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Disclaimer

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The work informing this study was undertaken in 2015 and 2016 and draws on primary field work and information collected from publicly available secondary sources during this time. Special thanks to Golf Management Australia and Golf Management Victoria for their contribution of valuable benchmarking data.

Due to rounding, numbers presented throughout this report may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

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FOREWORD



Simon Brookhouse CEO, Golf Victoria

Throughout history it is widely recognised that golf has provided a considerable benefit to the economy of Victoria. Additionally the industry has had a significant impact on the health and social wellbeing of those who participate. The question has always been – what is the quantum of this contribution?

This study has been undertaken to quantify these impacts.

Research projects over time have demonstrated that while golf participation is on the rise as an industry, the depth of data has not been available to demonstrate the exact economic, health and social benefits the game provides to Victoria.

Golf Victoria commissioned the "Community Impact of Golf in Victoria" report to determine the contribution that golf provides to the wider Victorian community. The aim of the project is to understand the community contribution generated across the three key areas of economic, health and social benefits and the results show the significant impact the sport of golf has on Victoria.

More than 300,000 Victorians are golf participants with a considerable percentage of these people being 55 years or older. Playing golf on a regular basis provides participants with positive health outcomes both in terms of physical and mental wellbeing.

There is no doubt that the golf industry throughout Victoria and Australia is an industry in transition. More and more we find that participants are time-poor, want more flexibility in their memberships, and are looking for options to enable them to play with family members, both young and old. Golf as a sport is in the ideal position to capitalise on this, being the "Game for Life".

The findings of this report will enable Golf Victoria to foster our relationships at national, state and local government level to boost participation and get more people, more active through the game of golf.

Golf Victoria is particularly pleased to see the significant economic contribution that golf tourism provides to the state. Victoria is home to some of the World's best golf courses and is a haven for golfing holiday experiences. This report demonstrates that Victoria's golf tourism industry is a key economic driver for Melbourne and regional Victoria.

Golf Victoria would like to acknowledge Golf Management Australia for their assistance in providing vital club data for the project and the team at Sport Business Partners for their thorough research and for producing such a useful and professional product.

We look forward to continuing our work with all of our stakeholders to ensure that the sport of golf is, and always will be, the game for life.



Martin Hirons
Managing Director, SBP

For a long time, the contribution of golf has not been truly understood, nor appreciated, by the wider community – and this has led to it being undervalued by sponsors, the community – and government at all levels. This report will enable a more sophisticated level of dialogue between Golf Victoria and key stakeholders about the game's true community impact.

The project methodology was designed to uncover a holistic view of the benefits of golf to the Victorian community. Through this study, we have demonstrated the significant contribution across three key areas of economic, social and health benefits. These benefits are underpinned by the size of the sport's footprint, its broad appeal, and the wide-ranging benefits that golf provides through regular and enduring exercise and socialising.

We would like to thank Golf Victoria and their broader network for their assistance and support to SBP and Street Ryan in conducting this study – we are proud to have been able to continue our recent work to prove the value of sport to the community.

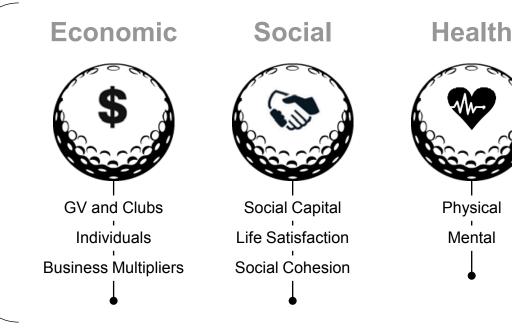
Finally, we hope to see this study become a catalyst for improving Golf Victoria's advocacy for the sport over the coming months.







The Community Impact of Golf in Victoria.



OBJECTIVE

The objective of this project was to determine the contribution of golf to the broader community in Victoria.

COVERAGE

The focus of this project was to understand the community contribution generated across three key areas of economic, health and social benefits.

METHOD

A range of valuation methodologies have been used in this project that are consistent with approaches and data inputs from the Australian Bureau of Statistics, the Australian Institute of Health and Welfare, the Australian Sports Commission. Further detail on the methodology is featured in the appendix.

This project also incorporates primary research with golf stakeholders and participants – including an online survey with approximately 2,628 individuals from within the Victorian golf community.





PROJECT SCOPE

DATA SOURCES

A wide range of data sources have been used to generate a holistic view of the contribution Golf makes to society. These data sources include, but are not limited to:

Golf-specific data

- Audited club membership numbers
- Golf Management Australia benchmarking data
- Survey with approximately 2,628 individuals from the Victorian golf community
- Financial statements from 43 Victorian golf clubs

Government statistics

- Australian Bureau of Statistics Household Survey data (i.e. Multipurpose; Expenditure; and Health surveys)
- Australian Bureau of Statistics Australian National Accounts
- Australian Sports Commission
- Australia Government Department of Health

Published research

- Australian Institute of Health and Welfare statistics
- Organisation for Economic Co-operation and Development Better Life Index

Stakeholder consultations

- 7 x Local Government Authorities
- ❖ 5 x Club Managers and Staff
- ❖ 8 x Golf Victoria Staff
- 4 x Golf Industry and Tourism Stakeholders

EXCLUSIONS

This project has focussed on golf participation and events at a community-level through to state level. We have not attempted to understand the contribution and impact of international and national events held within Victoria.





EXECUTIVE SUMMARY

- This report has been completed by SBP and Street Ryan for Golf Victoria.
- The purpose of the project is to demonstrate the contribution that golf makes to the community through economic, health and social benefits. The contribution of international and national events has been excluded.
- In total, golf in Victoria contributes \$883.6 million in benefits to the community. This is made up of \$849.7 million in economic contribution and \$33.8 million in health contribution.
- Whilst most sports make many positive contributions to the community through social capital and social cohesion, through this study we found that golf has a number of unique social strengths (listed right).
- ❖ The three largest Local Government Area contributors are the Shire of Mornington Peninsula: \$73.2 million; Greater Geelong and Queenscliffe (combined): \$57.6 million; and the City of Kingston: \$55.8 million.
- Golf tourism generates \$152.7 million through day and overnight visitation, and expenditure on food and beverages, accommodation, travel, shopping, etc.).
- Golf's physical health benefits contribute \$32.7 million per year due to the prevention of ischaemic heart disease, type 2 diabetes, stroke, colorectal cancer and breast cancer.
- Golf's mental health benefits contribute \$1.1 million per year due to the prevention of anxiety and depression.

Golf's Total Annual Contribution.

\$883,594,884

Annual Economic Contribution.

\$849,748,136

Unique Social Strengths

Lifelong reduction on healthcare burden.

Growth and maintenance of strong social capital (personal networks).

Significant local businesses.

Regular and enduring social interaction.

A culture based on respect, etiquette and selfdiscipline.

A sanctuary (both physically and mentally) from the hustle of modern life.

Annual Health Contribution.

\$33,846,748



The community contribution of Victorian Golf. \$883,594,884

Economic \$849,748,136

Direct: \$558,074,401

Ancillary: \$291,673,735

Unique Social Strengths

Lifelong reduction on healthcare burden.

Growth and maintenance of strong social capital (personal networks).

Significant local businesses.

Regular and enduring social interaction.

A culture based on respect, etiquette and self-discipline.

A sanctuary (both physically and mentally) from the hustle of modern life.

Health \$33,846,748

Physical: \$32,707,320

Mental: \$1,139,428



The community contribution of Victorian Golf. \$883,594,884



111,000 Club Golfers 192,000 Social Golfers \$124m contribution



\$153m from Golf Tourism 296,000 golf-related trips



\$34m health benefits 88% by Club Golfers



374 Golf Courses 35 Driving Ranges



\$412m contribution from Golf Clubs and Associations



\$393 million contribution from non-metro regions



Golf Victoria

KEY FINDINGS

1. ECONOMIC CONTRIBUTION

Overview

Golf is among a number of high profile sports which are becoming increasingly commercially oriented. Indeed, most golf clubs have been managed as small to medium businesses in their own right for many decades; both public (or community) and private ventures.

With the capital investment involved in golf courses and the scope of operations (clubhouse facilities, pro-shop operations and other retailing), golf has been required to be a commercially oriented sport for longer than many other traditional Australian sports.

Golf makes an economic contribution to local areas and to Victoria through:

- The regular and occasional participants (social and program based participants, school participants, regular club competitors, and elite participants at the many events staged throughout the year)
- Expenditure on services, goods, maintenance, and employees by golf clubs and other golf entities.
- Golf tourism visitation throughout the State.
- Golf training and coaching activities
- Retailing of golf equipment and merchandise.

The approach to valuing the economic contribution of golf is similar to many other published studies of a similar nature (including for sports such as Australian Rules, Tennis and Soccer). The methodology includes data input from the Australian Bureau of Statistics Census of Population and Housing Data, Tourism Research Australia regional profiles, IBISWorld industry reports, as well as primary data related to participation, membership, events and expenditure.

Total Economic Contribution of Golf in Victoria.

\$849,748,136

Direct: \$558,074,401

Ancillary: \$291,673,735





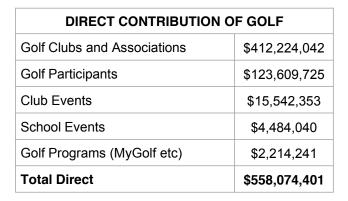
1. ECONOMIC CONTRIBUTION

Key findings

- ❖ The total economic contribution of golf in Victoria is \$849.7 million per year.
- This is made up of \$558 million from direct contributions from individuals, organisations, programs and events.
- Ancillary services related to golf generate an additional \$291.7 million.
- Golf tourism generated \$152.7 million through day and overnight visitation, expenditure on food and beverages, accommodation, travel, shopping, etc.
- ❖ The Melbourne metropolitan area generated an estimated 53.7% of the 2015 golf economic contribution.
- ❖ Eastern Melbourne was the most significant region, contributing 19.6% of the State total.
- The three largest Local Government Area contributors were the Shire of Mornington Peninsula: \$73.2 million; Greater Geelong and Queenscliffe (combined): \$57.6 million; and the City of Kingston: \$55.8 million.

Total Economic Contribution of Golf in Victoria.

