
The Contribution of Golf to the State of Oregon

Economic / Environmental / Quality of Life

2020 EDITION



Heron Lakes Golf Course, Portland Oregon

General Limiting Conditions

This report is based on information collected from direct National Golf Foundation Consulting, Inc. (“NGF”) research completed for the State of Oregon in 2020 for the data year of 2019.

GENERAL

NGF exerted every reasonable effort to ensure that the data presented in the written report is reliable and reflects the most accurate and timely information available. However, we assume no responsibility for inaccuracies in reporting by data sources used to compile this report, including golf facilities, associations and others.

CUSTOM NGF FACILITY SURVEY-2020

NGF conducted a survey among golf facility operators in Oregon in an effort to gather inputs that would assist in the quantification of golf’s economic impact in the state. Key survey questions centered around operational data like rounds played, revenues and expenses, as well as capital expenditures, information on employment/staffing and charitable events.

With the support of the Golf Alliance of Oregon, comprised of: the Oregon Golf Association (OGA), the Oregon Golf Course Owners and Operators Association, the Pacific Northwest Section of The PGA of America (Oregon Chapter), the Oregon Chapter of Golf Course Superintendents Association of America (GCSAA), and the Club Management Association of America (CMAA) Oregon Chapter, data collection took place in May – July of 2020. Of the 177 golf facilities in Oregon, a total of 61 completed the survey for a response rate of 34.5%. Survey responses were reviewed and weighted by type (public/private, number of holes, etc) to properly match and be representative of the mix of golf facilities in Oregon.

IMPLAN ECONOMIC MODELING

The IMPLAN economic modeling system was used to derive estimates of several direct and secondary economic impacts (including value added, employment, and labor income). The methodology and calculations were prepared and reviewed for soundness and accuracy by Dr. Terry L. Clower, the Northern Virginia Chair and Professor of Public Policy at George Mason University.

ACKNOWLEDGMENTS

This report was prepared by National Golf Foundation Consulting, Inc. in agreement with the World Golf Foundation and the Golf Alliance of Oregon, comprised of: the Oregon Golf Association (OGA), the Oregon Golf Course Owners and Operators Association, the Pacific Northwest Section of The PGA of America (Oregon Chapter), the Oregon Chapter of Golf Course Superintendents Association of America (GCSAA), and the Club Management Association of America (CMAA) Oregon Chapter. The study was conducted by David Lorentz, Richard Singer, Clark Brown, Ed Getherall, Jodi Reilly and Andre Paul at NGF, with support from Dr. Terry L. Clower the Northern Virginia Chair and Professor of Public Policy at George Mason University (also Director of GMU’s Center for Regional Analysis). Additional support for this report was provided by the following allied national golf organizations: CMAA, GCSAA, LPGA, NGCOA, PGA of America, PGA TOUR, and USGA.



OREGON CHAPTER



PGA

Pacific Northwest Sector
Oregon Chapter



2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

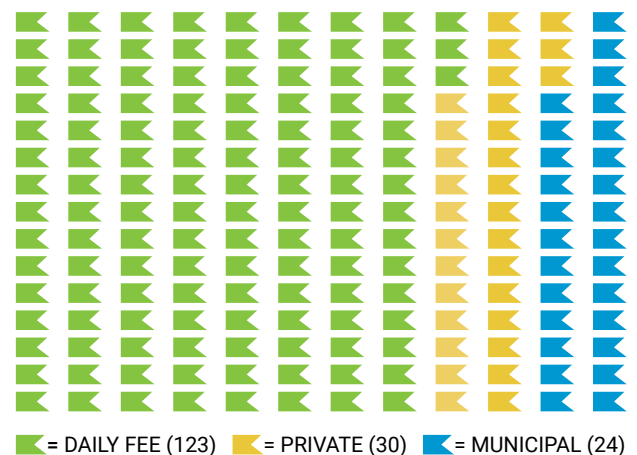
Introduction

Oregon is home to 177 golf facilities, including one of the most famous golf resorts in the world – Bandon Dunes. The state is also home to notable golf apparel companies Nike, Adidas North America and Columbia Sportswear, as well as several other smaller manufacturers and golf equipment companies. Seed for golf course turf grown in Oregon is used throughout the United States and the world - two-thirds of cold season grasses. It is clear that golf is more than just an enjoyable pastime in this State, it is a key industry contributing to the overall economy and quality of life in Oregon. Oregon golf courses are leaders in environmental stewardship and are originators of maintenance practices aimed at protecting the environment and preserving limited resources. Golf's presence in Oregon is vast and includes several world-famous facilities, including four on the Golf Digest Top 100 list: Pacific Dunes, Old MacDonald, Bandon Dunes and Bandon Trails.

The game of golf drives significant economic activity across the State of Oregon through direct operational expenditures and capital investment, as well as the attraction of golf tourism, golf-related retail spending and new home construction in golf communities. Golf is an important part of the Oregon experience and a defining component in many cities and towns. Golf indirectly supports other Oregon businesses that serve and supply golf courses, drive tourist spending and support sales by retailers. Important professional and amateur golf tournaments that are held in Oregon from time-to-time generate direct economic impact and add to the state's profile and overall appeal, while events held at the State's 177 golf facilities serve as valuable fundraising vehicles for a wide array of charities and foundations.

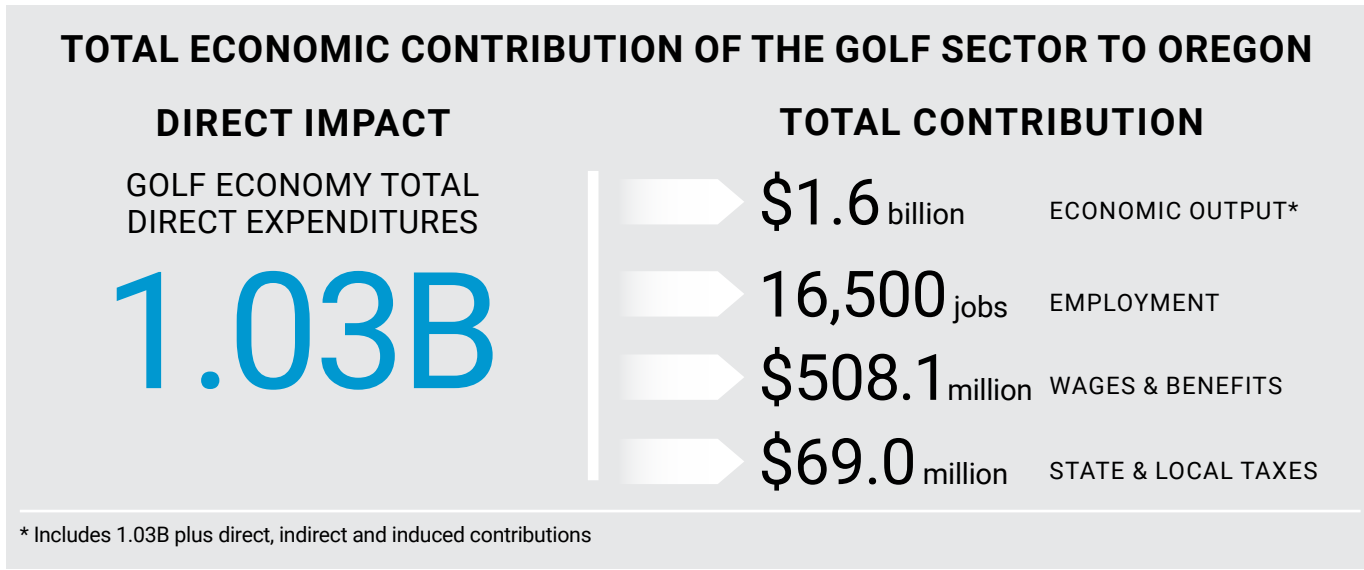
As a competitive sport, golf has a long and storied history in Oregon. The State hosted a PGA Championship in 1946 (won by Ben Hogan) and a U.S. Senior Open in 1982 (Miller Barber), both at Portland Golf Club. In 1996, Tiger Woods won his unprecedented third U.S. Amateur at Pumpkin Ridge, which has also hosted two U.S. Women's Open Championships in 1997 (Alison Nicholas) and 2003 (Hilary Lunke). More recently, Pumpkin Ridge has shared time with Columbia Edgewater to host the annual LPGA Cambia Portland Classic (formerly Safeway Classic) in August of each year (September in 2020). This event is the largest non-major championship on the LPGA calendar, attracting 36,000 fans at the 2019 event (won by Australian star Hannah Green). The WinCo Foods Portland Open is a key event on the Korn Ferry Golf Tour, and has been held at Pumpkin Ridge each year since 2014. In addition, Oregon has hosted many other non-major professional and amateur events, with additional events scheduled for 2020 and beyond (including the just completed U.S. Amateur at Bandon Dunes). **Suffice to say that Championship Golf in Oregon is alive and well!**

OREGON'S GOLF FACILITY SUPPLY



ECONOMIC CONTRIBUTION HIGHLIGHTS

In 2019, the size of **Oregon's direct golf economy was approximately \$1.03 billion**, while the NGF estimates that the industry **contributed just over \$1.6 billion (direct, indirect and induced) to the wider Oregon economy in 2019**, which compares favorably to other key state industries such as Fishing (\$698 million¹) and Wine (\$5.6 billion²). Golf supports more than **16,500 jobs** with **\$508.1 million of wage income** and more than **\$69.0 million in state and local taxes**.



CORE INDUSTRIES

A summary of the direct economic impact of golf on the state of Oregon follows::

- Golf is enjoyed by approximately **242,500 individual golfers** over the age of 6, and these golfers **played approximately 4.5 million rounds in 2019**. The State hosted an additional 300,000 to 500,000 rounds played by visitors to Oregon, many of whom played at one of the State's major golf resorts.
- The State has 146 public and 31 private facilities, plus 21 stand-alone driving ranges. There are 49 golf facilities connected to residential real estate and/or resorts in the state. Of the 177 facilities, some are multi-course operators accounting for a total of 200 individual golf courses.

