ACIL ALLEN CONSULTING

REPORT TO
THE WEST AUSTRALIAN FOOTBALL COMMISSION
OCTOBER 2018

THE ECONOMIC AND SOCIAL BENEFITS OF CLUB-BASED FOOTBALL IN WESTERN AUSTRALIA

INTERNAL REPORT
FINAL

ACIL ALLEN CONSULTING PTY LTD
ABN 68 102 652 148

LEVEL NINE
60 COLLINS STREET
MELBOURNE VIC 3000
AUSTRALIA
T+61 3 8650 6000
F+61 3 9654 6363

LEVEL ONE
50 PITT STREET
SYDNEY NSW 2000
AUSTRALIA
T+61 2 8272 5100
F+61 2 9247 2455

LEVEL FIFTEEN
127 CREEK STREET
BRISBANE QLD 4000
AUSTRALIA
T+61 7 3009 8700
F+61 7 3009 8799

LEVEL ONE
15 LONDON CIRCUIT
CANBERRA ACT 2600
AUSTRALIA
T+61 2 6103 8200
F+61 2 6103 8233

LEVEL TWELVE, BGC CENTRE
28 THE ESPLANADE
PERTH WA 6000
AUSTRALIA
T+61 8 9449 9600
F+61 8 9322 3955

167 FLINDERS STREET
ADELAIDE SA 5000
AUSTRALIA
T +61 8 8122 4965

ACILALLEN.COM.AU

REPORT AUTHORS

RYAN BUCKLAND
SENIOR CONSULTANT
R.BUCKLAND@ACILALLEN.COM.AU

JOHN NICOLAOU
EXECUTIVE DIRECTOR, WA & NT
J.NICOLAOU@ACILALLEN.COM.AU

NICK MARSH
ANALYST
N.MARSH@ACILALLEN.COM.AU

C O N T E N T S

EXECUTIVE SUMMARY

The Western Australian Football Commission ('WAFC') has commissioned ACIL Allen Consulting ('ACIL Allen') to complete an assessment of the economic and social benefits of club-based football in Western Australia. ACIL Allen has completed this assessment for the 2017-18 financial year using two modelling techniques, described briefly below.

- An economic contribution study of the consolidated West Australian Club-based Football industry ('the industry'), comprising of the WAFC, the Fremantle Football Club ('FFC'), the West Coast Eagles ('WCE'), the nine West Australian Football League ('WAFL') clubs, and the four community competitions affiliated to the WAFC (the WA Amateurs Football League, the WA Country Football League, the WA Masters Football League, and the WA Women's' Football League). The study was completed using ACIL Allen's in-house Input Output (IO) modelling framework.
- A "Social Return on Investment" (SROI) study, centred on the quantification of a number of benefits of participation in organised football activities, and discussion of additional unquantified benefits. SROI is an emerging form of analysis which seeks to value the intangible, involving the development of an overarching impact framework, which articulates how the activities of the program, policy, investment or entity contribute to changes experienced by the stakeholders they impact. A typical SROI study involves the determination of the changes fostered by the program, policy, investment or entity, and then applying a logical framework to determine whether the identified benefits can be converted into financial terms for the purposes of valuation. When benefits cannot be quantified, the SROI framework is used to describe them qualitatively and support them with the use of examples or case studies.

A more detailed methodology for both the economic contribution study and the SROI analysis is provided in Section 2.

As part of its study, ACIL Allen considered a total of 18 benefits associated with the football industry and participation in organised, club-based football in the State; 11 of these benefits were quantified (one being the economic contribution study results and the other ten being as part of the SROI analysis), and seven were described qualitatively (as part of the SROI analysis). These benefits are described in detail in Sections 2, 3, and 4 of this report.

A summary of the results of the analysis are presented below.