\$849,748,136



ANCILLARY CONTRIBUTION OF GOLF		
Golf Tourism \$152,740,931		
Golf Coaching and Retail \$138,932,804		
Total Ancillary \$291,673,735		



1. ECONOMIC CONTRIBUTION

DETAILED FINDINGS

State and Regional Contribution

The Melbourne metropolitan area generated an estimated 53.7% of the 2015 golf economic contribution, with Eastern Melbourne being the most significant region, contributing 19.6% of the State total.

The South East Melbourne region (which stretches from Bayside to the Mornington Peninsula) was the second largest metropolitan contributor, at 15.2% of the State total, and on a comparative resident population basis, almost three times its share of population.

Other interesting observations revealed by the economic contribution assessment include:

- ❖ 46.4% of economic contribution is made in nonmetropolitan Victoria, which accommodates just 25.1% of the State's resident population – and therefore provides a case for there being greater investment in regional golf.
- Barwon Western Victoria contributed 15.5% of the State total; second only to Eastern Melbourne. Not coincidentally, Barwon – Western Victoria (which encompasses Geelong, Bellarine Peninsula, Surf Coast, Great Ocean Road, and Shipwreck Coast) is the most popular tourist destination in non-metropolitan Victoria.
- ❖ 47.3% of 'golf tourism' economic contribution is estimated to occur in non-metropolitan Victoria (and this

- percentage would be higher if the New South Wales border towns were to be included).
- These examples highlight the lifestyle and leisure characteristics of the sport of golf, indicating that it is not necessarily a sport which people play near their residential location, and it is a motivator for experiential travel and tourism.

Local Government Area Contribution

At a local government area level, the most significant economic contributions in 2015 were estimated to be in:

- Shire of Mornington Peninsula: \$73.2 million
- Greater Geelong and Queenscliffe (combined): \$57.6 million
- City of Kingston: \$55.8 million
- City of Monash: \$48.1 million
- City of Bayside: \$31.5 million
- City of Ballarat: \$27.6 million
- City of Greater Bendigo: \$23.3 million
- Shire of East Gippsland: \$23.3 million

Note: A detailed breakdown of economic contribution by region and LGA is provided in the document Appendix D and E.







2. SOCIAL CONTRIBUTION

Overview

Sport at a grassroots community level contributes a broad range of social benefits such as community cohesion, social mobility, social inclusion and social capital.

There are a range of unique social benefits that golf as an industry sector arguably does better than many other sports and community activities.

This occurs most notably in the development of social capital within individuals, and through social cohesion within communities.

This study identified the unique strengths of social cohesion within the golf community, which are highlighted adjacent.

The approach towards understanding the social contribution of golf involved a literature review of sport's social impact, depth interviews with 24 golf industry stakeholders, a survey with approximately 2,628 individuals from the Victorian golf community, and Australian Bureau of Statistics data.

Unique strengths of golf's social contribution

- Lifelong reduction on healthcare burden.
- Growth and maintenance of strong social capital (personal networks).
- Significant local businesses.
- Regular and enduring social interaction.
- A culture based on respect, etiquette and self-discipline.
- A sanctuary (both physically and mentally) from the hustle of modern life.





2. SOCIAL CONTRIBUTION

Unique strengths of golf's social contribution

Whilst most sports make many positive contributions to the community through social capital and social cohesion, through this study we found that golf has the following unique strengths.

Genuine **lifelong** contribution to the **prevention of disease** which reduces the healthcare burden on society.

Maintenance of strong social capital from youth to well-beyond retirement age.

More than just a sport, Golf
Clubs are significant
businesses contributing to the
local community in many
diverse ways.

Golf participation provides regular and enduring social interaction – many will play weekly for almost 40-years.

The game has a **culture** based upon **respect for others** and self-discipline.

Golf courses preserve diminishing green-space within Victoria and provide a **sanctuary** (both physically and mentally) from the hustle of modern life.

Golf Victoria

KEY FINDINGS

2. SOCIAL CONTRIBUTION

Social Capital¹⁸

In 2012 the Australian Bureau of Statistics released a range of social capital indicators from the 2010 General Social Survey (GSS). These indicators compared sport participants versus non-sport participants within the Australian population.

Social capital is defined as being "a resource available to individuals and communities founded on networks of mutual support, reciprocity and trust".

Social capital can contribute to both individuals (via outcomes in health, education, employment and family wellbeing) and communities (community strength and resilience).

It is theorised that participating in sport develops social capital due to the community based social interaction that this involves.

The ABS suggests that whilst it is not possible to establish a causal link between sport participation and social capital, it is possible to establish correlations between the two.

From selected indicators of social capital (see adjacent table), it can be seen that Victorian golfers in comparison to both general sport participants and non-sport participants are healthier, more engaged with their local community, and have closer relationships with their social networks.

Each of the social capital indicators in the adjacent table is presented in more detail in Appendix B.

Social Capital Indicators



Social Capital Indicator	Victorian Golfers ⁹	Sport Participants	Non-sport Participants
Self-Assessed Health Status (% Excellent/Very Good)	70%	57%	40%
Personal Stressor (% that have not experienced personal stress)	46%	37%	44%
Work-life Balance (% can meet family/community responsibilities)	99%	92%	87%
Volunteership (% that volunteer within the community)	68%	42%	19%
No. of Confidants (% with 3 or more friends to confide in)	67%	58%	37%
Contact with Social Networks (% with weekly face-to-face contact	84%	81%	73%
Social Network Diversity (% with friends of diverse ethnicity)	81%	77%	67%
Access to support (% able to ask for small favours)	97%	94%	88%





2. SOCIAL CONTRIBUTION

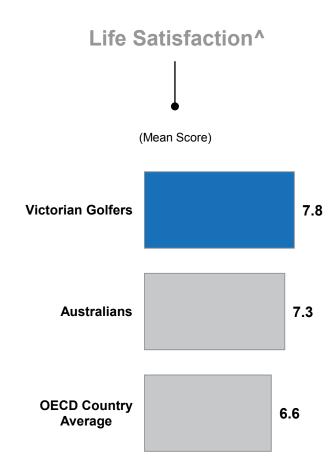
Life Satisafaction¹⁹

The Organisation for Economic Cooperation and Development (OECD) measures 11 topics identified as essential to well-being in terms of material living conditions (housing, income, jobs) and quality of life (community, education, environment, governance, health, life satisfaction, safety and work-life balance).

Life satisfaction is a specific measure of happiness or subjective well-being – made up of the presence of positive experiences and feelings, and the absence of negative experiences and feelings.

The measurement of life satisfaction evaluates a person's life as a whole rather than their current feelings.

The questionnaire construct for the OECD measure of life satisfaction was replicated through an online survey with 2,628 Victorian golfers in January 2016. The results showed that Victorian golfers had a statistically significant higher rating of life satisfaction compared to Australians in general.



[^]Question: Imagine an eleven-rung ladder where the bottom (0) represents the worst possible life for you and the top (10) represents the best possible life for you. On which step of the ladder do you feel you personally stand at the present time?





3. HEALTH CONTRIBUTION

Overview

Regular participation in physical activity provides significant health benefits to individuals from both a physical and mental perspective.

The physical health benefits analysed in this study are derived from the prevention of chronic diseases (ischaemic heart disease, type 2 diabetes, stroke, colorectal cancer and breast cancer).

The mental health benefits are derived from the prevention of anxiety and depression.

The value of golf's health contribution has been estimated based on the prevention of these selected physical and mental diseases amongst the total golf participation base in Victoria.

The key valuation approach is similar to many previous whole of sport industry studies, and includes data input related to the reduction in Disability-Adjusted Life Years (DALY) from the Australian Institute of Health and Welfare and the Australian Government Department of Health.

Modelling of the health benefits of golf is based on conservative estimates, and is focussed on selected health issues which are evidenced to be attributed to physical inactivity. It is therefore highly likely that the health benefits of participation in golf are significantly broader than what has been valued for this project.

Total Annual Health Contribution.

\$33,846,748

ANNUAL HEALTH CONTRIBUTION OF GOLF		
Physical Health Benefit	\$32,707,320	
Mental Health Benefit	\$1,139,428	
Total Annual Health Contribution	\$33,846,748	
Lifetime Health Contribution*	\$1,175,762,397	

Proportion of Annual Health Contribution generated by Club Members.

88%

^{*} The total golf lifetime health benefit is calculated on the basis of the yearly health benefit multiplied by the average number of years of golf participation remaining for each age/gender segment – this ranges from 1 year to 41 years.



3. HEALTH CONTRIBUTION

Key findings

- The total health contribution of golf participation in Victoria is \$33.8 million per year based upon approximately 111,000 club members and 192,000 nonmembers.
- Over the average duration of the golf participation lifetime (i.e. the number of years of an individual's life that they play golf), the total health contribution is \$1.176 billion.
- Golf club members account for 88% of the health benefits per annum (as they play more regularly than non-members). They also account for 92% of the lifetime health contribution (as they play for a longer duration throughout their life).
- Golf's physical health benefits contribute \$32.7 million per year due to the prevention of ischaemic heart disease, type 2 diabetes, stroke, colorectal cancer and breast cancer.
- Three out of the top six most common diseases in Australia are preventable through physical activity, with 6.6% of all diseases being attributed to physical inactivity according to the Australian Institute of Health and Welfare.
- These diseases which are preventable through physical activity have a significant negative impact on the health of Australians aged 65+ years of age – therefore golf participation plays a significant preventative role in the later stages of life.
- Physical inactivity is the fourth highest risk of disease

- behind tobacco, high blood pressure and obesity.
- 92% of the burden of disease resulting from physical inactivity is borne by people aged 15 years and above – therefore it is imperative that sport participants are encouraged to play well into adulthood.
- Golf's mental health benefits contribute \$1.1 million per year due to the prevention of anxiety and depression.
- Mental disorders are the third most burdensome disease, and are most prominent amongst younger people and females – of which golf does not have a significant playing population.
- Based upon the evidence used by the Department of Health to support the current physical activity guidelines, a conservative estimate of the preventative effect of physical activity is a 25% reduction in risk of anxiety and depression.





