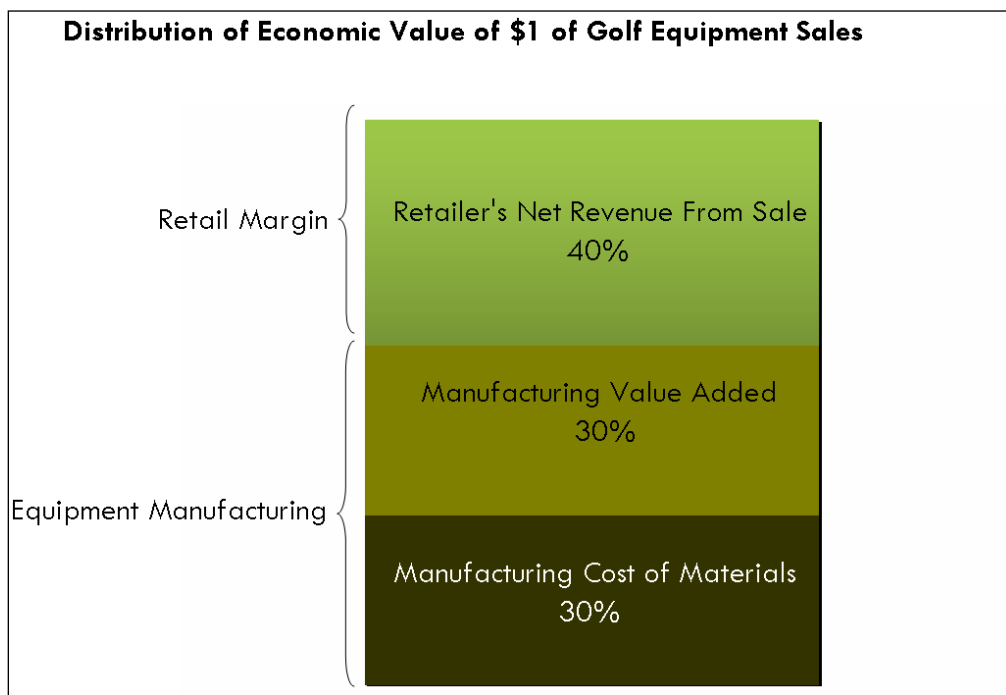
We began by conducting research to identify manufacturers of golf-related products in the state. We identified a small number of companies that manufacture golf shoes, golf accessories and golf personal transporters—ECCO USA, Segway, Denco, etc. Either the headquarters or manufacturing facilities of these companies are located in New Hampshire. We conducted further research on these companies to ascertain: (1) the total value of their golf-related sales, and (2) the percentage of these sales that were out-of-state. Finally, we extrapolated value-added output from each company's revenues using value-added data from the Census's *Survey of Manufacturers*.

| New Hampshire Manufacturers' Value-Added Exports<br>of Golf-Related Products in 2010 (\$ millions) |               |
|--|---------------|
| <b>TOTAL</b>   | <b>\$15.3</b> |

**Retail Margin.** On the retail side, the economic value is derived from the margin the retailer makes from the sale of the golf club, i.e., the net revenues accruing to retailers after covering the cost of purchasing the golf equipment or apparel from the wholesaler/producer.

To calculate this margin, we first estimate total sales of golf apparel and equipment at the state level and then apply the requisite retail margin percentage for economic impact analysis. In our national level study for GOLF 20/20, SRI was able to collect national sales data from a number of sources: (1) the NGF, (2) the National Sporting Goods Association (NSGA), (3) Golf Datatech, and (4) the Census Bureau. Unfortunately, the relatively small sample size for the majority of these surveys do not allow for publication of reliable state-level estimates by these organizations. However, each year the NSGA conducts a 100,000-household consumer panel survey for its annual *The Sporting Goods Market* publication. SRI uses these data in conjunction with the PGA's golf facilities data for each state to derive state-level estimates of golf equipment and apparel sales.

