



















Acknowledgements

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Table of Contents

Overview	6
Methodology	
Golf Facility Operations	
Golf Facility Capital Investment	14
Golf-Related Supplies	14
Tournaments, Associations & Charitable Events	16
Golf Tourism	
Golf Real Estate	21
Economic Impact	23
References	25
Appendix: Economic Impact Tables	27

Overview

Nevada is a small state of 3 million people that hits above its weight in golf facility operations (estimated at \$301.0 million) due to its large number of golf resorts (18 resorts) and golf rounds generated by visitors. Beyond the direct operating expenditures and capital investments made by Nevada's 88 golf facilities (which manage 98.5 18-hole equivalent courses), the game of golf drives significant economic activity across the State of Nevada.

Golf is a popular outdoor recreational activity that complements other activities and attractions that draw visitors and partial year residents to the state. In 2018, TEConomy estimates that visitor expenditures generated by visitors who played or watched golf while on a trip or vacation to be \$744.3 million. This includes spectators to the two PGA TOUR events Nevada hosted in 2018: The Shriners Hospitals for Children Open, played at the TPC Summerlin in Las Vegas, and The Barracuda Championship, played at the Montrêux Golf and Country Club, halfway between Reno and Lake Tahoe.

In 2018, demand for new golf homes was strong with significant construction activity occurring in many new and existing golf communities across the state. TEConomy identified new phases of golf home construction occurring at Sun City Mesquite at Conestoga Golf Club, Lake Las Vegas at Reflection Bay, The Summit at the Summit Club, Tuscany Village at Chimera Golf Club, and multiple subdivisions at Somersett Golf and Country Club, among others. The number of new golf homes constructed in these communities in 2018 ranged from 15 to 175 new homes, totaling \$166.8 million in new construction activity. Nevada has 42 total golf communities, according to the National Golf Foundation.

Member-driven state golf associations supported a variety of playing opportunities and tournaments, education and workshops, and meetings for amateur, junior, and senior golfers and golf professionals. Nevada golf facilities give back to their state and local communities by hosting charitable events that generated \$37.0 million in net proceeds and in-kind contributions for beneficiary organizations. These range from smaller, but highly impactful charitable golf events that raise money for local hospitals, homeless shelters, youth development organizations, veteran support organizations, medical research, and college scholarships, to major events, such as the Governor's Black-Tie Event at Southern Highlands, which raised over \$1 million for Assistance League of Las Vegas, Discovery Children's Museum, Opportunity Village, and several other organizations.

Table 1 presents the estimated size of each golf industry segment in 2018. The six segments sum to \$1.477 billion, with the golf industry's economic impact calculated on \$1.242 billion of this total. The \$1.242 billion includes only the margin of retail sales for both the Golf-Related Supplies and Tourism estimates and the new construction portions of Golf Course Capital Investment and Golf Real Estate. While an important contribution to the state, charitable giving is also excluded in economic impact accounting, because it is considered a transfer of income.



Table 1. Nevada's Direct Golf Economy by Industry Segment (\$M)

	2018
CORE INDUSTRIES	
Golf Facility Operations	\$301.0
Golf Course Capital Investments* (investment and renovations/new construction)	\$15.1
Golf-Related Supplies* (retail sales)	\$42.0
Major Golf Tournaments and Associations	\$11.4
Golf Charitable Events	\$37.0
ENABLED INDUSTRIES	
Golf Tourism*	\$744.3
Golf Real Estate* (new construction and realized premium)	\$326.4
TOTAL GOLF ECONOMY	\$1,477.1
TOTAL DIRECT IMPACT FOR IMPACT ANALYSIS*	\$1,242.5

Note: *The economic impact analysis calculates total impact on the margin of retail sales for both the Golf-Related Supplies and Tourism estimates and only the new golf course construction and new golf residential construction portions of Golf Course Capital Investment and Golf Real Estate. Source: TEConomy Partners, LLC.

Nevada's \$1.242 billion golf industry is comparable to other major industries in the state, such as Agriculture (\$664.9 million), Performing Arts (\$883.7 million), and Computer Programming (\$1.316 billion).