3. HEALTH CONTRIBUTION

Annual health contribution

Club Members

ANNUAL HEALTH CONTRIBUTION – CLUB MEMBERS				
Participant Segment	Physical Health Benefit	Mental Health Benefit	Total Health Benefit (Yr)	
Male 0-14 years	\$0	\$3,759	\$3,759	
Male 15-24 years	\$426	\$12,934	\$13,360	
Male 25-64 years	\$1,795,617	\$382,263	\$2,177,880	
Male 65-74 years	\$10,941,487	\$183,971	\$11,125,457	
Male 75+ years	\$11,855,714	\$42,521	\$11,898,235	
Female 0-14 years	\$0	\$945	\$945	
Female 15-24 years	\$138	\$6,236	\$6,374	
Female 25-64 years	\$352,563	\$217,715	\$570,279	
Female 65-74 years	\$2,329,226	\$10,885	\$2,340,111	
Female 75+ years	\$1,629,460	\$1,940	\$1,631,400	
Total	\$28,904,632	\$863,168	\$29,767,800	

Non-Members

ANNUAL HEALTH CONTRIBUTION - NON_MEMBERS			
Participant Segment	Physical Health Benefit	Mental Health Benefit	Total Health Benefit (Yr)
Male 0-14 years	\$0	\$2,011	\$2,011
Male 15-24 years	\$162	\$4,911	\$5,073
Male 25-64 years	\$635,931	\$135,381	\$771,312
Male 65-74 years	\$1,212,974	\$20,395	\$1,233,369
Male 75+ years	\$799,416	\$2,867	\$802,283
Female 0-14 years	\$0	\$400	\$400
Female 15-24 years	\$29	\$1,320	\$1,349
Female 25-64 years	\$171,035	\$105,618	\$276,653
Female 65-74 years	\$627,611	\$2,933	\$630,544
Female 75+ years	\$355,531	\$423	\$355,954
Total	\$3,802,688	\$276,260	\$4,078,948

111k individuals \$269 per person 192k individuals \$21 per person



3. HEALTH CONTRIBUTION

Lifetime* health contribution

Club Members

LIFETIME HEALTH CONTRIBUTION – CLUB MEMBERS			
Participant Segment	Physical Health Benefit	Mental Health Benefit	Total Health Benefit (Yr)
Male 0-14 years	\$0	\$20,575	\$20,575
Male 15-24 years	\$3,270	\$99,357	\$102,627
Male 25-64 years	\$52,543,311	\$11,185,765	\$63,729,077
Male 65-74 years	\$409,053,860	\$6,877,846	\$415,931,705
Male 75+ years	\$481,850,095	\$1,728,163	\$483,578,258
Female 0-14 years	\$0	\$3,497	\$3,497
Female 15-24 years	\$1,645	\$74,206	\$75,851
Female 25-64 years	\$6,154,285	\$3,800,407	\$9,954,691
Female 65-74 years	\$57,279,023	\$267,682	\$57,546,705
Female 75+ years	\$51,232,153	\$60,981	\$51,293,134
Total	\$1,058,117,641	\$24,118,479	\$1,082,236,120

Non-Members

LIFETIME HEALTH CONTRIBUTION – NON-MEMBERS			
Participant Segment	Physical Health Benefit	Mental Health Benefit	Total Health Benefit (Yr)
Male 0-14 years	\$0	\$4,525	\$4,525
Male 15-24 years	\$296	\$9,004	\$9,301
Male 25-64 years	\$14,619,713	\$3,112,341	\$17,732,053
Male 65-74 years	\$32,526,851	\$546,908	\$33,073,759
Male 75+ years	\$19,319,221	\$69,289	\$19,388,510
Female 0-14 years	\$0	\$400	\$400
Female 15-24 years	\$205	\$9,240	\$9,445
Female 25-64 years	\$2,586,327	\$1,597,114	\$4,183,441
Female 65-74 years	\$10,355,582	\$48,395	\$10,403,977
Female 75+ years	\$8,710,497	\$10,368	\$8,720,865
Total	\$88,118,693	\$5,407,583	\$93,526,276

111k individuals \$9,774 per person

192k individuals\$487 per person



^{*} The total golf lifetime health benefit is calculated on the basis of the yearly health benefit multiplied by the average number of years of golf participation remaining for each age/gender segment – this ranges from 1 year to 41 years.



3. HEALTH CONTRIBUTION

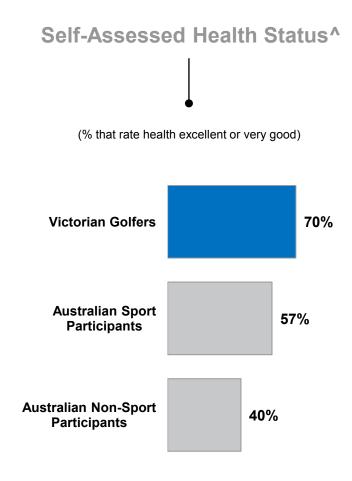
Self-Assessed Health Status¹⁸

In 2012, the Australian Bureau of Statistics released a range of social capital indicators from the 2010 General Social Survey (GSS). These indicators compared sport participants versus non-sport participants within the Australian population.

Respondents to the GSS were asked to make a general assessment of their own health against a five point scale ranging from excellent through to poor.

In order to compare Victorian golfers to the Australian population, an identical question was asked with a representative sample of the Victorian golf population. This data was collected by SBP through an online survey with Victorian golfers conducted in January 2016.

The findings show that Victorian golfers have a higher selfassessed health status than both general sport participants and non-sport participants.



[^]Question: In general, would you say that your health is excellent, very good, * good, fair or poor?





REFERENCES

- 1. Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez AD, 2007. The burden of disease and injury in Australia 2003. Australian Institute of Health and Welfare.
- Australian Government Department of Health, 2014.
 Australia's Physical Activity and Sedentary Behaviour Guidelines. Australia's Physical Activity and Sedentary Behaviour.
- 3. AIHW, 2015. Health expenditure Australia 2013–14. Health and welfare expenditure series no. 54. Cat. no. HWE 63. Australian Institute of Health and Welfare.
- 4. AIHW, 2014. Health-care expenditure on cardiovascular diseases 2008–09. Cat. no. CVD 65. AIHW.
- Muller P, Wadsley A, Adams D, Arthur D, Felmingham B, 2010. The Value of Sport and Physical Recreation to Tasmania. Australian Innovation Research Centre, University of Tasmania.
- 6. Access Economics, 2010. The economic contribution of sport and recreation in the ACT. Access Economics.
- 7. Office of Best Practice, 2008. Best Practice Regulation Guidance Note Value of a Statistical Life Year. Australian Government Department of Finance.
- 8. Brown WJ, Bauman AE, Bull FC, Burton NW, 2012. Development of Evidence-based Physical Activity Recommendations for Adults (18-64 years). Australian Government Department of Health.
- 9. Golf Victoria, 2016. Victorian Golf Social Contribution Survey.
- 10. ABS, 2015. Life Tables, States, Territories and Australia, 2012-2014. Australian Bureau of Statistics.
- 11. Atherley K, 2006. Sport and Community Cohesion in the 21st Century: Understanding linkages between sport, social

- capital and the community. Department of Sport and Recreation, Western Australia.
- 12. Sport England, 2013. Economic value of sport in England, June 2013. Sport England.
- 13. Delaney L, and Keaney E, 2005. Sport and Social Capital in the United Kingdom: Statistical Evidence from National and International Survey Data. Institute for Public Policy Research. London. Commissioned by the Department of Culture, Media and Sport.
- 14. OECD (2011). Perspectives on Global Development 2012: Social Cohesion in a Shifting World. The Organisation for Economic Co-operation and Development
- 15. Pope J, 2011. Indicators of Community Strength in Victoria: framework and evidence. Department of Planning and Community Development.
- profile.id, 2014 (accessed). Household Income 2001.
 Sourced from Australian Bureau of Statistics, Census of Population and Housing 2011.
- 17. ASC, 2013. Participation in Sport and Physical Recreation, Australia, 2011-2012 Report. Produced for the Committee of Australian Sport and Recreation Officials (CASRO) Research Group by the Australian Bureau of Statistics. Australian Sports Commission.
- 18. ABS, 2012. 4917.0 Sport and Social Capital. Australian Bureau of Statistics.
- 19. Golf Australia, 2014. 2014 Golf Participation Report.
- 20. ASC, 2001-2010. Exercise, Recreation and Sport Surveys (multiple). Australian Sports Commission.
- 21. Golf Australia, 2010. Casual and Member Golfer Research 2009.





ABOUT THE AUTHORS



SBP provides advice and insights to the not-for-profit and commercial business sectors through a range of integrated strategic, commercial and market research services.

The firm was established in 2001 as a specialist strategic consultancy for the sport business sector, and for the last 15 years we have been a trusted adviser to more than 75 leading professional and Olympic sports, government agencies and commercial businesses across Australia, New Zealand and internationally.

The core services offered by SBP are based around strategic reviews and planning, market research and insights, commercial and business model advisory and business problem solving.

Illustrating the breadth of sporting experience within SBP, sports that we have worked with include Football Federation Australia, Athletics Australia, Australian Rugby Union, Cricket Australia, Gymnastics Australia, Baseball Australia, Golf Australia and the Australian Sports Commission.



Street Ryan has been established since 1981 and works on regional development assignments in metropolitan, provincial, rural and remote areas of every Australian state and territory. Initially a function of the focus on regional development, quantitative analysis and impact assessment have become core Street Ryan consulting areas in their own right.

Street Ryan has exhaustive experience and practical knowledge in sports assessment, participation censuses, economic and demographic analysis and projections. Our senior staff have been working in these areas for more than three decades.

We have a long history in supporting national sporting organisation clients, including long-term relationships with the Australian Football League (AFL), Cricket Australia, Bowls Australia, and the Australian Rugby Union, as well as a range of shorter term assignments with Golf Australia, Softball Australia, New Zealand Cricket, Tennis Australia and Hockey Australia.

Beyond sporting organisations, Street Ryan specialises in regional development assignments around Australia for private and public organisations, often encompassing economic contribution and impact assessment and demographic analysis for capital development and investment projects, major events, tourism and industry sectors.





APPENDIX A: ECONOMIC CONTRIBUTION

VALUATION APPROACH

The following provides an overview of the <u>conceptual</u> <u>methodology</u> towards calculating the economic contribution derived from the Victorian golf industry through participation and events.

The approach to valuing the economic contribution of golf is consistent with many other published studies of a similar nature (including for sports such as Australian Rules, Tennis and Soccer). The methodology includes data input from the Australian Bureau of Statistics Census of Population and Housing Data, Tourism Research Australia regional profiles, IBISWorld industry reports, as well as primary data related to participation, membership, events and expenditure.

