



THE GEORGIA GOLF ECONOMY

FULL REPORT

This report was commissioned by
GOLF 20/20 for the
Georgia Allied Golf Council
and prepared by SRI International.





The Georgia Golf Economy

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ACRONYMS

CMAA	Club Managers Association of America
GCBA	Golf Course Builders Association of America
GCMAA	Georgia Chapter of the Club Managers Association of America
GCSAA	Golf Course Superintendents Association of America
GGCOA	Georgia Golf Course Owners Association
GGCSA	Georgia Golf Course Superintendents Association
GPGA	Georgia Section of The PGA of America
GRAA	Golf Range Association of America
GSGA	Georgia State Golf Association
LPGA	Ladies Professional Golf Association
NGCOA	National Golf Course Owners Association
PGA	The Professional Golfers' Association of America
USGA	United States Golf Association
WGF	World Golf Foundation

STUDY OVERVIEW

With 401 golf facilities and five championship golf events played in Georgia each year (including The Masters), golf is definitely on Georgia's mind. It is also a key industry contributing to the vitality of Georgia's economy. In 2009, the size of Georgia's direct golf economy was approximately \$2.4 billion. Golf brings visitors to the state, drives new construction and residential development, generates retail sales, and creates demand for a myriad of goods and services. When the total economic impact of Georgia's golf-related activities is considered, the golf industry generated approximately \$5.1 billion of direct, indirect and induced economic output, \$1.5 billion of wage income, and 56,922 jobs in 2009.

While Georgia is increasingly known for its high-tech manufacturing and services industries, the golf industry's \$2.4 billion in direct revenues supports economic activity comparable to several other important industries in the state: cotton, peanuts, and greenhouse/nursery products (\$1.2 billion); computer and electronics products manufacturing (\$3.4 billion), and aerospace products and parts manufacturing (\$6.7 billion).¹

Historically, many state-level economic studies surrounding the game of golf have been conducted across the country. However, no comprehensive, standardized framework was employed in these prior studies. This made it difficult to monitor a state's industry growth over time and to make state-to-state or regional comparisons. To ameliorate this problem, SRI International and GOLF 20/20 are currently working with key golf stakeholders in several states, including Georgia, to bring consistency to the industry measurement and reporting process. This report describes and analyzes Georgia's golf industry including the revenues and economic impact generated by the industry. Such analysis will assist Georgia's industry stakeholders² in raising awareness of the impact of golf to state and local policymakers.

There are many potential uses for such an analysis:

- § Defining the range of core and enabled industries associated with the game of golf;
- § Clearly articulating, for policymakers and regulatory agencies, the employment and revenue-generating contributions of the golf industry to the state economy; and

¹ U.S. Department of Agriculture, Economic Research Service (2010), Georgia: Leading Commodities for Cash Receipts, 2009. U.S. Census Bureau (2010), 2007 Economic Census, Geographic Series: Computer and Electronics Products Manufacturing (NAICS 334) and Aerospace Products and Parts Manufacturing (NAICS 3364). SRI used the GDP implicit price deflator to inflate 2007 industry revenue data to 2009 dollars.

² Key industry stakeholders comprising the Georgia Allied Golf Council include representatives from the Georgia State Golf Association, the Georgia Section of The PGA of America, the Georgia Golf Course Superintendents Association, the Georgia Chapter of the Club Managers Association of America, and the Georgia Golf Course Owners Association.

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

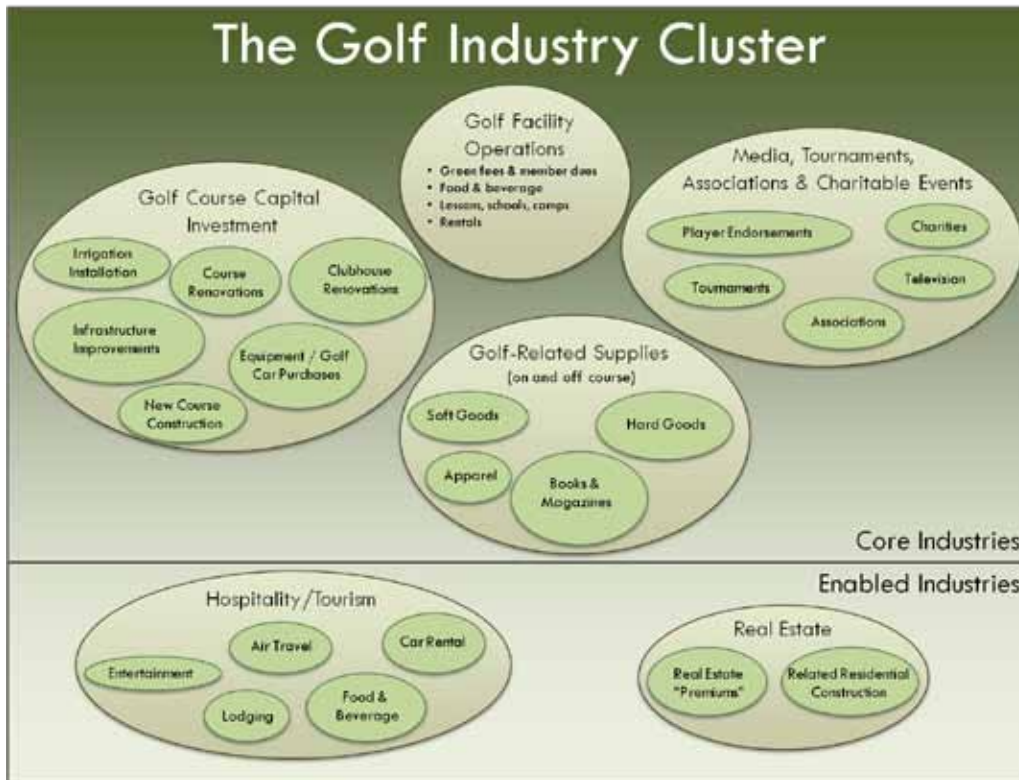
ANALYTICAL FRAMEWORK

Current economic studies of the golf industry in different states emphasize various factors and outcomes. For example, one may focus largely on the turf industry, while another might examine the impact of sports and recreation-related tourism more broadly. Ideally, one would want to include all the key activities and industries that are enabled by and benefit from the game of golf. To meet this goal, SRI has developed a standardized, economic impact framework that can be employed to measure a comprehensive set of golf-driven industry components. This state-level framework draws on the conceptual model of the golf economy developed in SRI's 2000 national-level *The Golf Economy Report* and the 2005 state-level *The Virginia Golf Economy Report*.

A. GOLF INDUSTRY CLUSTER DEFINITION

To arrive at economic impact, one must first estimate the size of the golf economy in the state. This entails mapping out where the golf industry begins and ends, and then estimating the size of each of these industry segments. We divide the golf industry cluster into two main categories: (1) core industries and (2) enabled industries (see figure on next page). The golf industry cluster begins with the golf facilities themselves and with those other core industries that produce goods and services used to operate facilities and to play the game: golf equipment and golf apparel manufacturers, golf course architects and course builders, turf maintenance equipment and service providers, and club management services. The game of golf further enables a number of other industries, such as golf-related tourism and real estate development.