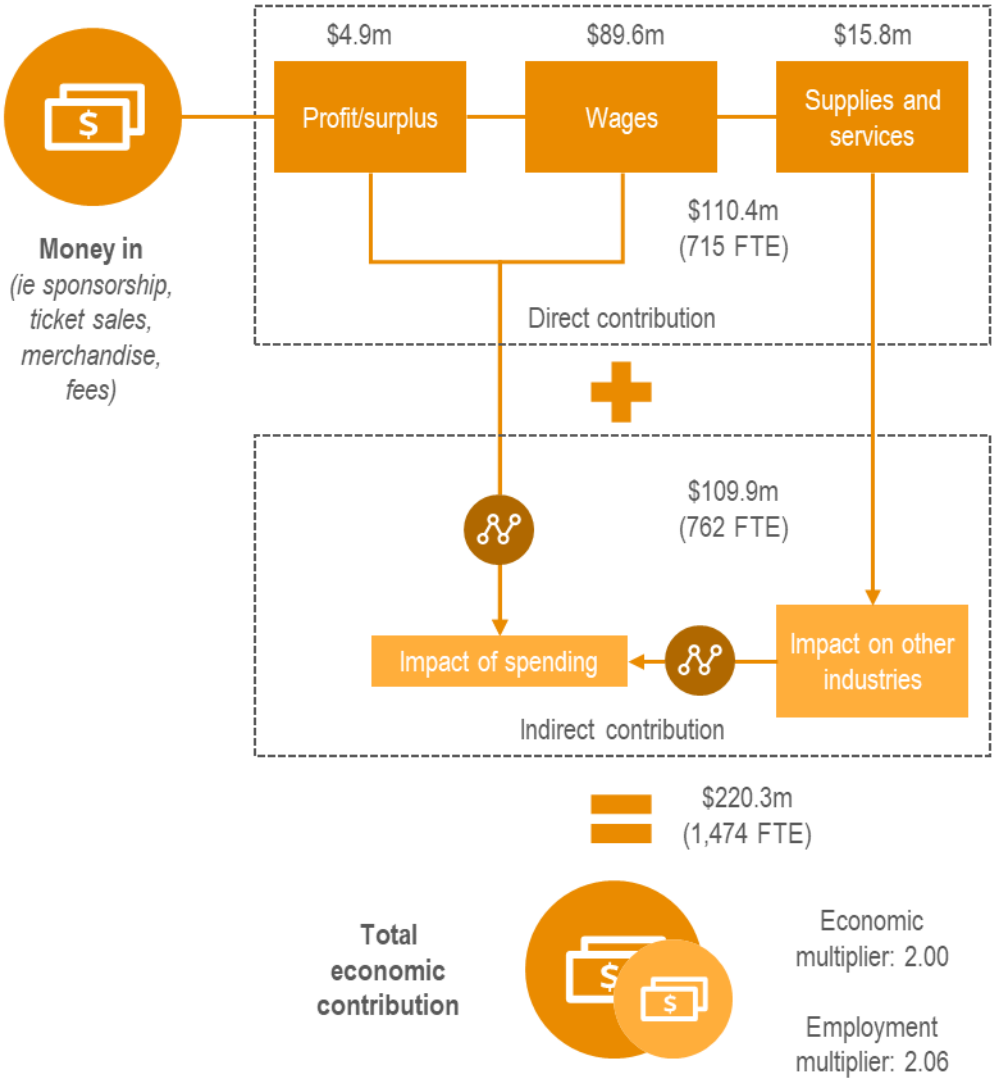
Economic contribution study

The economic contribution study was completed for the 2016-17 financial year, as at the time of the study it was the latest year that complete financial information for the Western Australian football industry was available. Overall, ACIL Allen estimates that the WA football industry directly contributed $110.4 million in economic output (measured in gross value added[1] terms) to Western Australia in

[1] Gross Value Added (GVA) is the output of an industry or sector minus intermediate consumption. GVA therefore represents the value of all goods and services produced, minus the cost of all inputs and raw materials used to produce that good or service.

2016-17 (refer to **Figure ES 1**). This level of direct value added in turn generated flow-on (or indirect) value add of $109.9 million. Overall, ACIL Allen estimates that the **WA football industry contributed $220.3 million to the WA economy in 2016-17**. This is equivalent to 0.1 per cent of the State's economy (Gross State Product) or 17.2 per cent of the Arts and Recreation Services sector. The implied economic value added multiplier is 2.00 (the actual multiplier is 1.966), which means that for every dollar spent by the WA football industry in Western Australia, additional spending of $1.00 is generated across Western Australia's economy.

FIGURE ES 1 ECONOMIC CONTRIBUTION OF FOOTBALL IN WESTERN AUSTRALIA, RESULTS SUMMARY



SOURCE: ACIL ALLEN CONSULTING

In terms of employment, the WA football industry directly accounted for 715 FTE jobs in 2016-17. A further 762 indirect FTE jobs were generated throughout the economy as a result of the WA football industry.

Overall, the **WA football industry accounted for 1,477 direct and indirect FTE jobs in 2016-17**. The implied employment multiplier is 2.06, meaning that for every direct FTE job generated by the WA football industry in Western Australia, a further 1.06 FTE jobs were generated throughout the economy.

Social benefits

Overall, ACIL Allen estimates the football industry in Western Australia delivered gross social benefits (prior to attribution) of **$377.4 million** to the **75,941 participants** involved in organised club-based football in the State. These participants were active for a total of **11.4 million hours**, of which 2.2 million were provided by coaches, umpires, administrators and other general volunteers involved in clubs.

The largest share of benefits (40.2 per cent) is derived from the physical and mental health benefits of participation, with ACIL Allen valuing this at **$151.9 million** in gross terms. Mental health benefits for younger participants ($74.6 million) are the largest benefit in this sub-group, followed by physical health benefits ($67.8 million), suicide prevention ($8.6 million) and the cost savings associated with reduced prevalence of non-communicable diseases ($0.8 million).

