



# THE CALIFORNIA GOLF ECONOMY

## REPORT

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





# The California Golf Economy

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## ACRONYMS

CAG	California Alliance for Golf
CMAA	Club Managers Association of America
CMAA-CA	California Chapter of the Club Managers Association of America
CGCOA	California Chapter of the Golf Course Owners Association
CGCSA	California Golf Course Superintendents Association
GCBA	Golf Course Builders Association of America
GRAA	Golf Range Association of America
GSCAA	Golf Course Superintendents Association of America
LPGA	Ladies Professional Golf Association
NCGA	Northern California Golf Association
NCPGA	Northern California Section of the Professional Golfers Association
NGCOA	National Golf Course Owners Association
PWGA	Pacific Women's Golf Association
PGA	Professional Golfers' Association of America
PLGASC	Public Links Golf Association of Southern California
SCGA	Southern California Golf Association
SCPGA	Southern California Section of the Professional Golfers Association
USGA	United States Golf Association
WGANC	Women's Golf Association of Northern California
WGF	World Golf Foundation
WSCGA	Women's Southern California Golf Association

## I. STUDY OVERVIEW

With 926 courses and a large number of annual golf events, golf in the Golden State is more than an enjoyable pastime—it is a key industry contributing to the vitality of California’s economy. In 2006, the size of California’s direct golf economy was approximately \$6.9 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, California’s golf industry generated approximately \$15.1 billion of direct, indirect and induced economic output, \$4.8 billion of wage income and nearly 160,000 jobs in 2006.

California’s highly diversified economy includes a range of manufacturing industries (aerospace; computers and electronics; composite materials; etc.), service industries (health care; management; professional, technical and scientific; etc.); and agricultural industries. With \$6.9 billion in revenues in 2006, the golf industry is on par with several other important industries in the state: biotechnology research and development (R&D) (\$4.6 billion), wineries (\$8.2 billion), and semiconductor and related device manufacturing (\$10.9 billion).<sup>1</sup>

While many state-level economic studies surrounding the game of golf have been conducted across the country over the last several years, no comprehensive, standardized framework has been employed in these studies. This has made it difficult to monitor a state’s industry growth over time, and to make state-to-state or regional comparisons. SRI International and GOLF 20/20 are currently working with key golf stakeholders in several states, including California, to bring consistency to the industry measurement and reporting process. This report describes and analyzes California’s golf industry including the revenues and economic impact generated by the industry. Such analysis will assist California’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, the employment and revenue-generating contributions of the golf industry to the state economy; and

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<sup>1</sup> U.S. Census Bureau. 2002 Economic Census. SRI used the GDP implicit price deflator to inflate 2002 industry revenue data to 2006 dollars.

<sup>2</sup> Key industry stakeholders comprising the California Golf Task Force include representatives from the California Alliance for Golf (CAG), California Chapter of the Club Managers Association of America (CMAA-CA), California Golf Course Owners Association (CGCOA), California Golf Course Superintendents Association (CGCSA), Northern California Golf Association (NCGA), Northern California Section of the PGA (NCPGA), Pacific Women’s Golf Association (PWGA), Southern California Golf Association (SCGA), Public Links Golf Association of Southern California (PLGASC), Southern California Section of the PGA (SCPGA), United States Golf Association (USGA), the Women’s Golf Association of Northern California (WGANC), and the Women’s Southern California Golf Association (WSCGA).

