

# THE WISCONSIN GOLF ECONOMY

## FULL REPORT

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





# The Wisconsin Golf Economy

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## ACRONYMS

CMAA	Club Managers Association of America
GCBA	Golf Course Builders Association of America
GRAA	Golf Range Association of America
GCSAA	Golf Course Superintendents Association of America
GCOW	Golf Course Owners of Wisconsin
LPGA	Ladies Professional Golf Association
NGCOA	National Golf Course Owners Association
PGA	The Professional Golfers' Association of America
USGA	United States Golf Association
WGCSAA	Wisconsin Golf Course Superintendents Association of America
WPGA	Wisconsin Section of The PGA of America
WSGA	Wisconsin State Golf Association
WWSGA	Wisconsin Women's State Golf Association
WGF	World Golf Foundation

## I. STUDY OVERVIEW

Home to 499 golf facilities, golf in the Badger State is more than an enjoyable pastime —it is a key industry contributing to the vitality of Wisconsin’s economy. In 2008, the size of Wisconsin’s direct golf economy was approximately \$1.2 billion. 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 these golf-related activities is considered, Wisconsin’s golf industry generated approximately \$2.4 billion of direct, indirect and induced economic output, \$771.5 million of wage income, and 38,431 jobs in 2008.

The golf industry’s \$1.2 billion in direct revenues supports economic activity comparable to several other important industries in the state: medical device manufacturing (\$2.4 billion), corn production (\$1.7 billion), and breweries (\$851.3 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 Wisconsin, to bring consistency to the industry measurement and reporting process. This report describes and analyzes Wisconsin’s golf industry including the revenues and economic impact generated by the industry. Such analysis will assist Wisconsin’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
- Building credibility and recognition of the golf industry as a significant business sector and a driver of economic activity in the state.

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<sup>1</sup> U.S. Census Bureau (2010). 2007 Economic Census, Geographic Series: Electromedical & Electrotherapeutic Apparatus Manufacturing (NAICS 334510), and U.S. Census Bureau (2005). 2002 Economic Census, Geographic Series: Breweries (NAICS 31212). SRI used the GDP implicit price deflator to inflate industry revenue data to 2008 dollars. U.S. Department of Agriculture, Economic Research Service (2010), “Top Commodities, Exports, and Counties in 2008,” Wisconsin State Fact Sheet.

<sup>2</sup> Key industry stakeholders comprising the Wisconsin Golf Alliance include representatives from (in alphabetical order): the Badger Chapter of the Club Managers Association of America the Golf Course Owners of Wisconsin, the Wisconsin Golf Course Superintendents Association, the Wisconsin Section of The PGA of America, and the Wisconsin State Golf Association.

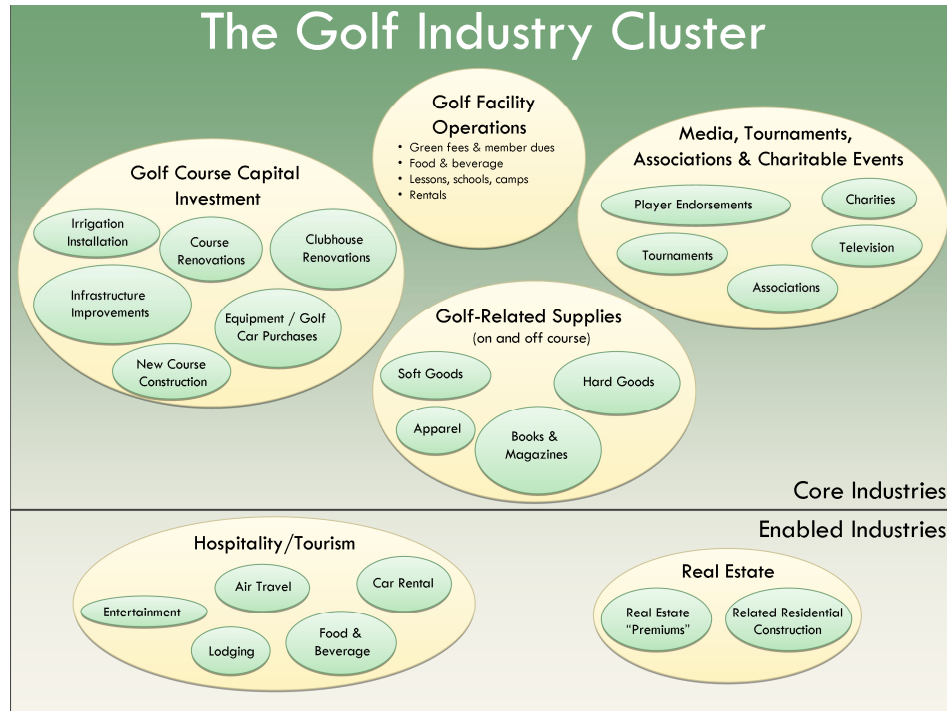
## **II. ANALYTICAL FRAMEWORK**

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 p.3). 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 ( 2006-2008 data)	2002 Economic Census; state task force; NGF Facility Database, multiple years
Avg. revenues by type of facility	PGA Facility Operations Survey, multiple years (2006-2008 data)	2002 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 data)	National Golf Foundation; state task force
Number of golf courses under construction in current year	National Golf Foundation (2007, 2008 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, 2008 data)	2006 PGA Compensation Survey (2005 data)
Golf apparel	National Sporting Goods Association (2007, 2008 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, 2008 data)	Amazon and Barnes & Noble for top golf book sales
<b>Major Tournaments</b>		
# of major tournaments held in state	State task force	Major golf associations
Visitor attendance at tournaments, tournament revenues	Major golf associations	State task force or state associations
<b>Associations &amp; Charitable Events</b>		
# of major state-level golf associations	State counterparts of national golf associations	State task force
Annual revenues/budgets	State golf associations	State task force
# of employees	State golf associations	State task force
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; real estate/development agencies	Interviews with golf community developers
# of lots per course	Interviews with golf course architects and real estate developers	Golf Course Builders Association of America, National Golf Course Owners Association,