Indirect economic benefits of involvement in organised club-based football are the second largest category, creating **$103.7 million** of gross benefits for participants (27.5 per cent of total). Job matching benefits are the largest benefit in this sub-group, creating $51.8 million of benefits. Other benefits include the realised economic value of volunteering hours donated by persons engaged in the labour force ($32.6 million) and workforce productivity benefits ($19.2 million).

Personal wellbeing is the third largest benefit, creating **$82 million** of social value for participants (21.7 per cent). This is calculated as a single benefit, using a subjective wellbeing approach that determines how much "free utility" is captured by participants in organised club-based football by measuring how much a participant would be willing to pay if faced with the requirement to do so. Subjective wellbeing means different things to different people. More information on this approach is included in the table below.

The remaining quantified benefits account for **$39.8 million** of social value (10.5 per cent). The majority of this is attributed to the education-related benefits which are captured by participants under the age of 18 ($38.3 million), while there are $1.5 million of cost savings that result from reduced recidivism.

In addition to the above quantified benefits, ACIL Allen's review of relevant literature, previous studies and stakeholder consultation finds there are an additional seven social benefits that are likely to be generated by participation in organised, club-based football. However, due to the limitations of the study and/or available evidence these benefits have not been quantified. These benefits are:

- Social inclusion
- Civic pride
- Empowerment
- Social connectedness
- Regional population stability
- Crime reduction
- Cultural integration

Social Return on Investment

An SROI framework should only consider the social benefits which arise that can be attributed to the particular policy, program, investment or entity. The benefits presented above are the gross benefits, which does not consider the attribution issue. To complete this attribution, ACIL Allen has used the Australian Sports Commission's AusPlay data, which sets a baseline level of participation in organised club-based sport by demographic group, and the share of club based participation attributable to Australian rules football. This has the effect of deflating gross social benefit values relative to an approach of assuming all quantified benefits arise as a result of the football industry.

Overall, ACIL Allen estimates the football industry in Western Australia delivered attributable social benefits of **$224.6 million** to the **75,941 participants** involved in organised club-based football in the State. These participants were active for a total of **11.4 million hours**, of which 2.2 million were provided by coaches, umpires, administrators and other general volunteers involved in clubs.

The largest share of benefits is derived from the physical and mental health benefits of participation, with ACIL Allen valuing this at **$78.6 million** in gross terms. Mental health benefits for younger participants ($41.0 million) are the largest benefit in this sub-group, followed by physical health benefits ($32.6 million), suicide prevention ($4.6 million) and the cost savings associated with reduced prevalence of non-communicable diseases ($0.4 million).

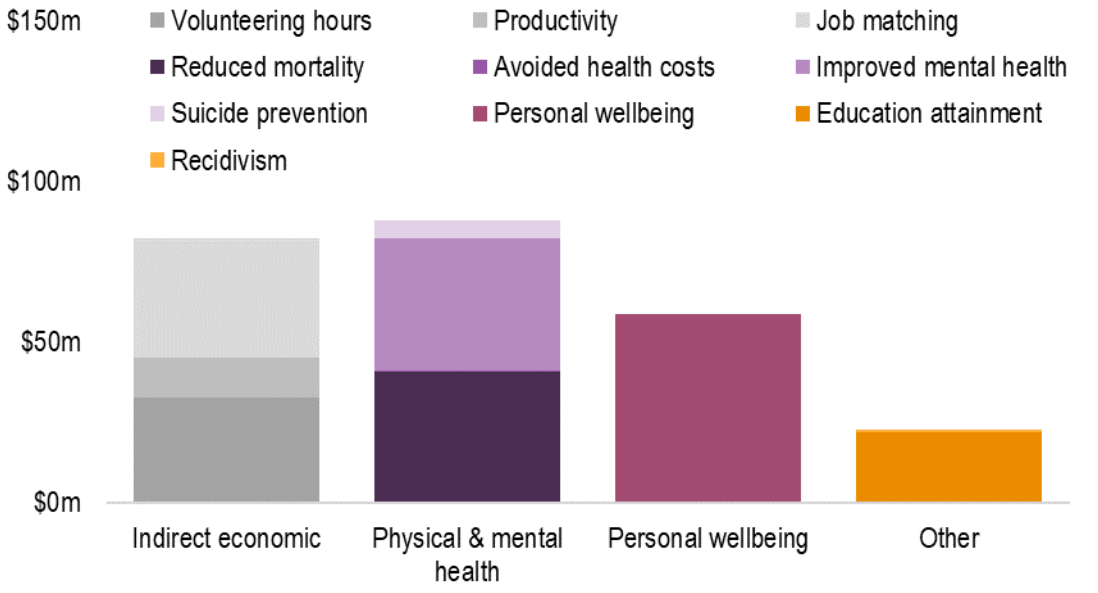
Indirect economic benefits of involvement in organised club-based football are the second largest category, creating **$76.4 million** of gross benefits for participants. Job matching benefits are the largest benefit in this sub-group, creating $33.2 million of benefits. Other benefits include the realised economic value of volunteering hours donated by persons engaged in the labour force ($32.6 million) and workforce productivity benefits ($10.6 million). The volunteering hours benefit does not change from the gross analysis as it is assumed 100 per cent of volunteer hours are an attributable benefit.