For example, in 2010, NSGA reported total U.S. off-course and on-course purchases of individual golf clubs to be \$532.0 million. The NSGA survey found the New England region accounted for 3.8% of these purchases, or \$20.2 million. Within the New England region, one can estimate New Hampshire’s share of purchases by creating a rounds- or courses-based weight. Using either approach yields similar weights, since the number of rounds played is highly correlated with the number of 18-hole equivalent courses in a state ( $r=0.93$ ). SRI used the number of 18-hole equivalent courses in each state, as it was easier to verify than estimated number of rounds played. New Hampshire represents 14.0% of total 18-hole equivalent courses in the New England region, so this weight was applied to the region total (\$20.2 million) to estimate \$2.8 million of individual golf club sales in the state of New Hampshire in 2010. Further, retail margins on final sales suggest that 38.9%, or \$1.1 million, of total sales was retained in the New Hampshire economy. (See graphic below.)



| New Hampshire's On-Course and Off-Course Golf Equipment & Apparel Purchases, 2010 |                                 |                        |
|---|---------------------------------|------------------------|
| Category  | Calculation                     | Estimate (\$ millions) |
| Golf club sets  | New England region's sales      | \$79.1                 |
|   | NH's courses-based weight       | 14.0%                  |
|   | <b>NH's share of sales [1]</b>  | <b>\$11.1</b>          |
| Golf apparel  | New England region's sales      | \$41.9                 |
|   | NH's courses-based weight       | 14.0%                  |
|   | <b>NH's share of sales, [2]</b> | <b>\$5.9</b>           |

|                            |                                 |               |
|----------------------------|---------------------------------|---------------|
| <b>Golf balls</b>          | New England region's sales      | \$28.0        |
|                            | NH's courses-based weight       | 14.0%         |
|                            | <b>NH's share of sales, [3]</b> | <b>\$3.9</b>  |
| <b>Golf clubs</b>          | New England region's sales      | \$20.2        |
|                            | NH's courses-based weight       | 14.0%         |
|                            | <b>NH's share of sales, [4]</b> | <b>\$2.8</b>  |
| <b>Golf bags</b>           | New England region's sales      | \$27.3        |
|                            | NH's courses-based weight       | 14.0%         |
|                            | <b>NH's share of sales, [5]</b> | <b>\$3.8</b>  |
| <b>Golf shoes</b>          | New England region's sales      | \$11.9        |
|                            | NH's courses-based weight       | 14.0%         |
|                            | <b>NH's share of sales, [6]</b> | <b>\$1.7</b>  |
| <b>TOTAL</b>               | Sum of [1] to [6]               | <b>\$29.2</b> |
| <b>Retail sales margin</b> | <b>Multiply TOTAL by 38.9%</b>  | <b>\$11.3</b> |

Source: National Sporting Goods Association (2011). *The Sporting Goods Market in 2010*, Mt. Prospect, IL: NSGA.

**Golf media.** Similar to golf equipment, golf media's economic contribution to the state economy has two components: value-added production and the retail sales margin. On the production side, the economic impact created by the publication of magazines or books is attributable to the state in which the magazine or book is published. On the retail side, the economic impact is derived from the margin the retailer makes from the sale of golf media, i.e., the net revenues accruing to retailers after covering the cost of purchasing the media from the wholesalers/producers. For golf magazines, we identified national golf publications with the largest circulations and the state in which they are published—no national golf magazines were published in New Hampshire in 2010. Similarly, no major publishers of golf books are located in the state. However, we calculated a weight to estimate the percentage of book retailers' sales attributable to the sale of golf books in stores. Total retail golf book sales in 2010 were estimated to be \$562,000 with a retail sales margin of \$219,000. Golf videos and DVDs are more difficult. In SRI's previous national-level study, we were not able to identify a source with data on the annual sales of golf-specific videos/DVDs. In the case of this current state-level study, this category was also omitted due to the absence of a reliable data source.



| On-Course and Off-Course Sales of<br>Golf Books in New Hampshire, 2010 |                  |
|--|------------------|
| Category   | Estimate         |
| New Hampshire retail book sales <sup>1</sup>                           | \$133,827,501    |
| Golf books as % of total book sales                                    | 0.4%             |
| Total retail golf book sales   | \$562,076        |
| <b>Retail sales margin</b>   | <b>\$218,647</b> |

Note: <sup>1</sup>Adjusted for inflation into 2010 dollars using the appropriate GDP deflator.

Sources: New Hampshire retail book sales data derived from the *2007 Economic Census*; this statistic was suppressed, so it was calculated as a share of total retail sales of bookstores and news dealers in New Hampshire, based on the ratio of retail sales from book stores (NAICS 451211) to total retail sales of book stores and news dealers (NAICS 45121) in the United States. Estimated percentage of golf books among total book sales derived from the *2006 Bowker Annual of Library & Book Trade Information* and American Booksellers Association data.

| New Hampshire Retailers' Net Revenues on Consumer Purchases<br>of Golf-Related Supplies in 2010 (\$ millions) |                    |                        |
|---|--------------------|------------------------|
|   | Total<br>purchases | Retail sales<br>margin |
| Golf Equipment (retail margin)  | \$23.3             | \$9.1                  |
| Golf Apparel (retail margin)  | \$5.9              | \$2.3                  |
| Golf Media (retail margin)  | \$0.6              | \$0.2                  |
| <b>TOTAL</b>  | <b>\$29.7</b>      | <b>\$11.6</b>          |

Note: This includes on-course and off-course purchases of golf equipment, apparel and media. Column does not sum due to rounding.