State Golf Economy Indicators and Data Sources		
Indicator	Primary source	Cross-validation source
Avg. construction costs per home and real estate premium	Interviews with real estate developers	Golf Course Builders Association of America, National Golf Course Owners
Hospitality/Tourism		
# of golf travelers or # of golf-related trips to the state	TIA/D.K. Shifflet & Associates	State department of tourism/recent surveys/studies
Avg. spending per traveler or per trip	TIA/D.K. Shifflet & Associates	State department of tourism/recent surveys/studies; National Golf Foundation

### III. THE SIZE OF WISCONSIN'S GOLF ECONOMY

SRI estimates the total size of Wisconsin's golf economy in 2008 was approximately \$1.2 billion. This estimate is comprised of \$691.1 million in core industries and an additional \$465.3 million in enabled industries, as illustrated in the table below.

Size of Wisconsin's Golf Economy in 2008 by Industry Segment (\$ millions)	
<b>Core Industries</b>	
Golf Facility Operations	<b>\$579.9</b>
Golf Course Construction and Capital Investment	<b>\$44.0</b>
Golf-Related Supplies (retail margin and manufacturing exports)	<b>\$58.7</b>
Major Golf Tournaments and Associations	<b>\$8.5</b>
<b>TOTAL CORE INDUSTRIES</b>	<b>\$691.1</b>
<b>Enabled Industries</b>	
Real Estate	<b>\$57.2</b>
Hospitality/Tourism	<b>\$408.1</b>
<b>TOTAL ENABLED INDUSTRIES</b>	<b>\$465.3</b>
<b>TOTAL GOLF ECONOMY</b>	<b>\$1,156.4</b>

#### A. Core Industries

##### Golf Facility Operations

At the center of any golf economy lies 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. Wisconsin's 499 golf courses, 31 stand-alone ranges, and 45 miniature golf facilities generated approximately \$579.9 million of revenues in 2008.

Wisconsin Golf Facility Revenues in 2008 (\$ millions)	
Golf Facilities	<b>\$558.7</b>
Practice Ranges & Alternative Facilities	<b>\$21.3</b>
<b>TOTAL<sup>1</sup></b>	<b>\$579.9</b>

Note: <sup>1</sup> Golf facility revenues exclude on-course merchandise sales, which are included in the Golfer Supplies industry segment. Numbers in column do not sum due to rounding.

This is a sizeable industry, but even more significant when compared to other popular revenue-generating sports. For example, Wisconsin's golf facilities generate revenues comparable to the total revenues of all other spectator sports in the state combined—e.g., football, baseball, basketball and racetracks. These other spectator sports generated revenues of \$560.8 million in 2007, or \$572.8 million in 2008 inflation-adjusted dollars.<sup>3</sup>

### Golf Course 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 Wisconsin's golf course capital investment is divided into two segments: (1) capital investment at existing facilities and (2) new course construction. Together, Wisconsin's golf facilities made \$44.0 million worth of capital investments in 2008: \$31.1 million of investments at existing facilities and \$12.9 million for the construction of new courses.

Wisconsin Golf Course Construction and Capital Investment in 2008 (\$ millions)	
Golf Course Capital Investment <sup>1</sup>	<b>\$31.1</b>
New Course Construction	<b>\$12.9</b>
<b>TOTAL</b>	<b>\$44.0</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.

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

### Golf-Related Supplies

In 2008, Wisconsin golfers spent significant sums on golf balls, golf clubs, golf apparel, and golf instructional books and DVDs. The economic value that accrues to a state comes from both the production of these golf-related goods, as well as retail sales of such items. Wisconsin is home to a small number of companies that produce golf course site furnishings, custom clubs, and accessories—e.g., The Prestwick Golf Group, Golf Solutions, Professional Golf Software, etc. In 2008, Wisconsin manufacturers' total value-added shipment of golf-related products was approximately \$3.1 million. On the retail side, Wisconsin retailers and golf facilities earned approximately \$55.6 million on the sale of \$137.2 million of golf equipment, apparel, and media in 2008. In total, the Golfer Supplies segment contributed \$58.7 million in revenues to the Wisconsin economy.

<b>Wisconsin Manufacturers' Value-Added Exports of Golf-Related Products in 2008 (\$ millions)</b>	
<b>TOTAL</b>	<b>\$3.1</b>

<b>Wisconsin Retailers' Net Revenues on Consumer Purchases of Golfer Supplies in 2008 (\$ millions)</b>		
	<b>Total purchases</b>	<b>Retail sales margin</b>
<b>Golf Equipment (retail margin)</b>	<b>\$65.1</b>	<b>\$26.4</b>
<b>Golf Apparel (retail margin)</b>	<b>\$71.4</b>	<b>\$28.9</b>
<b>Golf Media (retail margin)</b>	<b>\$0.8</b>	<b>\$0.3</b>
<b>TOTAL</b>	<b>\$137.2</b>	<b>\$55.6</b>

Note: This includes on-course and off-course purchases of golf equipment, apparel and media. Column does not sum due to rounding. The margin does not account for unsold inventory. It is the margin on the sale of merchandise.