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

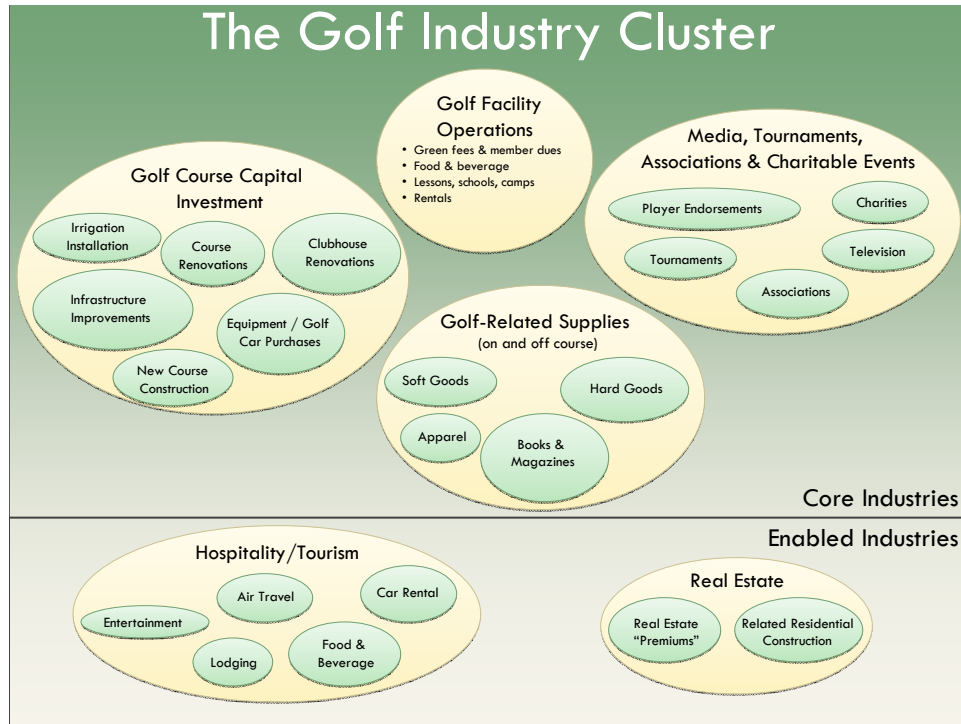
## **II. ANALYTICAL FRAMEWORK**

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 our 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). 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	2006 PGA Facility Database (2005 data)	2002 Economic Census; state task force; 2006 NGF Facility Database
Avg. revenues by type of facility	2006 and 2007 PGA Facility Operations Survey (2005 and 2006 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 (2005 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 (2006 data)	2006 PGA Compensation Survey (2005 data); 2006 PGA Facility Operations Survey (2005 data)
Golf apparel	National Sporting Goods Association (2006 data)	2006 PGA Compensation Survey (2005 data, gross sales by facility type); 2006 PGA Facility Operations Survey (2005 data)
Golf media	Magazine Publishers of America for golf magazine sales; <i>Bowker Annual of Library and Book Trade Information</i> (2006 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	Sampling of golf professionals to identify # of tournaments and average amount raised	National Golf Foundation
<b>Real Estate</b>		
# of residential golf courses under construction	National Golf Foundation; real estate/development agencies	Interviews with state level golf course architects and real estate 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
		National Association of Home Builders
Avg. construction costs per home and real estate premium	Interviews with golf course architects and real estate developers	Golf Course Builders Association of America, National Golf Course Owners, National Association of Home Builders
Hospitality/Tourism		
# of golf travelers or # of golf-related trips to the state	Travel Industry Association (TIA) of America	State department of tourism/recent surveys/studies
Avg. spending per traveler or per trip	Travel Industry Association (TIA) of America	State department of tourism/recent surveys/studies; National Golf Foundation

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

SRI estimates the total size of California's golf economy in 2006 was approximately \$6.9 billion. This estimate is comprised of \$4.3 billion in core industries and an additional \$2.6 billion in enabled industries, as illustrated in the table below.

Size of California's Golf Economy in 2006 by Segment (\$ million)	
Core Industries	
Golf Facility Operations	\$2,846.3
Golf Course Construction and Capital Investment	\$325.3
Golf-Related Supplies (retail margin and manufacturing exports)	\$951.8
Major Golf Tournaments and Associations	\$137.2
<b>Total Core Industries</b>	<b>\$4,260.6</b>
Enabled Industries	
Real Estate	\$1,365.2
Hospitality/Tourism	\$1,245.3
<b>Total Enabled Industries</b>	<b>\$2,610.5</b>
<b>TOTAL GOLF ECONOMY</b>	<b>\$6,871.1</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 greens fees, range fees, membership fees, golf cart rentals, 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.

California's 926 golf courses, 109 stand-alone ranges, and 73 miniature golf facilities generated \$2.8 billion of revenues in 2006.

California Golf Facility Revenues in 2006 (\$ millions)	
Golf Facilities	\$2,742.6
Practice Ranges & Alternative Facilities	\$103.8
<b>TOTAL<sup>1</sup></b>	<b>\$2,846.3</b>

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

This is a sizeable industry, but even more significant when compared to other popular revenue-generating sports. For example, California's golf facilities generated revenues comparable to all other spectator sports in the state combined—football, baseball, basketball, hockey, and soccer. These five other sports generated revenues of \$2.8 billion in 2002, or \$3.1 billion in 2006 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 design, construction and turf maintenance industries and often involve the purchase of significant amounts of equipment and supplies from companies within the state. SRI's estimate of California's golf course capital investment is divided into two segments: (1) capital investment at existing facilities and (2) new course construction. Together, California's golf facilities made \$325.3 million worth of capital investments in 2006: \$161.7 million of investments at existing facilities and \$163.6 million for the construction of new courses.

California Golf Course Construction and Capital Investment in 2006 (\$ millions)	
Golf Course Capital Investment <sup>1</sup>	\$161.7
New Course Construction	\$163.6
<b>TOTAL</b>	<b>\$325.3</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 (2005). *California: 2002, 2002 Economic Census, Arts, Entertainment & Recreation Geographic Series*, April 2005.