The golf industry's direct economic activity generates secondary and tertiary impacts throughout the state economy through operating expenditures and consumer spending by employees. When these indirect and induced impacts are included, Nevada's golf industry drove:

\$1.981 billion of direct, indirect, and induced economic output;

¹ All Commodities receipt data from "Top Five Commodities," State Fact Sheet: Nevada, 2017, U.S. Department of Agriculture, Economic Research Service; 488 Performing Arts Companies and 451 Custom Computer Programming, IMPLAN Nevada state model, 2017.



- 17,504 direct, indirect, and induced jobs;
- \$701.3 million in wages and benefits; and
- \$138.6 million in state and local tax revenue.

Figure 1, below, presents the Nevada golf economy's total direct economic expenditures (\$1.242 billion) and the total economic impact (e.g., output, employment, compensation, and state and local taxes) generated by the direct expenditures across the state.

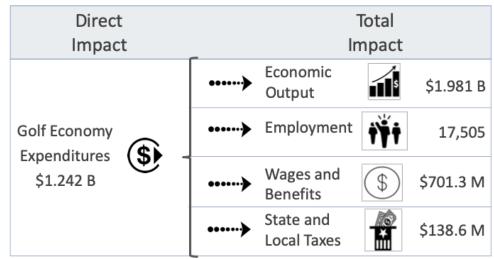


Figure 1. Nevada Golf's Total Economic Impact 2018

Source: TEConomy Partners, LLC



Methodology

Framework

For the past 15 years, the World Golf Foundation's GOLF 20/20 and key golf industry stakeholders in many states have successfully measured and communicated golf's economic impact—i.e., how much the game contributes to state and national economies through direct, indirect, and induced economic activity and employment. As a result, the framework has been replicated internationally—e.g., see Ernst & Young's The Australian Golf Industry Economic Report 2010 and Sports Marketing Survey Inc.'s The Economic Impact of Golf on the Economy of England 2012. Adoption of the WGF's golf industry impact framework has enabled the golf industry to assess its overall growth and the growth of individual industry segments over time and across geographic regions. Figure 2 presents the WGF's golf industry and economic impact framework.



Figure 2 Golf Industry Impact Framework

Source: TEConomy Partners, LLC

³ The World Golf Foundation's golf industry cluster framework debuted in its commissioned study performed by SRI International (2002). The Golf Economy Report. http://www.golf2020.com/media/30717/2002golf2020economicreport.pdf



² Ernst & Young (2011). The Australian Golf Industry Economic Report 2010,

https://www.clearinghouseforsport.gov.au/ data/assets/pdf file/0003/437610/AGIC 2010 Golf Industry Economic Report.pdf Sports Marketing Survey Inc. (2014). The Economic Impact of Golf on the Economy of England 2012, http://www.englandgolf.org/librarymedia%5 C documents%5 C The%20 E conomic%20 Impact%20 of%20 Golf%20 on%20 the%20 E conomy%20 of%20 England.pdf.

The framework divides the golf industry into core and enabled industries. The four core industry segments include Golf Facility Operations, Golf Facility Capital Investments (course construction and renovations), Golf-Related Supplies (production and retail sales), and Golf Tournaments, Associations, and Charitable Events. The two enabled industry segments are Golf Real Estate (new home construction and premiums related to the sale of existing homes in golf communities) and Golf Tourism.

Data and Estimations

To estimate Nevada's golf's economic impact, TEConomy first collected and analyzed secondary data from a wide range of long-standing data sources with time-series data for each of the six industry segments. These data were used to develop direct expenditure impact estimates for each of the four core and two enabled industry segments. These data sources include: the National Golf Foundation's *U.S. Golf Facilities* report and *Golf's Charitable Impact* report, the Professional Golfers' Association of America's *PGA Operations Survey* (discontinued in 2016) and *PGA Compensation Survey*, the U.S. Economic Census, the Golf Course Superintendents Association of America's *Capital Expenditures Survey*, the Golf Course Builders Association of America, Dun & Bradstreet/Hoovers, the National Sporting Goods Association's *The Sporting Goods Market Survey*, golf association tax filings, and tourism surveys and studies commissioned by the Nevada Tourism Department.

