



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 January 2015 through an agreement with



CONTENTS

STUDY OVERVIEW	1
ANALYTICAL FRAMEWORK	2
A. Golf Industry Cluster Definition	2
B. Data Sources	3
THE SIZE OF OREGON’S GOLF ECONOMY	6
A. Core Industries	6
B. Enabled Industries.....	11
GOLF’S ECONOMIC IMPACT IN OREGON	13
DETAILED METHODOLOGY & DATA SOURCES	16
A. Golf Facility Operations.....	16
B. Golf Facility Capital Investment	19
C. Golf-Related Supplies	21
D. Associations, Tournaments & Charitable Giving	25
E. Real Estate.....	26
F. Golf-Related Hospitality/Tourism.....	27
G. Golf’s Economic Impact	29
WORKS CITED	32

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 allied national golf organizations: CMAA, GCSAA, LPGA, NGCOA, PGA of America, PGA TOUR, and USGA.

The Oregon Golf Economy study was conducted by Steven Deitz, Katherine Johnston, Jennifer Ozawa, Daniel Querejazu, and Peter Ryan at SRI International with contributions from individuals representing the Oregon Golf Association, the Oregon Chapter of the Pacific Northwest Section of the PGA of America, Oregon Golf Course Owner’s Association, the Oregon Golf Course Superintendents Association, and the Oregon Club Managers Association.

ACRONYMS

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

STUDY OVERVIEW

Home to 190 golf facilities and some notable golf equipment and apparel manufacturers—Nike Golf, Adidas, and Columbia Sportswear—golf in Oregon is more than just an enjoyable pastime. It is a key industry contributing to the vitality of local communities and the state economy. In 2013, the size of Oregon’s golf economy was approximately \$1.3 billion, making it comparable in size to other important industries in the state, including paper manufacturing (\$3.9 billion), software publishing (\$1.5 billion), and greenhouses/nurseries (\$0.8 billion).¹ 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, Oregon’s golf industry supported approximately \$2.0 billion of total economic activity, over 21,000 jobs, and \$576.4 million of wage income in 2013.

This report represents the second study estimating the impact of the golf industry on Oregon’s economy. SRI conducted a previous economic impact study for the base year 2008. The significant U.S. economic recession, which began at the end of 2007 and ended officially in 2009, has had lingering effects on the performance of different Oregon golf industry segments over this five-year period. Although 2008 was a recessionary year, many residential construction projects were already underway and still represent historical highs. The housing bubble leading up to the recession contributed to an oversupply of homes post-recession, and it has taken some time for demand to catch up.

Overall, from 2008 to 2013, SRI finds that Oregon experienced a sharp contraction in new golf course and golf home construction, fewer professional tournaments being played in Oregon (due to declines in corporate sponsorship), and a decline in Oregon golf facility revenue. Balancing these declines were strong recovery by Oregon golf-related manufacturers and growth in golf-related tourism. As a result, Oregon’s overall golf industry grew (5.6 percent) in nominal terms, and declined slightly in real terms (by 1.6 percent) from 2008 to 2013. SRI estimates that the Oregon golf industry generated \$1.2 billion of economic activity in 2008, and \$1.3 billion in 2013. Looking forward, Oregon’s golf industry is poised to regain more ground as economic conditions improve. A sign of better times to come, the Web.com Tour, the developmental tour for the PGA Tour, returned to Oregon in 2014 as the WinCo Foods Portland Open.

¹ U.S. Census Bureau, 2007 Economic Census, Geographic Series: Paper Manufacturing (NAICS 322) and Software Publishers (NAICS 5112). 2007 revenues adjusted to 2013 dollars using the GDP deflator. U.S. Department of Agriculture, Economic Research Service (2013), “Top Commodities, Exports, and Counties,” Oregon State Fact Sheet.