242,500 GOLFERS
 (Enough to fill Portland International Raceway, Autzen Stadium, Reser Stadium, Providence Park, Moda Center and Veterans Memorial Coliseum combined)

~ 4.5 MILLION ROUNDS PLAYED
 93 rounds per facility per playable day
 19 rounds per person - (just higher than the national average - despite fewer playable days)

OVER THE AGE OF 6

¹ ECONorthwest. (October 2019). Economic Contribution of Oregon's Commercial Fisheries

² Full Glass Research. (2018, February). The Economic Impact of the Wine and Wine Grape Industries on the Oregon Economy. Oregon, United States of America

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

- Total consumer spending at golf facilities for items including initiation fees, member/pass-holder dues, green fees, cart fees, golf shop merchandise and food/ beverage sales, exceeded **\$339 million in 2019**, an amount comparable to the estimate in 2013 (\$336.4 million) despite 13 fewer golf facilities (177 vs. 190 in 2013). Golf facility operations supported almost **7,300 jobs** (both part-time and full-time).
- In 2019, Oregon golf facilities invested more than **\$43.1 million in capital improvements** for golf course renovations/enhancements and improving or replacing structures, supporting close to 500 additional jobs. Just over 41% of Oregon golf facilities began or continued large-scale capital projects in 2019 that were not included in regular operating expenses.
- Oregon retailers earned a \$47.8 million margin on \$109.64 million of gross retail sales of golf clothing, equipment and shoes in 2019. **Of this retail volume, \$73.46 million came from off-course retail outlets (including online) supporting 3,140 jobs.** The remaining \$36.18 million came from on-course pro shops (included in total golf spending noted above).
- Oregon is also home to 67 other companies that provide golf products and services, including a significant contribution by the State's large turf and grass seed industry. Three major apparel companies (Nike, Columbia Sportswear and Adidas North America) produce a large volume of golf apparel and have headquarters in Oregon. However, Nike no longer sells golf equipment, which is a major change from 2013. The direct economic contribution attributable to golf from **these companies totaled \$194 million in 2019, supporting at least 1,000 jobs in the state.**

GOLF ASSOCIATIONS / FOUNDATIONS

\$3.8 Million

\$ MILLIONS | **JOBS**

TOTAL GOLF FACILITY REVENUE **\$339** | **7,300**

(Includes green fees, cart fees, merchandise, etc.)

GOLF FACILITIES CAPITAL INVESTMENT **\$43.1** | **500**

(Includes new clubhouses, renovations, etc.)

TOTAL RETAIL SPENDING **\$73.5** | **3,140**

(Includes purchases of equipment, apparel, balls, hats, etc.)

GOLF COMPANIES CONTRIBUTION **\$194** | **1,000**

(Includes services, manufacturing, turf, apparel, etc.)

- Oregon is home to 49 separate golf associations, including the large Golf Charities Foundation in Beaverton. The total revenue generated from these Oregon golf associations and foundations was **\$3.8 million in 2019.**

LPGA & KORN FERRY TOUR EVENTS

\$ MILLIONS

JOBS

LPGA - \$12.7

100+

K.F. TOUR - \$6.5

CHARITABLE GOLF EVENTS HOSTED AT GOLF FACILITIES IN OREGON

\$19.1 M

- Oregon hosted the Cambia Portland Classic in 2019, which is a significant LPGA event hosting more than 36,000 fans at Columbia Edgewater CC and generating an estimated **\$12.7 million in economic impact**. Oregon was also host to a recurring annual Korn Ferry Tour event held at Pumpkin Ridge (WinCo Foods Portland Open) with an estimated **impact of \$6.5 million**. There were additional pro events held throughout the State in 2019 that attracted visitors and resulted in economic impact. Combined, **associations and tournaments support over 100 permanent jobs in the State**.
- Charitable golf events hosted at golf facilities in Oregon serve as important fund raisers for many state and local charitable organizations. The most significant of these includes the more than \$1.3 million raised by events at Bandon Dunes, including the Wild Rivers Coast Alliance (WRCA) grant. The two professional golf events held in the State in 2019 also had significant charitable impact. In total, NGF estimates that golf facilities in Oregon hosted approximately 975 separate charitable golf events and combined with professional tournaments to **raise as much as \$19.1 million for various charities in Oregon**.

TOTAL DIRECT ECONOMIC CONTRIBUTION OF THE GOLF SECTOR- STATE OF OREGON (\$MILLIONS) IN 2019 AND 2013

| | DIRECT IMPACT - 2019 | DIRECT IMPACT - 2013* |
|---------------------------------------|----------------------|-----------------------|
| GOLF FACILITY OPERATIONS [^] | \$339.0 | \$336.4 |
| CAPITAL INVESTMENTS | \$43.1 | \$45.0 |
| GOLF RELATED SUPPLIES ⁺ | \$267.5 | \$284.1 [°] |
| TOURNAMENTS & ASSOCIATIONS | \$23.0 | \$6.4 |
| CHARITABLE EVENTS | \$19.1 | # |
| TOTAL CORE INDUSTRIES | \$691.7 | \$671.9 |

* From The Oregon Golf Economy by SRI International, 2014

[^] Revenue from golf facility operations including on-course merchandise sold

⁺ Golf-Related Supplies includes total retail sales, but excludes merchandise sold at on-course pro shops (included in golf operations)

[°] Includes NGF-adjusted estimate for services and manufacturing exports from previous (2014) Economic Impact report

[#] Included in golf facility operations

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

ENABLED INDUSTRIES

In addition to the above, there are other golf-related economic impacts, including: NGF research indicates that about 345,000 overnight trips were made to Oregon in 2019 by visitors seeking to participate in golf, plus an additional 1.0 million trips of more than 50 miles made within the State during the year. These **visiting golfers are estimated to have contributed \$281.1 million to the Oregon economy** and added almost **3,900 jobs** from induced and indirect activity such as transportation, lodging, meals and other entertainment.

- The presence of golf courses located within, or in immediate proximity to, residential communities adds value to real estate in Oregon. The economic impact of golf real estate in Oregon encompasses two components: (1) Golf-related residential construction; and (2) Net gain to local tax jurisdictions from value premiums associated with golf course real estate:
 - The NGF estimates that there are six (6) separate golf communities in Oregon that had residential units under development in 2019, yielding a total **2019 golf-related residential construction figure of \$48.3 million, and supporting at least 560 jobs.**
 - The presence of a golf course with direct frontage on, or in immediate proximity to, a residential unit will provide an added value to the residential property known as the “golf premium.” NGF estimated the “golf premium” associated with these developments to be upwards of \$1.12 billion, with a **2019 property tax impact of \$9.8 million** in net gain for local taxing authorities to be used for education and other local initiatives funded by property tax revenue.

Summary of Economic Contribution

Total Economic Contribution of the Golf Sector - State of Oregon (\$ Millions)

Core Contribution

\$339.0 GOLF FACILITY OPERATIONS*

\$43.1 CAPITAL INVESTMENTS

\$267.5 GOLF-RELATED SUPPLIES^

\$23.0 TOURNAMENTS & ASSOCIATIONS

\$19.1 CHARITABLE EVENTS

\$691.7 TOTAL CORE INDUSTRIES

**GOLF ECONOMY TOTAL
DIRECT EXPENDITURES**

Enabled Contribution

\$281.1 GOLF TOURISM

\$48.3 GOLF-RELATED RESIDENTIAL
CONSTRUCTION

\$9.8 PROPERTY TAX IMPACT^

\$339.2 TOTAL ENABLED INDUSTRIES

\$1,030.9

* Revenue from golf facility operations including on-course merchandise sold

^Total retail sales do not include on-course merchandise sold

* Property tax impact of \$9.8 million is the net gain for local taxing authorities

NON-ECONOMIC CONTRIBUTION HIGHLIGHTS

Golf continues to be in a leadership position compared to many recreation activities in Oregon. In addition to the economic contribution noted above, there are other impacts that golf has on the State of Oregon, including:

- Golf provides upwards of **20,000 acres of green space** within the State, and provides affordable outdoor recreation to tens of thousands of Oregonians. Nearly all (80%) of Oregon golf facilities offer a junior golf program, while 58% report hosting scholastic golf, military and veterans' programs and 25% report participation in First Tee programming.
- More than 18,000 children participated in a First Tee program in Oregon in 2019. The primary chapter for the First Tee in Oregon is located at its own facility known as the Children's Course in Gladstone, OR. This facility is actively making new investment to serve children from a variety of socio-economic backgrounds, providing them with a training of the mind and body in values of honesty, integrity, and perseverance.



The Children's Course, Gladstone, OR

- Oregon ranks 28th in total golf facilities but has the **6th highest percentage of Audubon Cooperative Sanctuary Program-certified golf facilities (9.6% - 17 of 177) in the US**, including three of City of Portland's five municipal golf courses.
- The Oregon Golf Course Superintendents Association has published Environmental Stewardship Guidelines for golf courses in the State. As of July 2020, 71% of golf courses were aware of the stewardship guidelines and one-third of respondents had already adopted or planned to adopt (in 2020) practices from one or more stewardship area(s) as a result.

- Golf has proven to be a responsible user of scarce resources in the State. Golf facilities in Oregon consumed an average of 43.7 million gallons of water for irrigation in 2019. One in five Oregon golf facilities used at least some of their irrigation water from a reclaimed or recycled water source.
- The NGF's research finds that Oregon golf facilities used an estimated 8.8% less water in 2019 compared to 2011-2013. Oregon golf courses that adopted practices from Section 6 of the Environmental Stewardship Guidelines (Water Management and Conservation) used an average of 113.9% less water than non-adopters.
- In addition, one in ten Oregon golf facilities have removed turfgrass in the past five years, and of those, over 80% replaced turf with native vegetation.

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

The Oregon Golf Market

Oregon is in the western United States, covers a land area of 98,381 square miles, and is home to an estimated population of 4.22 million people in 2019.³ The largest City and metro area in the State is Portland, with more than 2.45 million residents. Oregon is one of the fastest growing States in the U.S., with a population that has doubled since 1970 and has added over a million new residents since 1990.⁴

Most of Oregon has a generally mild climate, though there is significant variation given the variety of landscapes across the state. The state's western region (west of the Cascade Range) is populated by dense evergreen mixed forests and has a climate heavily influenced by the Pacific Ocean. The western third of Oregon tends to be wet in the winter, spring and fall, and dry during the summer. Most of Oregon comprises of mountains, foothills, high plains and mountain valleys that greatly affect local climate. Oregon is generally a seasonal golf market, with a large portion of golf facilities closing entirely for the winter.

OREGON ECONOMIC OVERVIEW

DEMOGRAPHIC OVERVIEW

| SUMMARY DEMOGRAPHICS | OREGON | U.S. |
|--------------------------------------|-----------|-------------|
| Population 1990 | 2,842,333 | 248,584,652 |
| Population 2000 | 3,421,426 | 281,399,034 |
| Compound Annual Growth % (1990-2000) | 1.87% | 1.25% |
| Population 2010 | 3,831,074 | 308,745,538 |
| Compound Annual Growth % (2000-2010) | 1.14% | 0.93% |
| Population 2019 Estimate | 4,217,737 | 328,252,472 |
| Median Household Income | \$63,703 | \$63,709 |
| Median Age | 39.6 | 38.3 |

Source: Applied Geographic Systems (AGS) / Tactician Corp.⁵

ECONOMIC HIGHLIGHTS

Oregon's economy is largely powered by various forms of agriculture, fishing, and hydroelectric power. Oregon is also the top timber producer of the contiguous United States, and the timber industry dominated the state's economy in the 20th century. Technology has emerged in the 21st Century as a major economic force in the State, beginning with the establishment of the Silicon Forest and the expansion of Tektronix and Intel. Sportswear company Nike, Inc., headquartered in Beaverton, is the state's largest public corporation with an annual revenue well in excess of \$30 billion.⁶

³ <https://www.britannica.com/place/Oregon-state>

⁴ Applied Geographic Systems (AGS) via Tactician Corp. "Summary Demographics output report". April 2020, <<http://www.tactician.com/>>

⁵ Applied Geographic Systems (AGS) via Tactician Corp. "Summary Demographics output report". April 2020, <<http://www.tactician.com/>>

⁶ <https://www.fastweb.com/directory/oregon-scholarships#:~:text=Oregon%20is%20also%20the%20top%20timber%20producer%20of,Forest%20and%20the%20expansion%20of%20Tektronix%20and%20Intel>

Tourism has also emerged as a strong and growing industry in Oregon. Although Oregon tourism has traditionally been centered on the state's natural features (mountains, forests, waterfalls, rivers, beaches, lakes, etc.), activity-driven tourism in golf and skiing has seen real growth since the 1990s.