### Golf-Related Supplies

In 2006, California golfers spent significant sums on items, such as golf balls, golf clubs, golf apparel, golf instructional books and DVDs. The economic value that accrues to a state comes from both the production of these goods, as well as retail sales of such items. California is home to a number of companies that manufacture golf apparel and equipment—Acushnet, Ashworth, Callaway Golf, Cleveland Golf, TaylorMade-adidas Golf, etc. The value of these products sold in California is already captured in the retail portion of the Golf-Related Supplies segment. However, the proportion of production that is being shipped to other states and countries is not. Therefore, we include these companies' value-added exports in our analysis, here.

In 2006, California manufacturers' value-added, out-of-state shipments of golf products totaled approximately \$794.8 million. In addition, on- and off-course sales of golf equipment (clubs, bags, shoes, balls, etc.), apparel, and media (books, magazines, videos/DVDs) are sizeable. The margin that California retailers and golf facilities earned on the sale of golf-related supplies totaled \$157.0 million in 2006.

<b>California Manufacturers' Value-Added Exports of Golf-Related Products in 2006 (\$ millions)</b>	
<b>TOTAL</b>	<b>\$794.8</b>

<b>California Retailers' Net Revenues on Consumer Purchases of Golf-Related Supplies in 2006 (\$ millions)</b>	
<b>Golf Equipment (retail margin)</b>	<b>\$126.7</b>
<b>Golf Apparel (retail margin)</b>	<b>\$28.0</b>
<b>Golf Media (retail margin)</b>	<b>\$2.4</b>
<b>TOTAL</b>	<b>\$157.0</b>

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

### State Golf Associations, Tournaments and Charitable Events

#### *Associations*

Numerous associations represent the game of golf in California. As the largest state in the U.S. in terms of total population and golf participation, California has Northern and Southern chapters of many of the major state golf organizations, whereas in other states there may only be one. For example, there is a Northern and Southern California Golf Association, a Northern and Southern California Section of the PGA, and women's golf associations in both northern and southern California. There are also multiple chapters of the California Golf Course Superintendents Association, the California Club Managers Association, the California Senior Golf Association, and the state's Junior Golf Association, among others. The Tiger Woods Foundation, which operates youth development and scholarship programs, is located in Irvine,

California. There are also numerous chapters of The First Tee organization throughout the state. In 2006, California golf associations generated total revenues of \$41.4 million.

### *Major Tournaments*

As one of the largest golf states, California hosted 16 professional golf championships in 2006, including seven PGA TOUR events, four Champions Tour events, two Nationwide Tour events, and three LPGA events. Two of California’s annual PGA TOUR events include the Bob Hope Chrysler Classic, held in Palm Springs, and the AT&T Pebble Beach National Pro-Am which pairs top PGA TOUR players with Hollywood celebrities, world-renowned musicians and corporate executives. The Charles Schwab Cup Championship (Sonoma, CA) is the prestigious closing event each year on the Champions Tour. Examples of two of the California LPGA events include the Samsung World Championship<sup>4</sup>, played at Bighorn Golf Club (Palm Desert, CA) in 2006, and the Kraft Nabisco Championship at Mission Hills Country Club (Rancho Mirage, CA). Altogether, golf events in California generated approximately \$95.8 million in 2006, excluding the tournament purse and costs for TV broadcasting.

<b>California’s Major Golf Tournaments &amp; State Golf Association Revenues in 2006 (\$ millions)</b>	
Major tournaments	\$95.8
Associations	\$41.4
<b>TOTAL</b>	<b>\$137.2</b>

### *Charitable Events*

California’s golf industry makes substantial contributions to a variety of charities throughout the year. In addition to monies raised at local golf club events, golf serves as a vehicle for a variety of celebrity-sponsored charitable events. The annual PGA TOUR events, Champions Tour events, and the Nationwide Tour event raise significant funds for charities and organizations such as the United Way, the Make-A-Wish Foundation, Boy and Girls Clubs, and numerous local youth programs, hospitals, and charitable foundations. In addition, the Irvine-based Tiger Woods Foundation, along with numerous First Tee Chapters throughout the state, remain committed to supporting youth character development programs. Golf course owners, operators and golf professionals continue to serve as access points for annual fundraising by local service organizations. Overall, SRI estimates that the amount of charitable giving generated through the game of golf in California was \$324.3 million in 2006.

<b>Charitable Giving by California Golf Industry in 2006 (\$ millions)</b>	
<b>TOTAL</b>	<b>\$324.3</b>

<sup>4</sup> The Samsung World Championship will be played at Half Moon Bay Golf Links in 2008.

## B. Enabled Industries

### Real Estate

Real estate developers use amenities to attract new home buyers, and golf is a key amenity in many areas of the state. A number of golf communities were under construction in 2006 offering a mix of single family homes, townhomes and condominiums. New residential developments were under construction at existing courses (e.g., Saddle Creek Community in the foothills of the Sierra Mountains), as well as new courses (e.g., Timilick Tahoe in Truckee, near Lake Tahoe).