Personal wellbeing is the third largest benefit, creating **$52.0 million** of social value for participants. This is calculated as a single benefit, using a subjective wellbeing approach that determines how much "free utility" is captured by participants in organised club-based football by measuring how much a participant would be willing to pay if faced with the requirement to do so. Subjective wellbeing means different things to different people. More information on this approach is included in the table below.

The remaining quantified benefits account for **$17.5 million** of social value. The majority of this is attributed to the education-related benefits which are captured by participants under the age of 18 ($16.7 million), while there are $0.9 million of cost savings that result from reduced recidivism.

The attributable social benefits of football participation are summarised below (**Figure ES 2**).

FIGURE ES 2 ATTRIBUTABLE SOCIAL BENEFITS OF FOOTBALL IN WESTERN AUSTRALIA



SOURCE: ACIL ALLEN CONSULTING

An additional consideration is the cost of the football industry in the State, which should be net off attributable benefits to determine the total net benefit of football in Western Australia. The cost base of the football industry is also used to determine the SROI ratio. Costs are considered on the basis of real costs (being the actual expenditure of the WAFC, the AFL clubs, the WAFL clubs and affiliated competitions) and social costs (in this study, valuing the volunteering hours required to run the industry).

ACIL Allen has calculated the real cost of the football industry in Western Australia in the 2016-17 football year was $164.8 million. This represents the actual expenditures of the WAFC, WCE, FFC, WAFL clubs and the community competitions governed by the WAFC. The social cost included in the study is $40.6 million, being the total estimated volunteering hours in scope of the study multiplied by

the Australian minimum wage. As such, the total calculated cost base for SROI purposes is **$207.2 million**.

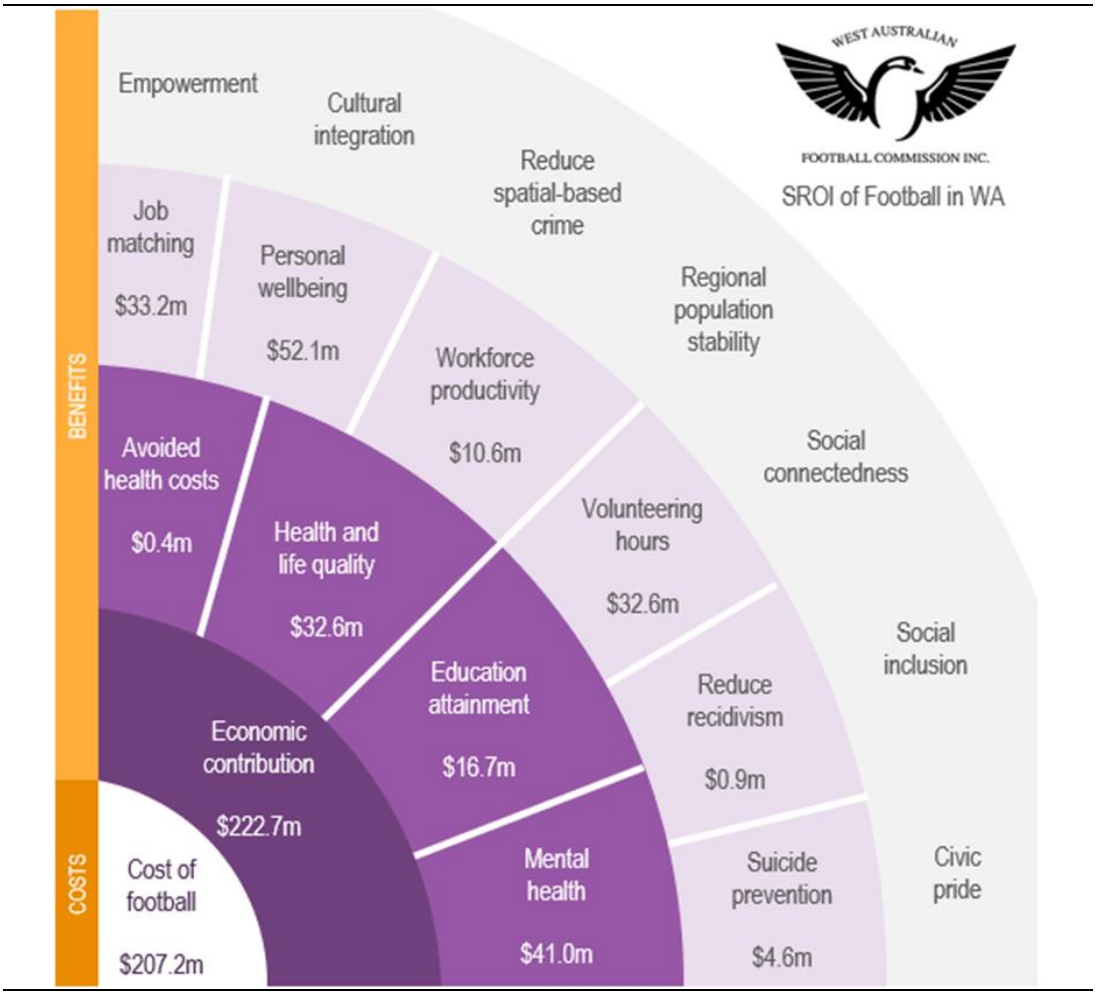
The SROI of football in Western Australia