- ❖ The economic contribution of golf participation and events has been modelled across the whole of Victoria.
- In addition to the whole of state contribution, each golfer, organisation and event has been allocated to a Local Government Area (LGA) to enable an estimated value for each LGA.
- Estimated expenditure of golf's peak organisation (Golf Victoria), Associations and Clubs across affiliation/registration fees; equipment; administration; marketing; coaching, referee, medical and player payments; equipment and grounds; trophies; events, food and beverage, and other general expenses.
- Estimated expenditure of individuals on equipment and accessories, coaching, transport, food and beverage; and travel costs.

Estimates of the flow-on effect of direct expenditure was calculated from multipliers generated from the national accounts and applied to each electorate using location quotients.





DATA SOURCES

The following data sources have been used as key inputs into the approach towards valuing the economic contribution of golf. Each data source is presented in more detail over the following pages.

- Annual reports from Golf Victoria and golf clubs/organisations
- Golf Management Australia benchmarking data
- Analysis of financial statements and/or income and expenditure records from golf associations and clubs. (Financial statements or records were collected for 43 golf organisations)
- Details of golf participants in 2015 from the Golf Australia Census
- Survey with approximately 2,628 individuals from the Victorian golf community
- Australian Bureau of Statistics Census of Population and Housing Data
- Tourism Research Australia regional profiles
- IBISWorld industry reports

Results for Golf Victoria have been applied to, and reported by, Local Government Areas and Regions in Victoria. Golf clubs which are located along on the New South Wales side of the NSW-Victorian border undoubtedly provide an additional economic contribution to Victoria, but they have not been included in this assessment.

The estimates presented in this report have been entirely derived from the above sources and, therefore, their accuracy is dependent on the extent to which these sources are truly representative of golf activities throughout Victoria.





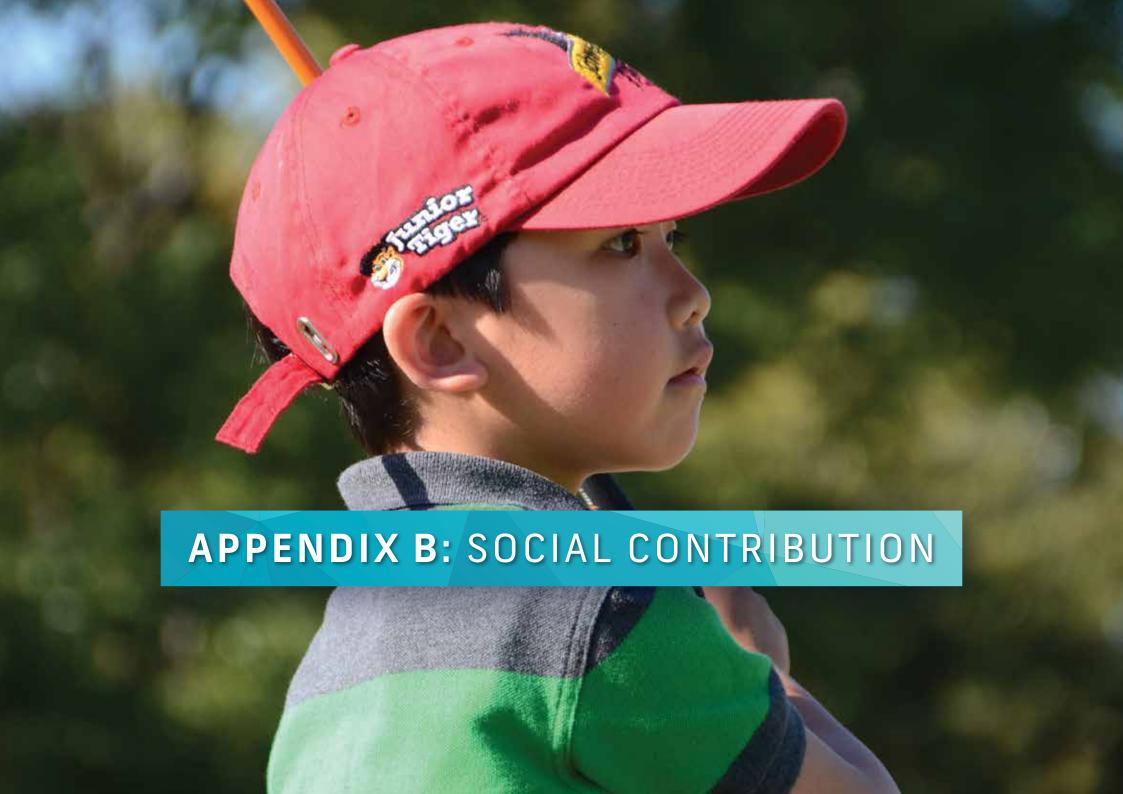
APPENDIX A: ECONOMIC CONTRIBUTION

DATA INPUT

The number of participants in varying forms of golf in Victoria during 2015 have been derived from the Golf Australia census, Golf Victoria Annual report, and a SBP survey of participants. The participation details are as follows:

- Program Participants
 - MyGolf Junior Programs 3,568
 - Crown Lager/GA Social Golf Club 765
 - Other programs 10,529
- School programs and competitions 38,784
- Event Participants 40,931
- Total Golf Rounds: Melbourne metropolitan 1,847,701
- Total Golf Rounds: Non-Metropolitan Victoria -1,935,430
- Playing Members of golf clubs 110,729
- Golf tourism: Victorian participants taking trips 81,645
- Golf tourism: Total number trips 295,555







APPENDIX B: SOCIAL CONTRIBUTION

ASSESSMENT APPROACH AND KEY ASSUMPTIONS

The following provides an overview of the conceptual methodology towards assessing the social contribution of the Victorian golfing community.

Qualitative assessment

- ❖ Literature review to understand the definitions and contextual approach towards what we have labelled as "community contribution". This includes social cohesion, social capital, social inclusion, and social mobility these concepts are frequently used interchangeably although there are slight differences. For this project we have focused on the development of social capital and social cohesion given these concepts primarily look at individuals and their local community networks, as distinct from society as a whole.
- ❖ Depth interviews with 24 individuals actively involved in the Victorian golf industry. This included interviews with 5 x Golf Club Managers and Staff; 7 x Local Government Authorities; 8 x Golf Victoria Staff; and 4 x Golf Industry and Tourism Stakeholders.

Quantitative data

In 2012 the Australian Bureau of Statistics produced a report which sought to establish a correlation between indicators of social capital and sports participation. These social capital indicators included self-assessed health;

- personal stressors; work-life balance; feelings of safety and trust; social network size and diversity; and access to support. The questionnaire construct for these ABS Social Capital indicators was replicated through an online survey with 2,628 Victorian golfers in January 2016.
- The Organisation for Economic Co-Operation and Development (OECD) measures conducts a measurement of life satisfaction which seeks to evaluate a person's life as a whole rather than their current feelings. The questionnaire construct for the OECD measure of life satisfaction was replicated through an online survey with 2,628 Victorian golfers in January 2016.

APPENDIX B: SOCIAL CONTRIBUTION



DATA SOURCES

The following data sources have been used as key inputs into the approach towards valuing the social contribution of golf. Each data source is presented in more detail over the following pages.

- The community benefits of sport participation
- What is a cohesive society?
- Victorian Golf Social Contribution Survey and the Australian Bureau of Statistics' Sport and Social Capital in Australia
- Depth interviews with golf stakeholders

The community benefits of sport participation 11,12,13

Some of the commonly identified social benefits of participating in sport are improved community identity, community cohesion, the promotion of community pride and ownership, and the promotion of ethnic or cultural harmony.

A literature review by Atherley (2006) concluded that sport can help provide social benefits such as community integration, cohesion, cooperation, and community identity and pride.

It is also evidenced that sport participation can contribute to crime reduction, community safety, education and lifelong learning, and environmental benefits.

What is a cohesive society?¹⁴

The OECD defines a society as "cohesive" if it works towards the well being of all its members, fights exclusion and marginalisation, creates a sense of belonging, promotes trust, and offers its members the opportunity of upward social mobility.

Within this definition of 'social cohesion' there are three distinct aspects. These being social inclusion, social capital and social mobility.

- Social inclusion: is measured by aspects of social exclusion such as poverty, inequality, acceptance, and social polarisation.
- Social capital: combines measures of trust (interpersonal and society), the extent of personal networks, and the extent of an individual's engagement within a community.
- Social mobility: measures the degree to which people can or believe they can change their position in society.

For the purposes of this study for Golf Victoria, the community contribution of golf has focussed on the development of social capital and social cohesion.





APPENDIX B: SOCIAL CONTRIBUTION

Sport and Social Capital in Australia – Selected Indicators^{9, 18}

SELF-ASSESSED HEALTH STATUS			
	Victorian Golfers	Sport Participants	Non-sport Participants
Excellent	23%	22%	13%
Very Good	48%	35%	27%
Good	22%	30%	32%
Fair	7%	11%	18%
Poor	1%	3%	9%
Total	100%	100%	100%

PERSONAL STRESSOR				
Victorian Sport Non-sport Golfers Participants Participants				
Experienced a personal stressor	48%	63%	56%	
Did not experience a personal stressor	52%	37%	44%	
Total	100%	100%	100%	

WORK LIFE BALANCE*				
Victorian Sport Non-sport Golfers Participants Participants				
Can meet responsibilities	99%	92%	87%	
Can not meet responsibilities	1%	8%	13%	
* Of those with family/community responsibilities				

VOLUNTEERSHIP				
Victorian Sport Non-sport Golfers Participants Participants				
Volunteers	63%	42%	19%	
Not volunteers	37%	58%	81%	
Total	100%	100%	100%	



Sport and Social Capital in Australia – Selected Indicators^{9, 18}

NO. OF CONFIDANTS					
	Victorian Sport Non-sport Golfers Participants Participants				
None	3%	10%	23%		
1-2 friends	30%	32%	40%		
3-4 friends 40% 32% 23%					
5 or more friends	27%	26%	14%		

SOCIAL NETWORK DIVERSITY					
	Victorian Golfers	Sport Participants	Non-sport Participants		
Friends with same ethnic background	19%	23%	33%		
Friends of similar age	4%	9%	17%		
Friends with same level 6% 12% 16%					
* % All Friends of same level					

CONTACT WITH SOCIAL NETWORKS					
	Victorian Golfers	Sport Participants	Non-sport Participants		
Everyday	27%	21%	19%		
At least once a week	57%	60%	54%		
At least once a month	11%	14%	17%		
At least once in three months	3%	4%	7%		
No recent contact	2%	1%	3%		
* Face-to-Face contact		•			

ACCESS TO SUPPORT					
Victorian Sport Non-sport Golfers Participants Participants					
Are able to ask for small favours	97%	94%	88%		
Are able to ask for support in a crisis	96%	95%	90%		





Qualitative assessment of the social cohesion generated through the Victorian golf community

Depth interviews with 24 individuals actively involved in the Victorian golf industry were conducted to identify golf's unique strengths in delivering social benefits to individuals and the community.