MAJOR GOLF APPAREL COMPANIES

Oregon is the home of several large corporations, including seven on the Fortune 100 list (as of 2019). This list includes three of the largest sporting apparel companies, all of which have significant lines of golf apparel and accessories. The world headquarters of Nike is located in Beaverton, with roughly 5,000 full-time employees at its 200-acre campus. Adidas' North American Headquarters is located in Portland and employs roughly 900 full-time workers at its Portland campus. Columbia Sportswear has over 1,000 employees at its world headquarters in Portland. Columbia has recently expanded its golf apparel line, which is now worn by several professional golf players. **In total, these three golf apparel companies sold approximately \$1.0 billion in golf apparel and accessories in 2019.**

OREGON GOLF RESORTS

Golf resorts in Oregon have a long and storied history dating back to the opening of Gearhart Golf Resort in 1892 – one of the oldest golf courses west of the Mississippi. Three other resorts also date back to the early 1900's, including Chinook Winds and the Resort at the Mountain – both opening before 1920. The most significant resort addition came within the last 20 years as Bandon Dunes opened its seaside golf resort in 1999 and forever changed the Bandon region and the profile of major resort golf in Oregon. Today, Bandon Dunes includes five golf courses and is widely regarded as one of the most famous golf resorts in the world, hosting over 166,000 rounds and total sales exceeding \$70 million in 2019. Bandon Dunes is also famous for severely limiting the use of golf carts on its courses and promoting the walking and caddy service aspects of the sport of golf.



Bandon Dunes Course, Hole #6

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

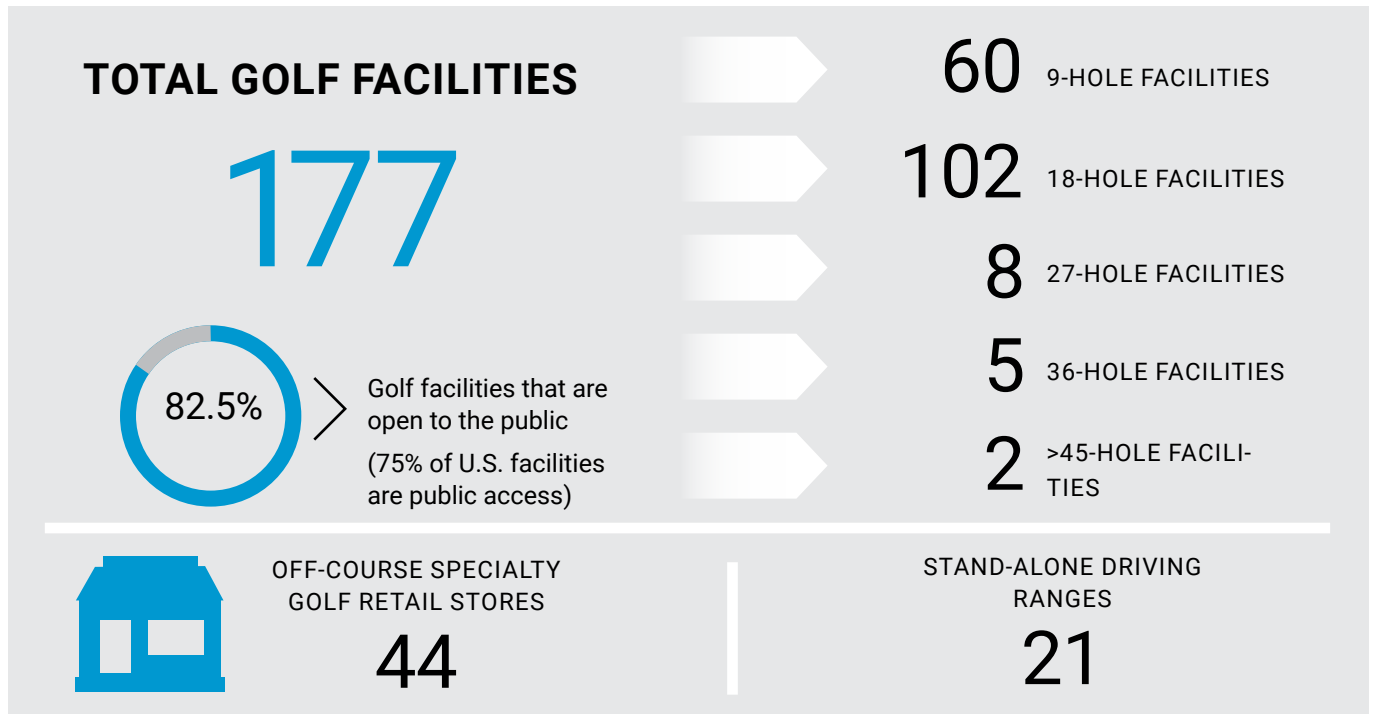
GOLF IN THE STATE OF OREGON

Golf is an important component to the overall Oregon experience, and the golf courses in the State are predominantly open and available to the public. Over 82% of all Oregon golf courses are public, compared to 74% for the total U.S. In recent years, golf has also become increasingly tied to residential and resort developments in and around the major metro centers of the state, with new golf facility development in the state driven mostly by new residential or resort communities.

OREGON GOLF FACILITIES⁷

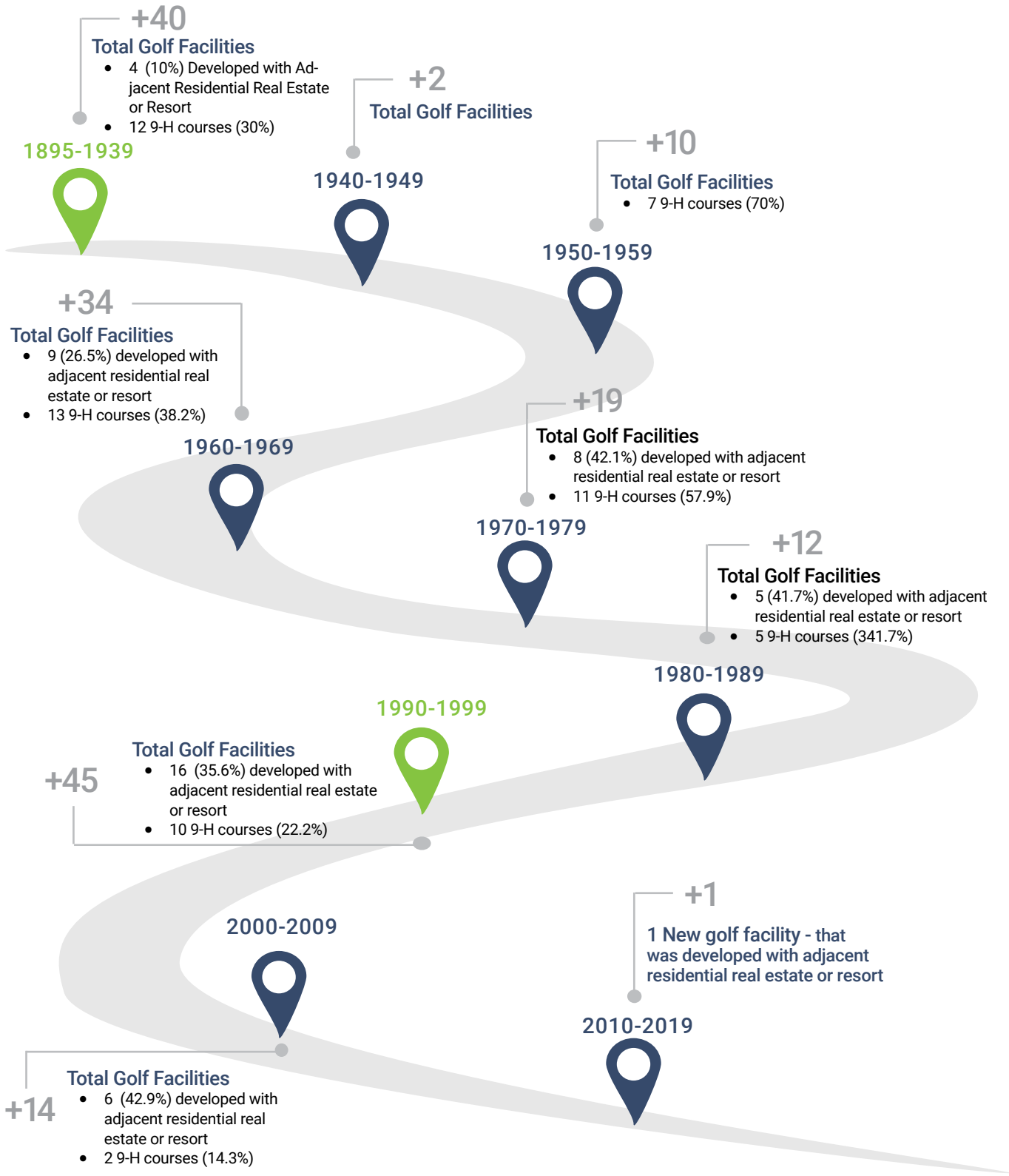
- Oregon’s public access golf courses are generally quite affordable. NGF classifies 116 of the state’s 146 public golf facilities – 79.5% – as either “Value” or “Standard” facilities, meaning peak season weekend green fees with cart are under \$70.
- There are 24 golf facilities in Oregon with some form of resort component, representing 13.6% of State golf facilities. In addition to golf, many of these resorts feature amenities such as snow sports activities (in winter) and other mountain and nature-oriented activities.
- Much of the new golf course development in Oregon over the past three decades has been associated with new real estate development. Between 1990 and 2009, 38% of new golf facilities were part of real estate developments.

In 2019, there are 146 public golf facilities and 31 private golf clubs in operation in Oregon, for a total of 177 facilities. In addition, there were 21 stand-alone driving ranges in the state, including one TopGolf facility. New golf course construction has been vigorous in Oregon, with 59 golf facilities (33% of the total golf facility inventory in the state) built after 1990, compared to 26% for the total U.S.