### State Golf Associations, Tournaments and Charitable Events

#### *Associations*

Numerous associations represent the game of golf in Wisconsin. The largest golf associations include the Wisconsin State Golf Association (WSGA), the Wisconsin Section of The PGA of America (WPGA), the Wisconsin Golf Course Superintendents Association, the Golf Course Owners of Wisconsin (GCOW), the Badger Chapter of Club Managers Association of America, the Wisconsin Women's State Golf Association, various chapters of the Executive Women's Golf Association (e.g., the Fond du Lac area, Fox City/Green Bay, Milwaukee and Madison), and the Senior Golf Association of Wisconsin. A number of golf associations and foundations support the development of young golfers in the state: The First Tee chapters of Madison, Milwaukee

County, and Northeast Wisconsin; the WPGA Junior Foundation; the WSGA Foundation; and the Learning Through Golf Foundation, among many others. In 2008, Wisconsin golf associations generated total revenues of \$5.0 million.

### *Professional Tournaments*

In 2008, Wisconsin hosted one PGA Tour event and an LPGA FUTURES Tour event. The PGA Tour's US Bank Championship has been played each July at Deer Park Golf Club in Milwaukee. The event has a 42-year history in the state.<sup>4</sup> The LPGA Duramed FUTURES Tour is the developmental tour of the LPGA. Wisconsin was part of the FUTURES Tour schedule from 1995 to 2008. In 2008, the Aurora Health Care Championship was played at Geneva National Golf Club in Lake Geneva, WI. Currently, Wisconsin is gearing up to host the PGA Championship at Whistling Straits in Kohler, WI, from August 12-15, 2010. Wisconsin last hosted the PGA Championship in 2004, also at Whistling Straits. A major championship golf event, like the PGA Championship, has a considerable economic impact in the host state. An economic impact evaluation of the 2004 event found the tournament generated \$76.4 million for Wisconsin's economy attracting over 94,000 spectators.<sup>5</sup> In 2008, Wisconsin's one professional tournament generated approximately \$3.5 million, excluding tournament purses and TV broadcasting.

<b>Wisconsin's Major Golf Tournaments &amp; Golf Association Revenues in 2008 (\$ millions)</b>	
<b>Major tournaments</b>	<b>\$3.5</b>
<b>Associations</b>	<b>\$5.0</b>
<b>TOTAL</b>	<b>\$8.5</b>

### *Charitable Giving*

Wisconsin's golf industry makes substantial contributions to a variety of charities. For example, in 2008 the US Bank Championship generated \$525,000 for local and state charities, such as Midwest Athletes Against Childhood Cancer, Inc. (the MACC Fund) which is dedicated to funding childhood cancer and related blood disorder research. The event has donated more than \$5 million to local and state charities over the past 10 years. Similarly, the Aurora Health Care Championship, part of the LPGA FUTURES Tour, benefitted the Geneva National Foundation which provides grants to local organizations that support people with disabilities and Aurora Health Care's provision of medical services for the uninsured. Locally, Wisconsin golf clubs host

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<sup>4</sup> The US Bank Championship is currently seeking a new title sponsor.

<sup>5</sup> The NorthStar Economics study (2004) estimated out-of-state spectator spending (31,000 out-of-state spectators times average spending of \$1,470 during their stay) to be \$46 million. Applying the relevant economic multipliers to capture indirect and induced effects, the total economic impact of out-of-state spectator spending was \$62.9 million. Additionally, when multipliers were applied to the PGA TOUR's spending in Wisconsin to host the tournament, the total economic impact totaled \$13.4 million. Adding the two components, NorthStar arrived at its conservative estimate of \$76.4 million of total tournament-generated economic impact.

several events in support of a number of local, state, and national charities. For example, in 2008, the Tripoli Country Club hosted the Skip Kendall Charity Pro-Am Fore Kids raising approximately \$400,000 for the Children’s Hospital of Wisconsin. North Hills Country Club hosted the Vince Lombardi Golf Classic which raised \$100,000 for funds for cancer research, education, and treatment at the Vince Lombardi Cancer Clinics operating throughout eastern Wisconsin. 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 Wisconsin to be \$46.0 million in 2008.

Charitable Giving by Wisconsin Golf Industry in 2008 (\$ millions)	
<b>TOTAL</b>	<b>\$46.0</b>

## B. Enabled Industries

### Real Estate

Real estate developers use amenities to attract new home buyers, and golf is a key amenity in Wisconsin. The development of new golf communities in Wisconsin followed the rise in the national real estate market which peaked in 2005 in terms of new home starts and existing home sales. In 2008, many golf communities were mid-way through build out, with the number of new homes under construction deeply curtailed by the economic downturn. The new golf community developments offer a mix of single family homes and townhomes/condos. Examples of golf community developments with active home construction in 2008 include: the 483-home The Legend at Bergamont golf community with an 18-hole Andy North golf course, which was a Golf Digest “Top 10 New Courses in America” in 2006; the Glacier Ridge Condominiums overlooking the Glacier Golf Course at Devil’s Head Resort; the 539-home Geneva National golf community development surrounding 54 holes of golf designed by Arnold Palmer, Gary Player and Lee Trevino; and the 62-home Estates at Strawberry Creek, a private golf community in Kenosha, WI; among many others.

New golf-related real estate construction generated \$45.9 million in 2008. Furthermore, in 2008 there were approximately 49 golf communities in Wisconsin, and we estimate the “golf” premium associated with the sale of real estate in these developments to be \$11.3 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>Wisconsin's Golf Real Estate Revenues in 2008 (\$ millions)</b>	
<b>Golf-Related Residential Construction</b>	<b>\$45.9</b>
<b>Realized Golf Premium</b>	<b>\$11.3</b>
<b>TOTAL</b>	<b>\$57.2</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 Wisconsin, golf is an important tourism segment, alongside trips to the state's lakes and rivers, parks, and other natural attractions. The state's "Travel Wisconsin" tourism website features golf as a key outdoor activity (<http://www.TravelWisconsin.com>). In 2008, SRI estimates golf-related tourism spending in Wisconsin was \$408.1 million. This is based on the following estimates of golf trips and associated expenditures by Wisconsin residents and non-residents: (1) an estimated 805,035 *day* trips with average golf trip spending of \$58, and (2) an estimated 818,623 *overnight* trips with average trip spending of \$442.