TEConomy also performed primary research, such as online searches for golf communities and interviews with developers and real estate agents to collect data on the number of homes constructed and the average construction cost of homes in these developments. In cases where response rates to existing facility surveys are low, TEConomy works with state golf task forces to implement golf facility surveys to collect additional economic data.

Using these data, TEConomy estimated the direct expenditure impacts for each of the four core and two enabled industry segments. Based on the golf task force's review and approval of these estimates, TEConomy then used IMPLAN, an economic impact modeling software, to perform the economic impact analysis to estimate the golf industry's total economic impact on Nevada's economy.

The subsequent chapters present TEConomy's direct impact estimate for each of the six golf industry segments, as well as an explanation of what was measured and the estimation approach. The final chapter presents the economic impact analysis results.





Golf Facility Operations

Finding

Nevada is a small state of 3 million people that hits above its weight in golf facility operations. In 2018, Nevada's 88 regulation golf facilities (which managed 98.5 18-hole equivalent courses) generated \$265.2 million in operating revenue. National Golf Foundation data indicate that Nevada's golf facilities maintained their footprint over the last 10 years despite a net decline of nearly 1,200 golf facilities nationally, from 15,970 facilities in 2007 to 14,794 facilities in 2017. In terms of financial performance, Nevada facilities (e.g., privates, resorts, and daily fees/semi-privates) perform better, on average, than the national average for annual revenue generated. This strong financial performance is driven by both Nevada golfers, as well as the many visitors to Nevada who play golf. In addition to its regulation golf courses, Nevada boasts a variety of indoor facilities, golf schools, and miniature golf facilities. Topgolf opened a facility on the Las Vegas Strip in May 2016, which has done very well. Collectively, these alternative facilities generated \$35.7 million in 2018.

Table 2. Nevada G	olf Facility Rever	nue (\$M)
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	2018
Regulation facilities	\$265.2
Alternative facilities	\$35.7
Total	\$301.0

Source: TEConomy Partners, LLC

Approach

What is measured:

Golf facilities generate operating revenue through greens fees, membership fees, range fees, golf cart rental, retail sales of equipment and apparel, and associated spending on food and beverage. The golf facilities use this revenue to support facility operations through direct employment and purchases of a range of goods and services from other vendors—e.g., turfgrass equipment and maintenance providers, golf equipment and apparel manufacturers, food and beverage providers, etc. These expenditures by golf facilities is what drives the economic impact.

How it's measured:

This industry segment's direct economic impact is calculated by multiplying the number of regulation golf facilities in each of four categories—private, daily fee/semi-private, municipal/university/military, and resort—by the





average revenue for that type of facility. TEConomy did the same for alternative facilities, which includes indoor facilities, ranges, golf schools, and miniature golf facilities.

Number of Facilities

TEConomy compiled and analyzed the total number of golf facilities reported by the National Golf Foundation over the past 10 years (Table 3). The NGF data shows no net change in the total number of Nevada golf facilities, although there have been golf facility openings and closures. There have also been some conversions across facility types.

Table 3. Number of Nevada Golf Facilities by Type of Facility: 2007-2017

	Private	Public	Daily fee/ Semi- private	Municipal/ University/ Military	Resort	Total
NGF 2017	15	79	N/A	N/A	13	94
NGF 2012	13	81	N/A	N/A	14	94
NGF 2007	13	81	N/A	N/A	14	94

Source: National Golf Foundation. U.S. Golf Facilities, 2008, 2013, and 2018 editions.

Average Revenue

For this study, TEConomy drew on the Nevada Golf Alliance list of facilities and classification of facilities by type. TEConomy then developed and implemented an online survey that was sent to 86 Nevada golf facilities for whom email contacts were available (out of 88 total Nevada golf facilities). The survey included questions on revenue, rounds, capital investment, and charitable events. Thirty-five golf facilities responded for a 40.7% response rate. TEConomy also collected revenue data for 20 facilities via the D&B Hoovers company database and for 2 private facilities via 990 tax filings. In total, TEConomy collected revenue data for a total of 57 facilities. The number of Nevada golf facilities by type of facility, the average revenue for Nevada golf facilities, and the average revenue for U.S. golf facilities (reported on the PGA Compensation Survey) are presented in Table 3.