We detail these industry segments and estimate their size in the following section. Having defined the core and enabled golf industries, it is possible to estimate the size of each industry segment and to total them for an overall estimate of the size of the golf economy. Multipliers can then be applied to calculate the ripple effects of these economic activities in terms of: (1) impact on total state economic output and (2) impact on total state employment. However, this process is complicated by the fact that, while most of these industries produce golf-related goods and services, the firms themselves may not limit their activities exclusively to the golf industry. For example, Nike produces golf shoes, but also running, tennis, basketball, and other shoes. Therefore, in general, our approach is to include only those firms and sales that are directly attributable to the game of golf. In so doing, we use a number of different estimation techniques to ensure that our final estimates are reasonable and robust.



Moreover, additional data challenges and location factors make estimation more difficult at the state level than the national level. For example, many of the major golf equipment manufacturers have production facilities in just a few states. Similarly, several of the major golf association headquarters are located in Florida. The presence of such firms, associations, or a number of well-known courses will change the size of golf's economic impact in the state considerably. Therefore, one should consider the size of the golf economy and the game's economic impact in the state in relation to the size of the overall economy and other major industries in that state.

B. DATA SOURCES

SRI developed its framework for measuring state golf economies based on a broad set of existing sources and data. Although there have been several state-level impact studies conducted in the past, by numerous golf constituencies, few have used a similar methodology, resulting in very different estimates depending on the golf economy elements included. A great deal of data is collected on the golf economy by many organizations on a regular basis. For example, government agencies, national golf associations, and national associations in the enabled industries collect data on different industry elements periodically—annually, every few years, or every five years. In addition, these data are based on a relatively consistent set of inputs by large numbers of constituents. Therefore, the principal challenges involve acquiring the data, inflating or deflating the estimates for the proper target year, and

then combining them to represent the entire golf economy in the target year. The core and enabled industry indicators and data sources we have identified are as follows:

State Golf Economy Indicators and Data Sources		
Indicator	Primary source	Cross-validation source
Golf Facility Operations		
# of golf course facilities by type	PGA Facility Database, multiple years (2006-2009 data)	NGF Facility Database, multiple years; state golf associations; 2007 Economic Census
Avg. revenues by type of facility	PGA Facility Operations Survey, multiple years (2006-2009 data)	2007 Economic Census; National Golf Foundation; state task force
# of rounds by facility type	2006 PGA Compensation Survey (2005 data)	National Golf Foundation
Golf Course Capital Investments		
Avg. capital investment by type of facility	GCSAA Compensation Survey (2005, 2007, 2009 data)	National Golf Foundation; state task force
Number of golf courses under construction in current year	National Golf Foundation (2007-2009 data)	NGF Construction database; state task force
Avg. cost of construction per new course	Golf Course Builders Association of America	State task force; interviews with golf course builders in state
Golf-Related Supplies		
Golf-related manufacturing exports	Company annual reports; SEC filings; interviews	Company interviews; state task force
Golf equipment	National Sporting Goods Association (2007-2009 data)	2006 PGA Compensation Survey (2005 data)
Golf apparel	National Sporting Goods Association (2007-2009 data)	2006 PGA Compensation Survey (2005 data)
Golf media	Magazine Publishers of America for golf magazine sales; <i>Bowker Annual of Library and Book Trade Information</i> (2007-2009 data)	Amazon and Barnes & Noble for top golf book sales
Major Tournaments		
# of major tournaments held in state	State task force	PGA TOUR, LPGA
Visitor attendance at tournaments, tournament revenues	Major golf associations	State tourism agency; national golf associations; state golf associations
Associations & Charitable Events		
# of major state-level golf associations	State counterparts of national golf associations	State task force
Annual expenditures/budgets	State golf associations	IRS Form 990
Revenues raised through charitable golf events	National Golf Foundation	Sampling of golf professionals and club managers to identify # of tournaments and average amount raised
Real Estate		
# of residential golf courses under construction	National Golf Foundation	Online research
# of lots per course	Real estate development site plans; interviews with real estate developers	Real estate agents

Avg. construction costs per home and real estate premium	Interviews with real estate developers	Real estate agents
Hospitality/Tourism		
# of golf travelers or # of golf-related trips to the state	TIA/D.K. Shifflet & Associates	State department of tourism/recent surveys/studies
Avg. spending per traveler or per trip	TIA/D.K. Shifflet & Associates	State department of tourism/recent surveys/studies; National Golf Foundation

THE SIZE OF GEORGIA'S GOLF ECONOMY

SRI estimates the total size of Georgia's golf economy in 2009 was approximately \$2.4 billion. This estimate is comprised of \$1.785 billion in core industries and an additional \$0.622 billion in enabled industries, as illustrated in the table below.

Size of Georgia's Golf Economy in 2009 by Industry Segment (\$ millions)	
CORE INDUSTRIES	
Golf Facility Operations	\$936.4
Golf Course Construction and Capital Investment	\$108.9
Golf-Related Supplies (retail margin and manufacturing exports)	\$665.8
Major Golf Tournaments and Associations	\$47.4
Total Core Industries	\$1,758.5
ENABLED INDUSTRIES	
Real Estate	\$141.6
Hospitality/Tourism	\$480.7
Total Enabled Industries	\$622.3
TOTAL GOLF ECONOMY	\$2,380.8

A. CORE INDUSTRIES

Golf Facility Operations

At the center of any golf economy lies the golf facilities—the largest component in terms of revenues. The revenue that flows through a golf facility comes primarily from green fees, membership fees, golf cart rentals, lessons, and associated spending on food and beverages. This revenue, in turn, supports a host of supply sectors including golf equipment manufacturers, food and beverage providers, and turfgrass equipment and maintenance service providers. Georgia's 401 golf courses, 35 stand-alone ranges, and 25 miniature golf facilities generated \$936.4 million of revenue in 2009.

Georgia Golf Facility Revenues in 2009 (\$ millions)	
Golf Facilities	\$919.0
Practice Ranges & Alternative Facilities	\$17.4
TOTAL¹	\$936.4

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

This is a sizeable industry, but even more significant when compared to other popular revenue-generating sports. For example, Georgia’s golf facilities generate revenues that exceed all other professional spectator sports in the state combined—football, baseball, basketball, hockey, auto racing and soccer. These five other sports generated revenues of \$594.6 million in 2007, or \$613.2 million in 2009 inflation-adjusted dollars.³

Golf Facility Capital Investments

Golf facilities generate economic impacts beyond operational revenues through investments to upgrade and maintain facilities and infrastructure, and through the construction, expansion and renovation of courses. These investments create employment in the construction and maintenance industries and often involve the purchase of significant amounts of equipment and supplies from companies within the state. SRI’s estimate of Georgia’s golf course capital investment is divided into two segments: (1) capital investment at existing facilities and (2) new course construction. Together, Georgia’s golf facilities made \$109.0 million worth of capital investments in 2008: \$60.6 million of investments at existing facilities and \$48.5 million for the construction of new courses.