<b>Wisconsin' Golf-Related Travel Expenditures in 2008</b>	
# of day trips	805,035
Average travel \$ per day trip	\$57.96
# of overnight trips	818,623
Average travel \$ per overnight trip	\$441.56
<b>TOTAL</b>	<b>\$408.1 million</b>

## **IV. GOLF'S ECONOMIC IMPACT IN WISCONSIN**








Golf's impact on Wisconsin'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 the overall 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 2008, the \$1.2 billion Wisconsin golf industry supported:

- A total economic impact of \$2.4 billion for the state of Wisconsin including the indirect and induced economic impacts stimulated by golf sector activity;
- A total employment impact of 38,431 jobs; and
- Total wage income of \$771.5 million.

<b>Golf’s Impact on Wisconsin’s Economy (2008)</b>						
<b>Industry</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>TOTAL OUTPUT (\$ million)</b>	<b>TOTAL JOBS (\$ million)</b>	<b>TOTAL WAGE INCOME (\$ million)</b>
<b>Golf Facility Operations</b>	\$579.9			\$1,179.1	20,635	\$396.1
<b>Golf Course Capital Investment*</b>	\$44.0			\$30.9	278	\$9.7
<b>Golf-Related Supplies</b>	\$58.7			\$122.1	1,506	\$37.5
<b>Tournaments &amp; Associations</b>	\$8.5			\$19.4	268	\$6.8
<b>Real Estate **</b>	\$57.2			\$109.9	987	\$34.7
<b>Hospitality/Tourism</b>	\$408.1			\$902.8	14,757	\$286.6
<b>TOTAL</b>	<b>\$1,156.4</b>			<b>\$2,365.0</b>	<b>38,431</b>	<b>\$771.5</b>

Note: To calculate golf’s total economic impact, SRI subtracted from the direct golf economy impact of \$1.2 billion the portion of capital investment that is investment in existing facilities (\$31.1 million of \$44.0 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$11.3 million of \$57.2 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.

## V. 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 Wisconsin in 2008 or the latest available year.

Estimates of Wisconsin Golf Facilities from Various Sources, 2002-2008					
	2002 Census (# of facilities minus resorts & municipals) <sup>1</sup>	2008 PGA (# of facilities) <sup>2</sup>	2008 NGF (# of facilities) <sup>3</sup>	2008 Adjusted NGF (# of facilities) <sup>4</sup>	2008 NGF (# of 18-hole equivalent courses) <sup>3</sup>
<b>PRIVATE</b>	<b>67</b>	<b>78</b>	<b>60</b>	<b>60</b>	<b>58</b>
<b>PUBLIC</b>	<b>336</b>	<b>370</b>	<b>404</b>	<b>425</b>	<b>354.5</b>
Daily fee/semi-private		303		358	
Municipal				65	
Military		67			
University				2	
<b>RESORT</b>		<b>14</b>	<b>35</b>	<b>11</b>	<b>40.5</b>
<b>TOTAL</b>	<b>403</b>	<b>462</b>	<b>499</b>	<b>499</b>	<b>453</b>

Sources: <sup>1</sup> U.S. Census Bureau, *2002 Economic Census*.

<sup>2</sup> Professional Golfers' Association of America (2008). *Facility Database*.

<sup>3</sup> NGF (2009). Total Facility Supply Tables 5-10, *Golf Facilities in the U.S., 2008 edition*, pp.5-10.

<sup>4</sup> The "2008 Adjusted NGF" column is based on NGF's total golf facility number and uses a breakdown of facilities based on SRI review of WSGA and NGCOA lists of Wisconsin facilities and online research.

The PGA of America and NGF total facility counts fall within a relatively narrow range, 462 vs. 499. In addition to these data, SRI also reviewed WSGA and NGCOA lists of Wisconsin facilities. SRI used these lists to verify the breakdown of facilities by type. While the PGA and NGF total facility ranges are relatively narrow, they differ more by type of facility. For example, the PGA data indicate 14 golf resorts, and the NGF data indicate 35. After reviewing WSGA and NGCOA lists of Wisconsin facilities and conducting online research on resorts<sup>6</sup>, SRI concluded that the NGF facility numbers are most representative of the number of golf facilities by type of facility in Wisconsin. The "Adjusted NGF 2008" column (second from right) indicates the breakdown of public facilities between daily fee, municipal, military, university, and resort.

**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), (2) the type of facility—whether a golf course facility is private, daily fee, resort, municipal, etc., and (3) location of the facility—rural or metropolitan area.

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

<sup>6</sup> SRI's online research identified the following 11 golf resorts as being a minimum of 3-star accommodation on or adjacent to a golf course: Chula Vista Resort, Devil's Head Resort, Fox Hills Resort, Grand Geneva Resort & Spa, House on the Rock Resort, Inn on Woodlake (Destination Kohler), Lake Lawn Resort, Olympia Resort & Conference Center, Tagalong Golf & Resort, The American Club (Destination Kohler), and Wilderness Hotel & Golf Resort.

sector organizations are often based on low response rates (less than 30 percent), all establishments are 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. Still, the latest 2002 Economic Census<sup>7</sup> contains revenue, payroll, and employment data on 12,261 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 2008. 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 for: (1) public (daily fee) facilities for two regions (Sunbelt and Frostbelt) by fee level (mid-range and premium) and (2) private facilities—a national average—by fee level (mid-range and premium). For the table, below, SRI calculated a single NGF national average revenue figure for each category by using the sample size and mean.