⁷ Proprietary Research, National Golf Foundation 2020

GOLF FACILITY DEVELOPMENT BY DECADE AND BY TYPE



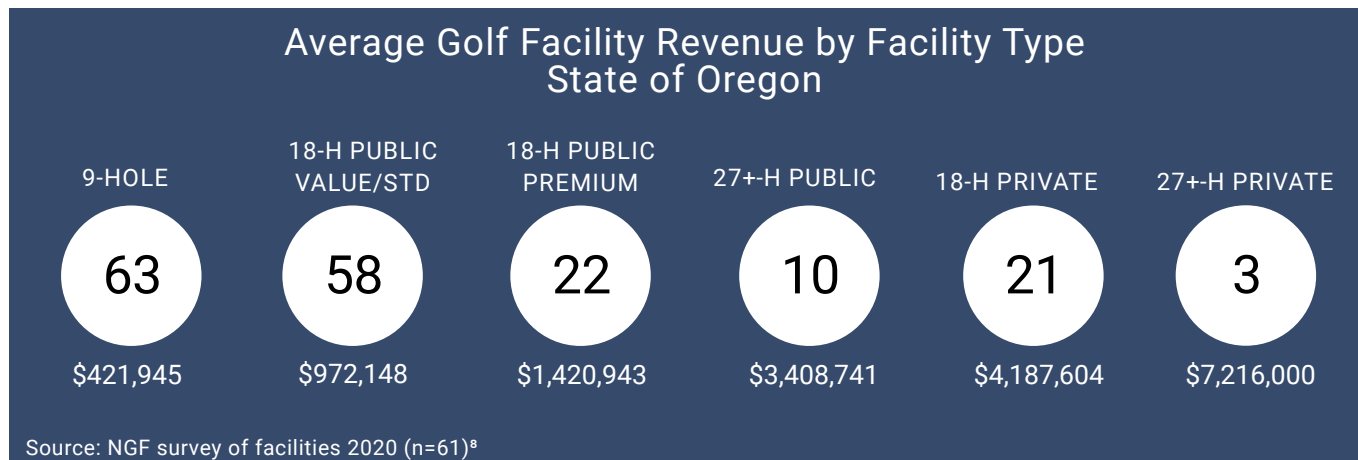
2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

Golf Facility Operations

In Oregon and elsewhere, the golf facility is at the core of the overall golf economy. The golf facility economy includes all revenues generated from green, cart, membership and initiation fees, as well as ancillary golf course purchases such as merchandise, food and beverage, banquets and other revenue. The revenue collected from all of these sources is assumed to be the basis for all expenditures required to operate the facility.

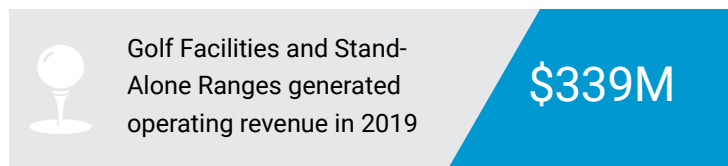
FINDING

Direct NGF research into the actual performance at Oregon golf facilities in 2020 shows average revenue in 2019 by type of facility as follows:



In addition, Oregon also has 21 stand-alone driving range facilities, including a new TopGolf facility located in Hillsboro and opened in 2016. Data collected from the City shows \$1.01 million in range revenue. Separate NGF research provided an estimate of \$4.3 million in total revenue from then TopGolf facility in Oregon in 2019. Large-scale range facilities are also located at RedTail Golf Center and Colwood Golf Center (both owned by the City of Portland), generating just over \$1.0 million in revenue in 2019. The remaining stand-alone ranges are generally smaller (under 40 stations) and average \$50,000 in revenue per location.

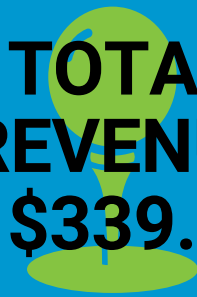
Oregon's 177 golf facilities and 22 stand-alone ranges generated \$339.0 million in operating revenue in 2019, up from \$336.4 when it was last measured in 2013 (from 190 golf facilities). The NGF analysis of total golf facility revenues is divided into six segments – golf playing fees (green, cart fees), membership dues, retail sales, restaurant, lessons, other and driving ranges (includes stand-alone ranges).



^a Facility Operators. (2020, April). State of Oregon Golf Operations Survey. (National Golf Foundation, Interviewer)

Golf Facility Total Revenue Summary

| Type of Revenue | Total (\$ Millions) | % of Total |
|-------------------|---------------------|------------|
| Golf Playing Fees | \$129.4 | 38.2% |
| Membership Dues | \$72.6 | 21.4% |
| Retail Sales | \$36.4 | 10.7% |
| Restaurant | \$83.7 | 24.7% |
| Lessons | \$5.2 | 1.5% |
| Other | \$3.3 | 1.0% |
| Driving Ranges* | \$8.4 | 2.5% |



**TOTAL
REVENUE
\$339.0**

* Includes revenue from stand-alone ranges

The golf courses in Oregon hosted approximately 4.8 million rounds of golf, or 28,896 rounds per 18 holes. This volume of golf activity is relatively strong for Oregon given the State's climate and relatively short golf season. The total U.S. averages 31,529 rounds per 18 holes in 2019 across all climates.

The average revenue from green, cart and membership fees in the State was \$44.66 per round of golf, plus additional revenue from ancillary items such as driving range (\$1.86), total F&B + banquets (\$18.49), pro shop merchandise (\$8.04) and other items (\$1.89).

APPROACH

What is Measured – Golf Facility revenue includes all receipts generated from green fees, cart fees, membership fees and initiation fees, as well as ancillary purchases at the golf course facility such as merchandise, food and beverage, banquets and other items. The revenue collected from all of these sources is assumed to be the basis for all expenditures required to operate the facility.

How its Measured - Golf facility revenue data comes from the 2020 Oregon golf facility survey conducted by NGF, which collected data on reported revenues by type for each of the six classes of golf facilities (n=61). The revenues generated from driving ranges was applied to only those golf facilities that had a driving range on site (126 of the 177 facilities), plus additional revenue assumed for 21 stand-alone ranges in the State and unique performers like RedTail GC and Colwood GC. We note that one of the stand-alone ranges is a TopGolf facility, assumed to have total revenue of \$4.3 million in 2019 (50% in F&B).

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

Golf Facility Capital Investment

In 2019, Oregon golf facilities invested over \$43.13 million in capital improvements for new facilities and renovations to greens, fairways, bunkers, infrastructure, equipment, and structures. This included several large-scale capital projects at premier Oregon golf facilities like the new \$3.5 million 16-room hotel at Gearhart Links, the \$5 million clubhouse renovation at Sunriver Resort, the \$5.0 million renovations at Bandon Dunes and the \$1.8 million new investment in facilities at the Children's Course in Gladstone. In all, NGF research found that 41% of Oregon golf facilities began or continued capital projects in 2019 (defined as new construction or major renovation to the course and/or related facilities) that were not funded directly from operating expenses.

The most significant golf facility capital expenditures undertaken in Oregon in 2019 and reported to NGF via survey (and additional research) were significant enough to review separately, and included:

- **Children's Course** – invested \$1.8 million for new indoor learning center plus offices and classrooms, as well as expansion of the golf practice area.
- **Sunriver Resort** - undertook a \$5 million clubhouse expansion and modernization project in 2019 that adds new dining and member lounge areas. Under construction in 2019 with completion expected in 2020.
- **Widgi Creek Golf Club** – has invested \$2.0 million for new pickleball and fitness elements at the club in 2019.
- **Bandon Dunes Golf Resort** – spent \$1.5 million in redesign of the Sheep Ranch course plus an additional \$3.5 million for renovation of the on-site resort hotel.
- **Willamette Country Club** – reported a large-scale facility upgrade undertaken in 2019, including \$2.5 million for new fitness center, pool cart building and expanded parking.

APPROACH

What is Measured – Capital investments are major improvements outside of normal maintenance and operating expenditures by golf facilities for turf maintenance and grounds upkeep. Golf facilities periodically make major investments to improve greens and tees, renovate clubhouses and other buildings, and purchase turf maintenance equipment and irrigation systems. In addition to capital investments by existing facilities, construction of new golf courses constitutes the other major type of capital investment.

How its Measured - Golf facility capital investment data comes from the 2020 Oregon golf facility survey conducted by NGF (n=61), which included a question about specific large-scale capital projects undertaken in 2019 outside of normal operating expense. For this study, NGF used reported average capital investment by facility type, with outliers removed, and applied the appropriate averages to the total golf facility census for the State. The unique outliers were then added back in as they represented significant individual projects as noted above.

Economic Impact Estimate Calculation

Oregon Golf Facility Capital Investment

| Facility Type | No. | On-Course Capital | Unique Projects | CH/Structures Capital | Unique Projects | Carts/Equip. |
|-----------------------------|------------|--------------------|--------------------|-----------------------|---------------------|--------------------|
| 9-Hole Courses* | 63 | \$1,580,000 | | \$90,000 | \$2,267,000 | \$390,000 |
| 18H Public (Value/Standard) | 58 | \$980,000 | | \$4,720,000 | | \$360,000 |
| 18H Public (Premium) | 22 | \$2,360,000 | | \$250,000 | \$5,500,000 | \$550,000 |
| 27+ Public* | 10 | \$570,000 | \$1,500,000 | \$1,810,000 | \$8,500,000 | \$820,000 |
| 18H Private# | 21 | \$1,780,000 | | \$5,120,000 | \$2,500,000 | \$420,000 |
| 27+ Private | 3 | \$750,000 | | \$80,000 | | \$230,000 |
| TOTAL | 177 | \$8,020,000 | \$1,500,000 | \$12,070,000 | \$18,767,000 | \$2,770,000 |

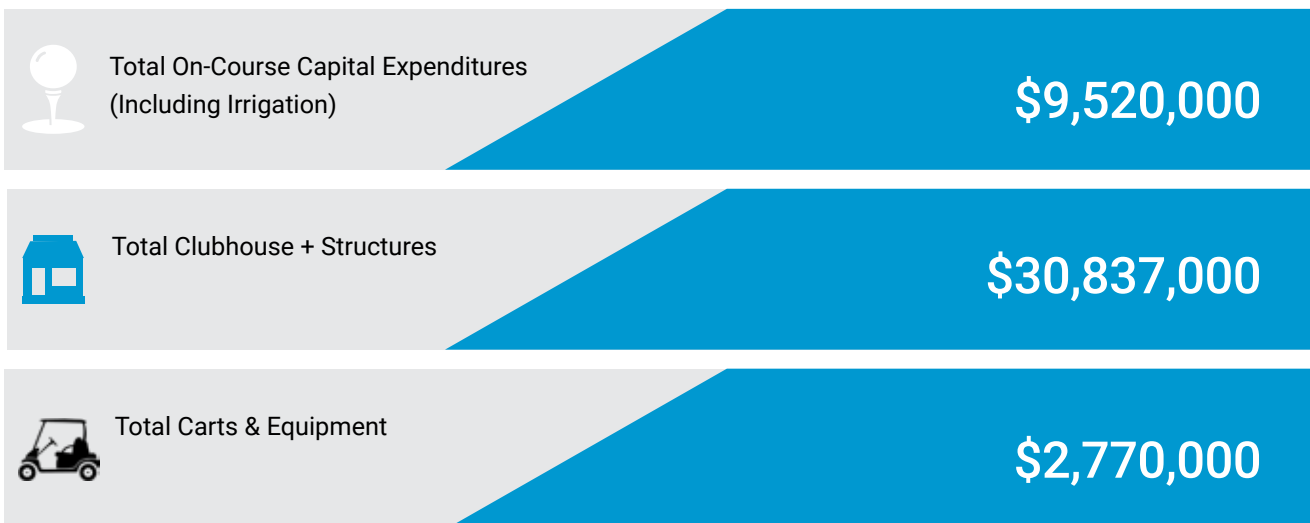
* \$1.8MM for new indoor learning ctr & offices, classrooms and expand P/S at Children's Course & \$467K clubhouse renovation at Summerfield

^ \$3.5MM for new 16-room hotel at Gearhart GL & \$2.0MM for new pickleball courts & fitness at Widgi Creek GC

+ \$1.5MM redesign of Sheep Ranch Course & \$3.5MM hotel renovation at Bandon Dunes & \$5.0MM clubhouse & member lounge renovation at Sunriver Resort

\$2.5MM for new fitness, pool, cart bldg & parking expansion at Willamette Country Club

Summary of Oregon Golf Facility Capital Investment



Total Capital Expenditures
in the State of Oregon - 2019

\$43,127,000

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON




Golf Related Supplies

Golf equipment comprises three categories: (1) clothing; (2) equipment; and (3) shoes. Golf clothing comprises several categories: (1) gloves; (2) shirts; (3) caps/visors; (4) shorts; (5) slacks; and (6) outerwear (rain, wind, thermal). NGF estimates that golfers spent \$109.64 million on clothing, equipment and shoes used primarily for golf in Oregon in 2019. These items were purchased at golf courses and other golf retail outlets, including specialty stores, sporting goods stores, mass merchants, etc. An estimated 33% of these purchases are presumed to be made at on-course retail outlets (pro shops) that were counted previously in the economic estimate from golf course operations.