Georgia Golf Course Construction and Capital Investment in 2009 (\$ millions)	
Golf Course Capital Investment¹	\$60.4
New Course Construction	\$48.5
TOTAL	\$108.9

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

Golf-Related Supplies

Georgia golfers spend significant sums on golf balls, golf clubs, golf apparel, and golf media (books, magazines, DVDs). The economic value that accrues to a state comes from the production of these golf-related goods, as well as retail sales of such items. Georgia is home to a number of golf-related companies with manufacturing operations or headquarters in the state, including the “Big Three” in golf car manufacturing: Club Car, E-Z-Go, and Yamaha, as well as Exide Technologies, a major manufacturer of golf car and other batteries. Bridgestone Golf, the golf equipment manufacturer, and Oxford Inc., an apparel company whose lines include golf apparel, are also located in Georgia, along with a number of

³ U.S. Census Bureau (2010). *Georgia: 2007, 2007 Economic Census, Arts, Entertainment & Recreation Geographic Series*, July 2010.

small golf equipment, apparel and accessories manufacturers. In 2009, Georgia manufacturers' total value-added shipment of golf-related products was approximately \$628.2 million. Georgia retailers and golf facilities earned approximately \$37.6 million on the sale of \$99.4 million of golf equipment, apparel, and media in 2009. In total, the Golf-Related Supplies segment contributed \$665.8 million in revenues to the Georgia economy.

Georgia Manufacturers' Value-Added Exports of Golf-Related Products in 2009 (\$ millions)	
TOTAL	\$628.2

Georgia Retailers' Net Revenues on Consumer Purchases of Golf-Related Supplies in 2009 (\$ millions)		
	Total purchases	Retail sales margin
Golf Equipment (retail margin)	\$68.0	\$25.7
Golf Apparel (retail margin)	\$30.2	\$11.4
Golf Media (retail margin)	\$1.2	\$0.4
TOTAL	\$99.4	\$37.6

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

Associations, Tournaments & Charitable Giving

Associations

Numerous associations represent the game of golf in Georgia. The largest golf associations include the Georgia State Golf Association, the Georgia Section of the PGA, the Georgia Golf Course Superintendents Association, the Georgia Golf Course Owners Association, and the Georgia Club Managers Association. Also very active are the Georgia Seniors Golf Association, the Georgia Women's Golf Association and Executive Women's Golf Association chapters, as well as regional member and junior golf associations. There are multiple chapters of the First Tee program in the state, including chapters in Atlanta, Augusta, Columbus, Albany, Savannah and Troupe County, among others. The First Tee aims to introduce youth to the game and values of golf, as do a number of golf foundations that support youth golf programs: the American Junior Golf Foundation, the Georgia Junior Golf Foundation, the African-American Golf Foundation, and the Atlanta Junior Golf Foundation. In 2009, Georgia golf associations and foundations generating \$11.6 million of expenditures.

Major Tournaments

Best known for the Masters Tournament, one of the four most prestigious tournaments in golf⁴, Georgia hosted five major golf championships in 2009. They include the Masters Tournament; the PGA TOUR Championship; the Liberty Mutual Legends of Golf Championship, a Champions Tour event; and two Nationwide Tour events. The Masters is played each April as an invitational event hosted by the Augusta National Golf Club in Augusta, Georgia. First played in 1934, the Masters is the only one of the four “majors” which has been played on the same course every year since the tournament’s founding. It is the most-watched golf event with an estimated 5 million viewers on opening day and over 30 million viewers during the final round.⁵ Angel Cabrera took home the Green Jacket in 2009 and Phil Mickelson in 2010. The Masters Tournament alone is estimated to generate \$125 million of local economic impact each year, including tourism impact.⁶ Drawing on this previous estimate of impact, SRI calculated the portion of direct spending to host the Masters Tournament, separate from tourism, to be \$19.7 million, excluding the tournament purse.

With regard to the four other professional golf events, the PGA TOUR Championship is played each September at the East Lake Golf Club in Atlanta. The Liberty Mutual Legends of Golf Championship, a Champions Tour event, is played each April, currently in Savannah, Georgia, at The Westin Savannah Harbor Resort. Finally, the Athens Regional Golf Classic⁷ and the South Georgia Classic are annual Nationwide Tour event played at Jennings Mill Country Club in Bogart, Georgia, and Kinderlou Forest Golf Club in Valdosta, Georgia, respectively. Altogether, golf events in Georgia generated approximately \$36.1 million in 2009, excluding the tournament purse and costs for TV broadcasting.

Georgia’s Major Golf Tournament & State Golf Association Revenues in 2009 (\$ millions)	
Major Tournaments	\$35.8
Associations	\$11.6
TOTAL¹	\$47.4

⁴ The four “majors” include the Masters Tournament, the U.S. Open Championship, the Open Championship (often referred to as the British Open), and the PGA Championship.

⁵ See Ibarra, Sergio (2009). “Masters Golf Draws 42 Million Viewers,” *TV Week*, http://www.tvweek.com/news/2009/04/masters_golf_draws_42_million.php

⁶ According to a local newspaper article, in 1998, the Augusta’s Convention and Visitors Bureau estimated the impact of The Masters Tournament at \$109 million, but then it stopped trying to calculate a number. “Impact of Masters Tournament on Augusta, Ga.,” *The Augusta Chronicle*, April 9, 2003, <http://www.highbeam.com/doc/1G1-122343833.html>

⁷ From 2010, the tournament is under new sponsorship. The event is now known as the Stadion Athens Classic at UGA and is played at the University of Georgia Golf Club in Athens, Georgia.

Charitable Giving

Georgia’s golf industry makes substantial contributions to a variety of charities. For example, the 2009 PGA TOUR Championship made contributions totaling more than \$1 million to the East Lake Foundation and The First Tee. The East Lake Foundation was established in 1995 to help transform the East Lake neighborhood of Atlanta and to create new educational and economic opportunities for the families who live there. As part of the transformation of this urban housing project, the historic East Lake Golf Club was refurbished and 100 corporate memberships made available for \$200,000 per membership raising \$20 million for the East Lakes neighborhood redevelopment. Today East Lakes boasts a dramatically lower crime rate, increased employment and home values, a new K-8 charter school, and a public golf course which is home to the First Tee of East Lakes. The state’s other championship golf events also donate considerable sums to charities ranging from Habitat for Humanity to seniors organizations and local schools.

Locally, Georgia golf clubs host multiple charitable events each year in support of local, state and national charities. For example, in 2009 the Golf Club of Georgia raised \$100,000 for the Leukemia and Lymphoma Society at its Rhubarb Jones Golf Classic event; the Cherokee Town & Country Club in Atlanta raised \$120,000 for Alzheimer’s research; the Club at Savannah Harbor raised close to \$78,000 for the Savannah Harbor Foundation which in turn supports a number of local children’s charities; and the Wilmington Island Club generated nearly \$120,000 over six annual events for a number of schools, school scholarships, the local YMCA, and cancer research. Golf course owners, operators, and golf professionals are happy to serve as access points for annual fundraising by local service organizations. In total, SRI estimates that the amount of charitable giving attributed to the game of golf in Georgia to be \$56.2 million in 2009.