Using the above, ACIL Allen calculates the gross SROI of the football industry in Western Australia is **$447.3 million**, bring $222.7 million of economic benefits and $224.6 million of attributable social benefits. ACIL Allen estimates **the SROI of the football industry in Western Australia is 2.16**, implying for every dollar of inputs the football industry produces $2.16 worth of economic and attributable social benefits for Western Australia.

At an individual participant level, the attributable social benefits included in the SROI framework total $2,957 per participant, which is equivalent to a 5.2 per cent increase in the estimated mean equivalised household disposable income for a typical Western Australian household in the 2017-18 financial year.

In net terms, the SROI of the football industry in Western Australia is **$240.0 million**. This compares the economic and attributable social benefits less the real and social costs incurred to produce the benefits. Given this figure is positive, it implies the football industry in Western Australia produces a benefit which exceeds the overall cost to society of the provision of the activities that deliver benefits.

FIGURE ES 3 SROI OF FOOTBALL IN WESTERN AUSTRALIA – 2017-18



1 INTRODUCTION AND PRELIMINARIES

1.1 Scope of works

ACIL Allen Consulting ('ACIL Allen') was engaged by the Western Australian Football Commission ('WAFC') in June 2018 to complete an assessment of the economic and social benefits of the West Australian Football industry to Western Australia. The engagement centred on the delivery of three pieces of work:

— An economic contribution study of the consolidated West Australian Club-based Football industry ('the industry'), comprising of the WAFC, the Fremantle Football Club ('FFC'), the West Coast Eagles ('WCE'), the nine West Australian Football League ('WAFL') clubs, and the four community competitions affiliated to the WAFC (the WA Amateurs Football League, the WA Country Football League, the WA Masters Football League, and the WA Women's' Football League). The study was completed using ACIL Allen's in-house Input Output (IO) modelling framework.

— A "Social Return on Investment" (SROI) study, centred on the quantification of a number of benefits of participation in organised football activities, and discussion of additional unquantified benefits. SROI is an emerging form of analysis which seeks to value the intangible, involving the development of an overarching impact framework, which articulates how the activities of the program, policy, investment or entity contribute to changes experienced by the stakeholders they impact. A typical SROI study involves the determination of the changes fostered by the program, policy, investment or entity, and then applying a logical framework to determine whether the identified benefits can be converted into financial terms for the purposes of valuation . When benefits cannot be quantified, the SROI framework is used to describe them qualitatively and support them with the use of examples or case studies.

The development of the SROI framework was primarily research driven, with some consultation with key representatives arranged by the WAFC. This included the formation of a Project Steering Committee, an Industry Workshop, and some targeted consultation with industry representatives by the WAFC.

In calculating the economic contribution of the industry, ACIL Allen received financial statements for each entity for the 2017 football year (1 December 2016 to 30 November 2017). The scope of economic contribution study is limited to the activities undertaken by the WAFC, FFC, WCE, the WAFL clubs and community competitions as disclosed in their 2017 football year annual reports. This excludes the contribution of the operations of stadia and the "event" side of football (ie the game day expenditure of persons attending games), as this was outside of the scope of the study.

In calculating the SROI of football to the State, ACIL Allen relied upon participation data provided by the WAFC for the 2018 football year (1 December 2017 to 30 November 2018), and supplemented this with targeted questions regarding specific aspects of participation. In developing the SROI framework, ACIL Allen relied upon publicly available research which linked participation in organised

sports activities to the achievement outcomes for participants, and used publicly available information to build the calculations required to determine the SROI. More information regarding ACIL Allen's methodology is provided in Section 2.