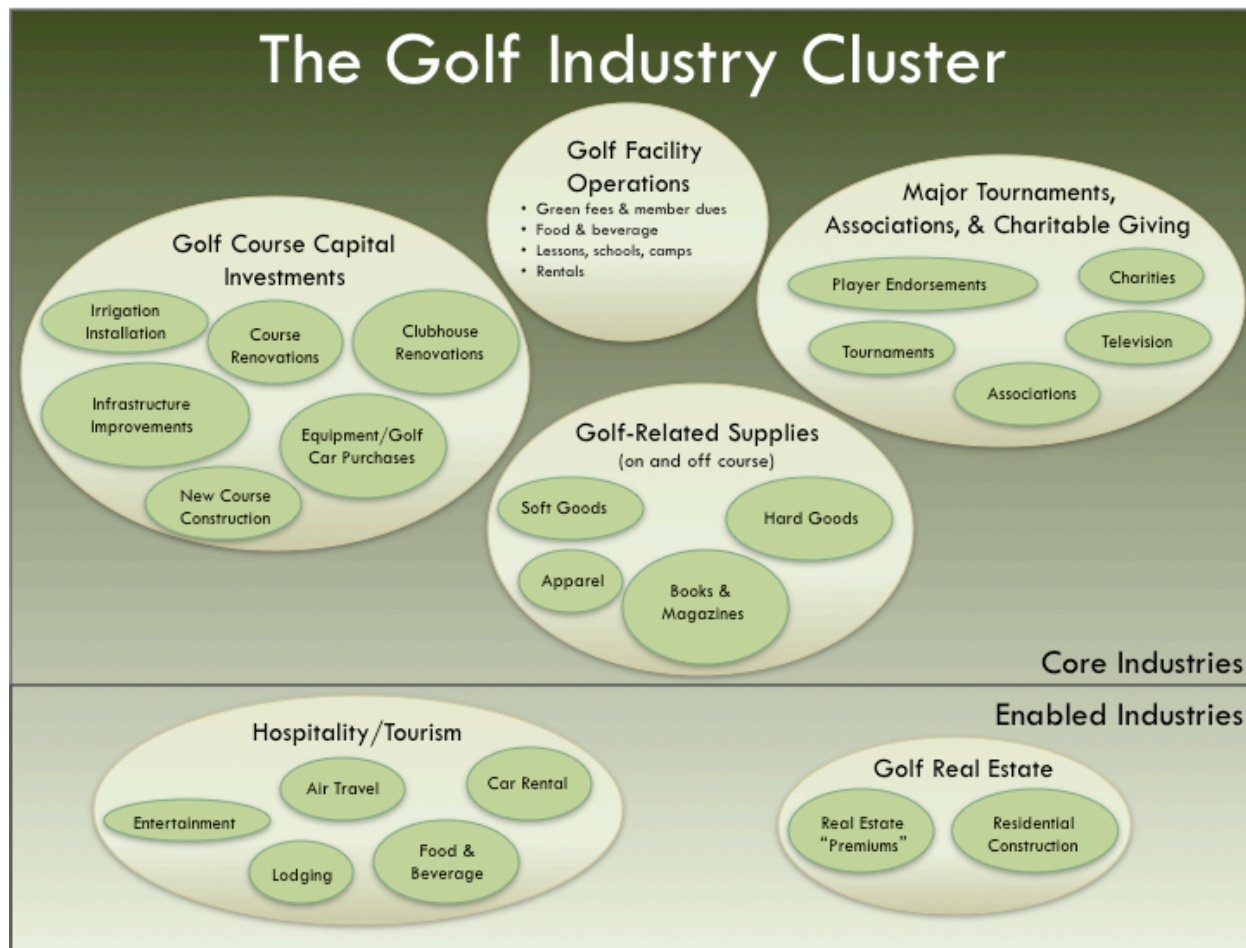
ANALYTICAL FRAMEWORK

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 2010 state-level *The Oregon 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 below). 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 (2008-2013 data)	NGF Facility Database, multiple years; state golf associations; 2007 Economic Census
Avg. revenues by type of facility	PGA Facility Operations Survey, multiple years (2008-2013 data)	2007 Economic Census; National Golf Foundation; state task force
# of rounds by facility type	2014 PGA Operations Survey (2013 data)	National Golf Foundation
Golf Course Capital Investments		
Avg. capital investment by type of facility	GCSAA Compensation Survey (2011 data)	National Golf Foundation; state task force
# of golf courses under construction in current year	National Golf Foundation (2013 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 (2013 data)	PGA Facility Database (2013 data)
Golf apparel	National Sporting Goods Association (2013 data)	PGA Facility Database (2013 data)
Golf media	Book Industry Study Group/ Association of American Publishers (2013 data)	2007 Economic Census
Associations, Tournaments & Charitable Giving		
# of major state-level golf associations	State counterparts of national golf associations	State task force
Annual expenditures/budgets	State golf associations	IRS Form 990
# of major tournaments held in state	State task force	PGA TOUR, LPGA
Visitor attendance at tournaments, tournament revenues	Major golf associations	State tourism agency; national golf associations; state golf associations
Revenues raised through charitable golf events	National Golf Foundation (2011 data)	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	Online research
# of lots per course	Real estate development site plans; interviews with real estate developers	Real estate agents

Avg. construction costs per home and real estate premium	Interviews with real estate developers	Real estate agents
Hospitality/Tourism		
# of golf travelers or # of golf-related trips to the state Avg. spending per traveler or per trip	Dean Runyan Associates; Longwoods International National Golf Foundation (2003 data); Online Research	State department of tourism/recent surveys/studies State department of tourism/recent surveys/studies

THE SIZE OF OREGON'S GOLF ECONOMY

SRI's estimates of the size of each of the six golf industry segments and the overall golf economy in 2008 and 2013 are presented in the table below. SRI estimates the total size of Oregon's golf economy in 2013 was approximately \$1.3 billion, up from \$1.2 billion in 2008. There were notable declines in Golf Facility Operations, Golf Course Construction and Capital Investments, Major Golf Tournaments and Association, and Real Estate. Balancing these declines were growth in Golf-Related Supplies and Hospitality/Tourism, which followed overall state and national growth trends in these sectors following the recession of 2007-09.

Size of Oregon's Golf Economy in 2013 and 2008 by Industry Segment (\$ millions)		
	2013	2008
CORE INDUSTRIES		
Golf Facility Operations	\$336.4	\$361.7
Golf Course Construction and Capital Investments	\$45.0	\$51.2
Golf-Related Supplies (retail margin and manufacturing exports)	\$581.2	\$464.7
Major Golf Tournaments and Associations	\$6.4	\$15.6
TOTAL CORE INDUSTRIES	\$968.9	\$893.2
ENABLED INDUSTRIES		
Real Estate	\$36.5	\$73.2
Hospitality/Tourism	\$251.7	\$223.6¹
TOTAL ENABLED INDUSTRIES	\$288.2	\$296.8
TOTAL GOLF ECONOMY	\$ 1,257.1	\$1,190.0

Note: Column sums may not sum due to rounding of individual estimates. Numbers also have not been adjusted for inflation but are expressed as nominal dollars.

¹ SRI revised the 2008 Hospitality/Tourism estimate from \$221.8 million to \$223.6 million, due to data issues. Consequently, SRI also revised the total golf economy estimate from \$1,188.1 million to \$1,190.0 million in 2008.

A. CORE INDUSTRIES

Golf Facility Operations

At the center of any golf economy lie the golf facilities—the largest component in terms of revenues. The revenue that flows through a golf facility comes primarily from green fees, membership fees, golf cart rentals, lessons, and associated spending on food and beverages. This revenue, in turn, supports a host of supply sectors including golf equipment and apparel designers and manufacturers, food and beverage providers, and turfgrass equipment and maintenance service providers. Oregon's 190 golf courses, 12 stand-alone ranges, and 5 miniature golf facilities generated \$336.4 million of revenue in

2013. This represents a decline from the 2008 total operations revenue of \$361.7 million (\$388.5 million in 2013 dollars when adjusted for inflation).

Oregon Golf Facility Revenues in 2013 (\$ millions)	
Golf Facilities	\$329.3
Practice Ranges & Alternative Facilities	\$7.1
TOTAL¹	\$336.4

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

Golf is a sizeable industry, but even more significant when compared to other popular revenue-generating sports. For example, Oregon's golf facilities generated revenues comparable to all other spectator sports in the state combined—racetracks, professional basketball, hockey, baseball, and soccer. These five other sports generated revenues of \$152.6 million in 2007 (latest available year for this data), or \$167.1 million in 2013 inflation-adjusted dollars.²

Golf Facility Capital Investments

Golf facilities generate economic impacts beyond operational expenditures 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 facility capital investments is divided into two segments: (1) capital investments at existing facilities and (2) new course construction. Together, Oregon's golf facilities made \$45.0 million worth of capital investments in 2013: \$26.8 million of investments at existing facilities and \$18.2 million for the construction of new courses or course rebuilding projects.

By comparison, Oregon's golf facilities made \$51.2 million in total capital investment in 2008, which includes \$26.9 million of investments at existing facilities and \$24.3 million for the construction of new courses. (When adjusted for inflation, these figures are \$55.0 million for total capital investments: \$28.9 million at existing facilities and \$26.1 million for the construction of new courses in 2013 dollars.) The decrease in total capital investments from 2008 to 2013 reflects a significant decline in new course construction, while investment at existing facilities declined slightly over this period.

² U.S. Census Bureau (2010). Oregon: 2007 Economic Census, Arts, Entertainment & Recreation Geographic Series.

Oregon Golf Facility Capital Investment and New Course Construction in 2013 (\$ millions)	
Golf Facility Capital Investments¹	\$26.8
New Course Construction	\$18.2
TOTAL	\$45.0

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

Golf-Related Supplies

Oregon golfers spend significant sums on golf balls, golf clubs, golf apparel, and golf media (books, magazines, DVDs). The economic value that accrues to a state comes from the production of these golf-related goods, as well as retail sales of such items. Oregon is home to some notable golf equipment manufacturers, such as Nike Golf, Adidas, and Columbia Sportswear, in addition to a number of smaller golf equipment and accessories manufacturers in the state—Seamus Golf, Pinemeadow Golf, Golf Scorecards Inc., etc. SRI's Golf-Related Supplies estimate is comprised of two segments: a retail margin estimate that captures the value associated with the sale of golf products in Oregon, and a value-added exports estimate that captures Oregon production that is shipped to other states and countries.