Charitable Giving by Georgia Golf Industry in 2009 (\$ millions)	
TOTAL	\$56.2

B. ENABLED INDUSTRIES

Real Estate

Real estate developers use amenities to attract new home buyers, and golf is a key amenity in many areas of the state. The development of new golf communities in Georgia followed the rise in the national real estate market which peaked in 2005 in terms of new home starts and existing home sales.⁸ In 2009, many golf communities were mid-way through build out although financing for new home construction was difficult to obtain. Large developments were underway at Reynolds Plantation in Greensboro, GA, and the Traditions of Braselton in Jefferson, GA. Examples of golf community developments elsewhere in the state include: Kinderlou Forest, a Valdosta golf community with a David Love III-designed course rated one of the 30 best new courses in 2004 by *Travel & Leisure Golf Magazine*; Bartram Trail, a forested golf community located just west of Augusta; and The River Club, a private golf community located along the Chattahoochee River in Suwanee, GA.

New golf-related real estate construction generated \$67.0 million in 2009. Furthermore, in 2009 there were an estimated 111 golf communities in Georgia, and SRI estimates the “golf” premium associated with the sale of real estate in these developments to be \$74.6 million. The premium is the additional amount a buyer is willing to pay for a home or property located on a golf course or within a golf community.

Georgia's Golf Real Estate Revenues in 2009 (\$ millions)	
Golf-Related Residential Construction	\$67.0
Realized Golf Premium	\$74.6
TOTAL	\$141.6

Note: The sale of existing homes is considered a transfer of assets rather than new economic output, so the golf premium that is realized in the sale of an existing home is not included in the economic impact analysis.

Hospitality/Tourism

Across the country, golf has enjoyed increasing popularity among travelers, whether it is the primary motivation for a trip or is connected to other recreational time spent with friends and family, or business colleagues. In Georgia, golf is an important tourism segment, alongside the state's other outdoor and recreational activities such as camping, fishing, and hiking, as well as trips to historic sites, beaches, and fairs and festivals. Georgia's golf resorts help the state attract conferences and business meetings, and both amateur and professional golf tournaments draw people to courses in different

⁸ National Association of Realtors data.

parts of the state. The state’s “Explore Georgia” website features golf as a key outdoor recreational activity (<http://www.exploregeorgia.org/>). In 2009, SRI estimates golf-related tourism spending in Georgia was \$480.7 million. This is based on the following estimates of golf trips and associated expenditures by Georgia residents and non-residents: (1) an estimated 586,000 *day* trips with average golf trip spending of \$55, and (2) an estimated 854,000 *overnight* trips with average trip spending of \$525.

Georgia’s Golf-Related Travel Expenditures in 2009	
# of day trips	586,000
Average travel \$ per day trip	\$55.07
# of overnight trips	854,000
Average travel \$ per overnight trip	\$524.83
Total	\$480.7 million

Note: Numbers do not sum due to rounding.

GOLF'S ECONOMIC IMPACT IN GEORGIA

Golf's impact on Georgia's economy includes both the direct effects of economic activity in the core and enabled golf industries, as well as the indirect and induced (or multiplier) effects on other industries in the state economy. In economics, the idea of the multiplier is that changes in the level of economic activity in one industry impacts other industries throughout the economy. For example, a fraction of each dollar spent at a golf course is, in turn, spent by the golf course to purchase goods and services for golf course operation—these are indirect effects. In addition, golf course employees spend their disposable income on personal goods and services, and this stimulates economic activity in a myriad of other industries—these are induced effects.

Therefore, golf's total (direct plus multiplier) economic impact includes both the direct employment and wage income of those employed in golf-related industries, as well as the secondary employment and wages supported in other sectors of the economy through subsequent purchases of goods and services by golf industry employees.

In 2009, the \$2.4 billion Georgia golf industry supported:

- § A total economic impact of \$5.1 billion for the state of Georgia including the indirect and induced economic impacts stimulated by golf sector activity;
- § A total employment impact of nearly 57,000 jobs; and
- § Total wage income of \$1.5 billion.

Golf's Impact on Georgia's Economy (2009)						
INDUSTRY	DIRECT	INDIRECT	INDUCED	TOTAL OUTPUT (\$ millions)	TOTAL JOBS (\$ millions)	TOTAL WAGE INCOME (\$ millions)
Golf Facility Operations	\$936.4	→		\$2,107.6	30,324	\$688.4
Golf Course Capital Investment*	\$108.9	→		\$125.6	1,069	\$39.1
Golf-Related Supplies	\$665.8	→		\$1,452.6	7,866	\$318.7
Tournaments & Associations	\$47.4	→		\$118.7	1,295	\$43.4
Real Estate **	\$480.7	→		\$173.4	1,476	\$54.0
Hospitality/Tourism	\$480.7	→		\$1,108.1	14,892	\$350.0
TOTAL	\$2,380.8	→		\$5,086.2	56,922	\$1,493.6

Note: Columns may not sum due to rounding. To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of \$2,380.8 million the portion of capital investment that is investment in existing facilities (\$60.4 million of \$108.9 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$74.6 million of \$141.6 million). This is because:

*Golf course capital investments—Only new course construction has an indirect and induced economic impact. Other types of facility capital investment are typically financed through facility revenues and, therefore, are omitted to avoid double-counting.

**Real Estate—Only golf residential construction has an indirect and induced impact. The golf premium associated with golf real estate is considered a transfer of assets rather than new economic activity.

Numbers in columns may not sum due to rounding.

DETAILED METHODOLOGY & DATA SOURCES

A key challenge in this study was to identify reliable state-level data sources and to develop methodologies for measuring the size of industry components for which cross-state estimates do not exist in straightforward metrics, e.g., golf real estate and off-course purchases of golf apparel and equipment. This section describes each of the core and enabled industries included in the golf economy and SRI's approach to measuring each of these segments.

A. GOLF FACILITY OPERATIONS

For this industry segment, we analyzed the number of golf facilities and average facility revenue data to derive a total facility operations estimate. Revenues for this segment include: annual or monthly membership fees, green fees, range fees, and cart rental fees; purchases of golf apparel and equipment in pro shops; golf lessons; tournament entry fees; consumption of food and beverages; etc.

Number of golf course facilities. Many golf organizations track the number of golf facilities in a state: the National Golf Foundation (NGF), The PGA of America, and state/regional golf associations, among others. The U.S. Census Bureau also surveys golf course facilities as business establishments in its Economic Census every five years. However, these organizations' calculations of the total numbers of golf courses in each state, by type of facility, are not always consistent with each other due to: (1) absence of data for courses which are not members (e.g., The PGA tracks those courses with a PGA member) or for particular subsets of courses (e.g., municipal facilities and golf resorts are not tracked by the Census), (2) facility closures and openings, and (3) inconsistency in the classification of courses, especially resorts.