These depth interviews included interviews with 5 x Golf Club Managers and Staff; 7 x Local Government Authorities; 8 x Golf Victoria Staff; and 4 x Golf Industry and Tourism Stakeholders.

Whilst golf, like all sports, delivers a broad range of social benefits, the following are some of the game's unique strengths (note a full debrief report of these qualitative research findings is available in a separate document provided to Golf Victoria).

Strengths of the game

There are a range of positive aspects that were uncovered and identified through our interviews, and while some of these are obvious, they will assist with identifying the core social impacts of the game and provide some clarity on the brand essence. At the core of the game is..

- The health benefits of the sport the pure walking, socialisation, and the physical exertion for a sustained period – the seven to nine kilometres of walking that many would not do without the connection to the sport.
- The vibrant club culture at many venues from the 19th hole camaraderie - to the food, coffee, golf events and shows through to public events and charity days.

- The traditional family values that underpin the culture of the sport honesty, integrity, respect.
- The game has a significant yet underappreciated economic footprint – and this was raised frequently.
- There are a variety of price points and offers to choose from – in some country venues 9-holes may be as low as \$10-\$12 – through to the expense of the Sandbelt offers (the game's value equation and offer is wider and deeper than ever before).
- The accessibility of the game is generally acknowledged to both social and club players – there is no shortage of offers.
- These offers now include formal clubs, local govt. courses, privately held courses, 9-hole, pitch and putt, X Golf, driving ranges, adventure golf, (even) Top Golf – the choices have never been more – short, long, low cost, premium, easy and hard.
- The passive health impacts are immeasurable and the socialisation of the sport – the mixing, the age spread, the interaction, the stories, the support network.
- Victoria's great golf regions all world class....from the Sandbelt, to the Murray, the Peninsulas, the Coast, the Yarra Valley....an unbridled advantage.
- The re-emergence of the Oates Vic Open and its strong regional impact and positioning.

The strengths of the game are not only built around the challenges of the game itself but the passive exercise and health benefits, the social interaction and camaraderie of the club environment as well as the values that underpin the game and how it is played.



The ethos of life

The game's life values are often underestimated by many on the periphery of the game...

- Respect for rules, dedication and commitment, self-improvement and patience in essence the game cultivates honesty, integrity, and respect. The game is underpinned by a set of ground rules and some will call these 'morals'.
- In an era of the least resistance or easiest path, the skills that people take from the game include persistence, reflection, learning from mistakes, patience, dedication, commitment, self-belief, confidence and accountability – 'if you have a bad day, you have no one to blame but yourself"...
- And equally if things aren't going well off the course, in the club environment, many have access to a huge network of support that can be relied on (and this aspect of the game provides for a real sense of belonging).
- Some will say that the game does offer a life education –
 and this can span from the people you meet through to
 the life lessons on and off the course across to the
 values of the game and the underpinning of respect.
- For some there is a career in the game as the industry has many employment options available from the suppliers, equipment manufacturers, clubs, and governing bodies. This game and its footprint is much larger than what is recognised in the community.

The game's values are embedded in descriptors such as respect, honesty, integrity, persistence, patience, reflection and personal self learning.

"I think some of the things that don't get written about the game include the strong social network for the members. In addition we have for example 50 staff on board and half live locally. The amount of money we spend on local food, handymen, trophies, office stationery, bakery, vegies, flowers – and the local motel use for the travelling golfer – it is a very under-rated aspect of the game."

Club GM.

"The strengths of the game are fun, social, outside, fresh air. It is good for your health, you get a decent walk out of it. The social side is a great benefit - the 19th hole and having a wine or a coffee. It is great."

Govt Advisor.

"The outdoor and aesthetics of the game are a great aspect. Spending 4-5 hours in the sun or fresh air. The ability to decompress from a wired world. It is a great way to unwind and escape."

Golf Administrator.





"The life education is built around self regulation, honesty, integrity, etiquette (respect). There is not too much tainted about the game. There are no fixes at the elite or professional level – and there are no betting scandals or real drug issues."

Club GM.

"There are a couple of aspects to the community – the well being aspect of 125 acres, birds, an amenity of green space amongst a concrete jungle of the city. It is a green belt. Socially the community uses clubs for a range of reasons, from Rotary, Lions and Charity days. At this level there is fundraising aspect for all walks of life. On a case by case basis many clubs will be aligned to the local Mayoral Charity Fund. So the clubs are a bit of a charity hub at times."

Club GM.

"It does not matter who you are when you go through that front gate – it is irrelevant if you are the Premier, the Judge, the School Teacher, the Plumber, it just does not matter who you are as long as you respect each other and the game."

Golf Administrator.

"The core values are built around the etiquette and rules – there are expectations of how you behave with core features of polite manners, keeping control of yourself, there are intrinsic values of the sport and it is not so much a dog eat dog sport. There is a general respect that underlies the game. Respect and be mindful of one another."

Golf Administrator.

"It is an unbelievable community. The support network that exists here — we have people rallying around a number of cancer sufferers here — the food that gets dropped off to people in need. One guy lost his girlfriend to heart failure last week-end and 3 days later here he is sitting with his mates. They got him out here and rallied around him — so it benefits the young and the old."

Club GM.

"It is a very social game in close proximity to each other, walking on a beautiful course, talking with fellow players – you average 9-10 kms on the course each round. How many people walk 9km during the week deliberately?

Club GM.





"No other sport can give an 80 year old a great physical and mental workout combined with a four-five hour conversation with like-minded people, with a 6-7 km walk and great mental stimulation... every shot is like a puzzle – the situation, wind, the slope, the target, the obstacles – most of golf is in your mind."

Club GM

"It is a life long sport – and underneath all of this it has an impact on how you handle yourself on the golf course, it is self governed – there are no umpires and you are responsible for your own actions."

Golf Administrator

"One round of golf is a six-seven kilometre walk – 15,000 steps per day if I play golf, 3,000 if I don't."

Club GM

"The game allows people to build confidence and it often empowers people to ensure they are an engaged person in the community. It is low impact, safe - and it stimulates your brain."

Golf Administrator

"It's a physical 7km walk. It is anti-stress and a time to unplug in today's world. The calories burned are significant – and then on top of that is the mental health aspects around the social connection narrative. The clubs and courses are being a haven for real connections."

Golf Administrator.





Golf Victoria

APPENDIX C: HEALTH CONTRIBUTION

VALUATION APPROACH

The following provides an overview of the conceptual methodology towards calculating the health benefits derived from golf participation. The approach is similar to many previous whole of sport industry studies, and includes data input from the Australian Institute of Health and Welfare and the Australian Government Department of Health.

Physical Health

- ❖ Evidencing the negative effects of insufficient physical activity. The seminal study by Begg et al (2007)¹ attributed 6.6% of the burden of disease in Australia to physical inactivity. The specific diseases resulting are ischaemic heart disease, type 2 diabetes, stroke, colorectal cancer and breast cancer.
- Identifying the total number of Disability-Adjusted Life Years (DALYs) lost due to diseases caused by physical inactivity, and then calculating the equivalent contribution from a per person perspective.
- Understanding the expected life duration based on current age and gender segments, as well as the average duration in years of golf participation.
- Calculating the Value of a Statistical Life Year (VSLY) based upon Department of Finance best practice guidelines. The VSLY used is \$183,865.
- Modelling the actual number of golf participants (across age and gender segments).

❖ The basic formula for calculating physical health benefits is therefore:- Physical Health = No. Of Participants x DALYs prevented x VSLY x (1-year of Golf Participation/Expected Life Remaining).

Mental Health

Calculating the mental health benefits was similar to the method used to calculated physical health, with a number of adjustments as follows:

- ❖ Evidencing the preventative effects of physical activity on anxiety and depression. Based upon the evidence used by the Australia Government Department of Health to support the current Physical Activity & Sedentary Behaviour Guidelines for Adults (18-64 years)², we have used the conservative estimated range that physical activity has a 25% preventative impact on anxiety and depression.
- Identifying the total number of Disability-Ability Life Years (DALYs) lost due to anxiety and depression, and then calculating the equivalent contribution from a per person (by age and gender) perspective.
- ❖ The basic formula for calculating mental health benefits is therefore:- Mental Health = No. Of Participants x (DALYs from anxiety and depression/preventative effect of physical activity) x VSLY x (1-year of Golf Participation/Expected Life Remaining).





DATA SOURCES

The following data sources have been used as key inputs into the approach towards valuing the health contribution of golf. Each data source is presented in more detail over the following pages.

Physical health sources

- Health care expenditure in Australia
- Health care expenditure on Disease
- The cause of disease in Australia
- The burden of disease due to physical inactivity
- Disability-Adjusted Life Year (DALY)
- DALYs attributed to physical inactivity
- Value of a Statistical Life Year (VSLY)
- Recommended physical activity levels
- ❖ Average life expectancy and duration of golf participation

Mental health sources

- Health care expenditure on mental disorders
- ❖ The cause of disease in Australia
- The prevention of anxiety and depression
- DALYs caused by anxiety and depression





PHYSICAL HEALTH DATA INPUT

Health care expenditure in Australia³

According to the AIHW total heath expenditure on goods and services in Australia was \$154.6 billion in 2013-2014 (up by 3.1% from 2012-2013), which represents 9.8% of Gross Domestic Product (GDP) per annum. This total health care expenditure is an equivalent of \$6,639 per person in Australia.

Health care expenditure on disease4

Whilst not all heath expenditure is allocated towards a specific category (such as disease) figures from 2008-2009 AIHW expenditure data show that approximately 11% of total allocated health expenditure is spent on cardiovascular diseases (the highest expenditure category). This is followed by neoplasms (cancers) at 7% and diabetes mellitus at 2% of allocated expenditure.