GOLF RETAIL IMPACT

The economic value created by golfer supplies consists of three components: (1) manufacturing cost of materials; (2) manufacturing value added; and (3) retailer's net revenue from sales. Since there are no significant manufacturers of golf-related supplies in the state of Oregon, we expect items #1 and #2 above to be relatively modest, with the bulk of the impact derived from retail margins. Consumer purchases of golf apparel, equipment, and shoes drive significant economic activity. Oregon off-course retailers earned a \$32.03 million margin on \$73.46 million of off-course gross retail sales of golf clothing, equipment and shoes in 2019 (NGF previously estimated \$36.4 million in on-course retail).

GOLF RELATED RETAIL REVENUE - 2019 (\$ Millions)

| | TOTAL RETAIL SALES ⁹ | VALUE ATTRIBUTED TO OREGON |
|-------------------------------------------------------------------------------------|---------------------------------|----------------------------|
|  | CLOTHING | \$32.52 |
|  | EQUIPMENT | \$71.95 |
|  | SHOES | \$5.17 |
| TOTALS | | 109.6M |
| % Attributed to on-course retail | | 33% |

NET TOTAL OFF-COURSE RETAIL

\$73.46M

| | |
|-------------------------------------------------------------------------------------------|---------|
| Retail sales margin % ¹⁰ | 43.6% |
| Off-Course Retail Sales Total (Margin) Manufacturing Out of State Shipments (Value Added) | \$32.03 |

⁹ National Sporting Goods Association – 2019 Report

¹⁰ US Census Annual Retail Trade Survey

⁹ Irwin Broh Research. The Sporting Goods Market: 2019 Edition. NSA – National Sporting Association. 2019

¹⁰ <https://www.census.gov/programs-surveys/arts.html>

APPROACH

What is Measured - This segment captures both: (1) the net revenue (known as retail margin) that accrues to Oregon retailers from spending by golfers on golf equipment, golf shoes, and golf apparel; and (2) the manufacture of these goods by Oregon companies. In addition to the manufacture of golf-related consumer goods, this segment captures the manufacture of golf cars, golf course accessories, and turf maintenance equipment. Like golfers, golf facilities also make purchases of goods to facilitate the game and facility operations.

How its Measured - Data to calculate on-course and off-course retail spending on golf equipment, golf shoes, and golf apparel comes from the National Sporting Goods Association. The NSGA conducts an annual survey of 100,000 households. NSGA has collected this data since 2002. Sales for different categories of purchases are broken down by geographic region, and NGF estimated state-level sales to be 1.96% of the national total, based on Oregon's share of 18-hole equivalent facilities for the Pacific Region (Pacific Region = 14.5% / % of region courses in Oregon = 13.5%).

The estimation of economic impact is based upon the retail margin that accrues to Oregon companies that sell golf equipment and apparel. The U.S. Census Bureau's Annual Retail Trade Survey reports the retail margin for different industry sectors. NGF used the most recent retail margin available for sporting goods stores (43.6% in 2019) to estimate the retail margin accruing to Oregon companies. The retail margin is the net revenue accruing to the business after paying for the cost of goods from the wholesaler or manufacturer.

SERVICES AND MANUFACTURING IMPACT

The second type of activity captured is golf-related service and manufacturing activity—companies that produce golf equipment, apparel, golf cars, turf or grass seed, and golf accessories, as well as those companies that provide direct golf-related services like golf car distribution, construction and/or other consulting services.

To identify golf-related manufacturers and service providers, NGF utilized our proprietary database of golf businesses in Oregon along with input from the Oregon golf task force. The NGF counted 70 companies that identified themselves as being providers of golf products and services, including several major companies in golf apparel (Nike, Adidas North America and Columbia Sportswear), golf manufacturing (Carnahan Golf, Golf Scorecards, Inc. and Mackenzie Golf Bags) and a significant turf & grass seed industry. These companies are divided by category as noted to the right:



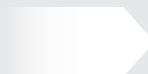
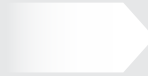
2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

Annual revenue and employment numbers for these companies come from Reference USA¹¹ information and data provided to local public libraries. NGF subtracted the share of sales going to in-state customers (estimated at 75% - Source: NGF) from total sales to avoid double-counting with the golf facility operations and retail consumer golf sales segments. The IMPLAN data and modeling software calculates economic impact based on the value added for manufacturing, i.e., the company's wholesale revenue minus the cost of production inputs.

In total, these golf-related companies generated the following revenue:

| TOTAL MANUFACTURING & SERVICES | | REVENUE (\$ MILLIONS) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------|
| REVENUE SOURCE | | |
|  TURF AND GRASS SEED INDUSTRY ATTRIBUTED TO GOLF | | \$40.95 |
|  LARGE UNIQUE IMPACT FROM NIKE, ADIDAS & COLUMBIA | | \$100.48 |
|  OTHER GOLF PRODUCT AND SERVICE SUPPLIERS/ MANUFACTURES AND GOLF CART DISTRIBUTORS | | \$ 52.62 |
| TOTAL MANUFACTURING & SERVICES | | \$194.05 |

Total Combined Golf-Related Supplies Impact

| | | |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------|
| TOTAL OFF-COURSE GOLF RETAIL | | \$267.51 |
| | | REVENUE (\$ MILLIONS) |
| REVENUE SOURCE | | |
| TOTAL OFF-COURSE GOLF RETAIL (On-course counted in operations) |  | \$73.46 |
| TOTAL MANUFACTURING & SERVICES |  | \$194.05 |

¹¹ Reference USA. "ReferenceUSA U.S. Business Database/ Quick Search". Jan 2020. (2019 Data) <<http://resource.referenceusa.com/>>

Tournaments and Associations

Oregon has several member-driven golf associations that support a variety of educational and training opportunities, tournaments, meetings, and workshops. In addition, the State hosts professional golf tournament events with regular stops on the LPGA and Korn Ferry golf tours. The major state golf associations include the Oregon Golf Association, the Oregon Seed Association, the Oregon Golf Course Superintendents Association, and the Oregon Golf Charities Foundation. Also active are women's and seniors golf associations. Some of the largest of these include the Oregon Women's Golf Association, the Mid Valley Senior Women's Golf Association, the Oregon Seniors and Junior-seniors Golf Association, and the Oregon Women's Public Links Golf Association. Promoting the long-term growth and development of the game and competitive junior golf are the Rainbow Youth Golf Education Program, as well as the First Tee chapter of Portland.

IMPACT

Professional and Amateur Golf Tournaments and Events:

Oregon did not host any PGA golf championships in 2019, but has hosted PGA Tour events in 2014 and will again in the 2020's (date yet to be determined). The most significant golf events in Oregon in 2019 included the LPGA Cambia Portland Classic (formerly Safeway Classic) in August at Columbia Edgewater Country Club in Portland. This event is the largest non-major championship on the LPGA calendar, attracting over 36,000 fans and generating an **estimated \$12.7 million in economic impact**¹²

\$12.7
million in economic impact

Oregon also hosted the WinCo Foods Portland Open at Pumpkin Ridge in August 2019 with a total purse of \$600,000 and nearly \$200,000 raised for charity. This tournament has been a key event on the Korn Ferry Golf Tour, and played each year since 2014 and has direct economic impact in Oregon. A comparable event in Wichita, Kansas (Wichita Open) had an estimated \$6.5 million economic impact and raised over \$200,000 for local charities.¹³

In addition, Oregon has hosted many other non-major professional and amateur events, with additional events scheduled for 2020 and beyond (including the just completed U.S. Amateur at Bandon Dunes).

Associations: Oregon is home to 49 separate golf associations, including the two large foundations – the Golf Charities Foundation and the Rainbow Youth Golf Education Program. NGF research from Internal Revenue Service (IRS) documents¹⁴ shows five other golf associations or foundations with annual revenue in excess of \$100,000 in 2019. The total revenue generated from these Oregon golf associations and foundations was \$3.8 million in 2019.

\$3.8
million in generated revenue
from Oregon associations and
foundations

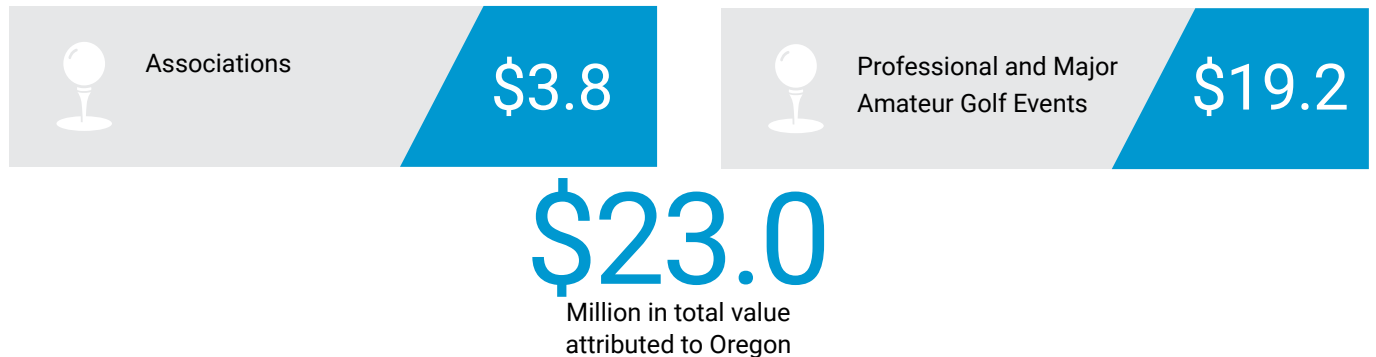
¹² Cambia Portland Classic and the LPGA

¹³ The Wichita Open. (2019). AboutUs. Retrieved from The Wichita Open: <http://www.wichitaopen.com/about-us/>

¹⁴ <https://apps.irs.gov/app/eos/>

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

Golf Tournaments and Associations



LPGA Cambia Portland Classic held in August, 2019 at Columbia Edgewater Country Club in Portland.