In 2013, SRI estimates that the value-added shipment of golf-related products generated \$535.6 million, up from \$422.2 million in 2008 (or \$453.5 million in inflation-adjusted dollars). This increase is due to recovery in revenue growth by some major manufacturers, as well as better data availability, which balanced the closure of some of the smaller firms over this five-year period.

Oregon Manufacturers' Value-Added Exports of Golf-Related Products in 2013 (\$ millions)	
TOTAL	\$535.6

On the retail side, Oregon retailers earned approximately \$45.5 million on the sale of \$112.7 million of golf equipment, apparel, and media. By comparison, in 2008, Oregon retailers earned approximately \$42.5 million (or \$45.6 million in 2013 dollars when adjusted for inflation) on the sale of \$104.9 million (or \$112.6 million in 2013 dollars) of golf-related merchandise, representing a marginal increase in real terms from 2008 to 2013. Overall, from 2008 to 2013, the Golf-Related Supplies segment (consisting of value-added exports plus retail margin) experienced a net increase from \$464.7 million (or \$499.1 million in 2013 dollars when adjusted for inflation) to \$581.2 million, due to growth in golf-related manufacturing in Oregon during these two periods.

Oregon Retailers' Net Revenues on Consumer Purchases of Golf-Related Supplies in 2013 (\$ millions)		
	Total purchases	Retail sales margin
Golf Equipment (retail margin)	\$97.1	\$39.2
Golf Apparel (retail margin)	\$15.2	\$6.1
Golf Media (retail margin)	\$0.4	\$0.2
TOTAL	\$112.7	\$45.5

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

Associations, Major Tournaments & Charitable Giving

Associations and Major Tournaments

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 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 of Greater Portland, 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 premier regional junior golf competitions in the country.

Oregon hosted one major golf championship in 2013: the Safeway Classic presented by Coca-Cola (now Portland Classic), an LPGA event.³ Founded in 1972, the Safeway Classic is the oldest continuous event on the LPGA Tour, and the event takes place each year in the Portland, Oregon region. In 2013, the tournament was played at the Columbia Edgewater Country Club in Portland.

In 2013, the Safeway Classic (excluding the tournament purse and costs for TV broadcasting), combined with Oregon golf association expenditures, generated approximately \$6.4 million. In 2008, SRI estimated combined tournament and golf association expenditures of \$15.6 million (or \$16.8 million in 2013 dollars when adjusted for inflation). The decrease in combined expenditures is due a decline in many golf associations' budgets, as well as the fact that Oregon hosted three championship events in 2008—

³ In 2014, the Web.com Tour, formerly the Nationwide Tour, returned to Oregon as the WinCo Foods Portland Open. The Web.com Tour is the developmental tour for the PGA Tour. However, 2014 was outside the base year for this study.

the Safeway Classic; the JELD-WEN Tradition, a Champions Tour event; and the Oregon Classic, a Nationwide Tour Event—but hosted only one professional tournament in 2013.

Oregon's Major Golf Tournament & Association Revenues in 2013 (\$ millions)	
TOTAL	\$6.4

Charitable Giving

Oregon' golf industry makes substantial contributions to a variety of charities. At the championship level, the Safeway Classic raises \$1 million each year for local charities. For example, the chief executive officer of the Boys & Girls Club of Portland estimated that his organization alone has received more than \$3 million over the past 10 years from this event. Other local children's charities supported by the tournament include Easter Seals of Oregon, the Evans Scholars Foundation, Trillium Family Services, Police Activities League, the Children's Course and Oregon Junior Golf.^{4,5}

When totaled across all facilities, charitable golf events organized at the local level also generate significant contributions for charitable organizations across Oregon. A few examples include Bandon Dunes Golf Resort's Fight for Fish charitable golf event that supports freshwater conservation and the Battle at Bandon competitive golf tournament that supports the Harrington Family Foundation, a foundation dedicated to improving quality education opportunities for Oregon youth. Bandon Dunes hosted six charitable golf events in 2013 that raised approximately \$500,000 in total net proceeds for beneficiary organizations. Shadow Hills Country Club hosts the Children's Miracle Network Golf Classic, the Eugene Young Life "Fore Kids" Golf Classic, and other charitable events that raise \$300,000 in net proceeds for charitable organizations. The Lake Oswego Public Golf Course hosts the "Round to Remember" charitable golf event benefiting the Alzheimer's Society and other events in support of the Mobility Impaired Golf Association and Special Olympics Golf. 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 was \$31.8 million in 2013.

Oregon' Golf Industry's Charitable Giving in 2013 (\$ millions)	
TOTAL	\$31.8

⁴ "Safeway Classic generates \$1 million for local children's charities," <http://www.lpga.com/golf/news/archive/2011/12/safeway-classic-generates--1-million-for-local-children-s-charities.aspx> Accessed August 29, 2014.

⁵ The Oregonian Editorial Board, "Safeway Classic scores for Portland," http://www.oregonlive.com/opinion/index.ssf/2013/08/safeway_classic_scores_for_por.html Accessed August 29, 2014.

B. ENABLED INDUSTRIES

Real Estate

Real estate developers use amenities to attract new home buyers, and golf is a key amenity in many parts of the state. The development of new homes in golf communities in Oregon followed the rise in the national real estate market, which peaked in 2005 in terms of new home starts, and suffered from the financial crisis and recession of 2007-2009.⁶ The Oregon Office of Economic Analysis reports that housing starts have experienced only a 55% recovery since the Great Recession due to overbuilding during the housing bubble and a surge in the preference of Oregonians to rent rather than own.^{7,8} Despite the dearth of new residential construction in the state overall, a few golf developments experienced some notable construction in 2013 (ranging from 12 to 20 new homes), such as Brasada Ranch in Bend and Caldera Springs in Sunriver. Many other golf community developments had only a handful of homes constructed in 2013. They include golf communities such as Eagle Crest in Redmond; Awbrey Glen Golf Club in Bend; and Aspen Lakes in Sisters, among others.

New golf-related real estate construction generated \$26.8 million in 2013. By comparison, in 2008, SRI estimated new golf home construction generated \$62.2 million (or \$66.8 million in 2013 inflation-adjusted dollars). Furthermore, in 2013 there were an estimated 23 golf communities (including properties on golf resorts) in Oregon, and SRI estimates the “golf” premium associated with the sale of real estate in these developments to be \$9.7 million, down from \$11.0 million (or \$11.8 million in inflation-adjusted dollars). 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. Although new golf home construction is down significantly since 2008, the sale of *existing* homes has recovered better fueled by low interest rates and a strengthening economy.

Oregon’s Golf Real Estate Revenues in 2013 (\$ millions)	
Golf-Related Residential Construction	\$26.8
Realized Golf Premium	\$9.7
TOTAL	\$36.5

Note: Numbers may not sum due to rounding. 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.

⁶ U.S. Census Bureau (2014). Building Permits Survey: Oregon, 2005-2013.

⁷ Oregon Office of Economic Analysis (2015). “Economic Recovery Scorecard.” Posted Jan. 7, 2015, <http://oregoneconomicanalysis.com/> Accessed Jan. 9, 2015.