Estimates of Wisconsin Average Revenue per Facility Data From Different Sources, 2002-2008				
	Census (2002) <sup>1</sup>	PGA (2007) <sup>2</sup>	PGA (2008) <sup>3</sup>	NGF (2005) <sup>4,5</sup>
<b>Private facility</b>	\$1,824,836	\$2,063,162	\$2,159,620	\$3,564,339
<b>Daily fee facility</b>	\$718,655	\$1,221,823	\$958,614	\$1,291,582
<b>Resort facility</b>	X	<b>\$3,016,652</b>	<b>\$1,212,800</b>	X
<b>Municipal/military/university facility</b>	X	\$1,352,699	\$927,998	X
<b>Driving range</b>	X	X	X	\$350,000
<b>Miniature golf</b>	\$186,289	X	X	X

Note: Bolded values are a Wisconsin, Michigan, Minnesota, Ohio and Illinois average.

Sources: <sup>1</sup> U.S. Census Bureau, *2002 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> NGF (2006). *Operating & Financial Performance Profiles of 18-hole Golf Facilities in the U.S., 2006 edition*.

<sup>5</sup> Golf Range Association of America (2006).

Average revenue data from the Census (2002), The PGA (2007 and 2008) and NGF (2005) are presented above. The PGA data indicate a slight increase between 2007 and 2008 in reported

<sup>7</sup> The most recent Economic Census is the 2007 Economic Census, but state-level data on Wisconsin golf facilities will not be publicly available until late summer or fall 2010.

average revenue for private facilities (\$2,063,162 in 2007 vs. \$2,159,620 in 2008) and a decline in reported average revenue for daily fee facilities (\$1,221,823 vs. \$958,614) and municipal/military/university facilities (\$1,352,699 vs. \$927,998). There was a significant difference in reported average revenue for golf resort facilities between 2007 and 2008: \$3,016,652 in 2007 vs. \$1,212,800. The reported average revenue for resort facilities is a regional average, because of the small sample size and low response rate. The PGA's resort average revenue figure is based on the responses of golf resorts in Wisconsin, Michigan, Minnesota, Ohio, and Illinois golf resorts. The difference in reported average revenue for golf resorts between 2007 and 2008 is likely due to differences in the mix of facilities that responded in each year, e.g., if more high-end facilities responded to the PGA survey in 2007 than in 2008, this would tend to skew the average revenue upwards significantly. In consultation with the Wisconsin Golf Alliance, SRI used the 2008 PGA average revenue data for private facilities, daily fee facilities, and municipal/military/university facilities and the 2007 PGA average revenue data for resort facilities.

2008 Golf Facility Operations Revenues		
Facility type	Calculation	Estimate
Private facilities	Average revenue <sup>1</sup>	\$1,901,043
	Number of facilities	60
	<b>Total revenue [1]</b>	<b>\$114,062,591</b>
Daily fee/semi-private facilities	Average revenue <sup>1</sup>	\$850,131
	Number of facilities	427
	<b>Total revenue [2]</b>	<b>\$363,005,937</b>
Municipal/military/university facilities	Average revenue <sup>1</sup>	\$776,122
	Number of facilities	67
	<b>Total revenue [3]</b>	<b>\$52,000,161</b>
Resort facilities	Average revenue <sup>1</sup>	\$2,691,203
	Number of facilities	11
	<b>Total revenue [4]</b>	<b>\$29,603,233</b>
Driving ranges	Average revenue	\$367,714
	Number of facilities	31
	<b>Total revenue</b>	<b>\$11,399,136</b>
Miniature golf facilities	Average revenue	\$219,384
	Number of facilities	45
	<b>Total revenue</b>	<b>\$9,872,267</b>
<b>TOTAL</b>	<b>Sum [1] to [6]</b>	<b>\$579,943,324</b>

Note: <sup>1</sup> In this table, on-course merchandise sales have been subtracted from average facility revenue, because on-course merchandise sales are included in the Golf-Related Supplies industry segment.

<sup>2</sup> Numbers in column may not sum due to rounding.

Sources: Private facility, daily fee facility, and municipal/military/university facility average revenue come from 2008 PGA Operations Survey data. Resort facility average revenue is from 2008 PGA Operations Survey data. Driving range average revenue is calculated using data from the Golf Range Association of America (2006). Miniature golf facilities revenue is calculated using data from the *2002 Economic Census*. Driving range and miniature golf facility revenue have been adjusted for inflation to 2008 dollars.

## 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.

Wisconsin Golf Course Construction and Capital Investment in 2008 (\$ millions)	
Golf Course Capital Investment <sup>1</sup>	<b>\$31.1</b>
New Course Construction	<b>\$12.9</b>
<b>TOTAL</b>	<b>\$44.0</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.

**Investment at existing courses.** Golf course 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. Maintenance expenses are not included. SRI examined golf course capital investment from two sources: NGF and the GCSAA. The GCSAA data comes from golf course capital budget questions included in its 2005 and 2008 Compensation Surveys. The 2008 data is broken down by: (1) type of facility, (2) number of holes at the facility and (3) agronomic region. The NGF's *2006 Operating and Financial Performance Profile* presents estimates of capital expenditures at: (1) public facilities by fee level (mid-range and premium) and divided into two regions (Sunbelt and Frostbelt); and (2) private facilities by size (those with revenues of less than \$3 million and those with revenues above \$3 million).