APPROACH

What is Measured - Direct expenditures related to hosting professional events, total expenditures on tournaments and other activities by state golf associations, and charitable monies raised via golf events. The PGA TOUR, the PGA of America, the USGA, and the LPGA organize professional golf championship events across the country. The Oregon Golf Association organizes amateur events for men and women of all ages, including juniors, seniors, and open events. The PGA Section organizes a series of events for juniors, as well as professional events for their members.

How its Measured - The Tournaments estimate is derived from the total reported economic impact of the Cambia Portland Open by the event itself in 2019, plus results from a comparable Korn Ferry Tour event held in Kansas in 2019 (Wichita Open) as a direct proxy for the Korn Ferry event held in Oregon in August 2019. The Associations estimate is the sum of major state golf association revenues. These are reported on profit and loss (P&L) statements provided by the state golf associations to NGF and/or via tax filings.

Charitable Giving

Charitable golf events hosted at golf facilities in Oregon serve as important fund raisers for many state and local charitable organizations. A national study by NGF in 2017 showed the average amount raised at a charitable golf event was just over \$26,000. Based on our 2020 survey, the NGF has estimated that Oregon golf facilities hosted about 975 charitable events (85% of facilities) with an average of 70 participants at each event.

Among the more newsworthy events in Oregon in 2019:

- The Golf for Joy Cancer Tournament held its event in June 2019 at Pumpkin Ridge GC. Since its inception in 2013, Golf for Joy has raised more than \$1.3 million for Lung Cancer Research . Pumpkin Ridge also raised over \$120,000 at its “Get Wet for a Vet” event held in October¹⁶.
- Bandon Dunes has also hosted a number of charitable events at this large golf resort, the most significant of which included the \$868,000 raised for the Wild Rivers Coast Alliance (WRCA) grant¹⁷.
- The TPF VIII annual golf tournament held at Langdon Farms in Aurora, Oregon hosted 200 players and raised \$132,000 for The Healing Project¹⁸.
- The 4th annual Oregon Guild Giving Golf Tournament took place at Tualatin Country Club in Tualatin in September, 2019 and raised over \$89,000 for Oregon charities¹⁹.

85%
of facilities hosted a
charitable event

IMPACT

\$19.1

million raised for charities

The estimated 975 charitable golf events held at golf course facilities in Oregon raised an estimated \$17.9 million in charitable proceeds for beneficiary organizations. This includes charitable monies raised at both championship events and at the club level. The two professional golf events raised an additional \$1.2 million for various charities, bringing the State total to \$19.1 million raised through golf events and professional tournaments.

APPROACH

What is Measured - Charitable giving captures both the in-kind contributions and the net proceeds resulting from charitable golf events that are hosted by Oregon golf facilities and professional golf tournament events.

How its Measured - The charitable giving estimate draws on the National Golf Foundation’s 2017 charitable giving survey. The national study of charitable giving is based on the number of golf facilities that hold charitable golf events, the average number of events held by each facility, and

the net proceeds raised. The NGF survey of Oregon golf facilities in 2020 shows that approximately 85% of Oregon golf facilities reported hosting a charitable golf event and the average number of charitable events held each year was 4 events. A national study by NGF in 2017 showed the average amount raised at a charitable golf event was just over \$26,000 in net proceeds per event for charitable and nonprofit organizations for private and premium public facilities, with value and standard fee public courses generating about \$13,000 per event (\$6,500 for 9-hole courses).

¹⁵ <https://pamplinmedia.com/pt/12-sports/432064-341253-golf-for-joy-brings-smiles-to-pumpkin-ridge>

¹⁶ <https://getwetforavet.org/golf-tournament/>

¹⁷ Wild Rivers Coast Alliance (WRCA)

¹⁸ <https://www.tpforever.org/history>

¹⁹ <https://www.guldgiving.org/4th-annual-oregon-guild-giving-golf-tournament-raised-81856-oregon-charities/>

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

Golf Tourism

Golf is a popular outdoor recreational activity that supports Oregon’s tourism industry through day and business trips, as well as extended vacations. NGF has identified a significant golf-travel industry – those people traveling to the state with the intention that golf will be a major part of the trip in Oregon. This finding is not surprising, as Oregon offers several top-quality golf resorts (Oregon has 24 resort-related golf facilities), including one of the most famous golf resorts in the world – Bandon Dunes. In addition, many who travel to Oregon for other reasons are likely to play golf while there.

IMPACT

Tourism is one of the strongest economic drivers of Oregon, providing a valuable source of revenue and jobs. In 2018, the Oregon Golf Travel 2017 Report²⁰ (Longwoods International, June 2018) reported 86.2 million total visitors to Oregon. The Oregon Travel Impacts Report (Dean Runyan Associates, April 2020) reported total spending by these visitors was \$12.8 billion. Of these visitors, facts presented by the Longwoods International report indicate there were 34.5 million “overnight” trips and 51.7 million “day” trips to Oregon in 2017. The report also estimated that 2.0% of travelers to Oregon participated in golf and that golf was defined as a “marketable leisure trip” that was identified specifically in spending estimates. According to NGF, traveling golfers spent \$129 per trip for day-trippers and \$843 per trip for overnight visitors.



In 2019, NGF estimates that tourism expenditures stemming from travelers who traveled to Oregon specifically to play golf generated \$281.1 million:

OREGON GOLF-RELATED TOURISM EXPENDITURES – 2019

| | \$63.0 DAYS TRIPS | \$218.1 OVERNIGHT |
|----------------------|-----------------------------|-----------------------------|
| TOTAL VISITORS | 51,720,000 | 34,480,000 |
| GOLF PARTICIPATION | 2% | 2% |
| TOTAL GOLF TRIPS | 1,034,000 | 345,000 |
| AVE. SPEND PER TRIP* | \$61 | \$632 |

* Average spending excluding \$68 for golf spending from day-trips and excluding \$142 in golf spending (to avoid double counting); and \$69 in transportation to destination expenses from overnight trips (to avoid double counting).

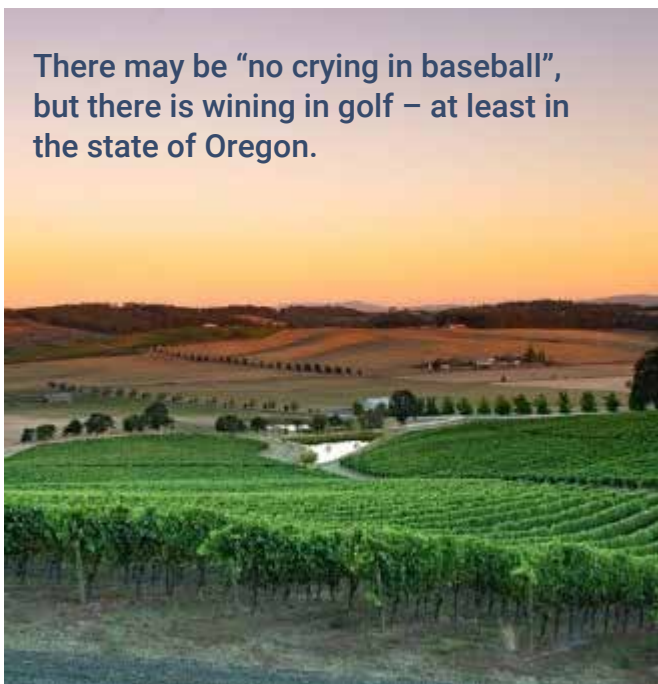
²⁰ Longwood International. (2017). Travel Oregon - Oregon 2017 Visitor Research

APPROACH

What is Measured - The golf tourism industry segment estimates the golf-related travel expenditures in which a person travels 50-plus miles and plays golf as a key recreational activity while on business or leisure travel. 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 at courses in other parts of the state. People also travel to watch amateur and professional golfers compete in tournaments played in Oregon.

How its Measured - Data for this calculation comes from surveys and studies of visitors and visitor spending conducted or commissioned by the State of Oregon and the NGF. The Oregon Golf Travel 2017 Report (Longwoods International, June 2019) and the Oregon Golf Travel Impacts 1992-2019 report (Dean Runyan Associates, April 2020) were key resources and detailed total visitors counts (by length of trip), activities undertaken while in Oregon (golf was noted specifically) and average spending per trip by trip type (including golf).

Average spending per golf trip - The NGF provided estimates of total spending per trip by golfers of \$129 for day trips and \$843 for overnight trips. The NGF has assumed that these amounts actually include spending at the golf facilities (green fees, cart fees, F&B, etc.) that has already been counted in golf facility operations. Thus, the average spend is reduced by \$68 for day trips and \$142 for overnight trips to account for on-course spending, plus 2/3 of transportation to destination is also removed, both to avoid double-counting. The intent was to include spending on accommodation, local transportation, food and beverage, entertainment, gifts, and so on.



A 2019 report from the University of Oregon²¹ found that golf was one of the top 5 outdoor activities among winery visitors. Oregon’s Willamette Valley is home to an estimated 600 wineries and nearly half (86) of Oregon’s golf facility total.

What’s their common link? The valley’s special soils developed from what was once the floor of the Pacific Ocean, followed by years of volcanic and geologic activity. Due to such fertile conditions, Willamette Valley is also the origin of almost 2/3 of the United States’ cool-season turfgrass, thus making Oregon the literal grassroots foundation of golf for many parts of the country.

²¹ University of Oregon (2019). https://industry.oregonwine.org/wp-content/uploads/UO_OWB_Visitor_Profile_Report_2019_Final_update.pdf

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

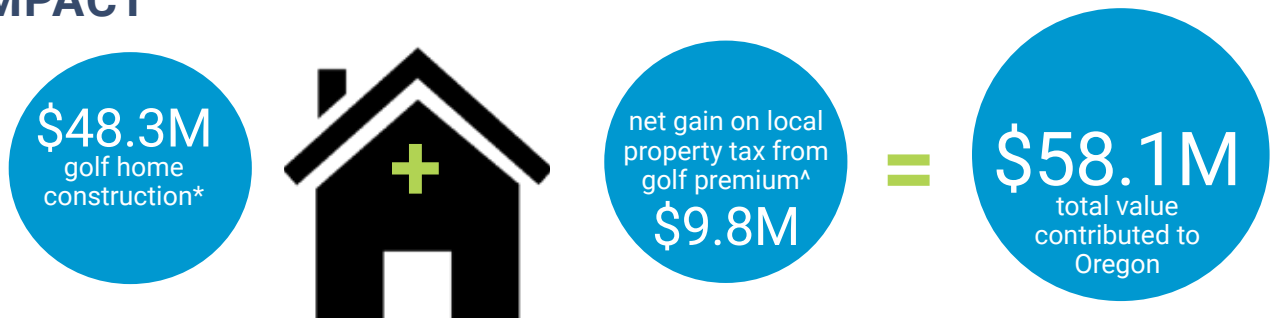
Golf Real Estate

The walkable open spaces and recreational opportunities provided by golf courses make them a key amenity in many residential communities. There are 25 “traditional” master-planned golf residential communities in Oregon. In addition, there are about 24 other golf courses that have some residential component associated with them, such as apartments, villas, lodges or resorts. In total, the NGF estimates upwards of 13,300 total residential units in Oregon that are part of master-planned golf

communities, or are immediately adjacent to golf courses.