⁸ Oregon Office of Economic Analysis (2015). *Oregon Economic Review and Forecast*, <http://www.oregon.gov/DAS/OEA/docs/economic/oregon.pdf> Accessed Jan. 9, 2015.

Golf-Related 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, family, or business colleagues. Golf is a sizeable tourism segment in Oregon, alongside key traveler activities such as outdoor recreation, sightseeing, and culinary experiences. Oregon's golf courses and 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 *Travel Oregon* website features the state's golf courses among the many recreational activities available in the state (<http://traveloregon.com/see-do/recreation/golf/>), and it highlights the fact that Oregon is home to *Golf Digest's* "best golf course in the world" (Brandon Dunes).

In 2013, SRI estimates golf-related tourism spending in Oregon was \$251.7 million. This is based on the following estimates of golf trips and associated expenditures by Oregon residents and non-residents: (1) an estimated 462,411 *day* trips with average golf trip spending of \$80 per person and (2) an estimated 297,540 *overnight* trips (which in Oregon SRI estimates average 2 nights) with average trip spending of \$722 per person.⁹ This represents an increase in real terms relative to golf-related tourism spending in 2008, which SRI now estimates at \$223.6 million (or \$240.2 million in 2013 dollars, when adjusted for inflation).¹⁰

The growth in golf-related tourism spending is consistent with the overall growth in visitor spending in Oregon, as the economy recovered from the recession of 2007-2009.¹¹ Tourism trips growth in Oregon has been quite strong from 2008-2013 (estimated at 6.8% annual growth for overnight and day trips combined), with especially robust growth rates for day trips (estimated at 7.6% annual growth). These trends have driven strong growth in golf overnight and day trips in Oregon over the same period.

Oregon Golf-Related Tourism Expenditures in 2013	
# of golf day trips	462,411
Average travel \$ per golf day trip	\$79.56
# of golf overnight trips	297,540
Average travel \$ per golf overnight trip	\$722.40
Total	\$251.7 million

⁹ All trips refer to "person-trips" which simply means the count of the total number of people taking a trip. Therefore, 462,411 day trips should be interpreted as 462,411 people who took a day trip. Trips include people traveling to Oregon from out of state, as well as people traveling within the state more than 50 miles from home.

¹⁰ Note that SRI has recalculated the size of Oregon golf-related tourism in 2008, due to inconsistencies in the tourism data used as a basis for the estimates presented in SRI's *Oregon Golf Economy 2008* report. Therefore, the 2008 figures shown here will not match with those presented in the previous report.

¹¹ Total direct travel spending in Oregon grew from \$8.57 billion in 2008 (or \$9.21 billion in 2013 dollars) to \$9.55 billion in 2013. Source: Dean Runyan Associates (April 2014), *Oregon Travel Impacts 1991-2013p*, http://www.deanrunyan.com/doc_library/ORImp.pdf








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 other industries in the state economy. In economics, the idea of the multiplier is that changes in the level of economic activity in one industry impact 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 businesses and employees.

In 2013, the \$1.3 billion Oregon golf industry supported:

- A total economic impact of \$2.0 billion for the state of Oregon including the indirect and induced economic impacts stimulated by golf sector activity;
- A total employment impact of over 21,000 jobs; and
- Total wage income of \$576.4 million.

Golf's Impact on Oregon's Economy in 2013						
INDUSTRY	DIRECT (\$ millions)	INDIRECT	INDUCED	TOTAL OUTPUT (\$ millions)	TOTAL JOBS	TOTAL WAGE INCOME (\$ millions)
Golf Facility Operations	\$336.4			\$471.0	8,082	\$152.4
Golf Course Capital Investments*	\$45.0			\$39.8	317	\$12.5
Golf-Related Supplies	\$581.2			\$1,037.6	7,447	\$276.8
Tournaments & Associations	\$6.4			\$9.6	102	\$3.3
Real Estate **	\$36.5			\$58.7	468	\$18.4
Hospitality/Tourism	\$251.7			\$369.4	4,804	\$113.1
TOTAL	\$1,257.1			\$1,986.1	21,219	\$576.4

Note: Columns may not sum due to rounding. To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of \$1,257.1 million the portion of capital investments that is investment in existing facilities (\$26.8 million of \$45.0 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$9.7 million of \$36.5 million). This is because:

*Golf Course Capital Investments—Only new course construction has an indirect and induced economic impact. Other types of facility capital investments 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.

The following table compares changes in the golf industry’s direct and total economic impact in 2008 and 2013. In 2008, the golf economy generated \$1.19 billion in economic activity, driven by golf-related manufacturing, golf facility operations, and golf tourism (in terms of size). In 2013, the direct golf economy expanded to \$1.257 billion due to significant growth in golf-related supplies and golf tourism. However, golf facility operations, new course construction, and golf-related residential construction—industry segments with relatively larger economic and employment impacts—declined during this period. The table shows this dichotomy, where direct economic impact has grown, but total golf output, employment, and wages, have declined.

Golf’s Impact on Oregon’s Economy in 2013 versus 2008 (\$ billions)		
Core and Enabled Industries	2008	2013
Direct Economic Impact (\$)	\$1.190	\$1.257
Total Output Impact (\$)	\$2.459	\$1.986
Total Jobs Impact	27,187	21,219
Total Wage Income Impact (\$)	\$0.704	\$0.576

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 golf car rental fees; purchases of golf apparel and equipment in pro shops; golf lessons; tournament entry fees; consumption of food and beverages; etc.

Number of golf course facilities. Many golf organizations track the number of golf facilities in a state: the National Golf Foundation (NGF), The PGA of America, and state/regional golf associations, among others. The U.S. Census Bureau also surveys golf facilities as business establishments in its Economic Census every five years. However, these organizations' calculations of the total numbers of golf facilities 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. 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 variation in the number of facilities caused by these data collection methods is very small, and thus does not materially impact the overall analysis. The table below presents slightly differing estimates for the number of golf facilities in Oregon in 2013 or the latest available year

Table 1 Estimates of Total Number of Oregon Golf Facilities by Type, 2007-2013

	2007 Economic Census ¹ (# of facilities minus resorts & munis)	2008 PGA ² (# of facilities)	2013 PGA ² (# of facilities)	2013 OGA (# of facilities)	2013 NGF ³ (# of facilities)	2013 NGF ³ (# of 18- hole equivalent courses)
PRIVATE	27	43	44	40	36	35.5
PUBLIC		133	147	139	138	117.5
Daily fee/semi- private	125	114	124	122		
Municipal						
Military		23	23	17		
University						
RESORT		14	14	11	15	17.0
TOTAL	152	190	205	190	189	170.0

Sources: ¹ U.S. Census Bureau (2010). Arts, Entertainment and Recreation: Geographic Area Series: Summary Statistics: 2007. *2007 Economic Census of the United States*.

² Professional Golfers' Association of America (2014). *Facility Database*.

³ NGF (2014). Total Facility Supply Tables 6-14, *Golf Facilities in the U.S., 2014 edition*, pp.6-14.

