THE OREGON GOLF ECONOMY

FULL REPORT

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

The Oregon Golf Economy

Published June 2010 through an agreement with

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Acknowledgements

This report was prepared by SRI in agreement with GOLF 20/20, the Oregon Golf Association, the Oregon Chapter of the Pacific Northwest Section of The PGA of America, the Oregon Golf Course Owners Association, the Oregon Golf Course Superintendents Association, and the Oregon Club Managers Association. In addition, support for this report comes from the following national allied organizations: CMAA, GCSAA, LPGA, NGCOA, The PGA of America, PGA TOUR and USGA.

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ACRONYMS

CMAA	Club Managers Association of America
GCBAA	Golf Course Builders Association of America
GRAA	Golf Range Association of America
GCSAA	Golf Course Superintendents Association of America
LPGA	Ladies Professional Golf Association
OPGA	Oregon Chapter of the Pacific Northwest Section of The PGA of America
NGCOA	National Golf Course Owners Association
OCMA	Oregon Club Managers Association
OGA	Oregon Golf Association
OGCOA	Oregon Golf Course Owners Association
OGCSA	Oregon Golf Course Superintendents Association
PGA	The Professional Golfers' Association of America
USGA	United States Golf Association
WGF	World Golf Foundation

I. STUDY OVERVIEW

Home to 190 golf facilities and host to three major golf championships, golf in Oregon is more than just an enjoyable pastime—it is a key industry contributing to the vitality of Oregon's economy. In 2008, the size of Oregon'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 Oregon's golf-related activities is considered, the golf industry generated approximately $2.5 billion of direct, indirect and induced economic output, $703.6 million of wage income, and 27,187 jobs in 2008.

While Oregon is known for its semiconductor and computer-related industries, the golf industry's $1.2 billion in direct revenues supports economic activity comparable to several other important industries in the state: paper manufacturing ($3.7 billion), software publishing ($1.4 billion), and greenhouses/nurseries ($0.9 billion).[1]

Oregon's golf industry is dedicated to environmental responsibility in the design, construction and management of the state's golf courses. Golf courses provide diverse habitats for a range of wildlife, and Oregon golf courses take their environmental stewardship seriously. Oregon leads the country in Audubon certified golf courses, with 19 Certified Audubon Cooperative Sanctuaries and one Certified Signature Sanctuary, collectively representing more than 10 percent of the state's total regulation courses. The Audubon Cooperative Sanctuary Program for Golf Courses awards certification to golf courses that protect the environment, conserve natural resources, and provide wildlife habitats. Achieving certification demonstrates a course's leadership, commitment, and high standards of environmental management.

Finally, Oregon's golf industry is committed to giving back to their local communities. Many Oregon golf courses provide free or significantly discounted greens fees and driving range fees to area high schools offering students access to a lifelong sport and recreational activity. In addition, Oregon golf courses support a wide array of local, state and national charitable organizations by hosting numerous charitable golf events each year. Golf courses often provide free or discounted greens fees and staff time in hosting these events—a cost directly born by these small businesses—in addition to the monies raised for charitable organizations.

Historically, many state-level economic studies surrounding the game of golf have been conducted across the country. However, no comprehensive, standardized framework was

[1] U.S. Census Bureau (2010). 2007 Economic Census, Geographic Series: Paper Manufacturing (NAICS 322) and Software Publishing (NAICS 5112). SRI used the GDP implicit price deflator to inflate 2007 industry revenue data to 2008 dollars. U.S. Department of Agriculture, Economic Research Service (2010), "Top Commodities, Exports, and Counties in 2008," Oregon State Fact Sheet.

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 Oregon, to bring consistency to the industry measurement and reporting process. This report describes and analyzes Oregon's golf industry including the revenues and economic impact generated by the industry. Such analysis will assist Oregon's industry stakeholders[2] 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.

[2] Key industry stakeholders comprising the Golf Alliance of Oregon include representatives from the Oregon Golf Association, the Oregon Chapter of the Pacific Northwest Section of The PGA of America, the Oregon Club Managers Association, and the Oregon Golf Course Superintendents Association.