In addition, there are several golf communities in Oregon that were still active in 2019 with new residential construction, adding an estimated 138 new single-family homes, townhouses and condominiums to the market. The ongoing residential construction produces real economic output that is enhanced by the presence of a golf course within the community.

IMPACT



The economic impact of golf real estate in Oregon encompasses two components: (1) Golf-related residential construction; and (2) Net gain to local tax jurisdictions from value premiums associated with golf course real estate.

The NGF estimates that there are six (6) separate golf communities in Oregon that had residential units under development, to varying degrees, in 2019. This includes Pronghorn Resort and Widgi Creek in Bend County, Florence Golf Links in Florence County, Running Y Ranch Resort in Klamath County, Centennial Golf Club in Medford County and Crosswater Club at Sunriver in Deschutes County. Multiplying the total number of units under construction at each location by their average cost of construction (\$350,000 per unit) and summing all of these values yielded a total 2019 golf-related residential construction figure of \$48.3 million.

The presence of a golf course with direct frontage on, or in immediate proximity to, a residential unit will provide an added value to the residential property known as the “golf premium” (estimated previously by NGF to be 15%). This golf premium is manifested by the extra value a homeowner can expect to receive on the sale of a housing unit located on a golf course, or within a defined golf community. As this sale is considered a transfer of assets rather than economic output, this is not included in the economic output analysis. However, the enhanced value of golf residential real estate does impact the total amount of property taxes collected by local authorities. NGF estimated the “golf premium” associated with these developments to be upwards of \$1.12 billion, with a property tax impact of \$9.77 million in net gain for local taxing authorities to be used for education and other local initiatives funded by property tax revenue.

* Assumes 138 new homes under construction in golf communities in 2019 at \$350,000 per unit

^Assumes a 15% “golf premium” on residential values of 13,353 golf residential units in Oregon multiplied by the 0.0087 average effective property tax rate of market value in Oregon (source: Wall St. 24/7 + Tax-Rates.org)

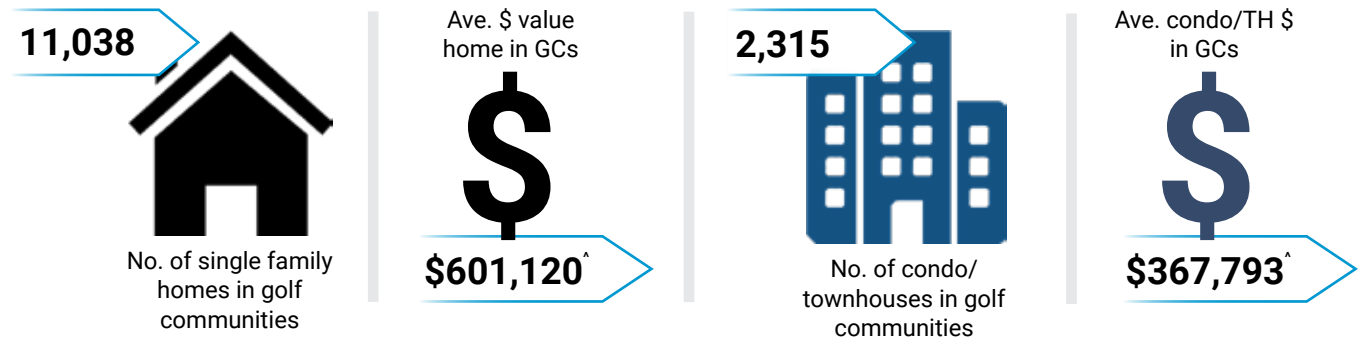
APPROACH

What is Measured - New golf home construction generates significant regional economic activity and impact. For this segment, NGF measures expenditures related to new golf home construction, as well as economic activity associated with the property tax assessment valuation of golf homes and the premium associated with these homes. The “golf premium” is the extra amount of property taxes collected by local authorities.

How its Measured - NGF conducted online research to identify new golf community developments and new phases of development at existing golf communities. We also solicited input from the Oregon golf task force. NGF then contacted real estate developers, builders, and real estate agents to identify the number of new homes under construction in the base year and the average construction cost of these homes. The NGF identified 6 communities with 138 residential units under development in 2019, with an average construction cost of \$350,000.

The calculation of the golf premium impact on local property taxes involves two parts: (1) the “premium” associated with proximity to a golf course was estimated based on previous NGF research on golf-residential communities at 15% premium; and (2) Identified the total inventory of residential units (by type) inside golf communities in the State multiplied by the average sale value (by type) of these units and then applying the 15% golf premium and the estimated 0.87% statewide effective property tax to market value estimate (source: Wall St 24/7²² & Tax-Rates.org/Oregon²³ both had 0.87% as the estimate for 2019-20). The calculation is summarized below:

Estimated Impact of Golf Value Premium of Local Property Taxes - Oregon 2019



\$7,487,000



\$9.8M
Net gain for local tax jurisdictions

²²From Oregon Realtors Association ^{*} Source NGF Analysis – 2020 ⁺Wall St 24/7 & Tax-Rates.org/Oregon
TH=Townhouse; GC=golf communities

²² <https://247wallst.com/housing/>

²³ <http://www.tax-rates.org/Oregon/property-tax>

Non-Economic Benefits of Golf in Oregon

To assess the net impact of golf, one must consider its social and environmental costs and benefits, along with how those elements are expected to evolve over time. As such, the NGF team sought to provide a summary of two key areas:

1. Golf's impact on the overall **QUALITY OF LIFE** in Oregon; and
2. Golf's impact on the **ENVIRONMENT** in Oregon (including resources and ecosystems).

GOLF'S IMPACT ON THE QUALITY OF LIFE IN OREGON

Teaching

Almost every facility surveyed by NGF in 2020 (91%) participated in at least one program for fostering the growth of the game in 2019. Results estimated that 80% of Oregon golf facilities offer a junior golf program, while over half offer a specialized beginner's program such as Get Ready Golf and WELCOME2GOLF. Other offerings included scholastic golf teams (58%), military and veteran programs (38%), and The First Tee (25%).

More than 18,000 children participated in a First Tee program in Oregon in 2019. The primary chapter for the First Tee in Oregon is located at its own facility known as the Children's Course in Gladstone, OR. The Children's Course recently built a new learning center with \$1.9M of capital investment. Such an investment in the community expects to result in triple the number of mentees. The updated facility will serve children from a variety of ages and socioeconomic backgrounds, providing them with a training of the mind and body in values of honesty, integrity, and perseverance.

Giving

The PGA Tour's record charitable total of \$204.3 million in 2019 brought its all-time total to over \$3 billion²⁴. While the State of Oregon did not host a PGA Tour event in 2019, approximately 85% of golf facilities in Oregon held a charitable event in 2019. Along with professional golf events from the LPGA and Korn Ferry Tour, as many as 975 local golf charity tournaments raised an estimated total of \$19 million in charitable contributions through active fund-raising.

Living

While golf is an industry with economic importance, the game also supports the health and well-being of roughly one in thirteen Americans. A study released in June of 2019 concluded that spending 120 minutes or more per week in nature is positively correlated with well-being²⁵. Walking 18 holes of golf also burns between 531 and 2,467 calories. Golf provides an activity for the improved physical and mental well-being of the nearly half million Oregonians who participate.

²⁴ Staff, P. T. (2020, Jan. 28). PGA TOUR, its tournaments surpass \$3 billion in all-time charitable giving. Retrieved from PGATOUR.COM, <<https://www.pgatour.com/impact/2020/01/28/pgatour-tournaments-surpass-3-billion-dollars-all-time-charitable-giving.html>>

²⁵ Matthew P. White, I. A. (June 13 2019). Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Scientific Reports*

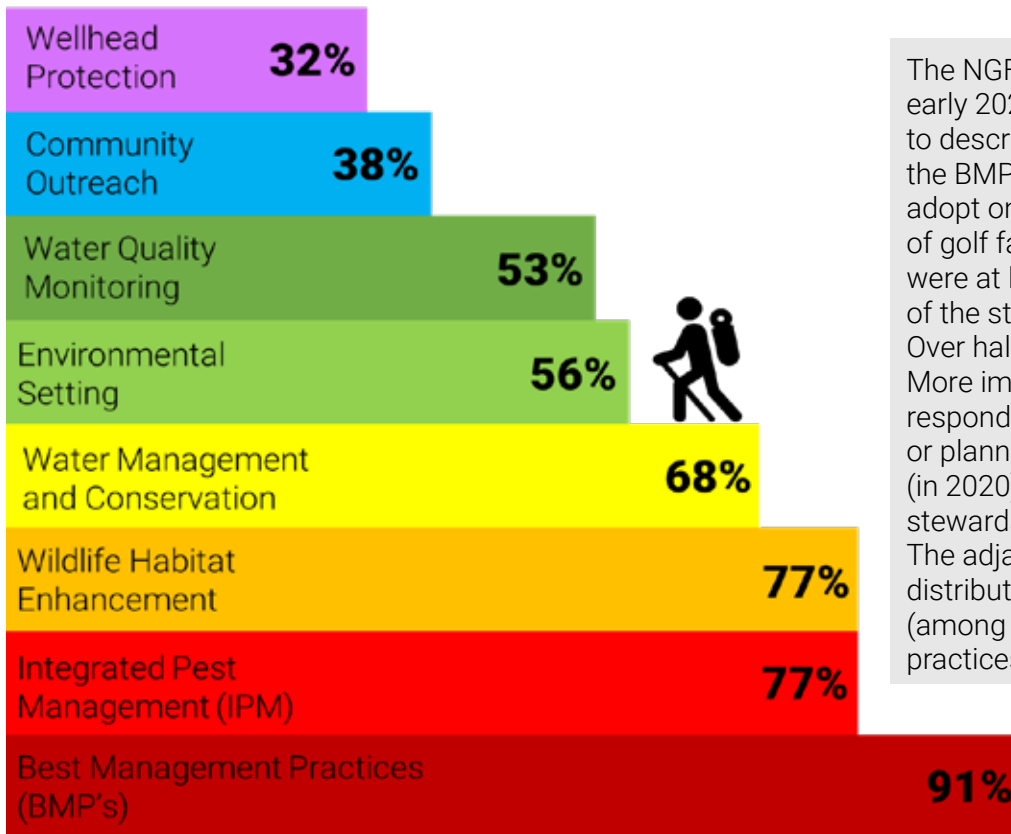
GOLF AND THE ENVIRONMENT IN OREGON

Environmental Stewardship Guidelines

Perhaps the pinnacle example of Oregon golf's environmental leadership is its invention of the environmental stewardship guidelines in 2000. The Oregon Golf Course Superintendents Association published Environmental Stewardship Guidelines for Oregon golf courses in 2000 and 2009, with a third edition underway in 2020. The Best Management Practices developed in 36 other states owe their development to the original leadership of Oregon two decades ago.