The PGA, NGF and Oregon Golf Association (OGA) total facility numbers for 2013 fall within a narrow range: the PGA reports 205; the OGA reports 190; and the NGF reports 189. In 2008, SRI and the Oregon golf task force estimated there were 190 total facilities based on PGA data. SRI does not recommend using the 2013 PGA data because we have not found evidence of a net gain of 15 facilities in Oregon from 2008 to 2013. Rather, we think the opening of new facilities that were under construction in 2008 and the closure of other facilities during the recession of 2007-2009 likely cancelled each other out. Therefore, SRI recommends using the OGA facilities total of 190 golf facilities in 2013.

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 lower 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 facilities without payroll. Data from the latest 2012 Economic Census has not yet been published at the state level for the golf course and club industry code. State-level data from the 2007 Economic Census has been published, and includes revenue, payroll, and employment data for 12,193 golf facilities broken down by state. This provides a robust estimate with which to compare other available golf facility revenue data despite the time lag.

The PGA collects revenue data for all 50 states on an annual basis through its Annual Operations Survey. The latest available data are from 2013, but the PGA has annual data going back to 2005. In addition, PGA revenue data are broken down by type of facility for categories for which Census data are not available—namely, resorts, municipal courses, and military courses.

Table 2 Estimates of Oregon Golf Facilities Average Revenues by Type, 2007-2013

	NGF (2009) ¹	Census (2007) ²	Adjusted PGA (2008) ^{3,4}	PGA (2012) ⁵	PGA (2013) ⁶	SRI Golf Survey (2013) ⁷
Private facility	\$3,277,000	\$2,099,407	\$3,263,576^a	\$2,385,497	\$2,702,680	\$2,644,106
Daily fee facility	\$1,457,700	\$1,438,888	\$1,354,269^b	\$1,792,148	\$801,937	\$1,340,159
Resort facility	X	X	\$3,987,345^c	\$2,333,333	N/A	\$4,221,118
Municipal/military/university facility	\$1,269,100	X	\$2,094,587^d	\$1,727,658	\$1,091,920	\$2,073,967
Driving range	\$400,000	X	X	X	X	X
Miniature golf	X	\$416,800	X	X	X	X

Note: Bolded values are an average of Oregon and neighboring states, due to low response sample.

Sources: ¹ National Golf Foundation (2010). *Operating & Financial Performance Profiles of 18-hole Golf Facilities in the U.S., 2010 edition*.

² U.S. Census Bureau (2010). Arts, Entertainment and Recreation: Geographic Area Series: Summary Statistics: 2007. *2007 Economic Census of the United States*.

³ Professional Golfers' Association of America (2008). *2007 Operations Survey*.

⁴ Professional Golfers' Association of America (2009). *2008 Operations Survey*.

^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

⁵ Professional Golfers' Association of America (2013). *2012 Operations Survey*.

⁶ Professional Golfers' Association of America (2014). *2013 Operations Survey*.

⁷ SRI golf survey of OR golf facility owners, GMs and golf professionals

Average revenue data from the NGF (2009), the Census (2007), the PGA (2008-2013), and an SRI golf survey (2013) are presented above. Because of the low response rate to the 2013 PGA Facility Operations Survey, SRI, in collaboration with the Oregon Golf Task Force, conducted a survey of Oregon

golf facilities. The survey was administered online to Oregon golf course owners, general managers, and golf professionals. The list of survey respondents was compiled through membership in the Oregon Golf Course Owners Association, the Oregon Club Managers Association, and the Oregon Section of the PGA. Oregon Golf Task Force representatives compiled these lists and provided them to SRI. SRI received responses from 26 private facilities, 21 semi-private/daily fee facilities, 6 resorts and 8 municipal facilities, for a total response rate of 31.3 percent. Driving range revenues were calculated using 2011 PGA survey data, which estimated the national median revenue figure for golf ranges in 2011, and average miniature golf facility revenue was calculated using the 2007 Census data adjusted for inflation. Although a more recent Economic Census was conducted in 2012, this data has not been publicly released at the state level yet.

SRI's Oregon golf operations survey reported **average private facility revenue** of \$2.644 million, a decrease from the 2008 average (\$3.264 million, or \$3.506 million in inflation-adjusted 2013 dollars). SRI's survey reported **average daily fee revenue** of \$1.340 million. This represents a decrease from the 2008 average (\$1.354 million, or \$1.454 million in inflation-adjusted 2013 dollars). SRI's survey reported \$2.074 million for **average municipal/military/university facility revenue** in 2013, a decrease from the 2008 average (\$2.095 million, or \$2.25 million in inflation-adjusted 2013 dollars). In 2013, SRI's survey reported **average resort revenue** for Oregon was \$4.221 million. This represents an increase in real terms from the 2008 average (\$3.987 million, or \$4.282 million in inflation-adjusted 2013 dollars). The PGA reported a median value for **standalone golf range** revenue of \$400,000 in 2011. SRI use the 2011 PGA average golf range revenue adjusted for inflation, or \$413,136. SRI used the latest available average revenue data for miniature golf facilities (2007) and adjusted for inflation.

To calculate golf facility operations revenues, SRI subtracted average on-course merchandise sales from the average golf facility revenue estimates because on-course merchandise sales are included in the Golf-Related Supplies industry segment. SRI then multiplied these adjusted average golf facility operations revenue estimates by the respective number of golf facilities. Overall, SRI estimates that Oregon's 190 golf courses, 12 stand-alone ranges, and 5 miniature golf facilities generated \$336.4 million of revenue in 2013. This reflects a decline from 2008, when facility operations revenue totaled \$361.7 million (or \$388.5 million in 2013 dollars when adjusted for inflation). This decrease reflects no net increase in facilities over this time period and a decline in average revenue for all facility types except resorts.

B. GOLF FACILITY CAPITAL INVESTMENTS

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

Oregon Golf Facility Capital Investment and New Course Construction in 2013 (\$ millions)	
Golf Facility Capital Investment¹	\$26.8
New Course Construction	\$18.2
TOTAL	\$45.0

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

Investment at existing facilities. Golf facility capital investments include improvements to greens and tees, repaving of cart paths, purchases of new turf maintenance equipment and irrigations systems, and renovations of the clubhouse, pro shop, and maintenance buildings. Ordinary maintenance expenses are not included. SRI examined golf facility capital investment data from three sources: NGF, the GCSAA, and SRI's 2014 Oregon Golf Survey. The GCSAA data comes from golf facility capital budget questions included in its 2011 Compensation Survey. The data is state-level and includes the mean, median, and standard deviation of capital expenditures (not maintenance expenses). The NGF's *2010 Operating and Financial Performance Profile* presents national estimates of capital expenditures (and also breaks out maintenance expenses separately). SRI's Oregon Golf Survey was a statewide survey of all golf facilities in the Oregon. Survey data includes information on the type of facility, number of holes, capital expenditures and revenue.