The cause of disease in Australia¹

Cancer and cardiovascular disease are the two leading causes of disease in Australia, accounting for 37% of all disease. Whilst there are a range of risk factors that contribute to each disease group, physical inactivity is attributable to 3 of the top 6 diseases in Australia. This means sport participation is critical to the prevention of the overall burden of disease in the community.

Top 10 causes of disease in Australia							
Cause	% of all Diseases	% of Disease attributable to physical inactivity					
Cancers	19.0	5.6					
Cardiovascular disease	18.0	23.7					
Mental disorders	13.3	-					
Neurological & sense disorders	11.9	-					
Chronic respiratory diseases	7.1	-					
Diabetes mellitus	5.5	23.7					
Unintentional injuries	4.8	-					
Musculoskeletal diseases	4.0	-					
Genitourinary diseases	2.5	-					
Intentional injuries	2.2	-					

Source: AIHW.





PHYSICAL HEALTH DATA INPUT

The burden of disease due to physical inactivity¹

In Australia, 32.2% of the burden of disease can be attributed to 14 selected risk factors (shown opposite). Of these risk factors, physical inactivity is the fourth highest cause at 6.6%, behind tobacco (7.8%); high blood pressure (7.6%); and high body mass (7.5%).

These findings are taken from a seminal study by Begg et al (2007) for the Australian Institute of Health Welfare (AIHW). The data from this study is widely used in Australia to measure the burden of disease, and has also been used in many similar studies to this one, including Muller et al (2010)⁵ and Access Economics (2010)⁶. Note that the Begg et al (2007) study is currently being updated by the AIHW using 2010 data, however this report is not due to be released until mid-2016.

Begg et al (2007) found five specific diseases which physical inactivity is an attributing factor. Ischaemic heart disease (also commonly known as Coronary Heart Disease) has the highest attribution at 3.4%, followed by Type 2 diabetes at 1.3%.

Disease burden attributable to 14 risk factors				
Risk Factor	% Attribution			
Tobacco	7.8			
High blood pressure	7.6			
High body mass	7.5			
Physical inactivity	6.6			
• Ischaemic heart disease	• 3.4			
• Type 2 diabetes	• 1.3			
• Stroke	• 0.9			
• Colorectal cancer	• 0.6			
Breast cancer	• 0.5			
High blood cholesterol	6.2			
Alcohol	2.3			
Low fruit and vegetable consumption	2.1			
Illicit drugs	2.0			
Occupational exposures and hazards	2.0			
Intimate partner violence	1.1			
Child sexual abuse	0.9			
Urban air pollution	0.7			
Unsafe sex	0.6			
Osteoporosis	0.2			
Total*	32.2			

Note: the total is not cumulative as there is some overlap between risk factors

Source: AIHW.



PHYSICAL HEALTH DATA INPUT

Disability-Adjusted Life Year (DALY)1

The Disability-Adjusted Life Year (DALY) is a single, consistent measurement of the years of life lost due to premature death and 'healthy' years of life lost. This measurement of the burden of disease is adopted and used by the World Health Organisation (WHO).

A study by Begg et all (2007) found that 50% of the burden of disease impacts people between the ages of 15-64 years of age.

Distribution of age, disease and GV participation						
Age Group	Australian Population Distribution	Vic Golf Member Distribution	DALY Population Distribution			
0-14 years	20.0%	1.2%	8.4%			
15-44 years	43.4%	25.8%	24.1%			
45-64 years	23.8%	37.0%	25.9%			
65-74 years	6.8%	28.5%	16.3%			
75+ years	6.0%	7.5%	25.4%			

Source: ABS, AIHW, Golf Australia, SBP calculations.







PHYSICAL HEALTH DATA INPUT

Disability-Adjusted Life Year (DALY) attributed to physical inactivity¹

Based upon the findings from Begg et al (2007), it is possible to calculate the contribution of any given person, based upon their age and gender profile, to the DALYs lost as a result of physical inactivity.

Note that there is zero to very minimal DALYs lost due to physical inactivity for people between 0-24 years of age.



		Males						Females		
	0-14	15-24	25-64	65-74	75+	0-14	15-24	25-64	65-74	75+
DALYs attributed to Physical inactivity - Australian Population (A)	0	147	42,424	21,262	23,909	0	166	32,596	17,172	36,756
Australian Population, 2003 (B)	2,041,000	1,404,000	5,292,000	656,000	478,000	1,938,000	1,349,000	5,311,000	694,000	718,000
Ave. DALY per person (C) = (A/B)	-	0.0001	0.008	0.032	0.050	-	0.0001	0.006	0.025	0.051

Source: AIHW, SBP calculations.





PHYSICAL HEALTH DATA INPUT

Value of a Statistical Life Year (VSLY)⁷

The value of a statistical life year in 2015 is \$183,865.

This figure is calculated based on best practice guidelines from the Australian Government (Office of Best Practice, Department of Finance) who calculated the VSLY in 2007 as \$151,000. In accordance with their recommendations, this figure has been indexed against the CPI inflation rate from June 2007 to June 2015.

Some other studies have used a VSLY as high as \$252,014 based on a global literature review conducted by Access Economics in 2008, however SBP has chosen to use a conservative VSLY to ensure consistency with Australian government guidelines and common practice. If the higher VSLY had been used, the annual health benefit would increase from \$33.8 million to \$46.4 million in total (a \$12.6 million increase).

Recommended physical activity levels^{2, 8}

According to the Australia Government Department of Health, the current Physical Activity & Sedentary Behaviour Guidelines for Adults (18-64 years) are:

 Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount.

- Be active on most, preferably all, days every week.
- Accumulate 150 to 300 minutes (2 ½ to 5 hours) of moderate intensity physical activity or 75 to 150 minutes (1 ¼ to 2 ½ hours) of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week.
- Do muscle strengthening activities on at least 2 days each week.

For health benefits to be achieved through physical activity, a person must meet the minimum recommended levels of 3 x sessions of at least 20 minutes vigorous exercise; OR 5 x 30 minutes of moderate exercise per week. Whilst regulatory standards on the minimum recommended levels of exercise continue to evolve, it is these levels of the amount of physically activity that contribute health benefits that are representative of the currently available scientific evidence.





PHYSICAL HEALTH DATA INPUT

Average life expectancy and duration of golf participation^{9,10}

The current life expectancy of individuals at their present age is shown in the adjacent table. This has been calculated from ABS, 2015 Life Tables. It shows that a Victorian Male who is currently 25 years of age is expected to live to 83 years of age, whilst a Victorian Female 75 years of age is expected to live to 94 years of age.

The expected average duration of golf participation amongst all golf members (29 years) is higher than non-members (23 years).

The current life remaining has been factored into the calculation of the physical health benefits of golf participation by valuing the contribution of one year of being physically active out of a person's remaining life.

Golf can not claim to be the source of disease prevention for a person's entire life, however it will contribute preventative health benefits for their remaining life.

Gender/Age Group	Current Life Expectancy (Years) 9	Average Life Remaining (Years) 9	Member Golfers: Average Participation Duration (Years)	Non-Member Golfers: Average Participation Duration (Years)
Male 0-14 years	81	74	5	2
Male 15-24 years	82	62	8	2
Male 25-64 years	83	38	29	23
Male 65-74 years	86	16	37	27
Male 75+ years	93	6	41	24
Female 0-14 years	85	78	4	1
Female 15-24 years	85	66	12	7
Female 25-64 years	86	41	17	15
Female 65-74 years	88	18	25	17
Female 75+ years	94	7	31	25
Mean no. of years	NA	NA	29	23

Source: ABS, Golf Victoria, SBP calculations.





PHYSICAL HEALTH DATA INPUT

Frequency of golf participation^{9,10}

Golf club members play significantly more golf than those golfers who are non-members – both in the number of times played per year, and in the number of hours played per week.

The disparity in the playing volume between members and non-members explains why a significant proportion of the physical health benefits of participating in golf are generated by club members.

Frequency of playing golf – past 12 months	Club Member Golfers	Non-Member Golfers
Not at all	1%	5%
Less than 3 times	1%	21%
3-6 times	2%	32%
7-12 times	4%	23%
13-26 times	10%	13%
27-52 times	25%	5%
53-104 times	37%	0%
More than 104 times	21%	0%
Mean no. of times	63 times per year	8 times per year

Source: ASC, Golf Australia, SBP Calculations

Hours per week playing golf (including practice)	Victorian Member Golfers	Victorian Non- Member Golfers
None / NA	1%	7%
Less than 1 hour	4%	19%
1 - 3 hours	5%	14%
4 - 6 hours	26%	29%
7 - 9 hours	23%	15%
10 - 12 hours	23%	11%
13 - 15 hours	11%	3%
16 - 18 hours	5%	2%
19+ hours	3%	0%
Mean no. of hours/week	8.7 hours	5.1 hours

Source: Golf Victoria, SBP calculations.





PHYSICAL HEALTH DATA INPUT

Number of individuals receiving health benefits

Whilst Golf Victoria have accurate records of the number of club members (reported at 110,729 in 2014), there is less consistent and reliable data on the number of non-member golfers in Victoria.

In order to determine the number of non-member golfers, SBP utlised all publicly available data relating to golf participation and developed five distinct methods of calculation. The data sources used included ERASS data from 2001 to 2010, ABS sport participation data from 2011/2012 and 2013/2014, and various Repucom statistics reported by Golf Australia through participation reports (in particular, figures relating to participation in 2013 and 2015).

Key variables in these methods include Victoria's share of the Australian golf participation market, the percentage of all golfers who play socially, the number of Victorian golf members, and the proportion of the Australian and Victorian population that play golf.

The five distinct calculations estimated the non-member golfer segment at 186,842; 190,275; 193,990; 198,665; and 190,495 respectively. For the purposes of this report, we have utilised the average of each of the five estimates (the average being 192,066.

Golfer Segment	Number of golfers
Male 0-14 years	5,641
Male 15-24 years	4,624
Male 25-64 years	149,541
Male 65-74 years	50,321
Male 75+ years	10,973
Female 0-14 years	730
Female 15-24 years	931
Female 25-64 years	52,016
Female 65-74 years	25,271
Female 75+ years	2,746
Total	302,795

Golfer Segment	Number of golfers
Club Members	110,729
Non-Members	192,066
Total	302,795

Source: Golf Australia, Golf Victoria, ASC, SBP Calculations





MENTAL HEALTH DATA INPUT

Health care expenditure on mental disorders⁴

Whilst not all heath expenditure is allocated towards a specific category (such as disease) figures from 2008-2009 AIHW expenditure data show that approximately 8% of total allocated health expenditure is spent on mental disorders — this being the third highest disease expenditure category.