Nevada private and daily fee/semi-private facilities reported higher average revenue compared to the national average. Nevada golf resorts reported average revenue that is comparable to the national average.⁴ Nevada municipal/university/military facilities reported average revenue that is \$498,177 below the national average.

⁴ Typically, a golf resort is defined as a golf course located on or adjacent to four- or five-star accommodation. In Nevada, golf resorts include facilities that meet this definition, but also include golf facilities with high-end green fees and a large share of visitor rounds that are





Table 4. Nevada Golf Facilities: Total Number and Average Revenue by Type, 2018

	Private	Daily fee/ Semi-private	Municipal/ University/ Military	Resort
Nevada Total Golf Facilities	14	47	9	18
Nevada Average Revenue (response)	\$5,485,193 (12)	\$2,377,397 (24)	\$1,216,942 (8)	\$5,295,936 (13)
U.S. Average Revenue	\$4,538,193	\$1,908,530	\$1,715,119	\$5,298,125

Source: TEConomy Partners, LLC. Nevada Golf Facility Operations Survey, 2018. U.S. revenue data from the PGA of America. PGA Compensation Survey, 2018.

located on or near the Las Vegas Strip, Reno, etc., where there is a high concentration of hotels and resorts. The Nevada Golf Alliance identified 18 golf resorts compared to NGF's estimate of 13 golf resorts.



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Golf Facility Capital Investment

In 2018, Nevada golf facilities invested \$12.6 million in capital expenditures and improvements to existing greens and tees, equipment, and structures. Despite no new courses under construction in 2018, two major renovations, occurred at existing facilities, which totaled approximately \$2.4 million. This is also the trend nationally where renovations of existing facilities now exceed brand new course constructions each year. These two projects plus capital expenditures in existing facilities totaled approximately \$15.0 million in 2018.

Table 5. Nevada Golf Facility Capital Investment (\$1	M)
	2018
Existing Facilities	\$12.6
New Course Construction/Major Renovations	\$2.4
Total	\$15.0

Source: TEConomy Partners, LLC

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 it's measured:

Golf facility capital investment data comes from surveys. The Golf Course Superintendents Association of America includes a golf facility capital budget question on its annual *Compensation Survey*. In the past, data was reported at the regional level, using U.S. Census Bureau region. Currently, the GCSAA only reports data at the national level. In 2017, the GCSAA reported that the average 18-hole equivalent course in the U.S. invested \$133,190. For this study, TEConomy used reported capital investment of \$143,516 from TEConomy's survey of Nevada golf facilities (n=28).

For new course construction, the National Golf Foundation reports the number of new golf courses under construction and the number of new golf facility openings each year as part of its annual U.S. Golf Facilities publication. In 2018, NGF estimated there were no new 18-hole equivalent golf courses under construction and





no new golf course openings. TEConomy's survey identified two major projects undertaken by golf facilities with total combined investment of \$2,428,151 in 2018.





Golf-Related Supplies

Consumer purchases of golf apparel, equipment, and accessories drive significant economic activity. Nevada retailers earned \$16.7 million on an estimated \$42.0 million of golf apparel and equipment purchases in 2018. Retail sales of golf apparel (\$14.4 million) and golf club sets (\$11.9 million) represented the largest categories in terms of total value of sales, followed by golf balls (\$6.8 million), individual golf clubs (\$15.0 million), bags (\$2.1 million), and golf shoes (\$1.8 million).

Table 6. Nevada Golf-Related Supplies Revenue (\$N	1)
	2018
Retail Sales	\$42.0
Retail Sales (Margin)	\$16.7

Source: TEConomy Partners, LLC

Approach

What is measured:

This segment captures both: (1) the net revenue (known as retail margin) that accrues to Nevada retailers from spending by golfers on golf equipment, golf shoes, and golf apparel and (2) the manufacture of these goods by Nevada 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 it's 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 TEConomy estimated state-level sales based on Nevada's share of 18-hole equivalent facilities for the Mountain Region.

The estimation of economic impact is based upon the retail margin that accrues to Nevada 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. TEConomy used the most recent retail margin available for sporting goods stores (39.8% in 2017, which is the latest available) to estimate the retail margin accruing to Nevada companies. The retail margin is the net revenue accruing to the business after paying for the cost of goods from the wholesaler or manufacturer.