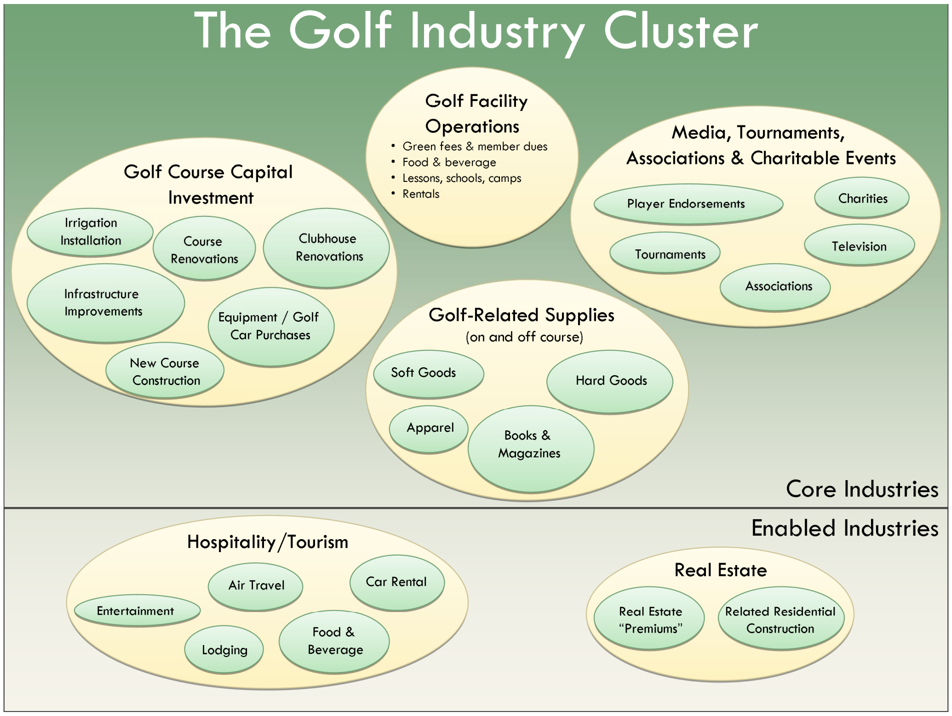
II. ANALYTICAL FRAMEWORK

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**
Golf Facility Operations		
# 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
Golf Course Capital Investments		
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
Golf-Related Supplies		
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; *Bowker Annual of Library and Book Trade Information* (2007, 2008 data)	Amazon and Barnes & Noble for top golf book sales
Major Tournaments		
# 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
Associations & Charitable Events		
# 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
Real Estate		
# of residential golf courses under construction	National Golf Foundation; real estate/development agencies	Interviews with 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**
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 OREGON'S GOLF ECONOMY

SRI estimates the total size of Oregon's golf economy in 2008 was approximately $1.2 billion. This estimate is comprised of $893.1 million in core industries and an additional $295.0 million in enabled industries, as illustrated in the table below.

Size of Oregon's Golf Economy in 2008 by Industry Segment ($ millions)	
Core Industries	
Golf Facility Operations	**$361.7**
Golf Course Construction and Capital Investment	**$51.2**
Golf-Related Supplies (retail margin and manufacturing exports)	**$464.6**
Major Golf Tournaments and Associations	**$15.6**
TOTAL CORE INDUSTRIES	***$893.1***
Enabled Industries	
Real Estate	**$73.2**
Hospitality/Tourism	**$221.8**
TOTAL ENABLED INDUSTRIES	***$295.0***
TOTAL GOLF ECONOMY	**$1,188.1**

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. Oregon's 190 golf courses, 8 stand-alone ranges, and 13 miniature golf facilities generated approximately $361.7 million of revenues in 2008.

Oregon Golf Facility Revenues in 2008 ($ millions)	
Golf Facilities	**$351.7**
Practice Ranges & Alternative Facilities	**$9.9**
TOTAL[1]	**$361.7**

Note: [1] Golf facility revenues exclude on-course merchandise sales, which are included in the Golfer Supplies industry segment. Numbers 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, Oregon's golf facilities generate revenues which approach the total for all other spectator sports in the state combined—including racetracks, professional basketball, and minor league hockey, baseball, and soccer. These other spectator sports generated revenues of $152.6 million in 2007, or $155.8 million in 2008 inflation-adjusted dollars.[3]

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 Oregon's golf course capital investment is divided into two segments: (1) capital investment at existing facilities and (2) new course construction. Together, Oregon's golf facilities made $51.2 million worth of capital investments in 2008: $26.9 million of investments at existing facilities and $24.3 million for the construction of new courses.

Oregon Golf Course Construction and Capital Investment in 2008 ($ millions)	
Golf Course Capital Investment[1]	**$26.9**
New Course Construction	**$24.3**
TOTAL	**$51.2**

Note: [1] 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.

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[3] U.S. Census Bureau (2010). Oregon*: 2007 Economic Census, Arts, Entertainment & Recreation Geographic Series*, May 2010.