In some surveys, golf facilities are allowed to self-classify themselves. In others, the surveying organization classifies the facility based on specific criteria. This can mean the difference between a small number of resorts (e.g., a figure that includes five-star accommodation located on or adjacent to an 18-hole course) or a much larger number of resorts (e.g., three-star hotel accommodation located near a daily fee golf course). Similarly, a resort with two 18-hole golf courses could be counted as two golf facilities or as one depending on the reporting organization. Fortunately, the variances caused by these data collection issues are very small, and thus do not materially impact the overall analysis. The table below presents slightly differing estimates for the number of golf course facilities in Georgia in 2007 or the latest available year.

Estimates of Georgia Golf Facilities from Various Sources, 2007-2009

	2007 Economic Census (# of facilities, excl resorts & municipal) ¹	2009 PGA (# of facilities) ²	2009 NGF (# of facilities) ³	2009 NGF (# of 18-hole equivalent courses) ³
PRIVATE	65	178	138	151.0
PUBLIC	240	235	252	238.5
Daily fee/ semi-private		165		
Municipal		70		
Military				
University				
RESORT		12	11	16.5
TOTAL	305	425	401	406.0

Sources: ¹ U.S. Census Bureau, *2007 Economic Census*.

² Professional Golfers' Association of America (2009). *Facility Database*.

³ NGF (2010). Total Facility Supply Tables 5-10, *Golf Facilities in the U.S., 2010 edition*, pp.5-10.

The PGA of America and NGF data fall within a relatively narrow range, PGA's 425 vs. NGF's 401. Using Georgia State Golf Association facility membership data as a further validity check, SRI used the NGF numbers as the basis for our assessment.

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

The U.S. Census Bureau collects revenue data for golf course facilities as part of its Economic Census of all U.S. establishments every five years. Whereas facility surveys conducted by private sector organizations are often based on low response rates (less than 30 percent), all establishments are required by law to respond to the Census Bureau survey. However, the Census Bureau data has several limitations. Many types of facilities are not included in the survey: (1) resort facilities, (2) municipal and military facilities, (3) stand-alone driving ranges and (4) golf course facilities without payroll. In addition, in 2002 the national economy was just emerging from an economic recession which is likely to have negatively impacted the golf industry. The latest 2007 Economic Census contains revenue, payroll, and employment data on 12,193 golf facilities broken down by state. This provides a robust estimate with which to compare other available golf facility revenue data.

The PGA recently began collecting revenue data for all 50 states on an annual basis through its Annual Operations Survey. The latest available data are from 2009, but the PGA has annual data going back to 2005. In addition, PGA revenue data are broken down by type of facility for categories for which Census data are not available—resorts, municipal courses, and military courses.

As an additional validity check, we also examined NGF revenue data. However, it is important to note that NGF does not provide state-level facility data. It presents national averages for: (1) daily fee facilities, (2) municipals, and (3) private facilities.

Estimates of Georgia Average Revenue per Facility Data From Different Sources, 2002-2009				
	Census (2007) ¹	PGA (2008) ²	PGA (2009) ³	NGF (2005) ^{4,5}
Private facility	\$4,707,800	\$4,122,433	\$4,565,321	\$3,277,000
Daily fee facility	\$1,875,671	\$1,030,859	\$990,515	\$1,457,700
Resort facility	X	\$3,302,748	\$3,151,833	X
Municipal/military/university facility	X	\$1,051,166	\$988,364	\$1,269,100
Driving range	X	X	X	\$350,000
Miniature golf	\$200,960	X	X	X

Note: The PGA's resort facility average revenue are an average of Georgia and neighboring states.

Sources: ¹ U.S. Census Bureau, *2007 Economic Census*.

² Professional Golfers' Association of America (2009). *2008 Operations Survey*.

³ Professional Golfers' Association of America (2010). *2009 Operations Survey*.

⁴ NGF (2010). *Operating & Financial Performance Profiles of 18-hole Golf Facilities in the U.S., 2010 edition*.

⁵ Golf Range Association of America (2006).

Average revenue data from the Census (2007), The PGA (2008, 2009) and NGF (2009) are presented above. In consultation with the Georgia Golf Task Force, SRI calculated total traditional facility revenues using the 2009 PGA survey data for private facilities, resort facilities, and municipal/military/university facilities, and resorts. The PGA's reported daily fee facility revenue is very low compared to the average daily fee revenue reported in the 2007 Economic Census. Because the daily fee response rate to the PGA survey was relatively low in 2008 and 2009, SRI used the 2007 Census data for daily fee facilities, and adjusted this figure downwards by 20% to account for the impact of the recession. This yielded average daily fee facility revenue of \$1.501 million (as opposed to the PGA's reported \$990,515). Driving range revenues were calculated using the Golf Range Association of America's estimate of average revenue figure for golf ranges in 2006 (the latest available data), and miniature golf facilities were calculated using the 2007 Census data.

To calculate golf facility operations revenues, SRI subtracted out on-course merchandise sales from the average golf facility revenue estimates because on-course merchandise sales are included in the Golf-

Related Supplies industry segment. SRI then multiplied these adjusted average golf facility operations revenue estimates by the respective number of golf facilities. Overall SRI estimates that Georgia's Georgia's 401 golf courses, 35 stand-alone ranges, and 25 miniature golf facilities generated \$936.4 million of revenue in 2009.

B. GOLF COURSE CAPITAL INVESTMENT

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

Georgia Golf Facility Capital Investment and New Course Construction in 2009 (\$ millions)	
Golf Course Capital Investment ¹	\$60.4
New Course Construction	\$48.5
TOTAL	\$108.9

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

Investment at existing courses. Golf facility capital investment includes improvements to greens and tees, repaving of cart paths, purchases of new turf maintenance equipment and irrigations systems, and renovations of the clubhouse, proshop and maintenance buildings. Ordinary maintenance expenses are not included. SRI examined golf facility capital investment data from two sources: NGF and the GCSAA. The GCSAA data comes from golf facility capital budget questions included in its 2009 Compensation Survey. The 2009 data is state-level and includes the mean, median and standard deviation of capital expenditures (not maintenance expenses). The NGF's *2009 Operating and Financial Performance Profile* presents national estimates of capital expenditures (and also breaks out maintenance expenses separately) at: (1) daily fee facilities (average revenue of \$1,457,700, with 69.6% of daily fee facilities making average capital improvement investments of \$131,700); (2) municipal facilities (average revenues of \$1,269,100, with 70.2% of municipal facilities making average capital investments of \$189,300); and (3) private facilities (average revenues of \$3,277,000, with 82% of private facilities making capital investments of \$410,400).

After review of both the state-level and national data sets, SRI used the GCSAA's data for Georgia in our capital investment calculations. The data indicate that, on average, a Georgia golf facility invested approximately \$150,732 in 2009, for a total capital investment of \$60.4 million. Both data sets indicate that capital investments were down significantly from 2006 (the year preceding the economic recession that began in 2007 and ended in 2009). The GCSAA data indicate a large standard deviation (\$282,178)

reflecting the fact that some facilities undertook no capital improvement investments, others scaled back investment, and some were able to take advantage of market conditions to undertake big projects at a lower cost than before the recession.