1.2 Glossary and key terms

Where possible, ACIL Allen has avoided the use of technical jargon in the presentation of this report. However there are a range of economic terms and acronyms used to discuss modelling inputs and outputs. These are presented below.

1.2.1 Terms used

The following terms and abbreviations have been used in this report.

TABLE 1.1 TERMS USED

Term	Description
Employment	The number of full time equivalent job years created as a result of a project or expenditure in the economy, which includes direct and indirect (flow-on) employment.
Gross product or real economic output	Gross product is a measure of the output generated by an economy over a period of time (typically a year). It represents the total dollar value of all finalised goods and services produced over a specific time period and is considered as a measure of the size of the economy. At a national level, it is referred to as Gross Domestic Product (GDP); at the state level, Gross State Product (GSP); while at a regional level, Gross Regional Product (GRP).
Gross Value Added	Gross Value Added (GVA) is the output of an industry or sector minus intermediate consumption. GVA therefore represents the value of all goods and services produced, minus the cost of all inputs and raw materials used to produce that good or service. Unlike Gross Product, GVA does not include the value of taxes minus subsidies.
Input-Output Tables	Input-Output (I-O) tables capture the direct and indirect effects of expenditure by capturing, for each industry, the industries it purchases inputs from and also the industries it sells its outputs to. For example, the I-O model for Western Australia captures purchases from and sales to industries located in Western Australia, as well as imports from outside of Western Australia.
Net present value (NPV)	The value of a future stream of income (or expenses) converted into current terms by an assumed annual discount rate. The underlying premise is that receiving, say, $100 in 10 years is not 'worth' the same (i.e. is less desirable) than receiving $100 today. Where used, the relevant discount rate has been cited.
Real income	Although changes in real economic output are useful measures for estimating how much the output of the economy may change due to a change in policy, changes in real income are also important as they provide an indication of the change in economic welfare of the residents of a region through their ability to purchase goods and services. Real income measures the income available for final consumption and saving after adjusting for inflation. An increase in real income means that there has been a rise in the capacity for consumption as well as a rise in the ability to accumulate wealth in the form of financial and other assets. The change in real income from a development is a measure of the change in the economic welfare of residents within an economy.

SOURCE: ACIL ALLEN CONSULTING

1.2.2 Acronyms used

The following acronyms have been used in this report.

TABLE 1.2 ACRONYMS USED

Acronym	Description
ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ASR	Age Standardised Rate
AUD/ A$ or $	Australian dollars (default unless otherwise specified)
AWE	Average Weekly Earnings
CPI	Consumer Price Index
DALY	Disability Adjusted Life Year
FFC	Fremantle Football Club
FTE	Full Time Equivalent
GSP	Gross State Product
GVA	Gross Value Added
MFL	Metro Football League
NPV	Net Present Value
PPP	Purchasing Power Parity
SROI	Social Return on Investment
UK	United Kingdom
WAAFL	West Australian Amateur Football League
WACFL	West Australian Country Football League
WAFC	West Australian Football Commission
WAFL	West Australian Football League
WAMFL	West Australian Masters Football League
WAWFL	West Australian Women's Football League
WCE	West Coast Eagles Football Club

SOURCE: ACIL ALLEN CONSULTING

2 WHAT IS SOCIAL RETURN ON INVESTMENT

2.1 What is Social Return on Investment (SROI)?

Social Return on Investment ('SROI') is an emerging form of analysis which seeks to value the intangible. SROI is a form of benefit cost assessment (BCA) but one that takes the approach of attempting to quantify the social change created by a program, a policy, investment or entity. It is a particularly useful form of analysis for not-for-profit or mission-based organisations, which seek to foster positive social change but have benefits which are difficult to measure in traditional financial means.

There is no right way to complete a SROI study. However, the method has been developed and refined progressively over time in partnership between the UK Government and Social Value UK – initially to ensure entities operating in the "third sector" (what we may call the not-for-profit sector) have a consistent approach to articulating their benefits for the purpose of receiving government funding.

As a result, a stylised six step process for SROI-style analysis was developed, and should form part of the development of an SROI framework. The SROI framework below represents a typical process for any rigorous benefit cost assessment. These are presented below.[2]

1. Establishing scope and identifying key stakeholders
2. Mapping outcomes
3. Evidencing outcomes and giving them a value
4. Establishing impact
5. Calculating the SROI
6. Reporting, using and embedding

SROI involves development of an overarching impact framework, which articulates how the activities of the program, policy, investment or entity contribute to changes experienced by the stakeholders they impact.

A typical SROI study initially involves the determination of the changes fostered by the program, policy, investment or entity, and then undertaking a structured approach to determining whether the identified benefits can be converted into financial terms for the purposes of valuation. When benefits cannot be quantified, the SROI framework is used to describe them qualitatively and support them with the use of examples or case studies.