Golf-Related Supplies

In 2008, Oregon 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. Oregon retailers and golf facilities earned approximately $42.5 million on the sale of $104.9 million of golf equipment, apparel, and media in 2008. On the production side, Oregon is home to Nike Golf, Adidas and Columbia Sportswear, in addition to a number of smaller golf equipment, apparel and accessories manufacturers in the state—Pinemeadow Golf, Golf Scorecards Inc., Lion Golf, etc. In 2008, Oregon manufacturers' total value-added shipment of golf-related products was approximately $422.1 million. Totaling retailers' sales margin and manufacturers' value added shipments, the Golfer Supplies segment contributed approximately $464.6 million to the Oregon economy in 2008. Additionally, the golf industry is also important to Oregon's agricultural sector—Oregon's grass seed growers are a major supplier of golf courses nationwide.[4]

Oregon Manufacturers' Value-Added Exports of Golf-Related Products in 2008 ($ millions)	
TOTAL	**$422.1**

Oregon Retailers' Net Revenues on Consumer Purchases of Golfer Supplies in 2008 ($ millions)		
	Total purchases	**Retail sales margin**
Golf Equipment (retail margin)	**$90.8**	**$36.8**
Golf Apparel (retail margin)	**$13.2**	**$5.3**
Golf Media (retail margin)	**$0.9**	**$0.4**
TOTAL	**$104.9**	**$42.5**

Note: This includes on-course and off-course purchases of golf equipment, apparel and media. Column may 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 Oregon. The largest golf associations include the Oregon Golf Association (OGA), the Oregon Chapter of the Pacific Northwest Section

[4] According to data compiled by the Oregon State University Extension Service, Oregon's grass seed growers produced $510.3 million worth of grass seed in 2008. Golf courses nationwide are believed to be the destination for approximately 10%-15% of this grass seed. The Oregon Seed Council is undertaking a market analysis study to provide better data on the fine turf market which should be available in late fall 2010.
http://www.nass.usda.gov/Statistics_by_State/Oregon/Publications/facts_and_figures/facts_and_figures.pdf

of The PGA of America, the Oregon Golf Course Superintendents Association, the Northwest Turfgrass Association, the Oregon Golf Course Owners Association, the Oregon Club Managers Association, women's golf associations, such as the Portland, Central Oregon, and Salem chapters of the Executive Women's Golf Association, and juniors and seniors golf associations. The First Nations Golf Association, The First Tee chapters of Portland, The Children's Course, and Willamette Valley, and the Portland Youth Golf Association all support the development of young golfers in the state. In addition, the Oregon Junior Golf Fund, an OGA subsidiary, oversees a nationally recognized junior golf program for over 1,100 youth in Oregon and Southwest Washington, and has developed the Hogan Cup, one of the premiere regional junior golf competitions in the country. In 2008, Oregon golf associations generated total revenues of $4.4 million.

Major Tournaments

Oregon hosted three major golf championships in 2008, including a Champions Tour event, an LPGA event, and a Nationwide Tour event. Since 2007, the Crosswater Club at Sunriver Resort in Sunriver, OR, has hosted the JELD-WEN Tradition, a Champions Tour event. The Safeway Classic is the oldest continuous event on the LPGA Tour, and has been played in Oregon since it was founded in 1972. In 2008, the Safeway Classic, presented by Pepsi, was hosted by the Columbia Edgewater Country Club in Portland. The Oregon Classic presented by Kendall Automotive Group, a Nationwide Tour Event, was played at Shadow Hills Country Club in Junction City, OR from 1998 to 2008. Altogether, golf events in Oregon generated approximately $11.2 million in 2008, excluding the tournament purse and costs for TV broadcasting.

Oregon State's Major Golf Tournaments & Golf Association Revenues in 2008 ($ millions)	
Major tournaments	**$11.2**
Associations	**$4.4**
TOTAL	**$15.6**

Charitable Giving

Oregon's golf industry makes substantial contributions to a variety of charities. For example, in 2008 the LPGA Tour Safeway Classic generated $1 million for local charities including Easter Seals of Oregon, the Evans Scholars Foundation, Boys & Girls Clubs of Portland, Trillium Family Services, Police Activities League, The Children's Course, and Oregon Junior Golf. Since its inception in 1972, the event has donated more than $14 million to local children's charities. Similarly, in its six-year history, the Champion's Tour JELD-WEN Tradition has generated more than $1.7 million in donations for over 40 Oregon-based charities; 2008 recipients include the American Diabetes Association, the Boys and Girls Club of Central Oregon, and Redmond School District, among several others. Locally, Oregon State golf clubs host several events in support of a number of local, state, and national charities. For example, the Ghost Tree Invitational, hosted by Pronghorn Golf Club in Bend, OR, raises approximately $50,000 each year for organizations such as The Kids Center, The Assistance League of Bend, and Family Access Network. The Portland Golf Club has raised $75,000 over the past two years for cancer research, and the Evan Cup of Oregon raised $105,000 in 2008 to provide college scholarships for caddies selected as Evans Scholars. 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 Oregon to be $28.5 million in 2008.