The cause of disease in Australia¹

Following cancer and cardiovascular disease, mental disorders are the third most common causes of disease in Australia, accounting for 13.3% of all disease. Within the mental disorder disease category, anxiety and depression was the largest specific cause, accounting for 7.3% of all disease.

Top 10 causes of disease in Australia					
Cause	% of all Diseases				
Cancers	19				
Cardiovascular disease	18				
Mental disorders	13.3				
Anxiety and Depression	• 7.3				
Neurological & sense disorders	11.9				
Chronic respiratory diseases	7.1				
Diabetes mellitus	5.5				
Unintentional injuries	4.8				
Musculoskeletal diseases	4				
Genitourinary diseases	2.5				
Intentional injuries	2.2				

Source: AIHW.





MENTAL HEALTH DATA INPUT

The prevention of anxiety and depression⁸

Based upon the evidence used by the Australia Government Department of Health to support the current Physical Activity & Sedentary Behaviour Guidelines for Adults (18-64 years), we have estimated that physical activity has a 25% preventative impact on anxiety and depression.

The 25% preventative impact has been used as a conservative estimate for a number of reasons. The Brown et al (2012) report identifies a range of studies which supported physical activity as protective against the onset of anxiety disorders and symptoms, with a reduction impact of 48-53%.

The Brown et al (2012) report also notes that there is substantial evidence that regular physical activity protects against the onset of depression symptoms and major depressive disorders. The reduction impact across a number of studies, was between 25-40% lower.

Whilst the evidence used by the Department of Health to support the physical activity guidelines address anxiety and depression separately, Begg et al (2007) do not. Begg et al (2007) reasoned that because of high levels of comorbidity between depression and anxiety, as well as the largely similar treatment pathways, these conditions should be combined. This resulted in the burden of disease as measured by DALYs to be grouped together for both anxiety and depression.

Given that we know the collective impact of anxiety and depression in terms of DALYs, and separately the preventative impact physical activity has on both anxiety and depression, we have chosen the lowest preventative impact (25%) in order to take a conservative approach.







MENTAL HEALTH DATA INPUT

Disability-Adjusted Life Year (DALY) caused by anxiety and depression¹

The findings from Begg et al (2007) show that anxiety and depression has a comparatively larger impact on a per person basis amongst the younger age groups, and females compared to males.

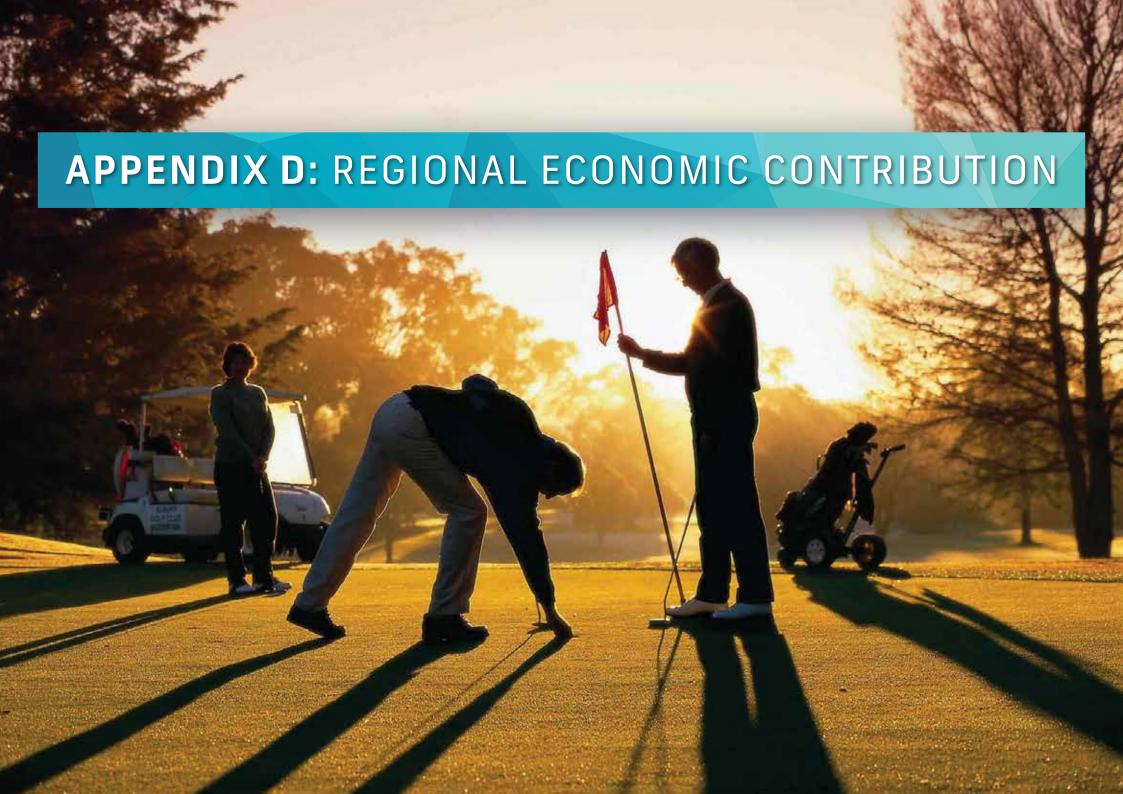
For the mental health aspects of this project we have calculated the number of DALYs caused by anxiety and depression that are likely to have been prevented due to participation in physical activity.

Across the various age segments, 25% of all DALY's lost due to anxiety and depression occur between the ages of 15-24, whilst 66% of all DALY's are lost to females.

	Males				Females					
	0-14	15-24	25-64	65-74	75+	0-14	15-24	25-64	65-74	75+
DALYs caused by Anxiety and Depression - Australian Population (A)	9,554	17,868	36,126	1,430	343	15,507	29,946	80,515	321	175
DALYs prevented due to participation in physical activity (B) = (A x 25%)	2,389	4,467	9,032	358	86	3,877	7,487	20,129	80	44
Australian Population, 2003 (C)	2,041,000	1,404,000	5,292,000	656,000	478,000	1,938,000	1,349,000	5,311,000	694,000	718,000
Ave. DALY prevented per person (D) = (B/C)	0.0012	0.0032	0.0017	0.0005	0.0002	0.0020	0.0055	0.0038	0.0001	0.0001

Source: AIHW, SBP calculations.







Region	Association and Club Expenditure	Regular Participants	Club Events	School Events and Comps	Sub Total Direct	Golf Tourism	Retail and Coaching	Total Ancillary	MyGolf, Qantas Social, Golf Club, Other Programs	Total Direct and Ancillary Contribution	Share of Golf	Share of Population
Barwon-West	\$62,371,439	\$27,108,874	\$1,426,407	\$726,528	\$91,633,249	\$16,420,399	\$22,902,998	\$39,323,397	NA	\$130,956,646	15.45%	6.82%
Central Highlands	\$16,480,328	\$7,354,407	\$1,450,011	\$90,816	\$25,375,562	\$11,751,856	\$6,342,419	\$18,094,275	NA	\$43,469,837	5.13%	2.84%
Gippsland	\$34,182,188	\$13,775,231	\$1,935,094	\$408,672	\$50,301,185	\$17,875,860	\$12,572,379	\$30,448,239	NA	\$80,749,423	9.53%	4.54%
Hume	\$21,850,265	\$10,895,169	\$1,409,367	\$553,410	\$34,708,211	\$14,970,060	\$8,675,040	\$23,645,100	NA	\$58,353,311	6.89%	4.70%
Loddon Mallee	\$26,437,320	\$12,904,491	\$1,039,653	\$363,264	\$40,744,728	\$10,700,024	\$10,183,819	\$20,883,843	NA	\$61,628,571	7.27%	5.10%
Wimmera	\$8,235,810	\$5,379,028	\$28,843	\$45,408	\$13,689,088	\$566,307	\$3,421,478	\$3,987,785	NA	\$17,676,874	2.09%	1.12%
Total Non- Metropolitan	\$169,557,350	\$77,417,200	\$7,289,374	\$2,188,098	\$256,452,022	\$72,284,507	\$64,098,133	\$136,382,640	NA	\$392,834,662	46.35%	25.11%
Eastern Melbourne	\$85,740,710	\$17,019,842	\$3,349,700	\$879,780	\$106,990,031	\$32,258,165	\$26,741,303	\$58,999,468	NA	\$165,989,499	19.58%	24.22%
Northern Melbourne	\$21,553,901	\$3,693,046	\$329,069	\$227,040	\$25,803,056	\$4,241,435	\$6,449,268	\$10,690,702	NA	\$36,493,759	4.31%	15.01%
Outer Eastern Melbourne	\$38,991,868	\$6,476,507	\$559,809	\$181,632	\$46,209,817	\$5,654,959	\$11,549,774	\$17,204,733	NA	\$63,414,550	7.48%	12.95%
South East Melbourne	\$60,298,428	\$15,938,286	\$3,101,919	\$644,226	\$79,982,859	\$28,571,778	\$19,991,076	\$48,562,854	NA	\$128,545,713	15.17%	6.66%
Western Melbourne	\$36,081,785	\$3,064,844	\$912,482	\$363,264	\$40,422,374	\$9,730,088	\$10,103,249	\$19,833,338	NA	\$60,255,712	7.11%	16.05%
Total Metropolitan	\$242,666,692	\$46,192,525	\$8,252,979	\$2,295,942	\$299,408,138	\$80,456,424	\$74,834,671	\$155,291,095	NA	\$454,699,233	53.65%	74.89%
TOTAL	\$412,224,042	\$123,609,725	\$15,542,353	\$4,484,040	\$555,860,160	\$152,740,931	\$138,932,804	\$291,673,735	\$2,214,241	\$849,748,136	100.00%	100.00%