The second type of activity captured by this industry segment is manufacturing activity—companies that produce golf equipment, as well as companies that manufacture turf maintenance equipment, golf course accessories, and golf cars for golf facilities. Since consumer retail purchases and golf facilities operating expenditures are already captured in the retail portion of this industry segment and in the Golf Facility Operations estimate, respectively, TEConomy treats manufacturing separately.





Tournaments, Associations & Charitable Events

Finding

Tournaments and Associations: Nevada hosted two professional golf championships in 2018—the Shriners Hospitals for Children Open and the Barracuda Championship. Both are PGA TOUR events. The Shriners Hospitals for Children Open is played each October at the TPC Summerlin course in Las Vegas. The Barracuda Championship, formerly the Reno-Tahoe Open, is played each July at the Montrêux Golf and Country Club, halfway between Reno and Lake Tahoe.

Nevada has several member-driven golf associations that support a variety of playing opportunities and tournaments, education and training, meetings, and workshops. The major state golf associations include the Southern Nevada State Golf Association, the Southern Nevada Chapter of the Southwestern Section of the PGA, the Southern Nevada Golf Course Superintendents Association, the Nevada Chapter of the National Golf Course Owners Association, and the Nevada State Women's Golf Association. Also active are the Senior Women's Golf League, the Executive Women's Golf Association, and the Southern Nevada Women's Golf Association. Promoting the long-term growth and development of the game and competitive junior golf are the Northern Nevada Junior Golf Association (First Tee of Northern Nevada) and the Southern Nevada Junior Golf Association (First Tee of Southern Nevada).

In 2018, TEConomy estimates that total expenditures stemming from the two professional golf tournaments and golf association operating expenditures generated \$11.4 million.

Charitable Events: Charitable golf events serve as important fundraisers for many state and local charitable organizations. In 2018, Nevada golf facilities hosted charitable events that raised \$37.0 million in charitable proceeds for beneficiary organizations. This includes charitable monies raised at both championship events and at the club level. At the club level, major 2018 fundraisers included the Coaches vs. Cancer Event at Shadow Creek and Southern Highlands, which raised \$1 million for the American Cancer Society; the Governor's Black-Tie Event at Southern Highlands, which raised over \$1 million for Assistance League of Las Vegas, Discovery Children's Museum, Opportunity Village, and several others; the 8th Annual Red Rock Classic, which raised over \$100,000 for Operation Homefront Nevada, which provides short-term and critical assistance to military families and wounded warriors; the Colliers International Links for Life Charity Golf Tournament at Siena Golf Club, which raised more than \$130,000 for several children's charities in Southern Nevada; and HELP of Southern Nevada Golfer's Roundup at Cascata Golf Club, which raised \$60,000 for outreach and homeless shelter and services for youth and adults. Many Nevada golf clubs generate smaller, but high-impact funds for local hospitals, schools, youth development organizations, college scholarships, medical research, etc.





Table 7. Nevada Tournaments, Associations & Charitable Giving (\$M)

	2018
Tournaments	\$9.5
Associations	\$1.9
Charitable Events	\$37.0

Source: TEConomy Partners, LLC

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. State golf associations organize junior, senior, and amateur tournaments, and support other activities on behalf of their members. Charitable giving captures both the in-kind contributions and the net proceeds resulting from charitable golf events that are hosted by Nevada's golf facilities.

How it's measured: The Tournaments estimate is derived from direct tournament-related expenditures. Lodging, food and beverage, and other tourism-related expenditures associated with these high-impact events are captured in the Golf Tourism segment of the report. The Associations estimate is the sum of major state golf association expenditures. These are reported on profit and loss (P&L) statements provided by the state golf associations to TEConomy and/or via tax filings.

The charitable giving estimate draws on the National Golf Foundation's 2016 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. TEConomy's survey of Nevada golf facilities found that the average facility hosted 10 events per year and raised, on average, \$30,552 in net proceeds per event for charitable and nonprofit organizations. Charitable giving is not included in economic impact estimation, because it is considered a direct transfer of income in economic impact accounting. However, it is an important way that golf facilities support their local and regional communities.