After review of both data sets, SRI applied the GCSAA data to our Wisconsin capital investment calculations. We estimated average facility investments in Wisconsin using the known distribution and type characteristics of facilities in the state. (See preceding section on number of facilities for sources.) These imply that each of Wisconsin's 439 public golf courses made average annual capital investments of approximately \$59,788 and each of Wisconsin's 60 private courses made average annual capital investments of \$80,245 in 2008, for a total capital investment of \$31.1 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 2008, NGF estimated that there were 1.5 new 18-hole equivalent golf course openings in Wisconsin and that 2.0 were under construction.

An estimate for the average investment for each new golf course in Wisconsin is derived from the Golf Course Builders Association of America's *2008 Guide to Estimating Cost for Golf Course Construction*. This database of golf course construction costs is based on a survey of golf course builders around the country and is divided into four construction regions. Using the values provided for Central Plains and the average ("normal") costs for each of the various construction categories (see box below), we estimate the average investment required to build a new golf course in Wisconsin is \$7.4 million.

To Build a Golf Course: Required Investments	
Mobilization	Greens Construction
Layout and Staking	Tees
Erosion Control	Bunkers
Clearing	Bridges
Selective Clearing	Bulkheading
Topsoil	Cart Paths
Excavation	Fine Grading
Rough Shaping	Seeding and/or Grassing
Drainage	
Irrigation	

This investment, however, is not entirely expended over one year but is rather disbursed over several years. Assuming the average course takes approximately two years to complete, we estimate the 3.5 courses that opened or were under construction in 2008 invest an average of \$3.7 million each, for a total of \$12.9 million.

### C. Golf-Related Supplies

This section explains our methodology for calculating Wisconsin manufacturers' out-of-state shipments of custom clubs and golf 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 golfer 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 working with the Wisconsin golf task force to identify major manufacturers of golf-related products in the state. We identified a small number of companies manufacturing golf

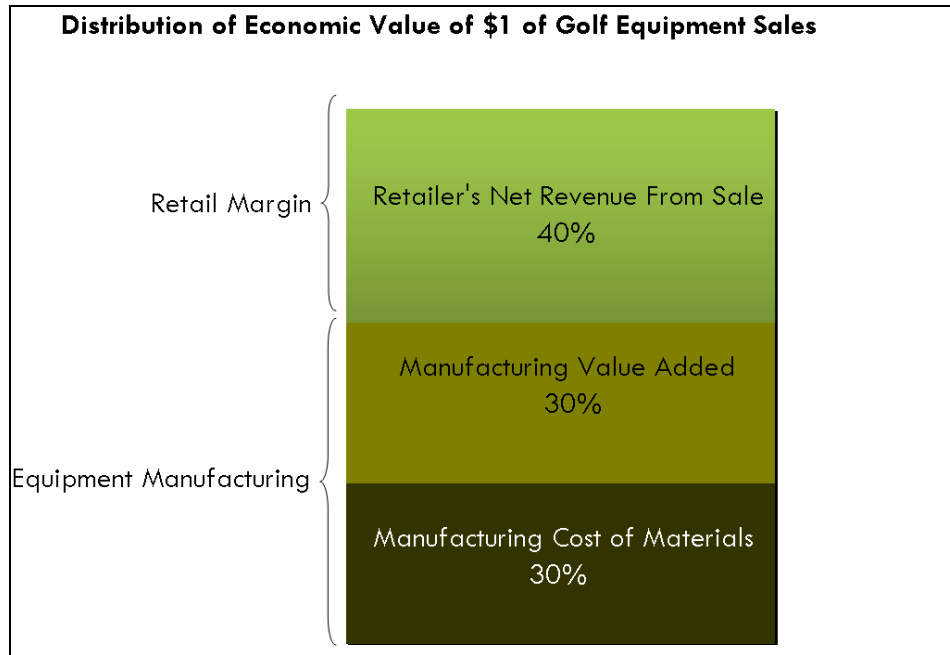
equipment and accessories in Wisconsin—e.g., The Prestwick Golf Group, Golf Solutions, Professional Golf Software, etc. We then conducted research on these companies to ascertain: (1) if they had headquarters, product R&D/design, or production facilities in Wisconsin, (2) the total value of their golf-related sales, and (3) 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*.

Wisconsin Manufacturers’ Value-Added Exports of Golf-Related Products in 2008 (\$ millions)	
TOTAL	\$3.1

**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 2008, NSGA reported total U.S. off-course and on-course purchases of individual golf clubs to be \$573.9 million. The NSGA survey found the East North Central region accounted for 14.2% of these purchases, or \$81.5 million. Within the East North Central region, one can estimate Wisconsin’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. Wisconsin represents 14.9% of total 18-hole equivalent courses in the East North Central region, so this weight was applied to the region total (\$81.5 million) to estimate \$12.1 million of individual golf club sales in the state of Wisconsin in 2008. Further, retail margins on final sales suggest that 40.5%, or \$4.9 million, of total sales was retained in the Wisconsin economy. (See graphic below.)



Wisconsin's On-Course and Off-Course Golf Equipment & Apparel Purchases, 2008		
Category	Calculation	Estimate (\$ million)
<b>Golf club sets</b>	East North Central region's sales	\$161.9
	WI's courses-based weight	14.9%
	<b>WI's share of sales [1]</b>	<b>\$24.1</b>
<b>Golf apparel</b>	East North Central region's sales	\$478.9
	WI's courses-based weight	14.9%
	<b>WI's share of sales, [2]</b>	<b>\$71.4</b>
<b>Golf balls</b>	East North Central region's sales	\$107.1
	WI's courses-based weight	14.9%
	<b>WI's share of sales, [3]</b>	<b>\$16.0</b>
<b>Golf clubs</b>	East North Central region's sales	\$81.5
	WI's courses-based weight	14.9%
	<b>WI's share of sales, [4]</b>	<b>\$12.1</b>
<b>Golf bags</b>	East North Central region's sales	\$54.6
	WI's courses-based weight	14.9%
	<b>WI's share of sales, [5]</b>	<b>\$8.1</b>
<b>Golf shoes</b>	East North Central region's sales	\$31.6
	WI's courses-based weight	14.9%
	<b>WI's share of sales, [6]</b>	<b>\$4.7</b>
<b>TOTAL</b>	<b>Sum of [1] to [6]</b>	<b>\$136.4</b>
<b>Retail sales margin</b>	<b>Multiply TOTAL by 40.5%</b>	<b>\$55.3</b>

Source: National Sporting Goods Association (2009). *The Sporting Goods Market in 2008*, 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 Wisconsin in 2008. 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 2008 were estimated to be \$769,728 with a retail sales margin of \$311,740. 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.