## D. STATE GOLF ASSOCIATIONS, TOURNAMENTS & CHARITABLE EVENTS

**Associations.** SRI gathered association revenue data for the largest state and regional golf organizations from these organizations' 990 income tax filings. These include the New Hampshire Golf Association, the New Hampshire Women's Golf Association, the New Hampshire Chapter of the New England Section of the PGA, the New Hampshire Golf Course Superintendents Association, the New England Club Managers Association, and The First Tee of New Hampshire. Also very active are the Richard D. McDonough Scholarship Foundation, and the Executive Women's Golf Association Southern

New Hampshire Chapter, and senior, junior, and regional member golf associations, such as the New Hampshire Senior Golfer’s Association.

**Major Tournaments.** No major professional golf championships were held in 2010. However, an LPGA developmental tour event and LPGA seniors tour event were hosted in New Hampshire in 2010. They include: “The International at Concord” tournament, which is part of the Duramed FUTURES Tour and was played at Beaver Meadow Golf Course in Concord, NH; and the LPGA Legends Tour Handa Cup, which was hosted by Wentworth by the Sea Country Club in Rye, NH.

| New Hampshire’s Golf Tournament & State Golf Association Revenues in 2010 (\$ millions) |              |
|---|--------------|
| <b>TOTAL<sup>1</sup></b>  | <b>\$1.5</b> |

**Charitable Events.** Overall, SRI estimates that the amount of charitable giving attributed to the game of golf in New Hampshire to be \$9.65 million in 2010. This estimate is derived from a national study<sup>9</sup> based on the number of charitable golf outings/events held each year; the discounted fees, services and staff time for these events; as well as the charitable giving associated with professional golf tournaments. Charitable giving is not included in economic impact estimation because it is a direct transfer of income. Nevertheless, it is an important golf industry contribution to the state.

| Charitable Giving by New Hampshire Golf Industry in 2010 (\$ millions) |               |
|--|---------------|
| <b>TOTAL</b>   | <b>\$9.65</b> |

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<sup>9</sup> National Golf Foundation (2002). *The Charitable Impact Report*, November 2002.

## E. REAL ESTATE

In analyzing golf-related residential real estate, SRI collected data on two components: (1) new golf-related residential construction and (2) the “golf” premium associated with the sale of golf community homes.

| New Hampshire’s Golf Real Estate Revenues in 2010 (\$ millions) |               |
|---|---------------|
| <b>Golf-Related Residential Construction</b>                    | <b>\$1.53</b> |
| <b>Realized Golf Premium</b>                                    | <b>\$2.09</b> |
| <b>TOTAL</b>  | <b>\$3.62</b> |

Note: The sale of existing homes is considered a transfer of assets rather than new economic output, so the golf premium that is realized in the sale of an existing home is not included in the economic impact analysis.

**Golf-related residential construction.** For this industry segment, SRI used NGF data on new golf facilities openings and construction, as well as online research to identify golf courses with possible residential construction in the study base year (2010). We then contacted these developments and real estate agents to collect information on the size of the development, the number of homes/townhomes/condos under construction in 2010, and the average construction costs per type of home (i.e., townhouse or single family home). Construction values can vary considerably depending on such factors as the location of golf communities within the state, the proportion of townhouses versus single family homes, and overall real estate market conditions (e.g., high-growth metro regions versus more rural parts of the state).

SRI identified a small number of golf communities with one or two homes under construction in 2010. The overall real estate market and economic conditions in 2010 continued to depress new home construction, including homes in golf communities and at golf resorts. Examples of New Hampshire golf communities with new home construction include the 590-home Owl’s Nest Resort & Golf Club development, with an 18-hole championship golf course located in the White Mountains, and the private resort community at Hale’s Location Country Club with 118 home sites. Multiplying the total number of new homes under construction with the average construction cost per unit yielded a total 2010 golf-related residential construction figure of \$1.53 million.