New course construction. The NGF's *Golf Facilities in the U.S.* series is the only national source for estimates of the number of new golf courses under construction in each state. In 2009, NGF estimated that there were 3.0 new 18-hole equivalent golf course openings in Georgia and that 9.0 were under construction.

An estimate for the average investment for each new golf course in Georgia is derived from the Golf Course Builders Association of America's 2008 Guide to Estimating Cost for Golf Course Construction. This database of golf course construction costs is based on a survey of golf course builders around the country and is divided into four construction regions. Using the values provided for Coastal Lowlands and the average ("normal") costs for each of the various construction categories (see box below), we estimate the average investment required to build a new golf course in Georgia is \$8.1 million.

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

This investment, however, is not entirely expended over one year but is rather disbursed over several years. Assuming the average course takes approximately two years to complete, we estimate the 3.0 new 18-hole equivalent golf course openings and the 9.0 courses under construction in 2008 invest an average of \$4.0 million each, for a total of \$48.5 million.

C. GOLF-RELATED SUPPLIES

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

Manufacturing exports. The economic value created by golf-related supplies consists of two components: (1) value-added production and (2) the retail sales margin. On the manufacturing, or production side, we are concerned with the value-added production of golf equipment, golf apparel, and golf accessories. This is the value of the company’s wholesale revenues minus the cost of production inputs, and this value-added production is attributable to the state in which the golf club or golf ball is manufactured.

We began by working with the Georgia Golf Task Force to identify major manufacturers of golf-related products in the state. We identified a large number of companies manufacturing golf cars, golf equipment, golf apparel, and accessories in Georgia in 2009—Club Car, E-Z-Go, Yamaha, Exide Technologies, Bridgestone Golf, Oxford Inc., etc. We then conducted research on these companies to ascertain: (1) if they had headquarters, design, or production facilities in Georgia State, (2) the total value of their golf-related sales, and (3) the percentage of these sales that were out-of-state. Finally, we extrapolated value-added output from each company’s revenues using value-added data from the Census’s *Survey of Manufacturers*.

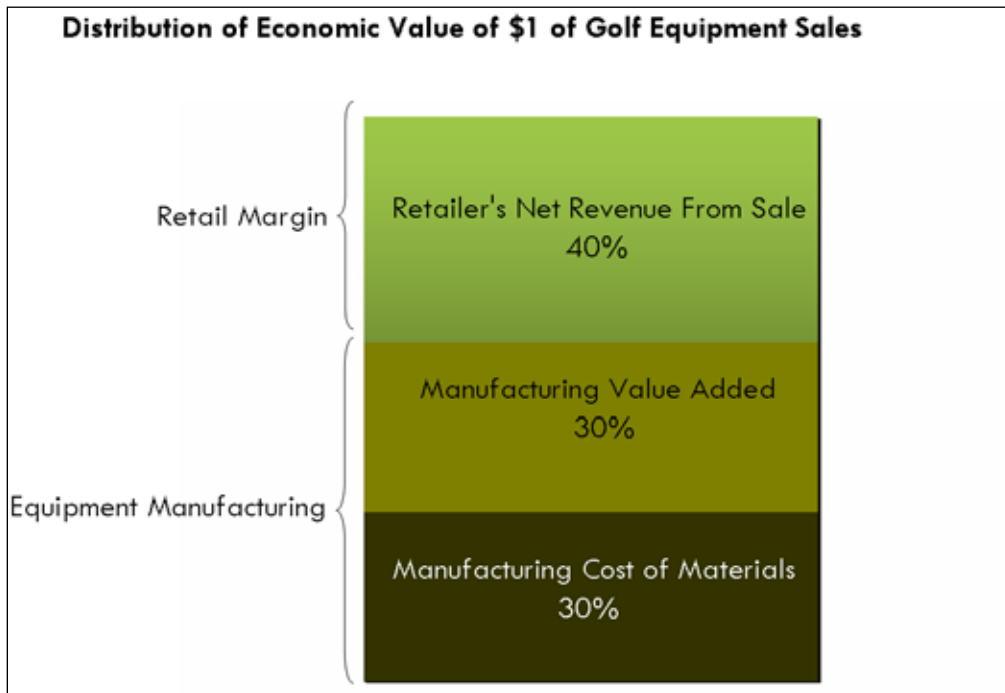
Georgia Manufacturers’ Value-Added Exports of Golf-Related Products in 2009 (\$ millions)	
TOTAL	\$628.2

Retail margin. On the retail side, the economic value is derived from the margin the retailer makes from the sale of the golf club, i.e., the net revenues accruing to retailers after covering the cost of purchasing the golf equipment or apparel from the wholesaler/producer.

To calculate this margin, we first estimate total sales of golf apparel and equipment at the state level and then apply the requisite retail margin percentage for economic impact analysis. In our national level study for GOLF 20/20, SRI was able to collect national sales data from a number of sources: (1) the NGF, (2) the National Sporting Goods Association (NSGA), (3) Golf Datatech, and (4) the Census Bureau. Unfortunately, the relatively small sample size for the majority of these surveys do not allow for publication of reliable state-level estimates by these organizations. However, each year the NSGA conducts a 100,000-household consumer panel survey for its annual *The Sporting Goods Market* publication. SRI uses these data in conjunction with the PGA’s golf facilities data for each state to derive state-level estimates of golf equipment and apparel sales.

For example, in 2009, NSGA reported total U.S. off-course and on-course purchases of individual golf clubs to be \$532.0 million. The NSGA survey found the South Atlantic region accounted for 24.9% of these purchases, or \$132.5 million. Within the South Atlantic region, one can estimate Georgia’s share of purchases by creating a rounds- or courses-based weight. Using either approach yields similar weights, since the number of rounds played is highly correlated with the number of 18-hole equivalent courses in

a state ($r=0.93$). SRI used the number of 18-hole equivalent courses in each state, as it was easier to verify than estimated number of rounds played. Georgia represents 12.6% of total 18-hole equivalent courses in the South Atlantic region, so this weight was applied to the region total (\$132.5 million) to estimate \$16.7 million of individual golf club sales in the state of Georgia in 2009. Further, retail margins on final sales suggest that 37.8%, or \$6.3 million, of total sales was retained in the Georgia economy. (See graphic below.)



Georgia's On-Course and Off-Course Golf Equipment & Apparel Purchases, 2009		
Category	Calculation	Estimate (\$ millions)
Golf club sets	South Atlantic region's sales	\$202.9
	GA's courses-based weight	12.6%
	GA's share of sales [1]	\$25.6
Golf apparel	South Atlantic region's sales	\$239.9
	GA's courses-based weight	12.6%
	GA's share of sales, [2]	\$30.2
Golf balls	South Atlantic region's sales	\$109.8
	GA's courses-based weight	12.6%
	GA's share of sales, [3]	\$13.8
Golf clubs	South Atlantic region's sales	\$132.5
	GA's courses-based weight	12.6%

Golf bags	GA's share of sales, [4]	\$16.7
	South Atlantic region's sales	\$45.5
	GA's courses-based weight	12.6%
Golf shoes	GA's share of sales, [5]	\$5.7
	South Atlantic region's sales	\$48.9
	GA's courses-based weight	12.6%
TOTAL	GA's share of sales, [6]	\$6.1
	Sum of [1] to [6]	\$99.4
Retail sales margin	Multiply TOTAL by 37.8%	\$37.6

Source: National Sporting Goods Association (2010). *The Sporting Goods Market in 2009*, Mt. Prospect, IL: NSGA.