Charitable Giving by Oregon Golf Industry in 2008 ($ millions)	
TOTAL	**$28.5**

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 Oregon. The development of new golf communities in Oregon followed the rise in the national real estate market which peaked in 2005 in terms of new home starts and existing home sales. A significant share of this golf-related residential construction was occurring at Oregon golf resorts, including Brasada Ranch Resort, Sunriver Lodge & Resort, and Eagle Crest Resort. The new golf community developments offer a mix of custom homes, cabins, and townhomes/condos. Other examples of golf community developments with new home construction include: the Club at Pronghorn, a 368-home development located near Bend, OR, boasting a Jack Nicklaus links course set alongside a Tom Fazio course with great views of Mt. Bachelor; the Goose Hollow and Renaissance golf subdivisions of the Tukwila residential community that surrounds the OGA Golf Course in Woodburn, OR; and The Greens at Springbrook, a 295-home development at Chehalem Glenn Golf Course, located in Newberg, OR, southwest of Portland.

New golf-related real estate construction generated $62.2 million in 2008. Furthermore, in 2008 there were approximately 24 golf communities in Oregon, and we estimate the “golf” premium associated with the sale of existing homes in these developments in 2008 to be $11 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.

Oregon's Golf Real Estate Revenues in 2008 ($ millions)	
Golf-Related Residential Construction	**$62.2**
Realized Golf Premium	**$11.0**
TOTAL	**$73.2**

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 Oregon, golf is an important tourism segment, alongside the state's other outdoor and recreational activities such as camping, biking, fishing and hiking. Oregon's golf resorts help the state attract conferences and business meetings, and both amateur and professional golf tournaments draw people to courses in different parts of the state. The state's "Travel Oregon" website features golf as a key outdoor recreational activity (http://www.TravelOregon.com). In 2008, SRI estimates golf-related tourism spending in Oregon was $221.8 million. This is based on the following estimates of golf trips and associated expenditures by Oregon residents and non-residents: (1) an estimated 354,000 *day* trips with average golf trip spending of $69, and (2) an estimated 378,000 *overnight* trips with average trip spending of $522.

Oregon's Golf-Related Travel Expenditures in 2008	
# of day trips	354,000
Average travel $ per day trip	$68.58
# of overnight trips	378,000
Average travel $ per overnight trip	$522.47
TOTAL	**$221.8 million**

IV. GOLF'S ECONOMIC IMPACT IN OREGON

Golf's impact on Oregon'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 Oregon golf industry supported:

- A total economic impact of $2.5 billion for the state of Oregon including the indirect and induced economic impacts stimulated by golf sector activity;
- A total employment impact of 27,187 jobs; and
- Total wage income of $703.6 million.

Golf's Impact on Oregon's Economy (2008)						
Industry	**Direct**	**Indirect**	**Induced**	**TOTAL OUTPUT ($ million)**	**TOTAL JOBS ($ million)**	**TOTAL WAGE INCOME ($ million)**
Golf Facility Operations	$361.7			$783.7	11,533	$241.0
Golf Course Capital Investment*	$51.2			$56.1	482	$17.1
Golf-Related Supplies	$464.6			$1,025.6	6,345	$242.3
Tournaments & Associations	$15.6			$33.9	474	$12.4
Real Estate **	$73.2			$143.7	1,235	$43.7
Hospitality/Tourism	$221.8			$467.6	7,117	$147.0
TOTAL	**$1,188.1**			**$2,458.8**	**27,187**	**$703.6**

Note: To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of $1,188.1 million the portion of capital investment that is investment in existing facilities ($26.9 million of $51.2 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments ($11.0 million of $73.2 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.
Numbers in columns may not sum due to rounding.

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[5]; 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 Oregon in 2008 or the latest available year.

[5] However, on-course merchandise sales are subtracted from facility revenue, because these sales are included in the Golf-Related Supplies industry segment.

Estimates of Oregon Golf Facilities from Various Sources, 2002-2008					
	2002 Census (# of facilities minus resorts & municipal)[1]	**2008 PGA (# of facilities)[2]**	**2008 OGA (# of facilities)[3]**	**2008 NGF (# of facilities)[4]**	**2008 NGF (# of 18-hole equivalent courses)[4]**
PRIVATE	**30**	**43**	**37**	**40**	**38**
PUBLIC	**122**	**133**	**156**	**139**	**119**
Daily fee/ semi-private		114			
Municipal		19			
Military					
University					
RESORT		**14**	**10**	**10**	**12**
TOTAL	**152**	**190**	**203**	**189**	**169**

Sources: [1] U.S. Census Bureau, *2002 Economic Census*.
[2] Professional Golfers' Association of America (2008). *Facility Database*.
[3] Oregon Golf Association (2010). Oregon Golf Facility Database.
[4] NGF (2009). Total Facility Supply Tables 5-10, *Golf Facilities in the U.S., 2008 edition*, pp.5-10.