After review of both the state-level and national data sets, SRI used the SRI survey data for Oregon in our capital investment calculation. The data indicate that, on average, Oregon daily fee facilities invested an average of \$84,225, municipal facilities invested an average of \$101,089, private facilities invest an average of \$205,727, and resort facilities invested an average of \$673,333, for a total capital investment of \$26.8 million. Capital investments at existing facilities decreased slightly relative to 2008, when Oregon's total golf facility capital investment was \$26.9 million (or \$28.9 million in 2012 dollars when adjusted for inflation).

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 2013, NGF estimated that there were no new 18-hole equivalent golf course openings in Oregon and that 8.5 were under construction. After consultation with the Oregon Golf Alliance, SRI revised the number of courses under construction down to one. SRI and the Oregon Golf Alliance also found that there were three major course renovations or course rebuilds in 2013.

An estimate for the average investment for each new golf course in Oregon is derived from the Golf Course Builders Association of America's (GCBA) *Golf Course Construction and Renovation Costing Guide, Version 6*. This database of golf course construction costs is based on a survey of golf course

builders around the country. Using the values provided for Oregon and the average (“normal”) costs for each of the various construction categories (see box below), GCBA estimates the average investment required to build a new golf course in Oregon is \$8.1 million (the average estimate across the various regions of Oregon). However, according to golf course architecture and design consultants, golf course construction alone accounts for only a portion of the total cost of constructing a new golf facility. Approximately a third of the total cost is attributed to the architectural/engineering services, construction of the clubhouse, pro shop, and maintenance buildings, and initial purchase of equipment and course amenities, etc. Therefore, we estimate the average cost of constructing a new 18-hole facility to be \$12.1 million.

Required Investments to Build a Golf Course:	
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 average investment in construction per 18-hole equivalent course per year was \$6.1 million. We applied this figure to the one course under construction in 2013. In total, SRI estimates that 2013 investment in new course construction in Oregon was \$6.1 million. In addition, SRI added the estimate of course rebuilding projects (\$12.1 million) to its estimate for new construction in Oregon in 2013, resulting in a total of \$18.2 million. Reflecting the lingering impact of the financial crisis and recession, this is a significantly lower level of investment relative to 2008, when the estimated total investment in new course construction was \$24.3 million (or \$26.1 million in 2013 dollars when adjusted for inflation).

C. GOLF-RELATED SUPPLIES

This section explains SRI’s methodology for calculating Oregon manufacturers’ exports (out-of-state and overseas shipments) of golf apparel, turf maintenance equipment, and accessories. We also detail our methodology for calculating the retail margin for on-course and off-course purchases of golf equipment, golf apparel, and golf media.

Manufacturing Exports. The economic value created by golf-related supplies consists of two components: (1) design, testing, and value-added production and (2) retail sales margin. On the manufacturing side, we are concerned with the value-added production of golf-related 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 club or golf mower is manufactured.

We began by conducting research to identify manufacturers of golf-related products in the state. We identified a small number of sizeable golf-related companies that design and manufacture golf equipment and golf apparel: Nike Golf, Adidas, and Columbia Sportswear. In addition, Oregon is home to a handful of much smaller golf equipment and accessories companies, including Seamus Golf, a startup that designs and produces Tartan golf head covers; Pinemeadow Golf, which builds custom clubs; Golf Scorecards, a designer and printer of scorecards and yardage systems; among others. We estimated the value-added shipment of these companies' products out-of-state to be \$535.7 million in 2013.

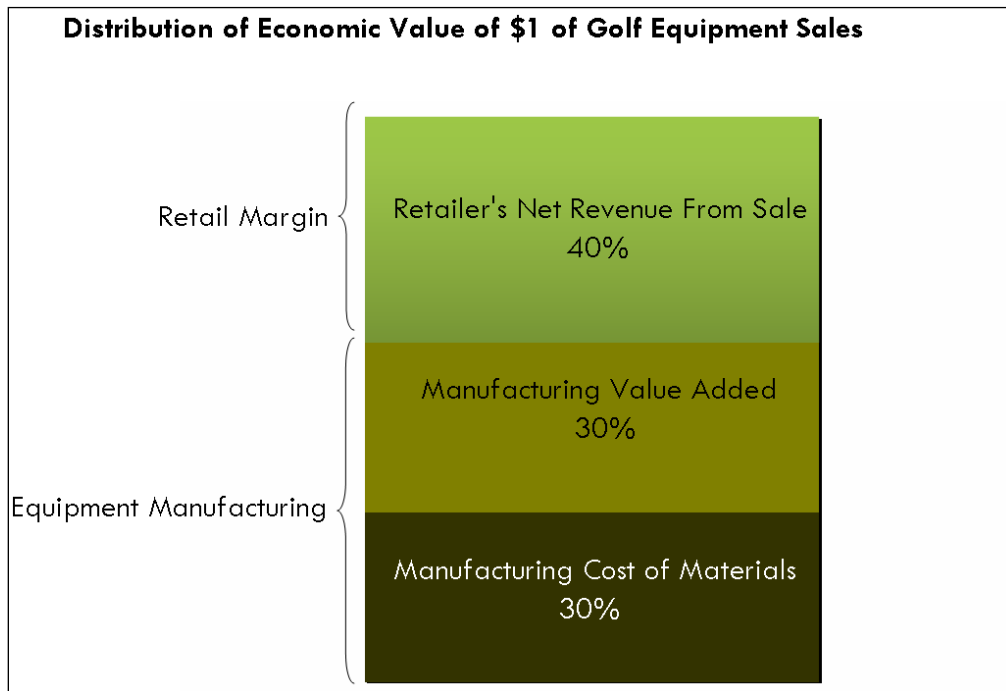
Oregon Manufacturers' Value-Added Exports of Golf-Related Products in 2013 (\$ millions)	
TOTAL	\$535.7

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 2013, NSGA reported total U.S. off-course and on-course purchases of individual golf clubs to be \$646.4 million. The NSGA survey found the Pacific region accounted for 27.1% of these purchases, or \$175.2 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 12% of total 18-hole equivalent courses in the Pacific region, so this weight was applied to the region total to estimate \$21.0 million of individual golf club sales in the state of Oregon in 2013. Further, retail margins on final sales suggest that 40.4%, or \$8.5 million, of total sales was retained in the Oregon economy. (See graphic below.)



Oregon On-Course and Off-Course Golf Equipment & Apparel Purchases in 2013 (\$ millions)		
Category	Calculation	Estimate
Golf club sets	Pacific region's sales	\$342.6
	OR's courses-based weight	12%
	OR's share of sales [1]	\$41.1
Golf apparel	Pacific region's sales	\$126.7
	OR's courses-based weight	12%
	OR's share of sales, [2]	\$15.2
Golf balls	Pacific region's sales	\$186.1
	OR's courses-based weight	12%
	OR's share of sales, [3]	\$22.3
Golf clubs	Pacific region's sales	\$175.2
	OR's courses-based weight	12%
	OR's share of sales, [4]	\$21.0
Golf bags	Pacific region's sales	\$49.7
	OR's courses-based weight	12%
	OR's share of sales, [5]	\$6.0
Golf shoes	Pacific region's sales	\$55.8
	OR's courses-based weight	12%
	OR's share of sales, [6]	\$6.7
TOTAL	Sum of [1] to [6]	\$112.3
Retail sales margin	Multiply TOTAL by 40.4%	\$45.4

Source: National Sporting Goods Association (2013). *The Sporting Goods Market in 2013*, 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 2013. 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 2013 were estimated to be \$390,458 with a retail sales margin of \$157,745. 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.