Golf media. Similar to golf equipment, golf media's economic contribution to the state economy has two components: value-added production and the retail sales margin. On the production side, the economic impact created by the publication of magazines or books is attributable to the state in which the magazine or book is published. On the retail side, the economic impact is derived from the margin the retailer makes from the sale of golf media, i.e., the net revenues accruing to retailers after covering the cost of purchasing the media from the wholesalers/producers. For golf magazines, we identified national golf publications with the largest circulations and the state in which they are published—no national golf magazines were published in Georgia in 2009. Similarly, no major publishers of golf books are located in the state. However, we calculated a weight to estimate the percentage of book retailers' sales attributable to the sale of golf books in stores. Total retail golf book sales in 2009 were estimated to be \$1,165,000 with a retail sales margin of \$440,000. Golf videos and DVDs are more difficult. In SRI's previous national-level study, we were not able to identify a source with data on the annual sales of golf-specific videos/DVDs. In the case of this current state-level study, this category was also omitted due to the absence of a reliable data source.

On-Course and Off-Course Sales of Golf Books in Georgia, 2009	
Category	Estimate
Georgia retail book sales ¹	\$277,452,914
Golf books as % of total book sales	0.4%
Total retail golf book sales	\$1,165,302
Retail sales margin	\$440,484

Note: ¹Adjusted for inflation into 2009 dollars using the appropriate GDP deflator. Sources: Georgia retail book sales data from the *2007 Economic Census*. Estimated percentage of golf books among total book sales derived from the *2006 Bowker Annual of Library & Book Trade Information* and American Booksellers Association data.

Georgia Retailers' Net Revenues on Consumer Purchases of Golf-Related Supplies in 2009 (\$ millions)		
	Total purchases	Retail sales margin
Golf Equipment (retail margin)	\$68.0	\$25.7
Golf Apparel (retail margin)	\$30.2	\$11.4
Golf Media (retail margin)	\$1.2	\$0.4
TOTAL	\$99.4	\$37.6

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

D. STATE GOLF ASSOCIATIONS, TOURNAMENTS & CHARITABLE EVENTS

Associations. SRI gathered association revenue data for the largest state and regional golf organizations from these organizations' 990 income tax filings. These include the Georgia State Golf Association, the Georgia Section of the PGA, the Georgia Golf Course Superintendents Association, the Georgia Golf Course Owners Association, and the Georgia Club Managers Association. Also very active are the Georgia Seniors Golf Association, the Georgia Women's Golf Association and Executive Women's Golf Association chapters, as well as regional member and junior golf associations.

Major Tournaments. In 2009, Georgia hosted five major golf championships including the Masters Tournament; the PGA TOUR Championship; the Liberty Mutual Legends of Golf Championship, a Champions Tour event; and two Nationwide Tour events. We subtracted the tournament purse and cost of television broadcasting from total tournament revenues to estimate the direct event-related spending that remained in the state.

Georgia's Major Golf Tournament & State Golf Association Revenues in 2009 (\$ millions)	
Major Tournaments	\$35.8
Associations	\$11.6
TOTAL¹	\$47.4

Charitable Events. Overall, SRI estimates that the amount of charitable giving attributed to the game of golf in Georgia to be \$56.2 million in 2009. This estimate is derived from a national study⁹ based on the number of charitable golf outings/events held each year; the discounted fees, services and staff time

⁹ National Golf Foundation (2002). *The Charitable Impact Report*, November 2002.

for these events; as well as the charitable giving associated with professional golf tournaments. Charitable giving is not included in economic impact estimation because it is a direct transfer of income. Nevertheless, it is an important golf industry contribution to the state.

Charitable Giving by Georgia Golf Industry in 2009 (\$ millions)	
TOTAL	\$56.2

E. REAL ESTATE

In analyzing golf-related residential real estate, SRI collected data on two components: (1) new golf-related residential construction and (2) the “golf” premium associated with the sale of golf community homes.

Georgia’s Golf Real Estate Revenues in 2009 (\$ millions)	
Golf-Related Residential Construction	\$67.0
Realized Golf Premium	\$74.6
TOTAL	\$141.6

Note: The sale of existing homes is considered a transfer of assets rather than new economic output, so the golf premium that is realized in the sale of an existing home is not included in the economic impact analysis.

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

SRI estimates that approximately 30 golf communities were under development, to varying degrees, in Georgia in 2009. Developments ranged from the 2,200-unit Reynolds Plantation development in Greensboro to the 450-unit River Club development in Suwanee. In 2009, an average of only 6 single family homes were constructed per course due to the overall economic situation and particular difficulty in securing financing for new home construction. The new homes built in 2009 had an average construction cost of \$320,000. Multiplying the total number of units under construction at each course

by their average construction cost and summing all of these values yielded a total 2009 golf-related residential construction figure of \$66.962 million.

Realized golf premium. The “golf” premium is the extra value a homeowner can expect to receive on the sale of a housing unit located in a golf community that is above and beyond the premium associated with a home’s other features or amenities (e.g., square footage, fixtures, landscaping, etc.). Through industry interviews, SRI arrived at a conservative estimate of this premium of \$25,000 per unit in 2009. Multiplying the approximately 111 existing Georgia golf communities by 625, the median number of housing units per golf course, we arrive at a total of 69,375 golf community homes. In 2009, the home turnover rate (percentage of homes sold relative to the total housing stock) was 4.3 percent in Georgia. Therefore, the realized golf premium was calculated by multiplying the home turnover rate by the total number of golf community homes by the average golf premium per unit. SRI estimates Georgia’s golf real estate premium was \$74.6 million in 2009.

F. HOSPITALITY/TOURISM

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

Number of golf-related trips. A number of organizations conduct surveys monitoring changes in trip volume and traveler preferences. Some of these surveys include golf participation questions, such as the Travel Industry Association (TIA) of America’s TravelScope® surveys, now conducted by D.K. Shifflet & Associates (DKSA) and marketed as TravelScope®/Directions®. To maintain consistency with golf tourism estimates calculated for other states, SRI used the most recent DKSA estimate available for total Georgia visitor trips: 61.7 million in 2006 (31.3 million day trips and 30.4 million overnight trips).¹⁰ Applying the growth rate in U.S. visitor trips from 2006 to 2009 (-2.2% CAGR) to the 2006 figure, SRI estimates that the total number of visitor trips in Georgia in 2009 was 57.8 million (29.3 million day trips and 28.5 million overnight trips).¹¹

Based on tourism data from Longwoods Travel USA, SRI estimated that approximately 2.0 percent of Georgia’s domestic day visitors and 3.0 percent of domestic overnight visitors played golf while on a trip

¹⁰ D.K. Shifflet & Associates (DKSA), cited in Travel Industry Association (TIA) of America’s 2008 Economic Impact Report for Georgia. <http://www.georgia.org/GeorgialIndustries/Tourism/Pages/IndustryResearch.aspx>.