At the same time, California real estate continued to increase in value at a rate far greater than the national average. In fact, in 2005 the median price of homes in California exceeded \$450,000, which was 2.44 times the national average according to the National Association of Realtors. Furthermore, the value of real estate in golf communities far exceeded the statewide median values. Thus, California golf-related real estate construction prices, as well as sales prices and premium values, were far greater than most other states and regions in the United States. Although real estate construction and sales prices began to decline in 2006, real estate still represented a sizable segment in the California golf economy.

New golf-related real estate construction generated over \$1.0 billion in 2006. Furthermore, in 2006 there were more than 300 golf communities in California, and we estimate the “golf” premium associated with the sale of real estate in these developments to be \$340.2 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.

California' Golf Real Estate Revenues in 2006 (\$ millions)	
Golf-Related Residential Construction	\$1,025.0
Realized Golf Premium	\$340.2
<b>TOTAL</b>	<b>\$1,365.2</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. Golf is actively promoted as an important tourism segment in California, the country's most visited state. The state's official “Visit California” website features

golf as a primary tourist attraction providing tantalizing golf trip ideas (<http://www.visitcalifornia.com>). In 2006, SRI estimates golf-related tourism spending in California was \$1.2 billion. This is based on: (1) an estimated 3 million golf person trips taken annually in the state by California residents and non residents and (2) an average of \$416 of golf tourism spending per person per trip.








<b>California's Golf-Related Travel Expenditures in 2006</b>	
# Golf person trips	2,994,550
Average travel \$ per person per trip	\$416
<b>Total (2006\$ million)</b>	<b>\$1,245.3 million</b>

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

Golf's impact on the California 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 employment and wage income of those employed in golf-related industries, as well as the employment and wages generated in other sectors of the economy through subsequent purchases of goods and services by golf industry employees.

In 2006, the \$6.9 billion California golf industry generated:

- An additional \$8.2 billion in indirect and induced economic impacts for the state of California for a total impact of \$15.1 billion;
- A total impact of nearly 160,000 jobs; and
- Total earnings of \$4.8 billion.

Multiplier Impacts on State Economy						
Industry	Direct	Indirect	Induced	TOTAL OUTPUT (\$ million)	TOTAL JOBS (\$ million)	TOTAL WAGE INCOME (\$ million)
Golf Facility Operations	\$2,846.3			\$6,466.8	76,748	\$2,170.9
Golf Course Capital Investment*	\$325.3			\$415.1	3,343	\$134.7
Golf-Related Supplies	\$951.8			\$2,228.1	14,480	\$571.1
Tournaments & Associations	\$137.2			\$351.7	4,249	\$131.7
Real Estate **	\$1,365.2			\$2,600.8	20,942	\$843.8
Hospitality/Tourism	\$1,245.3			\$3,039.8	40,230	\$984.4
<b>TOTAL</b>	<b>\$6,871.1</b>			<b>\$15,102.3</b>	<b>159,992</b>	<b>\$4,837.6</b>

Note: Economic impact is calculated on \$6,369.2 million of direct golf economy revenues. Portions of two industry segments included in direct economy calculations are excluded from economic impact estimation.

\*Golf Course Capital Investments—only new course construction (\$163.6 million) is included for this category as other types of facility capital investment are typically financed through facility revenues and, therefore, are omitted to avoid double-counting.

\*\*Real Estate—the golf premium associated with golf real estate is considered a transfer of assets rather than new economic activity, so only golf-related residential construction (\$1,025.0 million) is included.

## 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 membership fees, greens fees, range fees, and cart rental fees; purchases of golf apparel and equipment in pro shops<sup>5</sup>; golf lessons; tournament entry fees; consumption of food and beverages; etc.

<sup>5</sup> However, on-course merchandise sales are subtracted from facility revenue, because on-course merchandise sales are included in the Golf-Related Supplies industry segment.

**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., 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) annual facility or course 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 California in 2006 or the latest available year.

<b>Estimates of California Golf Facilities from Various Sources, 2002-2006</b>				
	<b>2002 Census (# of facilities, no resorts or municipal)<sup>1</sup></b>	<b>2005 PGA (# of facilities)<sup>2</sup></b>	<b>2006 NGF (# of facilities)<sup>3</sup></b>	<b>2006 NGF (# of 18-hole equivalent courses)<sup>3</sup></b>
<b>PRIVATE</b>	<b>727</b>	<b>276</b>	<b>287</b>	<b>303.0</b>
<b>PUBLIC</b>		<b>562</b>	<b>549</b>	<b>508.5</b>
Daily fee/ semi-private		366		
Municipal	<b>(PGA: 196)</b>	196		
Military				
University				
<b>RESORT</b>	<b>(PGA: 88)</b>	<b>88</b>	<b>85</b>	<b>92.0</b>
<b>TOTAL</b>	<b>1,011</b>	<b>926</b>	<b>921</b>	<b>903.5</b>

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

<sup>2</sup> Professional Golfers' Association of America (2006). *Facility Database*

<sup>3</sup> NGF (2007). Total Facility Supply Tables 5-8, *Golf Facilities in the U.S., 2007 edition*, pp.6-8.