The 2nd Edition of *Oregon Golf Course Superintendents Association Environmental Stewardship Guidelines* spans eight key areas (listed below in order of adoption).

Adoption of Environmental Stewardship Guidelines



The NGF survey, conducted in early 2020, asked Oregon facilities to describe their awareness of the BMP Guide, and if they plan to adopt one or more practices. 71% of golf facility operators in Oregon were at least somewhat aware of the stewardship guidelines. Over half had actively read them. More impressively, one-third of respondents had already adopted or planned to adopt practices (in 2020) from one or more stewardship area(s) as a result. The adjacent graphic shows the distribution of adopted practices (among those already adopting practices from one or more area).

**Adoption rates among the one-third already adopting one or more practices*

Two notes follow regarding the 29% who reported no awareness of the guidelines:

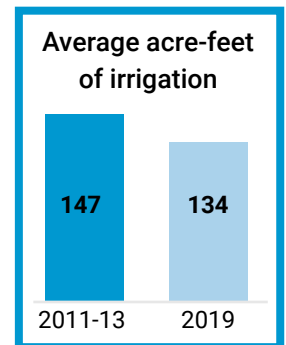
1. The survey primarily sampled from general managers and head professionals (who are less apt to be aware of golf course management practices than superintendents); and
2. Incomplete awareness demonstrates a continued opportunity for improvement in the already strong environmental stewardship of golf in Oregon.

2019 GOLF CONTRIBUTIONS TO THE STATE OF OREGON

Water and Land Resources

Water

Golf facilities in Oregon consumed an average of 43.7 million gallons of water for irrigation in 2019, which translates to a median of roughly 134 acre-feet. The most recent and reliable “baseline” estimate for water usage comes from the GCSAA’s 2014 national water survey²⁶, which showed median usage of 133 acre-feet among Oregon courses from 2011-2013 (N=22). The NGF’s research finds that Oregon golf facilities used an estimated 8.8% less water in 2019 compared to years 2011-2013. Samples varied between irrigation studies, but were each adjusted to account for facility size and number of holes.



2019 also brought significant precipitation, setting several daily records for rainfall across the state of Oregon, thus minimizing irrigation needs for the stand-alone year²⁷. Other highlights include:

- Nearly one in four Oregon golf facilities conducted an irrigation audit in the past five years, reflecting growing industry concern about water usage.
- 57% of those facilities made adjustments as a result, leading to an average savings of 9% in total water usage.
- Moreover, to suggest the efficacy of the stewardship guide, courses adopting practices from Section 6: Water Management and Conservation used an average of 13.9% less water than non-practitioners.
- NGF’s survey showed that one in five Oregon golf facilities used at least some of their irrigation water from a reclaimed or recycled water source.

Land

The median Oregon golf facility comprises 113 total acres, of which just 85 acres (75%) are maintained turfgrass. Furthermore, about one in ten Oregon golf facilities removed turfgrass in the past five years, and of those, over 80% replaced turf with native vegetation. This indicates growing concern regarding the costs of maintaining turfgrass to both the environment and the bottom line.

Golf operators were asked to describe the type of land upon which their golf course was originally built. Up to 40% of Oregon golf courses were built on non-natural land having some type of prior human impact. Research shows that golf courses built on land with prior anthropogenic impact (e.g., residential, agricultural, industrial, or urban landscapes) can play a beneficial role in preserving and even restoring biodiversity.²⁸

Energy

Oregon courses were asked whether or not they completed an energy audit in the last five years. Nearly a quarter of Oregon golf facilities conducted an energy audit in the last five years. Roughly $\frac{3}{4}$ of those facilities that conducted an energy audit made adjustments or adopted practices as a result, saving an average of 12% in energy consumption. This result deserves note, as it comes from a state with abundant renewable energy and low kWh rates, and thus lessened economic pressure to cut back.

²⁶ GCSAA. (2014). Golf Course Environmental Profile. Water Use and Conservation Practices on U.S. Golf Courses, Phase II, Volume I

²⁷ NOAA’s Annual Climate Report

²⁸ Colding J., Folke, C. The Role of Golf Courses in Biodiversity Conservation and Ecosystem Management. *Ecosystems* 12, 191–206 (2009).

Ecosystems and Golf

Impacts of Golf on Wildlife and Biodiversity in Oregon

In 1991, Audubon International began collaborating with the United States Golf Association in an effort to encourage and recognize sustainable development and management in golf. Since then, ongoing efforts have spanned across the following key areas of outreach & education, water conservation, water quality management, and chemical use reduction & safety. Oregon has the sixth highest percentage of Audubon-certified golf facilities (9.6%) in the US, with 17 total Audubon-certified golf facilities. Oregon ranks 28th in number of total golf facilities, but sixth in its percentage of Audubon participants.



Portland Parks & Recreation released a Golf Program Strategic Plan designed to take place from 2015-2018 designed to enhance the sustainability of Portland's five municipal golf courses. Such holistic planning efforts continue to improve golf in Oregon by reducing barriers to access, reducing resource consumption, and increasing ecosystem services. Three of these five municipal courses participate in at least one Audubon International program

Wild Rivers Coast Alliance (WRCA) was formed as a grant-making department of Bandon Dunes Golf Resort in 2013 with a mission to fund projects that yield triple-bottom-line results (conservation, community, and economy) along the South Coast of Oregon. Projects support habitat protection and restoration, healthy ecosystems, and a sustainable local economy. Its funding comes from the net proceeds of the Bandon Preserve par 3 golf course (known as a "course with a mission").



Bandon Preserve Par 3 Golf Course

Summary

THE CONTRIBUTION OF GOLF IN OREGON

DECENT WORK AND
ECONOMIC GROWTH



The golf industry contributed an estimate of \$1.6B to the State of Oregon in 2019.

SUSTAINABLE CITIES
AND COMMUNITIES



Oregon has the 6th-highest % of Audubon-participating golf courses in the nation.

LIFE
ON LAND



Portland's 5 municipal golf courses provide over 750 acres of urban green space and accessible golf.

GOOD HEALTH
AND WELL-BEING



Oregon's 177 golf facilities provide safe recreation to nourish the mind and body of 242,500 Oregon residents.

PARTNERSHIPS
FOR THE GOALS



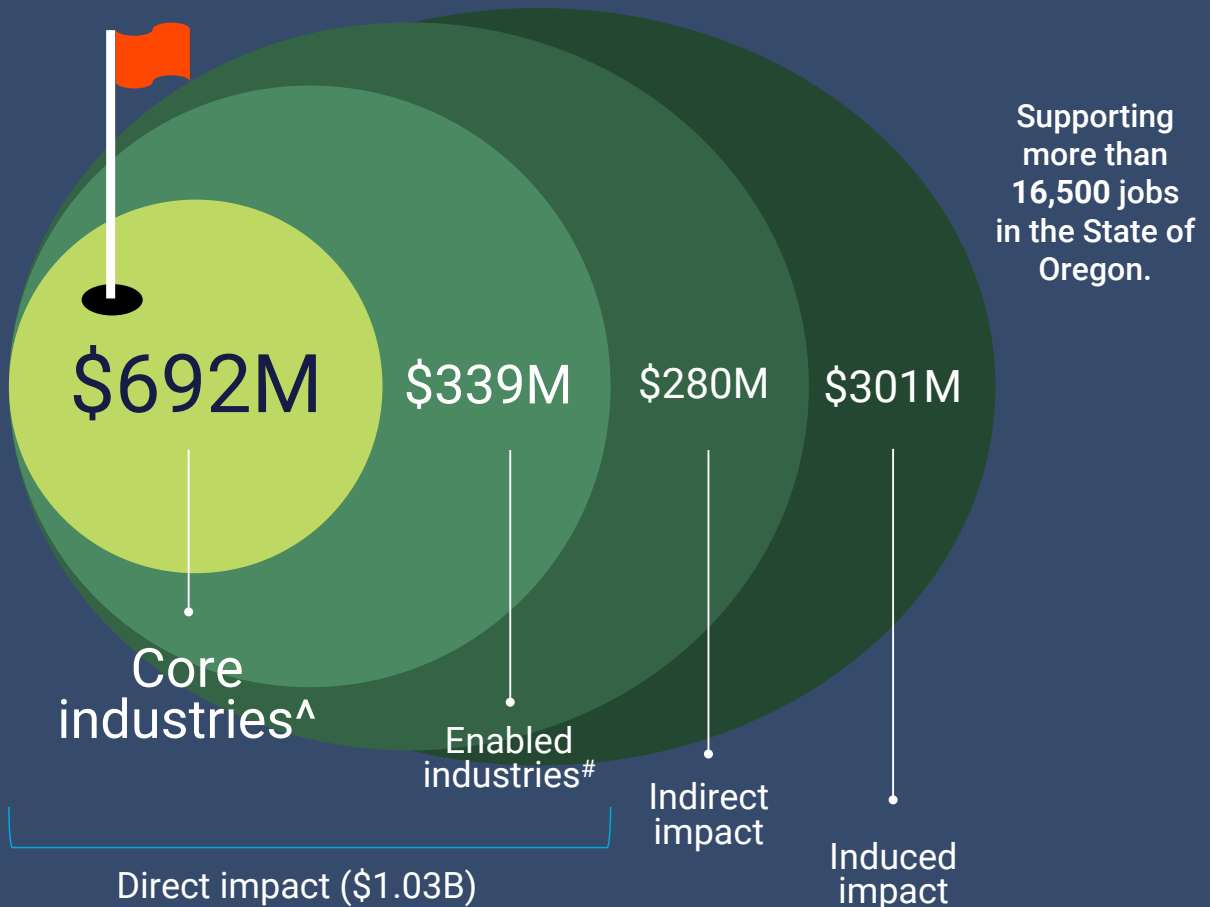
Through Wild Rivers Coast Alliance, Bandon Dunes Golf Resort has given over \$4.8M in grants to projects on the South Coast of Oregon since 2013.

The Economic Contribution of Golf to the State of Oregon

Statistics belie the true magnitude of golf's impact in Oregon. The presence of world renowned golf resorts like Bandon Dunes, major golf apparel companies like Nike, Adidas and Columbia, and the large turf/grass seed industry lead to golf-related economic activity in higher proportion than the data might actually suggest.

Among all States, Oregon ranks 25th in total population, 23rd in total rounds played, 28th in number of golfers, and 24th in golf participation (% of population that plays golf).

\$1,600,000,000
Total economic impact (2019)



[^] Core industries include: Golf facility operations (\$339.0M), golf-related supplies (\$267.5M), Capital investments (\$43.1M), Charitable events (\$23.0M), and Tournaments & Associations (\$19.1M)

[#] Enabled industries include: Golf-related tourism (\$281.1M), Golf-related residential construction (\$48.3M), and Net gain for local taxing authorities (Property Tax) (\$9.8M)

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Front Cover Photo taken and provided by Richard Singer, "Heron Lakes Golf Course, Portland, OR"

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