The PGA of America, Oregon Golf Association (OGA), and NGF count of total golf facilities fall within a narrow range, NGF's 189 vs. OGA's 203. The OGA data is slightly higher because it counts each 18-hole golf course as a facility, whereas the PGA will count as one facility a golf facility with two 18-hole golf courses. After analysis of all three data sets, SRI used the PGA numbers as the basis for our assessment.

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

The U.S. Census Bureau collects revenue data for golf course facilities as part of its Economic Census of all U.S. establishments every five years. Whereas facility surveys conducted by private sector organizations are often based on low response rates (less than 30 percent), all establishments are 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 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 Oregon Average Revenue per Facility Data From Different Sources, 2002-2008					
	Census (2002)[1]	PGA (2007)[2]	PGA (2008)[3]	Adjusted PGA (2008)	NGF (2005)[4,5]
Private facility	$1,697,300	$2,783,868	$4,565,239	**$3,263,576**[a]	$3,564,339
Daily fee facility	$1,246,811	$1,081,582	$1,626,955	**$1,354,269**[b]	$1,291,582
Resort facility	X	$2,125,429	$1,859,839*	**$3,987,345**[c]	X
Municipal/military/ university facility	X	$2,778,402	$1,410,771	**$2,094,587**[d]	X
Driving range	X	X	X	X	$350,000
Miniature golf	$456,923	X	X	X	X

Note: * is a regional resort facility average combing data for Oregon and neighboring states due to low sample size.
[a] Weighted average using PGA and OGA survey data for private facilities
[b] Average of 2007-2008 PGA facility revenue for daily fee facilities
[c] OGA/SRI survey data for resort facilities
[d] Average of 2007-2008 PGA facility revenue for municipal/military/university facilities
Sources: [1] U.S. Census Bureau, *2002 Economic Census*.
[2] Professional Golfers' Association of America (2008). *2007 Operations Survey*.
[3] Professional Golfers' Association of America (2009). *2008 Operations Survey*.

Average revenue data from the Census (2002), The PGA (2008) and NGF (2005) are presented above. With regard to the PGA data, there were significant differences between 2007 and 2008 in reported average revenue for private facilities ($2,783,868 in 2007 vs. $4,565,239 in 2008), daily fee facilities ($1,081,582 vs. $1,626,955), and municipal/military/university facilities ($2,778,402 vs. $1,410,771). These differences are likely due to differences in the mix of facilities that responded in each year, e.g., if higher end facilities located in larger metropolitan areas accounted for a majority of the responses in 2008 than in 2007, this would skew the average revenue upwards significantly. To address this self-selection sampling bias, SRI took the average of 2007 and 2008 data to create an adjusted PGA average revenue figure for daily fee facilities ($1,354,269) and municipal/military/university facilities ($2,094,587).

In the case of private facilities, the PGA's $4,565,239 average revenue figure seemed quite high for a state average during a tough economic year. The OGA/CMA surveyed additional private facilities from across the state (Portland region, Bend region, the Coast, and Southern Oregon) to get a sense of average revenue for higher end facilities. The OGA/CMA received responses from 11 out of the 43 total private facilities resulting in average private facility revenue of $4,659,091. SRI calculated a new weighted average of $3,263,576 using the $4,659,091 for the 11 higher-end facilities and the PGA's $2,783,868 for the 32 remaining facilities.

SRI also collected data to get a better sense of actual average revenue for Oregon resorts. The PGA's 2008 average revenue figure suffered from a low response rate, and the figure presented is actually a regional average using responses from Oregon as well as neighboring states. SRI received responses from 10 out of 14 golf resorts in the state. It should be noted that Oregon's golf resorts are extremely diverse—some are highly seasonal operations while others operate year-round, some are located in highly populated regions while others are located in less populated parts of the state, some golf resorts operated two or three 18-hole courses in 2008, while others had one. The median average revenue resulting from this survey was $1,850,000, and the average revenue was $3,987,345.

SRI calculated total traditional facility revenues using the "Adjusted PGA" column of data in the table, above. Driving range revenues were calculated using the Golf Range Association of America's estimate of average revenue figure for golf ranges in 2006, and miniature golf facilities were calculated using Census (2002) data. We adjusted the Census and GRAA data for inflation using the GDP deflator. In 2008, SRI calculated Oregon's total facility operations generated approximately $361.7 million in revenue.