Golf Tourism

Direct Impact

Golf is a popular outdoor recreational activity that complements other activities and attractions that draw visitors and partial year residents. Nevada has one of the highest percentages of golf resorts in the U.S.: 20% of Nevada's 88 golf facilities are golf resorts based on their relatively high share of non-resident rounds. Nevada hosts two PGA TOUR events each year—the Shriners Hospitals for Children Open and the Barracuda Championship. The Shriners Open attracts over 40,000 spectators. In addition, junior, senior, amateur, and member-guest tournaments also attract Nevada residents and non-residents to different parts of the state. In 2018, TEConomy estimates that tourism expenditures stemming from travelers who played golf while on a trip or vacation generated \$744.3 million.

Table 8. Nevada Golf Tou	urism (\$M)
	2018
Travel Expenditures (\$)	\$744.3

Source: TEConomy Partners, LLC

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 or watches golf as a key recreational activity while on business or leisure travel.

How it's measured: Data for this calculation comes from surveys and studies of visitors and visitor spending conducted or commissioned by state departments of tourism. The Nevada Division of Tourism uses data from TNS OmniTrak for tracking the number of visitors to Nevada and Tourism Economics for visitor spending. In 2018, there were an estimated 56.4 million visitors to Nevada who spent an estimated \$40.6 billion on their trip. The share of visitors who played golf while on a trip is 1-2% nationally, and 2% in western states that attract golfers during the winter months. In 2018, TEConomy estimated 1,128,252 of these visitors played golf while on a day or overnight trip and estimated average per person spending of \$659.66 based on average reported expenditures per overnight visitor and average length of stay in Las Vegas and the rest of the state.





Golf Real Estate

The scenic, walkable green spaces and recreational opportunities provided by golf courses make them a key amenity in many residential communities. There were an estimated 42 golf communities in Nevada in 2018, down slightly from 44 golf communities in 2010. In 2018, Nevada's real estate market, which includes new phases of development in new and existing golf communities, was experiencing strong growth driven by job growth and population growth. New golf home construction generated \$166.8 million in 2018. TEConomy identified new construction activity at Sun City Mesquite at Conestoga Golf Club in Mesquite; Lake Las Vegas at Reflection Bay Golf Club; The Summit at The Summit Golf Club in Las Vegas; Tuscany Village at Chimera Golf Club in Henderson; and The Pointe and Wintercreek developments at Somersett Golf and Country Club in Reno; among others. The number of new golf homes constructed in these communities in 2018 ranged from 15 to 175 new homes.

The Golf Real Estate segment also estimates the "golf" premium associated with golf communities. TEConomy estimated the "golf" premium associated with these 42 developments to be \$159.7 million. The premium is generated by the sale of existing golf homes and reflects the additional amount a buyer is willing to pay to purchase a home or property located within a golf community. The value of golf homes has rebounded since the recession, and the pace of sales of existing homes relative to the total stock of golf homes is also up.

Table 9. Nevada Golf Real Estate (\$M)						
	2018					
Golf Home Construction	\$166.8					
Existing Home Sales Golf Premium	\$159.7					
Total	\$326.4					

Source: TEConomy Partners, LLC

Approach

What is measured: New golf home construction generates significant regional economic activity and impact. For this segment, TEConomy measures expenditures related to new golf home construction, as well as economic activity associated with the resale of existing golf homes and the premium associated with these homes. The "golf premium" is the extra value a homeowner can expect to receive on the sale of a home located in a golf community beyond the home's other features.

How it's measured: TEConomy conducted online research to identify new golf community developments and new phases of development at existing golf communities. We also solicited input from the Nevada golf task force.





TEConomy then contacted real estate developers, builders, and city planning agencies to identify the number of new homes under construction in the base year and the average construction cost of these homes.

To calculate the golf premium, TEConomy multiplied Nevada's 42 existing golf communities by the median number of housing units per golf community (2,028 homes) by the home turnover rate. TEConomy estimates that in 2018, the home turnover rate (percentage of homes sold relative to the total housing stock) was 3.9% in Nevada. TEConomy used a golf premium of \$48,000 which represents the additional amount a buyer is willing to pay for a home located within a golf community (both on and off the golf course) as opposed to a comparable gated community without a golf course.