<b>On-Course and Off-Course Sales of Golf Books in Wisconsin, 2008</b>	
<b>Category</b>	<b>Estimate</b>
<b>Wisconsin retail book sales<sup>1</sup></b>	<b>\$183,268,649</b>
<b>Golf books as % of total book sales</b>	<b>0.4%</b>
<b>Total retail golf book sales</b>	<b>\$769,728</b>
<b>Retail sales margin</b>	<b>\$311,740</b>

Note: <sup>1</sup>Adjusted for inflation into 2008 dollars using the appropriate GDP deflator. Sources: Wisconsin retail book sales data from the 2002 Economic Census. 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.

<b>Wisconsin Retailers’ Net Revenues on Consumer Purchases of Golfer Supplies in 2008 (\$ millions)</b>		
	<b>Total purchases</b>	<b>Retail sales margin</b>
<b>Golf Equipment (retail margin)</b>	<b>\$65.1</b>	<b>\$26.4</b>
<b>Golf Apparel (retail margin)</b>	<b>\$71.4</b>	<b>\$28.9</b>
<b>Golf Media (retail margin)</b>	<b>\$0.8</b>	<b>\$0.3</b>
<b>TOTAL</b>	<b>\$137.2</b>	<b>\$55.6</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 Wisconsin State Golf Association (WSGA), the Wisconsin Section of The PGA of America (WPGA), the Wisconsin Golf Course Superintendents Association, the Golf Course Owners of Wisconsin (GCOW), the Badger Chapter of Club Managers Association of America, and the Wisconsin Women's State Golf Association, as well as seniors and other member-based golf associations.

**Major Tournaments.** In 2008, Wisconsin hosted one major golf championship, a PGA Tour event. We subtracted the tournament purse and cost of television broadcasting from total tournament revenues to estimate the revenues that remained in the state.

Wisconsin's Major Golf Tournament & Golf Association Revenues in 2008 (\$ millions)	
Major tournaments	\$3.5
Associations	\$5.0
<b>TOTAL</b>	<b>\$8.5</b>

**Charitable Events.** Overall, SRI estimates that the amount of charitable giving attributed to the game of golf in Wisconsin to be \$46.0 million in 2008. This estimate is derived from a national study<sup>8</sup> based on the number of charitable golf outings/events held; 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 Wisconsin's Golf Industry in 2008 (\$ millions)	
<b>TOTAL</b>	<b>\$46.0</b>

#### 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.

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<sup>8</sup> National Golf Foundation (2002). *The Charitable Impact Report*, November 2002.

<b>Wisconsin's Golf Real Estate Revenues in 2008 (\$ millions)</b>	
<b>Golf-Related Residential Construction</b>	<b>\$45.9</b>
<b>Realized Golf Premium</b>	<b>\$11.3</b>
<b>TOTAL</b>	<b>\$57.2</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 facility openings and construction, as well as online research to identify golf courses with residential construction in the study base year (2008). We then contacted these developments directly to collect information on the size of the development, the number of homes/townhomes/condos under construction in 2008, 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 several Wisconsin golf communities that were under development in 2008, although the overall real estate market and economic and financial conditions in 2008 sidelined a significant share of new home construction. Golf communities that had new home construction in 2008 include the Glacier Ridge Condominiums at Devil's Head Resort in Merrimac, WI; Geneva National in Lake Geneva, WI; Kestrel Ridge in Columbus, WI; The Legend at Bergamont in Oregon, WI; and Strawberry Creek in Kenosha, WI; among several others. Multiplying the total number of new homes under construction at these developments with the average construction cost per unit yielded a total 2008 golf-related residential construction figure of \$45.9 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.). Through industry interviews, SRI arrived at a conservative estimate of this premium of \$25,000 per unit. Multiplying the approximately 49 existing Wisconsin golf communities by 280, the mean number of housing units per golf course, we arrived at a total of 13,720 golf community homes. In 2008, the home turnover rate (percentage of homes sold relative to the total housing stock) was 3.3 percent in Wisconsin. 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 Wisconsin's golf real estate premium was approximately \$11.3 million in 2008.

## F. Hospitality/Tourism

### *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.** A number of organizations conduct surveys monitoring changes in trip volume and traveler preferences. Some of these surveys include golf participation questions. SRI used 2007 data from D.K. Shifflet & Associates on the number of "person-stays"<sup>9</sup> in Wisconsin as a baseline (83.4 million in total).<sup>10</sup> Because 2008 data were not available, SRI assumed that Wisconsin experienced the same decline in person-stays from 2007-2008 as the national average decline in person-stays (-2.6%).<sup>11</sup> Applying this percentage decline to 2007 Wisconsin person-stays, SRI arrived at an estimated 81.2 million Wisconsin person-stays in 2008.

There are no estimates available for the percentage of Wisconsin's visitors who played golf while on a trip, so SRI used the average of comparable statistics from surrounding states (Illinois, Indiana, Iowa, Michigan, and Minnesota) as a basis to estimate that 2.0% of all trips in Wisconsin were golf-related. This amounts to 1.62 million golf trips in Wisconsin in 2008. This figure includes trips to Wisconsin golf resort destinations (of which Wisconsin has 11), as well as trips 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 annually in Wisconsin.