2008 Golf Facility Operations Revenues		
Facility type	**Calculation**	**Estimate**
Private facilities	Average revenue[1]	$2,891,379
	Number of facilities	43
	Total revenue [1]	**$124,329,276**
Daily fee/semi-private facilities	Average revenue[1]	$1,178,845
	Number of facilities	133
	Total revenue [2]	**$156,786,351**
Municipal/military/university facilities	Average revenue[1]	$1,155,172
	Number of facilities	19
	Total revenue [3]	**$21,948,272**
Resort facilities	Average revenue[1]	$3,476,352
	Number of facilities	14
	Total revenue [4]	**$48,668,932**
Driving ranges	Average revenue	$367,714
	Number of facilities	8
	Total revenue	**$2,941,712**

2008 Golf Facility Operations Revenues		
Facility type	**Calculation**	**Estimate**
Miniature golf facilities	Average revenue	$538,097
	Number of facilities	13
	Total revenue	**$6,995,255**
TOTAL	**Sum [1] to [6]**	**$361,669,798**

Note: [1]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. Numbers may not sum due to rounding.

Sources: Private facility revenue is a weighted average calculated using data from an OGA survey and 2007 PGA data for private facilities. Resort facility average revenue is based on data from a SRI/OGA survey, with representative responses from 10 out of 14 total golf resorts. Daily fee and municipal/military/university facility revenue are calculated using an average of PGA 2007 and 2008 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.

Oregon Golf Course Construction and Capital Investment in 2008 ($ millions)	
Golf Course Capital Investment[1]	**$26.9**
New Course Construction	**$24.3**
TOTAL	**$51.2**

Note: [1] 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 used the GCSAA data in the Oregon capital investment calculations. We estimated average facility investments in Oregon using the known distribution and type characteristics of facilities in the state. (See preceding section on number of facilities for sources.) Annual facility revenue and capital investment by private facilities located in more densely populated regions of the state (greater Portland, Bend, Salem and Eugene, etc.) are significantly higher than for the rest of the state. Therefore, we supplemented the GCSAA private facility data with data collected through a Club Managers or Oregon survey of a representative group of these higher-end private facilities from across the state. SRI applied the $340,727 average capital investment from the Club Managers of Oregon survey to half of the state's private facilities resulting in a weighted average of $257,754. The higher average capital investment figure was also used for Oregon's 14 resorts which are included in the public facilities calculation. SRI's calculations indicate that Oregon's 43 private facilities invested an average of $255,810 and the state's 147 public facilities invested an average of $108,484, for a total capital investment of $25.8 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 1.5 new 18-hole equivalent golf courses opened in Oregon and that 4.5 were under construction.

An estimate for the average investment for each new golf course in Oregon 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 High Piedmont and Coastal Lowlands 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 Oregon is $8.1 million.

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

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 4.5 courses under construction in 2008 and the 1.5 new openings invest an average of $4.0 million each, for a total of $24.3 million.

C. Golf-Related Supplies

This section explains our methodology for calculating Oregon manufacturers' out-of-state shipments of golf equipment, golf apparel, 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. 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 Golf Alliance of Oregon to identify major golf-related companies in the state. We identified a small number of companies manufacturing golf equipment and accessories in Oregon—Nike Golf, Pinemeadow Golf, Golf Scorecards Inc., Lion Golf, etc. We then conducted research on these companies to ascertain: (1) if they had headquarters, R&D/design, or production facilities in Oregon, (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 2008 Survey of Manufacturers.

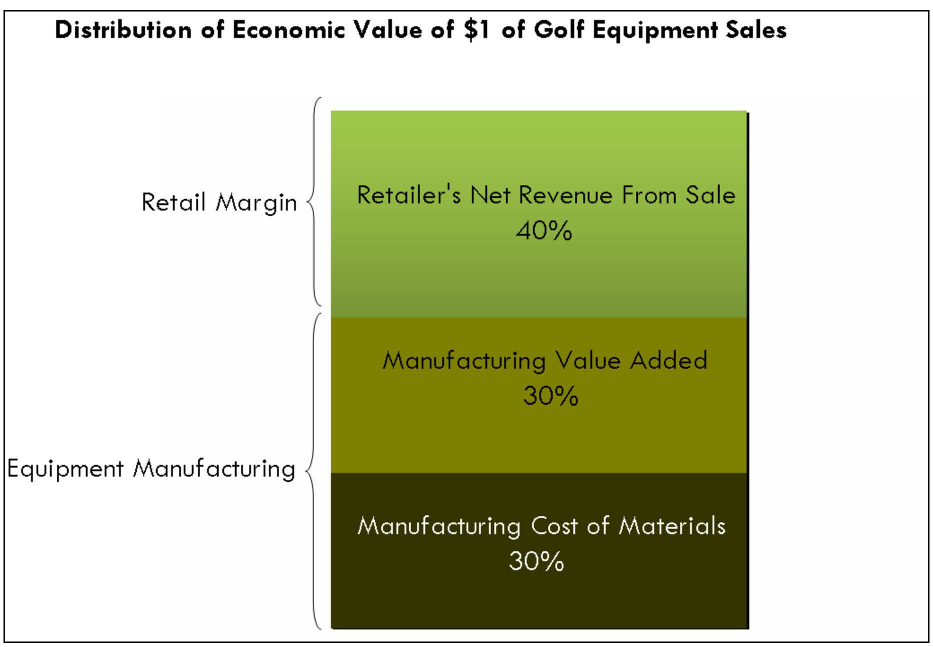
Oregon Manufacturers' Value-Added Exports of Golf-Related Products in 2008 ($ millions)	
TOTAL	**$422.1**