Economic Impact

Economic impact analysis is an effective way of modeling how growth or decline of a target industry sector contributes to changes in the overall level of economic activity in a state economy. In the case of the golf industry, TEConomy analyzed the total economic impact of each of the six core and enabled golf industry segments. Economic impact analysis measures three major channels by which growth or decline of an industry sector impacts the overall level of economic activity in a state:

- **Direct effects:** The direct employment and economic activity stemming from the golf industry segments' operations and expenditures.
- Indirect effects: The demand generated for supplier firms by the six golf industry segments.
- **Induced effects:** The additional economic activity generated by the spending of the golf industry's and related supplier firms' employees in the overall economy.

The sum of these three effects is referred to as the **total impact.** This concept of how a dollar of investment is respent multiple times throughout the economy as it passes from business to business or business to employee is known as the "multiplier effect." The result of the multiplier effect is that one dollar of expenditure or investment ends up having a total economic impact that is a few multiples higher.

Multiplier effects are larger when the initial investment spurs follow-on investment, when the consumption component, including purchases from suppliers, is higher, and when the spending occurs locally. To calculate economic impact, TEConomy used a State of Nevada-specific model and data from IMPLAN to create a golf industry-specific model. IMPLAN is one of the most widely used and respected providers of economic impact modeling software. The software provides a platform for estimating total impact using highly detailed data tables representing 536 economic sectors in the state economy. An advantage of IMPLAN is that it also estimates total state/local and federal taxes generated by the golf industry in the form of income, sales, property, and other taxes.

Table 9 presents the total economic impacts stemming from the direct, indirect and induced effects of each of the six golf industry segments. Note that capital investments in existing golf courses, charitable giving, and the realized golf premium on the sale of existing golf homes are not included in the economic impact calculation. Capital investments, outside of major renovations, are assumed to be financed through operating revenue and, therefore, not included to avoid double counting. Charitable giving is considered a transfer of income rather than the generation of new income. Similarly, the sale of existing homes is also considered a transfer of assets rather than new economic activity.



Table 10. Nevada Golf's Total Economic Impact in 2018 by Industry Segment (\$M)

	Direct Total (Direct, Indirect, and Induced) Economic					
		Output	Output	Employment	Wages and Benefits	State and Local Taxes
CORE INDUS	STRIES					
A A	Golf Facility Operations	\$301.0	\$532.6	5,787	\$201.3	\$38.1
	Golf Course Renovations*	\$2.4	\$3.9	31	\$1.5	\$0.13
	Golf-Related Supplies*	\$16.7	\$30.2	435	\$11.4	\$3.3
∜ ; ₽	Major Golf Tournaments and Associations	\$11.4	\$17.4	98	\$6.0	\$0.85
	Total Core Industries	\$331.5	\$584.1	6,351	\$220.8	\$42.4
ENABLED IN	IDUSTRIES					
	Golf Tourism*	\$744.3	\$1,119.3	9,271	\$383.1	\$88.1
	Golf Residential Construction*	\$166.8	\$277.3	1,882	\$97.9	\$9.0
	Total Enabled Industries	\$911.0	\$1,396.6	11,153	\$481.0	\$97.1
TOTAL DIRE	CT GOLF IMPACT T ANALYSIS	\$1,242.5	\$1,980.6	17,504	\$701.3	\$138.6

Source: TEConomy Partners, LLC analysis using IMPLAN Nevada state model. Note: Rounded figures. *The economic impact analysis calculates total impact on the margin of retail sales for both the Golf-Related Supplies and Tourism estimates and only the new golf course construction and new golf residential construction portions of Golf Course Capital Investment and Golf Real Estate.