Oregon On-Course and Off-Course Sales of Golf Books in 2013	
Category	Estimate
Oregon retail book sales ¹	\$178,281,000
Golf books as % of total book sales	0.2%
Total retail golf book sales	\$390,458
Retail sales margin	\$157,745

Note: ¹Adjusted for inflation into 2013 dollars using the appropriate GDP deflator.

Sources: Oregon retail book sales data from the 2007 Economic Census. Estimated percentage of golf books among total book sales derived from Book Industry Study Group/Association of American Publishers (2013), *BookStats 2013*, and SRI International (2013), *The 2011 Golf Economy Report*, Arlington, VA: SRI International.

Oregon Retailers' Net Revenues on Consumer Purchases of Golf-Related Supplies in 2013 (\$ millions)		
	Total purchases	Retail sales margin
Golf Equipment (retail margin)	\$97.1	\$39.2
Golf Apparel (retail margin)	\$15.2	\$6.1
Golf Media (retail margin)	\$0.4	\$0.2
TOTAL	\$112.7	\$45.5

Note: This includes on-course and off-course purchases of golf equipment, apparel, and media.

D. ASSOCIATIONS, TOURNAMENTS & CHARITABLE GIVING

Associations. SRI gathered association expenditure data for the largest national, state and regional golf organizations from these organizations' 990 income tax filings. These include 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, and the Oregon Club Managers Association. Also included are the expenditures of women's, senior, junior, and regional member golf associations and other golf-related 501(c)3 organizations.

Major Tournaments. In 2013, one major golf championship was played in Oregon: the Safeway Classic hosted by Coca-Cola, an LPGA event. We subtracted the tournament purse and cost of television broadcasting from total tournament revenues to estimate the direct event-related spending that remained in the state. Accommodation and tourism-related expenditures from this event are captured in the Tourism segment of the report.

Oregon's Major Golf Tournament & Association Revenues in 2013 (\$ millions)	
TOTAL¹	\$6.4

Charitable Giving. Overall, SRI estimates that the amount of charitable giving attributed to the game of golf in Oregon to be \$31.8 million in 2013. This estimate is derived from a national study¹² based on the number of golf facilities that hold charitable golf events, the average number of events held by each facility, and the average net proceeds donated to charities from these events. It also includes 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.

Oregon Golf Industry's Charitable Giving in 2013 (\$ millions)	
TOTAL	\$31.8

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 2013 (\$ millions)	
Golf-Related Residential Construction	\$26.8
Realized Golf Premium	\$9.7
TOTAL	\$36.5

Note: Numbers may not sum due to rounding. 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.

¹² National Golf Foundation (2011). *The Charitable Impact Report*.

Golf-related residential construction. For this industry segment, SRI conducted research and interviews with golf real estate developers to arrive at estimates of the number of courses with active real estate development, the size of the development, the number of homes under construction in a given year, and the average construction costs per type of home (i.e., townhouse, condo or single family home). The number of courses with active development was derived from new course openings over the past five years and online research. Construction values varied considerably depending on such factors as the location of golf communities within the state, the proportion of townhouses versus single-family homes and overall real estate market conditions (e.g., high-growth metro regions versus more rural parts of the state).

SRI estimates that approximately 12 golf communities were under development, to varying degrees, in Oregon in 2013. Developments ranged from the 1,850-unit Eagle Crest Resort development in Redmond to the 70-home Aspen Lakes development in Sisters. Multiplying the total number of units under construction at each course by their average construction cost and summing all of these values yielded a total 2013 golf-related residential construction figure of \$26.8 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 \$40,000 per unit in 2013. Multiplying the approximately 23 existing Oregon golf communities by the median number of housing units per golf course, we arrive at a total of 7,590 golf community homes. SRI estimates that in 2013, the home turnover rate (percentage of homes sold relative to the total housing stock) was 3.2 percent in Oregon.¹³ 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 \$9.7 million in 2013.

F. GOLF-RELATED HOSPITALITY/TOURISM

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

Number of golf-related trips. SRI defines a “golf trip” as an Oregon resident or non-resident traveling 50-plus miles to, through, or within the state to a unique destination and playing golf while at this

¹³ State-level information was not available from the Oregon Association of Realtors for 2013, so a turnover rate of 3.2%, the rate for neighboring Washington State as well as the U.S. national rate for that year, is used here as an estimate.

destination. Golf-related trips include both overnight and day trips. This figure includes trips to Oregon golf resort destinations, golf outings while on vacation or business travel, as well as trips by Oregon residents to play golf courses in other parts of the state. People also travel to watch amateur and professional golfers compete in tournaments played in Oregon.¹⁴

The Oregon Tourism Commission (Travel Oregon) provides overall tourism figures for the State of Oregon each year, including number of visitor trips and visitor expenditures. According to data compiled by Dean Runyan Associates, there were 26.1 million overnight person-trips in Oregon in 2013, including both domestic and international travelers. Since SRI's golf tourism methodology focuses on domestic tourism only, SRI adjusted this figure downwards by 5% to remove international visitors, resulting in an estimated 24.8 million domestic overnight person-trips in 2013. Dean Runyan does not provide estimates of the number of day trips "because of data limitations;" however, utilizing Dean Runyan's data on total day trip expenditures, average daily spending per travel party, travel party size, and purpose of trip, SRI has extrapolated an estimate of 38.5 million day trips taken in Oregon in 2013.¹⁵

In 2011, Longwoods International estimated that approximately 2% of Oregon's domestic "day marketable trips" and 5% of its domestic "overnight marketable trips" included golf as an activity.¹⁶ By adjusting these percentages to apply to *all* Oregon domestic day and overnight visitor trips in 2013 (38.5 million day trips and 26.1 million overnight trips), SRI estimated that approximately 1.2% of all trips in Oregon include golf, with approximately 462,411 golf day trips and 297,540 golf overnight trips, totaling 759,951 golf trips made in Oregon in 2013.

Note: Upon examination of Oregon tourism statistics and reports, SRI found that there were inconsistencies between the data used in the *Oregon Golf Economy 2008* calculations and the currently available data regarding the percentage breakdown between day trips and overnight trips in Oregon. As we are unable to account for this inconsistency (a change in state tourism data provider and/or change in estimation methodologies often can cause these kinds of challenges with time series data), the significant difference between the two figures led us to determine that the 2008 golf tourism estimates for Oregon should be re-calculated. SRI now estimates that 2008 golf tourism in Oregon totaled 730,185 golf trips and \$223.6 million in golf tourism spending. An estimated 58% of these golf trips were day trips (427,785 golf day trips) and 42% were overnight trips (302,400 golf overnight trips).

¹⁴ Oregon hosted one major golf championship in 2013: the Safeway Classic presented by Coca-Cola (now Portland Classic), an LPGA event. Founded in 1972, the Safeway Classic is the oldest continuous event on the LPGA Tour, and the event takes place each year in the Portland, Oregon region. In 2013, the tournament was played at the Columbia Edgewater Country Club in Portland.