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 Pacific region accounted for 27.1% of these purchases, or $155.5 million. Within the Pacific region, one can estimate Oregon'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. Oregon represents 11.7% of total 18-hole equivalent courses in the Pacific region, so this weight was applied to the region total ($155.5 million) to estimate $18.2 million of individual golf club sales in the state of Oregon in 2008. Further, retail margins on final sales suggest that 40.5%, or $7.4 million, of total sales was retained in the Oregon economy. (See graphic below.)



Oregon's On-Course and Off-Course Golf Equipment & Apparel Purchases, 2008		
Category	**Calculation**	**Estimate ($ million)**
Golf club sets	Pacific region's sales	$359.2
	OR's courses-based weight	11.7%
	OR's share of sales [1]	**$42.0**
Golf apparel	Pacific region's sales	$112.7
	OR's courses-based weight	11.7%
	OR's share of sales, [2]	**$13.2**
Golf balls	Pacific region's sales	$146.9
	OR's courses-based weight	11.7%
	OR's share of sales, [3]	**$17.2**
Golf clubs	Pacific region's sales	$155.5
	OR's courses-based weight	11.7%
	OR's share of sales, [4]	**$18.2**
Golf bags	Pacific region's sales	$60.1
	OR's courses-based weight	11.7%
	OR's share of sales, [5]	**$7.0**
Golf shoes	Pacific region's sales	$54.6
	OR's courses-based weight	11.7%
	OR's share of sales, [6]	**$6.4**
TOTAL	**Sum of [1] to [6]**	**$104.0**
Retail sales margin	**Multiply TOTAL by 40.5%**	**$42.1**

Source: National Sporting Goods Association (2008). *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 Oregon 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 $865,352 with a retail sales margin of $350,468. 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 Oregon, 2008	
Category	**Estimate**
Oregon retail book sales[1]	**$206,036,206**
Golf books as % of total book sales	**0.4%**
Total retail golf book sales	**$865,352**
Retail sales margin	**$350,468**

Note: [1]Adjusted for inflation into 2008 dollars using the appropriate GDP deflator.
Sources: Oregon 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.

Oregon Retailers' Net Revenues on Consumer Purchases of Golfer Supplies in 2008 ($ millions)		
	Total purchases	**Retail sales margin**
Golf Equipment (retail margin)	**$90.8**	**$36.8**
Golf Apparel (retail margin)	**$13.2**	**$5.3**
Golf Media (retail margin)	**$0.9**	**$0.4**
TOTAL	**$104.9**	**$42.5**

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 Oregon Golf Association (OGA), the Oregon Chapter of the Pacific Northwest Section of The PGA of America, the Oregon Golf Course Superintendents Association, the Northwest Turfgrass Association, the Oregon Golf Course Owners Association, the Oregon Club Managers Association, women's golf associations, juniors and seniors golf associations, and other member-based golf associations.

Major Tournaments. In 2008, Oregon hosted three major golf championships, including a Champions Tour event, an LPGA event, and a Nationwide 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.

Oregon State's Major Golf Tournaments & Golf Association Revenues in 2008 ($ millions)	
Major tournaments	**$11.2**
Associations	**$4.4**
TOTAL	**$15.6**

Charitable Events. Overall, SRI estimates that the amount of charitable giving attributed to the game of golf in Oregon to be $28.5 million in 2008. This estimate is derived from a national study[6] 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 Oregon's Golf Industry in 2008 ($ millions)	
TOTAL	**$28.5**

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.

Oregon's Golf Real Estate Revenues in 2008 ($ millions)	
Golf-Related Residential Construction	**$62.2**
Realized Golf Premium	**$11.0**
TOTAL	**$73.2**

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

[6] National Golf Foundation (2002). *The Charitable Impact Report,* November 2002.

of townhouses versus single family homes, and overall real estate market conditions (e.g., high-growth metro regions versus more rural parts of the state).