SROI can be calculated for a single year or over the life of a project or program, and it can be calculated summatively (i.e. at the end of a program once outcomes have been realised) or

[2] Social Value UK. 2012. *A Guide to Social Return On Investment*. Accessed online at http://www.socialvalueuk.org/

formatively (i.e. as a program is underway, or prior to a program getting underway as part of the project selection and approval process). SROI can also be calculated over multiple years, or in a single year. ACIL Allen's frame of reference is discussed below.

The output of a SROI exercise is similar to a benefit cost assessment, in that benefits are presented in a ratio relative to costs. However in SROI, the value of non-financial inputs, which are principally volunteer hours contributed to deliver outputs, are also considered as part of the costs of the program, policy, investment or entity. An overall "SROI ratio" demonstrates the unit benefits achieved for every dollar of investment society has made in the delivery of the program, policy, investment or entity.

The WAFC is a prime example of an entity for which SROI analysis can be employed as a way of demonstrating the value of its activities to stakeholders. ACIL Allen's methodology for completing the SROI study is discussed below.

2.2 ACIL Allen's methodology

ACIL Allen has broadly adopted the suggested SROI approach discussed above, with a reliance on publicly available information to supplement a program of stakeholder engagement and consultation. We have also included as part of our methodology the completion of a formalised economic contribution study to provide a sense of the realised economic contribution of the industry to Western Australia, which while not part of the suggested process of Social Value UK is considered an important social contribution the industry makes to Western Australia (in the form of direct and indirect employment and spending in the local economy).

In the SROI task, ACIL Allen has limited its scope to **participation in organised, club-based football activities in Western Australia**. The scope of the SROI therefore excludes the school-based programs run by the football industry in the State (as it is assumed these do not deliver a direct incremental social benefit, given they take place during school physical education periods), AusKick (as there is limited research centred on the social benefits of participation by very young children) and the AFL 9s program (as this is primarily recreational). However, each of these tranches of participation may offer social benefits which cannot be quantified – and they would certainly not result in social harm – and are thought to help grow organised club participation.

ACIL Allen has included a number of estimates of the social benefits and overall costs of the football industry in the State, plus a preferred or recommended SROI metric.

ACIL Allen's methodology is outlined below. The below methodology does not include the initial scoping of the engagement and various data requests made to the WAFC.

2.2.1 Initial benefit mapping

The first step in the development of the SROI framework was creation of an unconstrained list of benefits associated with participation in organised football in Western Australia. To do this, ACIL Allen completed a literature review centred on a number of previous studies of the benefits of organised sport generally and Australian rules football specifically. The primary source materials consulted are listed below.

- **Intergenerational Review of Sport** (2017). Prepared by Boston Consulting Group for the Australian Sports Commission
- **After the Siren: The Community Benefits of Indigenous Participation[3] in Australian Rules Football** (2017): Prepared by the Bankwest Curtin Economics Centre, Curtin University
- **The Value of a Community Football Club** (2014): LaTrobe University Centre for Sport and Social Impact for AFL Victoria
- **A Review of the Social Impacts of Culture and Sport** (2015): Prepared by the UK Culture and Sport Evidence (CASE) Programme

[3] While the overall subject matter of this paper was the benefit of football participation by Indigenous Australians, the source material (including regression analysis) in the report was applicable to Non-Indigenous Australians

- **Brain Boost: How Sport and Physical Activity Enhance Children's Learning** (2015). Prepared by the Centre for Sport and Recreation Research, Curtin University for the WA Department of Sport and Recreation
- **More Than Winning: The real value of sport and recreation in Western Australia** (no date): Prepared by the WA Department of Sport and Recreation
- **The Relationship Between Organised Recreational Activity and Mental Health** (no date): Prepared by the Mentally Healthy WA Centre for Behavioural Research in Cancer Control, Curtin University

In addition to these primary studies, ACIL Allen accessed a number of research papers and sources quoted in these documents as part of its evidence gathering process.

ACIL Allen also attended two sessions arranged by the WAFC in this initial benefits mapping stage: a Project Steering Committee Meeting and an Industry Working Group. These groups provided additional input on the benefits of participation in organised football, which formed part of the overall benefits mapping exercise completed by ACIL Allen.

Benefits were then stratified according to the strength of the link between organised sports participation and the realisation of the benefit, and the extent to which the benefit was quantifiable versus unquantifiable. The result of the process was the creation of a benefits map, which is presented in Section 2.3.

2.2.2 Determine quantification methodology and gather data

Following the benefit mapping, ACIL Allen reviewed the source material and internally workshopped an approach to quantification of each of the benefits that could be quantified. This involved a process of investigating past approaches to quantification, and adapting these to the available data and ACIL Allen's own methods of quantification. The quantification of each benefit is discussed in Section 4.

ACIL Allen accessed a variety of sources to gather the data required to quantify the benefits listed above. These are summarised below. Specific sources (ie the Australian Bureau of Statistics catalogue) are cited in Section 4 as relevant.