**Realized golf premium.** The “golf” premium is the extra value a homeowner can expect to receive on the sale of a housing unit located in a golf community that is above and beyond the premium associated with a home’s other features or amenities (e.g., square footage, fixtures, landscaping, etc.). SRI arrived at a conservative estimate of this premium of \$25,000 per unit, given current economic conditions. Multiplying the approximately 9 existing New Hampshire golf communities by 300, the mean number of housing units per golf course, we arrive at a total of 2,700 golf community homes. In 2010, the home

turnover rate (percentage of homes sold relative to the total housing stock) was 3.1 percent in New Hampshire. Therefore, the realized golf premium was calculated by multiplying the home turnover rate by the total number of golf community homes by the average golf premium per unit. SRI estimates New Hampshire's golf real estate premium was approximately \$2.09 million in 2010.

## F. HOSPITALITY/TOURISM

Although a large and critical golf industry segment, there are no national sources of state-level golf tourism data. SRI calculates a state's total golf tourism revenues by collecting data for two types of figures: (1) the annual number of golf-related trips and (2) average spending per trip.

**Number of golf-related trips.** SRI used the 2010 estimate available for total New Hampshire domestic visitor trips from the New Hampshire Division of Travel and Tourism Development: 33.2 million.<sup>10</sup> Using data for fiscal year 2010 and applying it to calendar year 2010, this comes out to 24.2 million day trips and 8.9 million overnight trips in 2010.<sup>11</sup>

SRI defines a "golf trip" as a trip in which a New Hampshire resident or non-resident travels 50-plus miles to, through, or within the state and plays golf while on this trip. Golf-related trips include both overnight and day trips. This figure includes trips to New Hampshire golf resort destinations (of which New Hampshire has seven), golf outings while on vacation or business travel, as well as trips by New Hampshire residents to play golf courses in other parts of the state. People also travel to watch the golf pros and upcoming golf talent battle it out at the professional and amateur golf tournaments played in New Hampshire. In 2010-2011, TNS TravelsAmerica estimated that approximately 1.8 percent of New Hampshire's domestic travel parties played golf while on a trip.<sup>12</sup> To estimate the percentage of domestic visitors who played golf while on a trip, SRI adjusted this figure downwards to 1.2 percent,

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<sup>10</sup> Institute for New Hampshire Studies at Plymouth State University. *NH Travel Barometer 2010 Annual*. <http://oz.plymouth.edu/inhs/Barometers/> Courtesy of the New Hampshire Department of Resources and Economic Development's Division of Travel and Tourism Development. SRI calculated there were approximately 33.2 million domestic visitor trips based on the total 34.19 million visitor trips (international and domestic) reported in 2010, of which approximately 3 percent were international visitors.

<sup>11</sup> Institute for New Hampshire Studies at Plymouth State University. *New Hampshire Fiscal Year 2010 Tourism Satellite Account*. <http://oz.plymouth.edu/inhs/Barometers/> Courtesy of the New Hampshire Department of Resources and Economic Development's Division of Travel and Tourism Development. In FY 2010, there were 9.06 million overnight trips out of 33.6 million total trips. Applying this proportion of overnight trips (27.0%) to 34.2 million trips in calendar year 2010 results in an estimated 9.2 million overnight trips and 25.0 million day trips.

<sup>12</sup> TNS TravelsAmerica, courtesy of the New Hampshire Department of Resources and Economic Development's Division of Travel and Tourism Development.

since not everyone in a travel party (of which the average size was 2.6 visitors) would be playing golf.<sup>13</sup> By applying this adjusted percentage to the number of New Hampshire domestic visitor trips in 2010 (33.2 million total, including 24.2 million day trips and 8.9 million overnight trips), SRI estimated that there were 397,972 golf trips made in New Hampshire in 2010, including 290,661 golf day trips and 107,310 golf overnight trips.

**Average spending per golf trip.** SRI estimated that average spending per golf trip in New Hampshire in 2010 was \$71 per day trip and \$652 per overnight trip. This includes spending on accommodation, local transportation, food and beverage, entertainment, gifts and so on. Greens fees and cart fees are not included as they are already captured in the Golf Facility Operations revenues. To estimate average golf trip expenditure, we began with national golf trip survey data from the National Golf Foundation’s *The U.S. Golf Travel Market, 2003 Edition* report<sup>14</sup> and adjusted average trip spending based upon online research of New Hampshire golf packages and relative price levels in New Hampshire vis-à-vis the rest of the country. Multiplying the total number of golf trips (day and overnight) by average spending per golf trip (day and overnight), SRI found that total golf-related tourism spending in New Hampshire was \$90.8 million in 2010.

| New Hampshire’s Golf-Related Travel Expenditures in 2010 |                       |
|--|-----------------------|
| # Golf person day trips                                  | 290,661               |
| Average travel \$ per person per day trip                | \$71.45               |
| # Golf person overnight trips                            | 107,310               |
| Average travel \$ per person per overnight trip          | \$652.37              |
| <b>Total</b>   | <b>\$90.8 million</b> |

## G. GOLF’S ECONOMIC IMPACT

The impact of golf on a state’s economy includes both the direct impact of the sector itself (its core and enabled industries), as well as the indirect and induced (or multiplier) impacts that are supported by golf industry employment and expenditures.