SRI identified a number of golf communities that were under development at private clubs, golf resorts and daily fee facilities in 2008. The overall real estate market and economic and financial conditions in 2008 sidelined a significant share of new home construction. However, the golf communities that were under development in 2008 ranged from the 368-home Club at Pronghorn development in Bend, OR, to the Goose Hollow and Renaissance golf subdivisions of the Tukwila residential community surrounding the OGA Golf Course in Woodburn, OR. New homes were also constructed at Brasada Ranch Resort, Sunriver Lodge & Resort, and Eagle Crest Resort. Multiplying the total number of new homes under construction in each community with the average construction cost per unit yielded a total 2008 golf-related residential construction figure of $62.2 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 $50,000 per unit. Multiplying the approximately 24 existing Oregon golf communities by 270, the mean number of housing units per golf course, we arrive at a total of 6,480 golf community homes. In 2008, the home turnover rate (percentage of homes sold relative to the total housing stock) was 3.4 percent in Oregon. 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 Oregon's golf real estate premium was approximately $11.0 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. Longwoods International estimated that approximately 2 percent of Oregon's domestic overnight visitors played golf while on a trip in 2006. [7] This figure includes trips to Oregon golf resort destinations (of which Oregon has ten), golf outings while on vacation

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[7] Longwoods International (2007). *2006 Oregon Overnight Travel Study*, slide 71. http://industry.traveloregon.com/upload/otc/departments/tourismdevelopment/oregonovernightvisitor06.pdf

or business travel, as well as trips by Oregonians 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 Oregon.

SRI defines a "golf trip" as a trip in which an Oregon resident or non-resident travels 50-plus miles to, through, or within the state and plays golf while on this trip. Golf-related trips include both overnight and day trips. To estimate the number of overnight golf trips in 2008, SRI multiplied the total number of domestic visitor overnight trips in 2008 (18.9 million) by the estimated percentage of visitors who play golf while on an overnight trip to Oregon (2.0 percent). SRI calculated that 378,000 Oregon overnight golf trips were made in 2008.

To estimate the total number of golf day trips, SRI first had to estimate the total number of domestic visitor day trips taken in Oregon in 2008, since information for this year was not available. SRI estimated this figure by applying the ratio of day trips versus overnight trips (48% vs. 52%) reported in a 2007 Dean Runyan Associates report in Oregon to the total number of overnight trips in Oregon in 2008 (18.9 million). From this calculation, SRI arrived at an estimate of 17.7 million day trips in Oregon in 2008. SRI then estimated that there were 354,000 Oregon golf day trips in 2008, assuming a similar percentage of domestic visitors played golf while on a day trip to Oregon as is the case with overnight trips (2 percent). The total number of golf trips (732,000 total golf trips, including both day and overnight) seems plausible given the PGA of America's estimate of 5.8 million rounds played in Oregon in 2005. This translates into approximately 12.6 percent of total rounds played on Oregon courses being played by golfers from other parts of Oregon or from out of state.

Average spending per golf trip. SRI estimated that average spending per golf trip in Oregon in 2008 was $69 per day trip and $522 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 and adjusted average trip spending based upon online research of Oregon golf packages and relative price levels in Oregon vis-à-vis the rest of the country. Multiplying the total number of golf trips (day and overnight) by average spending per golf trip (day and overnight), SRI found that total golf-related tourism spending in Oregon was $221.8 million in 2008.

Oregon's Golf-Related Travel Expenditures in 2008	
# Golf person day trips	354,000
Average travel $ per person per day trip	$68.58
# Golf person overnight trips	378,000
Average travel $ per person per overnight trip	$522.47
TOTAL	**$221.8 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 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 Oregon's golf economy.

Golf's Impact on Oregon's Economy (2008)						
Industry	Direct	Indirect	Induced	TOTAL OUTPUT ($ million)	TOTAL JOBS ($ million)	TOTAL WAGE INCOME ($ million)
Golf Facility Operations	$361.7			$783.7	11,533	$241.0
Golf Course Capital Investment*	$51.2			$56.1	482	$17.1
Golf-Related Supplies	$464.6			$1,025.6	6,345	$242.3
Tournaments & Associations	$15.6			$33.9	474	$12.4
Real Estate **	$73.2			$143.7	1,235	$43.7
Hospitality/Tourism	$221.8			$467.6	7,117	$147.0
TOTAL	**$1,188.1**			**$2,458.8**	**27,187**	**$703.6**

Note: To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of $1,188.1 million the portion of capital investment that is investment in existing facilities ($26.9 million of $51.2 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments ($11.0 million of $73.2 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.

Numbers in columns may not sum due to rounding.

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