DKSA estimated that 48.7% of leisure person-stays in Wisconsin were day trips and 51.3% were overnight in 2007.<sup>12</sup> No day/overnight detail was available for business person-stays in

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<sup>9</sup> D.K. Shifflet & Associates (DKSA) differentiates between person trips and person-stays. A "person-stay" is destination specific, therefore one person could take one trip to Wisconsin but visit relatives in Milwaukee and also spend a couple nights at a resort in Delavan. This would be considered two person-stays, one for Milwaukee and one for Delavan, but one person-trip. For this reason, there are typically more person stays, on average, than person trips. For the purposes of this study, SRI assumes that data on the percentage of trips that are golf-related (2%) and the breakdown between day trips and overnight trips are the same as the percentages for person stays.

<sup>10</sup> D.K. Shifflet & Associates (2008). Data provided by the Wisconsin Department of Tourism, for the seasonal year 2007 (December 2006 through November 2007). The number of 2008 person-stays in Wisconsin was estimated by SRI.

<sup>11</sup> D. K. Shifflet & Associates reported that there was a decrease of -2.6% from 2007 to 2008 for domestic person-trips in the United States; SRI assumed this rate of decline also applies roughly to U.S. domestic person-stays from 2007 to 2008.

<https://www.dksa.com/downloads/USForecast061809.pdf>

<sup>12</sup> D. K. Shifflet & Associates. Data provided by the Wisconsin Department of Tourism, for the seasonal year 2007 (December 2006 through November 2007). The number of 2008 day and overnight business person-stays in Wisconsin were estimated by SRI.

Wisconsin, so SRI applied available business trip data from Illinois, a neighboring state. In Illinois, 53.4% of business person-stays were day trips, while 46.6% were overnight.<sup>13</sup> Using a weighted average based on 67.2 million leisure and 16.1 million business person-stays in Wisconsin in 2007 (as reported by DKSA), SRI then estimated that 49.6% of all Wisconsin person-stays were day trips, while 50.4% of person-stays were overnight in 2007. We applied these same proportions to the 2008 person-stay estimates.

Using SRI’s estimates of total golf trips (1.62 million) and the percentage of day trips (49.6%) versus overnight trips (50.4%), SRI calculated that 805,035 Wisconsin golf *day* trips and 818,623 golf *overnight* trips were made in 2008. SRI defines a “golf trip” as a trip in which a Wisconsin resident or non-resident travels 50-plus miles to, through, or within the state and plays golf while on this trip. This figure (1.62 million total golf trips, day and overnight) seems plausible given the PGA of America’s estimate of 11.0 million rounds played in Wisconsin in 2005.<sup>14</sup> This translates into approximately 14.7% of total rounds played on Wisconsin courses being played by golfers from other parts of Wisconsin or from other states.

**Average spending per golf trip.** SRI estimated that average spending per golf trip in Wisconsin in 2008 was \$58 per day trip and \$442 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>15</sup> and adjusted average trip spending based upon cost of living in Wisconsin vis-à-vis the rest of the country, as well as other average trip expenditure research. Multiplying the total number of golf trips (day and overnight) by average spending per golf trip (day and overnight), SRI found that golf-related tourism spending in Wisconsin was approximately \$46.7 million for *day* trips and \$361.5 million for *overnight* trips, totaling \$408.1 million.

Wisconsin’ Golf-Related Travel Expenditures in 2008	
# Golf person day trips	805,035
Average travel \$ per person per day trip	\$57.96
# Golf person overnight trips	818,623
Average travel \$ per person per overnight trip	\$441.56
<b>Total</b>	<b>\$408.1 million</b>

<sup>13</sup> There were 10.91 million day business person-stays and 9.61 million overnight business person-stays in Illinois in 2007, which is 53.4% day trip versus 46.6% overnight. D.K. Shifflet & Associates. *Illinois & Chicago: 2007 Total Leisure Visitor Profile*, p. 22, “Illinois Volume Summary.”

<sup>14</sup> 2005 was the most recent year for which the rounds data was available.

<sup>15</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 2002-2008, since 2002 is NGF’s most recent on golf travel survey.

## 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:

Direct Impact of the State Golf Economy	
Core Industries	+ Golf Facility Operations
	+ Golf Course Capital Investment
	+ Golf-Related Supplies
	+ Media, Tournaments, Associations
Enabled Industries	+ 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 Wisconsin's golf economy.

<b>Golf's Impact on Wisconsin's Economy (2008)</b>						
<b>Industry</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>TOTAL OUTPUT (\$ million)</b>	<b>TOTAL JOBS (\$ million)</b>	<b>TOTAL WAGE INCOME (\$ million)</b>
<b>Golf Facility Operations</b>	\$579.9			\$1,179.1	20,635	\$396.1
<b>Golf Course Capital Investment*</b>	\$44.0			\$30.9	278	\$9.7
<b>Golf-Related Supplies</b>	\$58.7			\$122.1	1,506	\$37.5
<b>Tournaments &amp; Associations</b>	\$8.5			\$19.4	268	\$6.8
<b>Real Estate **</b>	\$57.2			\$109.9	987	\$34.7
<b>Hospitality/Tourism</b>	\$408.1			\$902.8	14,757	\$286.6
<b>TOTAL</b>	<b>\$1,156.4</b>			<b>\$2,365.0</b>	<b>38,431</b>	<b>\$771.5</b>

Note: To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of \$1.2 billion the portion of capital investment that is investment in existing facilities (\$31.1 million of \$44.0 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$11.3 million of \$57.2 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.

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