After analysis of different golf facility numbers in collaboration with the California Golf Alliance, SRI used the PGA's facility numbers as the basis for our assessment. The facility number totals from the two organizations fall within an extremely narrow range, 921-926 facilities. The PGA



has slightly higher facility numbers in the public facility and resort facility categories, and NGF has a slightly higher number in the private facility category.

**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, military, 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 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) 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 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 for the years 2005 and 2006. The 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. For some categories of facilities, e.g., private facilities in California, there is a noticeable difference in the reported average revenue between 2005 and 2006: \$3.4 million versus \$4.8 million. Therefore, we calculated a 2005-06 average for each facility category.

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). SRI calculated a single NGF national average revenue figure for each category by using the sample size and mean.

Estimates of California Average Revenue per Facility Data From Different Sources, 2002-2005			
	Census (2002\$) <sup>1</sup>	PGA (2005-06 avg) <sup>2</sup>	NGF (2005) <sup>3,4</sup>
Private facility	\$4,079,013	\$4,086,918	\$3,564,339
Daily fee facility	\$2,473,016	\$3,016,026	\$2,152,883
Resort facility	X	\$4,368,498	X
Municipal/military/university facility	X	\$2,142,917	X
Driving range	X	X	\$618,594
Miniature golf	\$455,137	X	X

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

<sup>2</sup> Professional Golfers' Association of America (2006, 2007). *Operations Survey*.

<sup>3</sup> NGF (2006). *Operating & Financial Performance Profiles of 18-hole Golf Facilities in the U.S., 2006 edition*.

<sup>4</sup> Golf Range Association of America (2006).

Average revenue data from the Census (2002), PGA (2005-06 average) and NGF (2005) are presented in the table, above. The range of figures from these different sources is fairly narrow. As mentioned earlier, NGF's private facility revenue figure is a national average rather than a California average, which may explain why it is lower than the average revenue figure reported by the Census and the PGA for private facilities. NGF's public facility revenue figure is a regional average (NGF breaks public courses into Frostbelt and Sunbelt by fee level) rather than a California average, which may explain why it, also, is lower.

In consultation with the California Alliance for Golf, SRI calculated total traditional facility revenues using PGA average revenue data for private facilities, daily fee facilities, and municipal/military/university facilities. Driving range revenues were calculated using PGA's mean average revenue figure for golf ranges in 2006, and miniature golf facilities were calculated using Census (2002) data. We adjusted the Census data for inflation over the 2002-2006 period using the GDP deflator.

2006 Golf Facility Operations Revenues		
Facility type	Calculation	Estimate
Private facilities	Average revenue <sup>1</sup>	\$3,721,446
	Number of facilities	276
	<b>Total revenue [1]</b>	<b>\$1,027,119,190</b>
Daily fee/semi-private facilities	Average revenue <sup>1</sup>	\$2,771,678
	Number of facilities	366
	<b>Total revenue [2]</b>	<b>\$1,014,434,106</b>
Municipal/military/university facilities	Average revenue <sup>1</sup>	\$1,870,824
	Number of facilities	196
	<b>Total revenue [4]</b>	<b>\$366,681,477</b>
Resort facilities	Average revenue <sup>1</sup>	\$3,799,117

2006 Golf Facility Operations Revenues		
Facility type	Calculation	Estimate
	Number of facilities	88
	<b>Total revenue [3]</b>	<b>\$334,322,269</b>
Driving ranges	Average revenue	\$618,594
	Number of facilities	109
	<b>Total revenue [5]</b>	<b>\$67,426,746</b>
Miniature golf facilities	Average revenue	\$455,137
	Number of facilities	73
	<b>Total revenue [6]</b>	<b>\$33,225,001</b>
	<b>Adjusted for inflation<sup>2</sup></b>	<b>\$36,356,790</b>
<b>TOTAL</b>	<b>Sum [1] to [6]</b>	<b>\$2,846,340,577</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> Total revenues have been adjusted for inflation into 2006 dollars using the appropriate GDP deflator.

Sources: Golf facilities average revenue data are from the PGA of America (2006, 2007), *Operations Survey 2006 and 2007*. Driving range average revenue data from the Golf Range Association of America (2006). Miniature golf facilities average revenue data are from the *2002 Economic Census*.