¹¹ The estimate for the number of domestic person trips in 2009 in the U.S. was 1.873 billion, according to IHS Global Insight & D.K. Shifflet & Associates, Ltd. *US Travel Insights: The Outlook for Domestic Travel & International Arrivals*, June 2009, Table 2, p.10 (<https://www.dksa.com/downloads/USForecast061809.pdf>). Based on data from this report, SRI interpolated the number of domestic person trips in 2006 in the U.S. to be 2.001 billion. Based on these figures, the U.S. compound annual growth rate (CAGR) in domestic person trips from 2006 to 2009 was calculated to be -2.2 percent.

in 2009.¹² By applying these percentages to the adjusted DKSA data (28.5 million overnight trips and 29.3 million day trips), SRI arrived at 586,000 domestic golf day trips and 854,000 domestic golf overnight trips in 2009. SRI defines a “golf trip” as a trip in which a Georgia resident or non-resident travels 50-plus miles to, through, or within the state and plays golf while on this trip. Golf-related trips include both overnight and day trips. This figure includes trips to Georgia golf resort destinations (of which Georgia has eleven), golf outings while on vacation or business travel, as well as trips by Georgians to play golf courses in other parts of the state. People also travel to watch the golf pros and upcoming golf talent battle it out at the professional and amateur golf tournaments played annually in Georgia.

Average spending per golf trip. SRI estimated that average spending per golf trip in Georgia in 2009 was \$55 per day trip and \$525 per overnight trip. This includes spending on accommodation, local transportation, food and beverage, entertainment, gifts and so on. Greens fees and cart fees are not included as they are already captured in the Golf Facility Operations revenues. To estimate average golf trip expenditure, we began with national golf trip survey data from the National Golf Foundation’s *The U.S. Golf Travel Market, 2003 Edition* report¹³ and adjusted average trip spending based upon online research of Georgia golf packages and relative price levels in Georgia vis-à-vis the rest of the country. Multiplying the total number of golf trips (day and overnight) by average spending per golf trip (day and overnight), SRI found that total golf-related tourism spending in Georgia was \$480.7 million in 2009.

Georgia’s Golf-Related Travel Expenditures in 2009	
# Golf person day trips	586,000
Average travel \$ per person per day trip	\$55.07
# Golf person overnight trips	854,000
Average travel \$ per person per overnight trip	\$524.83
Total	\$480.7 million

¹² Longwoods Travel USA (2010). *Georgia 2009 Visitor Report*, slides 30 and 90. Longwoods Travel USA estimated that approximately 3 percent of Georgia’s domestic “marketable” day visitors and 7 percent of domestic “marketable” overnight visitors played golf while on a trip in 2009. Longwoods defines “marketable trips” as trips influenced by marketing efforts, not including visits to friends or family; in 2009, 52 percent of day trips in Georgia were classified as marketable, while 38 percent of overnight trips in the state were considered marketable (slides 18 and 19). By applying these percentages to the adjusted DKSA data (28.5 million overnight trips and 29.3 million day trips), SRI arrived at 586,000 domestic marketable golf day trips and 854,000 domestic marketable golf overnight trips in 2009. These figures equate roughly to 2.0 percent of Georgia’s domestic day trips and 3.0 percent of domestic overnight trips being classified as golf trips.
<http://www.georgia.org/SiteCollectionDocuments/Industries/Tourism/IndustryResearch/2010/Georgia%202009%20Visitor%20-%20%20Final%20Report.pdf>

¹³ See “Average Travel Spending” table on p.16 in NGF (2003), *U.S. Golf Travel Market*, available at: <http://www.ngf.org/cgi/catalogsearchdetail.asp?ITEMNUMBER=99MR002>. SRI adjusted for inflation from 2002-2009, since 2002 is NGF’s most recent on golf travel survey.

G. GOLF'S ECONOMIC IMPACT

The impact of golf on a state's economy includes both the direct impact of the sector itself (its core and enabled industries), as well as the indirect and induced (or multiplier) impacts that are supported by golf industry employment and expenditures.

Direct economic impact. The direct economic impact of golf is simply the size of the golf industry cluster within the state economy in terms of revenues. The "state golf economy" can be calculated by adding together the size of each of the core and enabled industries calculated in the sections above:

Direct Impact of the State Golf Economy	
+	Golf Facility Operations
+	Golf Course Capital Investment
+	Golf-Related Supplies
+	Media, Tournaments, Associations
+	Real Estate
+	Hospitality/Tourism
=	Size of State Golf Economy

Indirect/induced economic impact (multiplier impact). Golf course facilities and the companies that provide goods and services to the golf industry, in turn, purchase goods and services from other companies. These purchases are considered the "indirect" impacts of the golf sector. Furthermore, the employees directly employed by the golf sector will spend much of their incomes in the region, creating more spending and more jobs in the economy. These impacts are considered "induced" impacts. Together, the indirect and induced impacts make up the multiplier impact of the golf economy.

Multiplier values vary from region to region, based on the unique characteristics of the state's or region's economy. Industries with more extensive linkages to other industries within the local economy will have a greater multiplier effect on final economic activity relative to the initial, direct effect. Conversely, economies and industry sectors dependent on a large share of imported supply will have smaller multiplier effects. For this study, the RIMS II (Regional Input-Output Multipliers), calculated by the U.S. Bureau of Economic Analysis, were used to calculate the multiplier impact of Georgia's golf economy.

INDUSTRY	DIRECT	INDIRECT	INDUCED	TOTAL OUTPUT (\$ millions)	TOTAL JOBS (\$ millions)	TOTAL WAGE INCOME (\$ millions)
Golf Facility Operations	\$936.4	→		\$2,107.6	30,324	\$688.4
Golf Course Capital Investment*	\$108.9	→		\$125.6	1,069	\$39.1
Golf-Related Supplies	\$665.8	→		\$1,452.6	7,866	\$318.7
Tournaments & Associations	\$47.4	→		\$118.7	1,295	\$43.4
Real Estate **	\$141.6	→		\$173.4	1,476	\$54.0
Hospitality/Tourism	\$480.7	→		\$1,108.1	14,892	\$350.0
TOTAL	\$2,380.8	→		\$5,086.2	56,922	\$1,493.6

Note: Columns may not sum due to rounding. To calculate golf's total economic impact, SRI subtracted from the direct golf economy impact of \$2,380.8 million the portion of capital investment that is investment in existing facilities (\$60.4 million of \$108.9 million) and the portion of real estate that is the realized golf premium associated with the sale of real estate in existing developments (\$74.6 million of \$141.6 million). This is because:

*Golf course capital investments—Only new course construction has an indirect and induced economic impact. Other types of facility capital investment are typically financed through facility revenues and, therefore, are omitted to avoid double-counting.

**Real Estate—Only golf residential construction has an indirect and induced impact. The golf premium associated with golf real estate is considered a transfer of assets rather than new economic activity.

Numbers in columns may not sum due to rounding.

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