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Appendix: Economic Impact Tables

Table A1-1. Golf Facility Operations

Impact Type	Employment	Labor Income	Value Added	Output	State & Local Tax Revenues	Federal Tax Revenues
Direct Effect	4,225	\$132,646,386	\$179,429,930	\$300,972,831	\$25,254,100	\$31,001,592
Indirect Effect	713	\$30,791,904	\$63,205,091	\$106,753,513	\$4,654,723	\$7,979,893
Induced Effect	849	\$37,856,554	\$73,631,054	\$124,829,868	\$8,235,728	\$9,769,798
Total Impacts	5,787	\$201,294,844	\$316,266,075	\$532,556,211	\$38,144,551	\$48,751,283
Multiplier	1.37	1.52	1.76	1.77		

Source: TEConomy Partners, LLC analysis using IMPLAN Nevada state model

Table A1-2. Golf Course Construction

Impact Type	Employment	Labor Income	Value Added	Output	State & Local Tax Revenues	Federal Tax Revenues
Direct Effect	21	\$1,046,180	\$1,397,138	\$2,428,151	\$28,398	\$228,986
Indirect Effect	4	\$193,169	\$336,895	\$577,026	\$39,440	\$47,845
Induced Effect	6	\$286,448	\$557,200	\$944,419	\$62,356	\$73,926
Total Impacts	31	\$1,525,798	\$2,291,232	\$3,949,596	\$130,194	\$350,757
Multiplier	1.48	1.46	1.64	1.63		

Source: TEConomy Partners, LLC analysis using IMPLAN Nevada state model

Table A1-3. Golf-Related Supplies (Retail Sales)

Impact Type	Employment	Labor Income	Value Added	Output	State & Local Tax Revenues	Federal Tax Revenues
Direct Effect	344	\$7,297,125	\$10,626,551	\$16,708,881	\$2,588,679	\$1,822,208
Indirect Effect	43	\$1,947,323	\$3,751,563	\$6,378,481	\$219,314	\$489,828
Induced Effect	48	\$2,143,102	\$4,168,165	\$7,067,141	\$466,120	\$553,072
Total Impacts	435	\$11,387,550	\$18,546,278	\$30,154,504	\$3,274,113	\$2,865,108
Multiplier	1.26	1.56	1.75	1.80		

Source: TEConomy Partners, LLC analysis using IMPLAN Nevada state model



Table A1-4. Major Golf Tournaments and Associations

Impact Type	Employment	Labor Income	Value Added	Output	State & Local Tax Revenues	Federal Tax Revenues
Direct Effect	57	\$4,147,380	\$9,029,476	\$11,416,775	\$484,764	\$875,776
Indirect Effect	15	\$767,220	\$1,279,133	\$2,238,414	\$122,598	\$180,390
Induced Effect	25	\$1,133,646	\$2,205,380	\$3,737,161	\$246,917	\$292,580
Total Impacts	98	\$6,048,247	\$12,513,988	\$17,392,350	\$854,279	\$1,348,746
Multiplier	1.71	1.46	1.39	1.52		

Source: TEConomy Partners, LLC analysis using IMPLAN Nevada state model

Table A1-5. Golf Tourism (Non-Golf Spending)

Impact Type	Employment	Labor Income	Value Added	Output	State & Local Tax Revenues	Federal Tax Revenues
Direct Effect	6,230	\$243,152,834	\$431,265,769	\$667,542,255	\$64,315,611	\$62,287,623
Indirect Effect	1,427	\$67,939,993	\$126,984,244	\$214,224,115	\$8,100,068	\$16,877,338
Induced Effect	1,615	\$72,026,213	\$140,093,961	\$237,496,003	\$15,671,286	\$18,588,209
Total Impacts	9,271	\$383,119,040	\$698,343,974	\$1,119,262,373	\$88,086,965	\$97,753,170
Multiplier	1.49	1.58	1.62	1.68		

Source: TEConomy Partners, LLC analysis using IMPLAN Nevada state model

Table A1-5. Golf Residential Construction

Impact Type	Employment	Labor Income	Value Added	Output	State & Local Tax Revenues	Federal Tax Revenues
Direct Effect	1,100	\$61,904,156	\$94,331,434	\$166,760,000	\$1,318,997	\$14,113,271
Indirect Effect	370	\$17,621,470	\$28,738,837	\$49,930,789	\$3,645,537	\$4,295,906
Induced Effect	412	\$18,390,004	\$35,771,388	\$60,633,755	\$4,002,635	\$4,746,087
Total Impacts	1,882	\$97,915,630	\$158,841,658	\$277,324,544	\$8,967,169	\$23,155,264
Multiplier	1.71	1.58	1.68	1.66		

Source: TEConomy Partners, LLC analysis using IMPLAN Nevada state model