## 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.

California Golf Course Construction and Capital Investment in 2006 (\$ millions)	
Golf Course Capital Investment <sup>1</sup>	\$161.7
New Course Construction	\$163.6
<b>TOTAL</b>	<b>\$325.3</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 irrigation systems, and renovations of the clubhouse, pro shop 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 Compensation Surveys. Data is available for 2005 and 2007. The 2007 data is broken down by: (1) type of facility, (2) number of holes at the facility and (3) agronomic region. 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 California capital investment calculations. We estimated average facility investments in California 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 California’s 926 golf courses invested an average of approximately \$174,669 in 2006, for a total capital investment of \$161.7 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 2006, NGF estimated that 12 new 18-hole equivalent golf courses opened in California and that 19.5 were under construction.

An estimate for the average investment for each new golf course in California is derived from the Golf Course Builders Association of America’s *2006 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 a composite value provided for the Coastal Lowlands and High Piedmont regions 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 California is \$10.4 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 19.5 courses under construction in 2006 and the 12 new openings invest an average of \$5.2 million each, for a total of \$163.6 million.

### C. Golf-Related Supplies

This section explains our methodology for calculating California manufacturers' exports of golf clubs, training aids, and accessories used by golfers. We also detail our methodology for calculating the retail margin for on-course and off-course purchases of golf equipment, apparel and golf media (e.g., golf books and magazines).

**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, apparel, and 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-related product is manufactured.

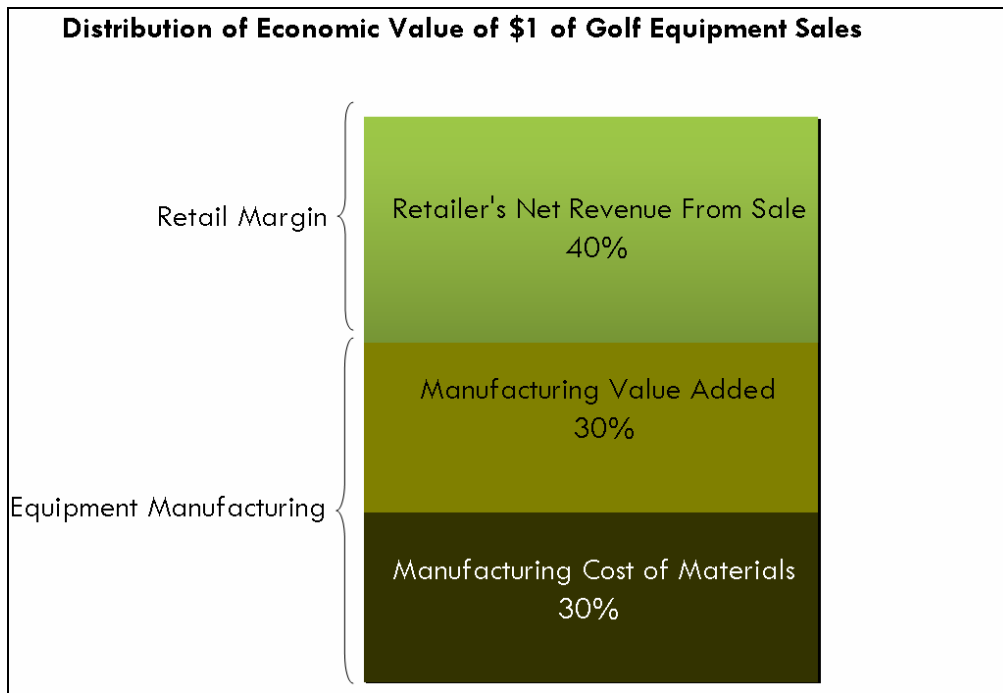
We began by working with the California Golf Alliance to identify major manufacturers of golf-related products in the state. We identified a number of major companies manufacturing both hard and soft goods—Acushnet, Ashworth, Callaway Golf, Cleveland Golf, TaylorMade-adidas Golf—as well as many smaller firms. We then contacted these companies to ascertain: (1) if they had production facilities in California (if not, they were not included), (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*.

California Manufacturers' Value-Added Exports of Golf-Related Products in 2006 (\$ millions)	
TOTAL	\$794.8

**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 2006, NSGA reported total U.S. off-course and on-course purchases of individual golf clubs to be \$592.9 million. The NSGA survey found the Pacific region accounted for 12.3% of these purchases, or \$72.9 million. Within the Pacific region, one can estimate California'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. California represents 63.6% of total 18-hole equivalent courses in the Pacific region, so this weight was applied to the region total (\$72.9 million) to estimate \$46.4 million of individual golf club sales in the state of California in 2006. Further, retail margins on final sales suggest that 40.1%, or \$18.6 million, of total sales was retained in the California economy. (See graphic below.)