¹⁵ Dean Runyan Associates (April 2014), *Oregon Travel Impacts 1991-2013p*, http://www.deanrunyan.com/doc_library/ORImp.pdf

¹⁶ Longwoods International (March 2013), *Oregon 2011 Visitor Final Report*, <http://industry.traveloregon.com/wp-content/uploads/2013/03/Oregon-2011-Visitor-Final-Report.pdf>

Average spending per golf trip. SRI estimates that average spending per golf trip in Oregon in 2013 was \$80 per person per *day* trip and \$722 per person per *overnight* trip (which SRI estimates in Oregon averages 2 nights). This includes spending on accommodation, local transportation, food and beverage, entertainment, gifts, and so on. Green fees and cart fees are not included as they are already captured in the Golf Facility Operations revenues. To estimate average golf trip expenditures, we began with national golf trip survey data from the National Golf Foundation's *The U.S. Golf Travel Market, 2003 Edition* report¹⁷ 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 (as well as for inflation through 2013). 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 \$251.7 million in 2013. This represents an increase in real terms relative to golf-related tourism spending in 2008, which SRI now estimates at \$223.6 million (or \$240.2 million in 2013 dollars, when adjusted for inflation); this increase is consistent with the overall increase in domestic visitor spending in Oregon, as the economy recovered from the recession of 2007-2009.¹⁸

Oregon Golf-Related Tourism Expenditures in 2008 and 2013		
	2008	2013
# of golf day trips	427,785	462,411
Average travel \$ per golf day trip	\$68.58	\$79.56
# of golf overnight trips	302,400	297,540
Average travel \$ per golf overnight trip	\$642.48	\$722.40
Total	\$223.6 million	\$251.7 million

Note: Numbers may not sum due to rounding.

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:








¹⁷ See "Average Travel Spending" table on p.16 in NGF (2003), *U.S. Golf Travel Market*, available at: <http://www.ngf.org/cgi/catalogsearchdetail.asp?ITEMNUMBER=99MR002> SRI adjusted for inflation from 2002-2013, since 2002 is NGF's most recent on golf travel survey.

¹⁸ Total direct travel spending in Oregon grew from \$8.57 billion in 2008 (or \$9.21 billion in 2013 dollars) to \$9.55 billion in 2013. Source: Dean Runyan Associates (April 2014), *Oregon Travel Impacts 1991-2013p*, http://www.deanrunyan.com/doc_library/ORImp.pdf

Direct Impact of the State Golf Economy	
+	Golf Facility Operations
+	Golf Course Capital Investments
+	Golf-Related Supplies
+	Associations, Major Tournaments & Charitable Giving
+	Golf Real Estate
+	Golf 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 multipliers (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 in 2013						
INDUSTRY	DIRECT (\$ millions)	INDIRECT	INDUCED	TOTAL OUTPUT (\$ millions)	TOTAL JOBS	TOTAL WAGE INCOME (\$ millions)
Golf Facility Operations	\$336.4			\$471.0	8,082	\$152.4
Golf Course Capital Investments*	\$45.0			\$39.8	317	\$12.5
Golf-Related Supplies	\$581.2			\$1,037.6	7,447	\$276.8
Tournaments & Associations	\$6.4			\$9.6	102	\$3.3
Real Estate **	\$36.5			\$58.7	468	\$18.4
Hospitality/Tourism	\$251.7			\$369.4	4,804	\$113.1
TOTAL	\$1,257.1			\$1,986.1	21,219	\$576.4

Note: Columns may not sum due to rounding. To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of \$1.3 billion the portion of capital investments that is investment in existing facilities (\$26.8 million of \$45.0 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$9.7 million of \$36.5 million). This is because:

*Golf Course Capital Investments—Only new course construction has an indirect and induced economic impact. Other types of facility capital investments 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.

WORKS CITED

- Book Industry Study Group and Association of American Publishers (2013). *BookStats 2013*.
- Dean Runyan Associations (2014). *Oregon Travel Impacts 1991-2013p*.
http://www.deanrunyan.com/doc_library/ORImp.pdf
- Golf Course Builders Association of America (2011). *Guide to Estimating Cost for Golf Course Construction*. Lincoln, NE: Golf Course Builders Association of America.
- Golf Course Superintendents Association of America (2011). Compensation Survey. Lawrence, KS: Golf Course Superintendents Association of America.
- Golf Datatech (2006). On-Course Sales Data by Equipment Category. Kissimmee, FL: Golf Datatech.
- Longwoods International (2013). *Oregon 2011 Visitor Final Report*.
<http://industry.traveloregon.com/wp-content/uploads/2013/03/Oregon-2011-Visitor-Final-Report.pdf>
- Oregon Office of Economic Analysis (2015). "Economic Recovery Scorecard." Posted Jan. 7, 2015,
<http://oregoneconomicanalysis.com/> Accessed Jan. 9, 2015.
- Oregon Office of Economic Analysis (2015). *Oregon Economic Review and Forecast*.
<http://www.oregon.gov/DAS/OEA/docs/economic/oregon.pdf> Accessed Jan. 9, 2015.
- NGF (2003). *U.S. Golf Travel Market*. Jupiter, FL: National Golf Foundation.
- NGF (2010). *Operating & Financial Performance Profiles of 18-hole Facilities in the U.S., 2010 edition*, Jupiter, FL: National Golf Foundation.
- NGF (2011). *The Charitable Impact Report*. Jupiter, FL: National Golf Foundation.
- NGF (2014). *Golf Facilities in the U.S.* Jupiter, FL: The National Golf Foundation.
- National Sporting Goods Association (2013). *The Sporting Goods Market in 2013*. Mt. Prospect, IL: National Sporting Goods Association.
- The PGA of America (2014). Golf Facility Database. Palm Beach Gardens, FL: The PGA of America.

The PGA of America (2008). Operations Survey. Palm Beach Gardens, FL: The PGA of America.

The PGA of America (2009). Operations Survey. Palm Beach Gardens, FL: The PGA of America.

The PGA of America (2010). Operations Survey. Palm Beach Gardens, FL: The PGA of America.

The PGA of America (2011). Operations Survey. Palm Beach Gardens, FL: The PGA of America.

The PGA of America (2012). Operations Survey. Palm Beach Gardens, FL: The PGA of America.

The PGA of America (2013). Operations Survey. Palm Beach Gardens, FL: The PGA of America.

The PGA of America (2014). Operations Survey. Palm Beach Gardens, FL: The PGA of America.

SRI International (2002). *The Golf Economy Report*. Arlington, VA: SRI International.

SRI International (2010). *The Oregon Golf Economy 2008*. Arlington, VA: SRI International.

SRI International (2013). *The 2011 Golf Economy Report*. Arlington, VA: SRI International.

U.S. Census Bureau (2010). Oregon: *2007 Economic Census: Arts, Entertainment and Recreation Geographic Area Series*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration.

U.S. Census Bureau (2014). Oregon: 2005-2013 *Building Permits Survey*. Washington, DC: U.S. Department of Commerce.