**Direct economic impact.** The direct economic impact of golf is simply the size of the golf industry cluster within the state economy in terms of revenues. The “state golf economy” can be calculated by adding together the size of each of the core and enabled industries calculated in the sections above:

<sup>13</sup> This estimate of 1.2 percent of visitors to New Hampshire playing golf while on a trip is in line with estimates for surrounding states (1.0 percent for New York, New Jersey, and Connecticut; and 2.1 percent for Massachusetts).

<sup>14</sup> See “Average Travel Spending” table on p.16 in NGF (2003), *U.S. Golf Travel Market*, available at: <http://www.ngf.org/cgi/catalogsearchdetail.asp?ITEMNUMBER=99MR002>. SRI adjusted for inflation from 2002-2010, since 2002 is NGF’s most recent on golf travel survey.

| Direct Impact of the State Golf Economy |                                  |
|---|----------------------------------|
| +                                       | Golf Facility Operations         |
| +                                       | Golf Course Capital Investment   |
| +                                       | Golf-Related Supplies            |
| +                                       | Media, Tournaments, Associations |
| +                                       | Real Estate                      |
| +                                       | Hospitality/Tourism              |
| =                                       | Size of State Golf Economy       |

**Indirect/induced economic impact (multiplier impact).** Golf course facilities and the companies that provide goods and services to the golf industry, in turn, purchase goods and services from other companies. These purchases are considered the “indirect” impacts of the golf sector. Furthermore, the employees directly employed by the golf sector will spend much of their incomes in the region, creating more spending and more jobs in the economy. These impacts are considered “induced” impacts. Together, the indirect and induced impacts make up the multiplier impact of the golf economy.

Multiplier values vary from region to region, based on the unique characteristics of the state’s or region’s economy. Industries with more extensive linkages to other industries within the local economy will have a greater multiplier effect on final economic activity relative to the initial, direct effect. Conversely, economies and industry sectors dependent on a large share of imported supply will have smaller multiplier effects. For this study, the RIMS II (Regional Input-Output Multipliers), calculated by the U.S. Bureau of Economic Analysis, were used to calculate the multiplier impact of New Hampshire’s golf economy.

| <b>Golf's Impact on New Hampshire's Economy (2010)</b> |                |                 |                |                                   |                   |  |
|--|----------------|-----------------|----------------|-----------------------------------|-------------------|--|
| <b>INDUSTRY</b>  | <b>DIRECT</b>  | <b>INDIRECT</b> | <b>INDUCED</b> | <b>TOTAL OUTPUT (\$ millions)</b> | <b>TOTAL JOBS</b> | <b>TOTAL WAGE INCOME (\$ millions)</b> |
| Golf Facility Operations                               | \$157.4        | →               |                | \$295.9                           | 3,879             | \$87.8                                 |
| Golf Course Capital Investment*                        | \$9.7          | →               |                | \$0                               | 0                 | \$0                                    |
| Golf-Related Supplies                                  | \$26.8         | →               |                | \$49.8                            | 384               | \$12.7                                 |
| Tournaments & Associations                             | \$1.5          | →               |                | \$3.2                             | 32                | \$0.9                                  |
| Real Estate **   | \$3.6          | →               |                | \$3.2                             | 25                | \$1.0                                  |
| Hospitality/Tourism                                    | \$90.8         | →               |                | \$172.9                           | 1,867             | \$48.7                                 |
| <b>TOTAL</b>   | <b>\$289.8</b> | <b>→</b>        |                | <b>\$525.1</b>                    | <b>6,187</b>      | <b>\$151.2</b>                         |

Note: Columns may not sum due to rounding. To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of \$289.8 million the portion of capital investment that is investment in existing facilities (in this case the entire \$9.7 million because there was no new course construction in 2010) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$2.1 million of \$3.6 million). This is because:

\*Golf course capital investments—Only new course construction has an indirect and induced economic impact. Other types of facility capital investment are typically financed through facility revenues and, therefore, are omitted to avoid double-counting.

\*\*Real Estate—Only golf residential construction has an indirect and induced impact. The golf premium associated with golf real estate is considered a transfer of assets rather than new economic activity.

Numbers in columns may not sum due to rounding.

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