California's On-Course and Off-Course Golf Equipment & Apparel Purchases, 2006		
Category	Calculation	Estimate (\$ million)
<b>Golf club sets</b>	Pacific region's sales	\$198.4
	CA's courses-based weight	63.6%
	<b>CA's share of sales [1]</b>	<b>\$126.3</b>
<b>Golf apparel</b>	Pacific region's sales	\$109.6
	CA's courses-based weight	63.6%
	<b>CA's share of sales, [2]</b>	<b>\$69.8</b>
<b>Golf balls</b>	Pacific region's sales	\$103.6
	CA's courses-based weight	63.6%
	<b>CA's share of sales, [3]</b>	<b>\$66.0</b>
<b>Golf clubs</b>	Pacific region's sales	\$72.9
	CA's courses-based weight	63.6%
	<b>CA's share of sales, [4]</b>	<b>\$46.4</b>
<b>Golf bags</b>	Pacific region's sales	\$59.0
	CA's courses-based weight	63.6%
	<b>CA's share of sales, [5]</b>	<b>\$37.6</b>
<b>Golf shoes</b>	Pacific region's sales	\$62.2
	CA's courses-based weight	63.6%
	<b>CA's share of sales, [6]</b>	<b>\$39.6</b>
<b>TOTAL</b>	<b>Sum of [1] to [6]</b>	<b>\$385.6</b>
<b>Retail sales margin</b>	<b>Multiply TOTAL by 40.1%</b>	<b>\$154.6</b>

Source: National Sporting Goods Association (2007). *The Sporting Goods Market in 2007*, Mt. Prospect, IL: NSGA, and NSGA (2007) *Sports Clothing Expenditures in 2006*, Mt. Prospect, IL: NSGA. The 2005 NSGA data has been adjusted for inflation to 2006 dollars.

**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 California in 2006. 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 2006 were estimated to be \$6.0 million with a retail sales margin of \$2.4 million. 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 Golf Books in California, 2006	
Category	Estimate (\$1,000)
California retail book sales <sup>1</sup>	\$1,432,346
Golf books as % of total book sales	0.4%
Total retail golf book sales	\$6,016
Retail sales margin	\$2,412

Note: <sup>1</sup>Adjusted for inflation into 2006 dollars using the appropriate GDP deflator.  
Sources: California 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.

California Retailers' Net Revenues on Consumer Purchases of Golf-Related Supplies in 2006 (\$ millions)	
Golf Equipment (retail margin)	\$126.7
Golf Apparel (retail margin)	\$28.0
Golf Media (retail margin)	\$2.4
<b>TOTAL</b>	<b>\$157.0</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 worked with the California Alliance for Golf to collect revenue data for the largest state or regional golf organizations with headquarters in California. These included the Northern and Southern chapters of the California Golf Association, the Northern and Southern California Sections of the PGA, women's golf associations of northern and southern California, as well as multiple chapters of the state's Golf Course Superintendents Association, Club Managers Association, Senior Golf Association, junior golf associations, The First Tee, and other allied organizations.

**Major Tournaments.** In 2006, California hosted 16 professional golf events. We subtracted the tournament purse and cost of television broadcasting from total tournament revenues to estimate the revenues that remained in the state.



California's Major Golf Tournaments & State Golf Association Revenues in 2006 (\$ millions)	
Major tournaments	\$95.8
Associations	\$41.4
<b>TOTAL</b>	<b>\$137.2</b>

**Charitable Events.** Overall, SRI estimates that the amount of charitable giving attributed to the game of golf in California to be \$324.3 million in 2006.<sup>6</sup> This estimate is derived from a national study<sup>7</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 California Golf Industry in 2006 (\$ millions)	
<b>TOTAL</b>	<b>\$324.3</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.

California's Golf Real Estate Revenues in 2006 (\$ millions)	
Golf-Related Residential Construction	\$1,025.0
Realized Golf Premium	\$340.2
<b>TOTAL</b>	<b>\$1,365.2</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 worked with California golf course builders and golf real estate developers to arrive at estimates of the number of courses with active real estate development, the average number of homes constructed in each new golf community, the fraction of these homes under construction in a given year, and the average construction costs per type of home (i.e., condominium, townhouse or single family home). The number of courses with active development was derived from total golf facility openings over

<sup>6</sup> SRI based its calculation on the number of rounds played in California in 2006, and adjusted the figures for inflation based on the CPI inflation rate, cross-referenced with the rate of increase in charitable giving in the United States during this period.

<sup>7</sup> National Golf Foundation (2002). *The Charitable Impact Report*, November 2002.

the past five years and adjusted based on golf task force input, since not all new courses have real estate development. Construction values varied considerably depending on such factors as the location of golf communities within the state, the proportion of condominiums or townhouses versus single family homes, and overall real estate market conditions.