LGA	Region	Association and Club Expenditure	Regular Participants, School Programs and Events	Golf Tourism, Retail and Coaching	Total Direct and Ancillary Contribution
Colac Otway	Barwon-West	\$4,839,149	\$1,367,184	\$2,243,875	\$8,450,208
Corangamite	Barwon-West	\$2,293,008	\$990,418	\$1,166,992	\$4,450,418
Glenelg	Barwon-West	\$3,274,346	\$1,156,433	\$1,453,764	\$5,884,543
Golden Plains	Barwon-West	\$674,917	\$705,696	\$1,974,953	\$3,355,565
Greater Geelong and Queenscliffe	Barwon-West	\$29,420,113	\$13,927,015	\$14,232,112	\$57,579,239
Moyne	Barwon-West	\$5,504,743	\$2,380,971	\$5,079,791	\$12,965,506
Southern Grampians	Barwon-West	\$2,326,112	\$1,285,778	\$902,763	\$4,514,653
Surf Coast	Barwon-West	\$10,779,088	\$5,130,679	\$5,952,725	\$21,862,492
Warrnambool	Barwon-West	\$3,259,963	\$2,317,636	\$6,316,423	\$11,894,022
Ballarat	Central Highlands	\$9,185,507	\$5,076,545	\$13,340,337	\$27,602,389
Central Goldfields	Central Highlands	\$634,251	\$663,389	\$324,335	\$1,621,974
Hepburn	Central Highlands	\$3,269,286	\$1,540,477	\$2,832,041	\$7,641,804
Moorabool	Central Highlands	\$2,716,367	\$1,041,499	\$1,285,575	\$5,043,441
Pyrenees	Central Highlands	\$674,917	\$573,324	\$311,988	\$1,560,229
Bass Coast	Gippsland	\$4,250,624	\$1,455,649	\$2,086,181	\$7,792,454
Baw Baw	Gippsland	\$7,500,467	\$2,760,899	\$5,013,623	\$15,274,989
East Gippsland	Gippsland	\$7,172,823	\$4,225,018	\$11,907,204	\$23,305,045
Latrobe	Gippsland	\$5,944,987	\$2,752,401	\$4,993,639	\$13,691,027
South Gippsland	Gippsland	\$4,928,043	\$2,986,913	\$4,520,793	\$12,435,748
Wellington	Gippsland	\$4,385,244	\$1,938,116	\$1,926,799	\$8,250,159
Alpine	Hume	\$1,663,817	\$1,738,176	\$5,812,989	\$9,214,982
Benalla	Hume	\$2,163,448	\$948,746	\$1,124,194	\$4,236,388
Greater Shepparton	Hume	\$6,569,915	\$3,617,330	\$6,718,613	\$16,905,858
Indigo	Hume	\$644,371	\$467,128	\$277,810	\$1,389,309
Mansfield	Hume	\$2,122,782	\$673,471	\$698,901	\$3,495,154
Mitchell	Hume	\$1,663,817	\$1,211,488	\$1,284,967	\$4,160,272
Moira	Hume	\$2,244,780	\$1,286,516	\$5,112,314	\$8,643,609



LGA	Region	Association and Club Expenditure	Regular Participants, School Programs and Events	Golf Tourism, Retail and Coaching	Total Direct and Ancillary Contribution
Murrindindi	Hume	\$121,998	\$393,194	\$128,768	\$643,960
Strathbogie	Hume	\$644,371	\$641,209	\$321,320	\$1,606,900
Towong	Hume	\$137,178	\$211,048	\$87,036	\$435,262
Wangaratta	Hume	\$60,906	\$251,079	\$424,304	\$736,289
Wodonga	Hume	\$3,812,882	\$1,418,562	\$1,653,884	\$6,885,328
Campaspe	Loddon Mallee	\$2,853,545	\$1,779,813	\$2,567,969	\$7,201,326
Gannawarra	Loddon Mallee	\$1,192,230	\$873,468	\$862,631	\$2,928,328
Greater Bendigo	Loddon Mallee	\$10,303,226	\$4,577,443	\$8,458,004	\$23,338,673
Loddon	Loddon Mallee	\$264,236	\$492,669	\$189,182	\$946,087
Macedon Ranges	Loddon Mallee	\$4,482,739	\$2,275,881	\$3,445,487	\$10,204,108
Mildura	Loddon Mallee	\$2,807,819	\$1,570,838	\$1,787,062	\$6,165,720
Mount Alexander	Loddon Mallee	\$634,251	\$528,291	\$290,568	\$1,453,111
Swan Hill	Loddon Mallee	\$3,899,274	\$2,209,005	\$3,282,940	\$9,391,218
Ararat	Wimmera	\$2,219,294	\$702,372	\$730,247	\$3,651,913
Buloke	Wimmera	\$213,450	\$479,226	\$173,129	\$865,805
Hindmarsh	Wimmera	\$644,371	\$524,259	\$292,090	\$1,460,719
Horsham	Wimmera	\$3,422,627	\$1,607,371	\$1,823,515	\$6,853,513
Northern Grampians	Wimmera	\$756,249	\$798,486	\$388,594	\$1,943,329
West Wimmera	Wimmera	\$243,996	\$560,553	\$201,091	\$1,005,640
Yarriambiack	Wimmera	\$735,823	\$781,011	\$379,121	\$1,895,954
Boroondara	Eastern Melbourne	\$9,620,696	\$2,902,588	\$8,989,669	\$21,512,952
Glen Eira	Eastern Melbourne	\$3,254,903	\$743,211	\$1,439,259	\$5,437,373
Kingston	Eastern Melbourne	\$32,890,195	\$7,719,498	\$15,202,386	\$55,812,079
Knox	Eastern Melbourne	\$4,401,407	\$776,404	\$1,514,134	\$6,691,944
Manningham	Eastern Melbourne	\$5,377,685	\$813,124	\$1,893,669	\$8,084,478
Maroondah	Eastern Melbourne	\$4,245,564	\$537,113	\$1,195,392	\$5,978,069
Monash	Eastern Melbourne	\$19,426,071	\$5,963,080	\$22,697,074	\$48,086,225



LGA	Region	Association and Club Expenditure	Regular Participants, School Programs and Events	Golf Tourism, Retail and Coaching	Total Direct and Ancillary Contribution
Port Phillip	Eastern Melbourne	\$2,122,782	\$429,970	\$1,204,347	\$3,757,100
Stonnington	Eastern Melbourne	\$552,919	\$156,702	\$743,671	\$1,453,293
Whitehorse	Eastern Melbourne	\$3,848,488	\$1,207,631	\$4,119,867	\$9,175,986
Banyule	Northern Melbourne	\$8,103,387	\$1,710,158	\$3,805,413	\$13,618,958
Darebin	Northern Melbourne	\$1,146,504	\$221,441	\$341,907	\$1,709,852
Hume	Northern Melbourne	\$2,680,761	\$451,521	\$782,889	\$3,915,170
Moreland	Northern Melbourne	\$3,254,903	\$954,842	\$3,028,397	\$7,238,142
Nillumbik	Northern Melbourne	\$2,122,782	\$360,083	\$1,186,879	\$3,669,744
Whittlesea	Northern Melbourne	\$4,245,564	\$551,111	\$1,545,217	\$6,341,892
Cardinia	Outer Eastern Melbourne	\$9,663,915	\$1,442,735	\$3,562,307	\$14,668,957
Casey	Outer Eastern Melbourne	\$11,892,551	\$2,377,085	\$6,202,731	\$20,472,367
Greater Dandenong	Outer Eastern Melbourne	\$3,807,822	\$655,786	\$1,555,606	\$6,019,214
Yarra	Outer Eastern Melbourne	\$4,360,741	\$1,078,166	\$2,365,681	\$7,804,588
Yarra Ranges	Outer Eastern Melbourne	\$9,266,839	\$1,664,177	\$3,518,409	\$14,449,424
Bayside	South East Melbourne	\$16,024,648	\$4,455,557	\$10,978,438	\$31,458,642
Frankston	South East Melbourne	\$13,998,385	\$3,097,265	\$6,758,132	\$23,853,782
Mornington Peninsula	South East Melbourne	\$30,275,395	\$12,131,609	\$30,826,285	\$73,233,289
Brimbank	Western Melbourne	\$2,163,448	\$811,101	\$3,689,606	\$6,664,155
Hobsons Bay	Western Melbourne	\$5,401,403	\$1,235,875	\$4,201,447	\$10,838,726
Maribyrnong	Western Melbourne	\$3,254,903	\$599,722	\$1,183,414	\$5,038,039
Melbourne	Western Melbourne	\$16,650,666	\$48,686	\$4,173,869	\$20,873,221
Melton	Western Melbourne	\$2,680,761	\$408,632	\$1,684,802	\$4,774,195
Moonee Valley	Western Melbourne	\$552,919	\$349,150	\$2,201,670	\$3,103,739
Wyndham	Western Melbourne	\$5,377,685	\$887,424	\$2,698,529	\$8,963,638
Total		\$412,224,042	\$143,636,118	\$291,673,735	\$847,533,895





Total Annual Contribution	\$883,594,884
Total Annual Economic Contribution	\$849,748,136
Direct Contribution	\$558,074,401
Golf Clubs and Associations	\$412,224,042
Golf Participants	\$123,609,725
Club Events	\$15,542,353
School Events	\$4,484,040
Golf Programs (MyGolf etc)	\$2,214,241
Ancillary Contribution	\$291,673,735
Golf Tourism	\$152,740,931
Golf Coaching and Retail	\$138,932,804
Total Annual Health Contribution – All Golfers	\$33,846,748
Physical Health Benefit	\$32,707,320
Mental Health Benefit	\$1,139,428
Total Annual Health Contribution – Member Golfers	\$29,767,800
Physical Health Benefit	\$28,904,632
Mental Health Benefit	\$863,168
Total Annual Health Contribution – Non-Member Golfers	\$4,078,948
Physical Health Benefit	\$3,802,688
Mental Health Benefit	\$276,260

Total Number of Victorian Golfers	302,795
Member Golfers	110,729
Ave. Duration of Participation	29 years
Ave. Playing Frequency	63 times per year
Ave. Weekly Play	8.7 hours
Non-Member Golfers	192,066
Ave. Duration of Participation	23 years
Ave. Playing Frequency	8 times per year
Ave. Weekly Play	5.1 hours
Total Number of Victorian Golf Courses	374
Total Number of Victorian Driving Ranges	35
Total Number of Golf-related Tourism Trips	295,555
Total Number of Metropolitan Golf Rounds Played	1,847,701
Total Number of Non-Metropolitan Golf Rounds Played	1,935,430
Total Number of Program Participants	10,529
Total Number of School Participants	38,784
Total Number of Event Participants	40,931



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