SRI estimates that 35 courses with residential components opened within the state in 2006, based on new course openings over the past five years (2002-2006) and adjusted for the fact that not all new courses have a residential component. Each course is estimated to have an average of 500 single family homes and 125 townhouses/condos, with an average construction cost of \$500,000 for single family homes, \$225,000 for townhomes, and \$175,000 for condos. Multiplying the total number of each type of unit under construction with the average construction cost per unit yielded a total 2006 golf-related residential construction figure of \$1,025.5 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 \$60,000 per unit. Multiplying the approximately 324 existing California golf communities by 500, the average number of housing units (single family homes, townhouses and condos) per golf course, we arrive at a total of 162,000 golf community homes. In 2006, the home turnover rate (percentage of homes sold relative to the total housing stock) was 3.5 percent in California. 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 California’s golf real estate premium was \$340.2 million in 2006.

## **F. Hospitality/Tourism**

Although a large and critical golf industry segment, there are no central 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.** Many states subscribe to the Travel Industry Association (TIA) of America’s TravelScope® statistics which provide annual data on the number of people traveling to or within a state and the average length of their trips.<sup>8</sup> In addition, some states’ departments of tourism sponsor golf tourism studies. In 2006, the California Travel and Tourism Commission

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<sup>8</sup> In 2005, TIA ceased collecting primary data on travelers and trips, and a new data set was created based on a national survey conducted by D.K. Shifflet & Associates. Like the original TravelScope®, the new TravelScope®/Directions® provides annual data on trip volume and characteristics (such as average length of stay and average trip expenditures).

sponsored the *California Domestic Travel Report* from D.K. Shifflet & Associates.<sup>9</sup> The report estimated a total of 352 million trips were taken in California in 2006.

The *California Domestic Travel Report 2006* found that nearly 1 percent of California’s total trips, or approximately 3 million trips, were golf-related. A “golf trip” is defined as a trip in which a California resident or non resident travels 50-plus miles to, through or within the state and plays golf while on this trip. This figure (3 million golf trips) seems plausible given the PGA of America’s estimate of 40.3 million rounds played in California in 2005. This translates into approximately 8.0 percent of total rounds played on local courses being played by golfers from other parts of California, from out of state, or from other countries.

**Average spending per golf trip.** SRI estimated that average spending per golf trip in California in 2006 was \$416 per person. This includes spending on accommodation, transportation, food and beverage, entertainment, gifts, etc. Greens fees and cart fees are not included as they are already captured in the Golf Facility Operations revenues. Average golf trip spending figures are slightly higher in California compared to other states studied by SRI.<sup>10</sup> To estimate average golf trip expenditure, we analyzed data from NGF’s *The U.S. Golf Travel Market, 2003 Edition* report and the *2006 Economic Impact of Expenditures by Travelers in California* report. We adjusted average trip spending based upon relative price levels in California vis-à-vis the rest of the country. Multiplying the total number of golf trips by average spending per trip, SRI found that golf-related tourism spending in California was approximately \$1,245.3 million in 2006.

California’s Golf-Related Travel Expenditures in 2006	
# Golf person trips	2,994,550
Average travel \$ per person per trip	\$416
Total (2006\$ million)	\$1,245.3 million

## 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 occur as golf’s direct impact creates ripple effects throughout the state economy.

**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

<sup>9</sup> D.K. Shifflet & Associates (2007). *California Domestic Travel Report 2006*. Prepared for the California Travel and Tourism Commission.







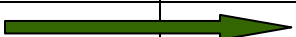

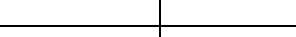
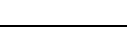
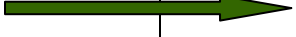



<sup>10</sup> In 2007, SRI conducted golf economy studies of Iowa, Louisiana, Massachusetts, Michigan, Ohio and Texas, in addition to California.

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 California’s golf economy.

Multiplier Impacts on State Economy				
Industry	Direct	Indirect	Induced	TOTAL (\$ million)
Golf Facility Operations	\$2,846.3			\$6,466.8
Golf Course Capital Investments*	\$325.3			\$415.1
Golf-Related Supplies	\$951.8			\$2,228.1
Tournaments & Associations	\$137.2			\$351.7
Real Estate**	\$1,365.2			\$2,600.8
Hospitality/Tourism	\$1,245.3			\$3,039.8
<b>TOTAL</b>	<b>\$6,871.1</b>			<b>\$15,102.3</b>

Note: Economic impact is calculated on \$6,369.2 million of direct golf economy revenues. Portions of two industry segments included in direct economy calculations are excluded from economic impact estimation.

\*Golf Course Capital Investments—only new course construction (\$163.6 million) is included for this category as other types of facility capital investment are typically financed through facility revenues and, therefore, are omitted to avoid double-counting.

\*\*Real Estate—the golf premium associated with golf real estate is considered a transfer of assets rather than new economic activity, so only golf-related residential construction (\$1,025.0 million) is included.

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