- Australian Bureau of Statistics
- Australian Institute of Health and Welfare
- Australian Sports Commission AusPlay
- Productivity Commission Report on Government Services
- Western Australian Government State Budget
- Department of Prime Minister and Cabinet
- The Lancet (a peer-reviewed medical research journal)

This data was in addition to the WAFC's official participation database, which provided the base for the level and type of participation in organised football in the State.

2.2.3 Calculate benefits using WAFC participation data

While ten benefits have been included in the SROI framework, not every benefit is attributable to every type of participant. With the assistance of the WAFC, participation in football was stratified into 12 categories:

1. Pre-primary School Age Child
2. Primary School Age Child
3. High School Age Child
4. Coach
5. Umpire
6. Volunteer
7. Female - 18-24
8. Male - 18-24

9. Female - 25-34
10. Male - 25-34
11. Female - 35+
12. Male - 35+

The stratification of categories broadly reflects the structure of the football industry's organised participation (for example, AFL Masters is for players aged 35 or older). Each of these groups has a different benefits map, reflecting that not all benefits are applicable to all demographic groups (ie mental health benefits are greater for males than females on account of the higher incidence of mental health issues among the cohort).

The general approach to calculating benefits is to use empirical data on the type of benefit that is derived from participation, the scale of the benefit that can be attributed to participation, and value it using a calculated financial proxy measure suggested by the literature or developed by ACIL Allen.

In most instances, the benefit is linked specifically to the act of participation itself – it is assumed benefits do not scale with the level of participation. This is a simplifying assumption that reflects the desktop nature of the exercise, which could be refined in the event an industry-wide survey of the benefits of participation was developed.

The specific calculations created for each of the ten benefits in the SROI framework are included in Section 4. In a general sense, a benefit was derived by applying a series of multipliers and ratios, which derived a dollar value per participant for each of the benefits. This dollar value is then multiplied by the number of participants to yield a gross benefit of participation across the cohort of participants.

2.2.4 Determine attribution of benefits and calculate costs

A critical aspect of SROI analysis is the determination of attribution. Following the calculation of gross benefits, it is important to ascertain the extent to which the measured change came about specifically because of the policy, program, investment or entity, and to what extent the benefits are realised regardless of the intervention. This is to ensure the benefits are not overstated.

In this exercise, the important distinction to be made is between average participation in organised club-based sporting activities in Western Australia by each of the demographic cohorts versus what the football industry achieves for each demographic cohort. The "participation rate" for participants is set at 100 per cent, and compared to an average participation rate for the State at large. The difference between the two is the attributable benefit of the football industry. A graphic explaining this concept has been included in Section 4.3.

ACIL Allen has used the Australian Sports Commission's AusPlay data to set the base level of participation for each demographic category. The level of attribution is discussed further in Section 4.

As this stage it is important to consider the overall cost of the delivery of the football industry in Western Australia. Cost in SROI include real or actual financial costs, as well as the calculation of costs to society in the form of a draw on non-financial resources.

In this initial SROI exercise ACIL Allen has access to the relevant real cost data, being the expenditure on football by all aspects of the football industry (AFL clubs down to amateur leagues) except individual community clubs. Future iterations of the SROI framework may consider the inclusion of these costs, however it is considered unlikely to be a material additional amount to the real costs calculated in this SROI framework. The most important societal cost in this instance is to value 100 per cent of the assumed volunteering hours utilised across the football industry. Other societal costs have not been considered in this framework, and none are considered material to the overall cost of the football industry to the State.

2.2.5 Calculate overall SROI

There are a number of ways ACIL Allen considers the calculation of an overall SROI can be completed. These include:

- A **Gross Benefit** calculation, which considers the total benefits calculated as part of the SROI framework. This presents an overall picture of the scale of the benefits derived, but should only be used as part of a broader discussion of the overall SROI
- A **Net Benefit** calculation, which considers total attributable benefits net of total attributable costs, to yield a net financial return in dollar terms
- A **Real Benefit Cost Ratio**, which considers all benefits (ie disregards the attribution of benefits) divided by the total real costs only, yielding an approximation of the unit return on a dollar of expenditure associated with the policy, program, investment or entity. This is considered the presentation of the maximum ratio of benefits to costs
- A more traditional **SROI ratio**, which considers the total attributable benefits divided by the total attributable costs (ie real costs and social costs), yielding an approximation of the true social return delivered by the policy, program, investment or entity.

As part of this report, ACIL Allen has included a number of different outputs, plus a recommended option for the WAFC to carry forward as its internal SROI benchmark.

An important consideration at this point of the methodology is the inclusion and noting of non-quantified benefits, which would ultimately be additive to the overall SROI framework (as they are benefits which accrue without additional real costs). As such, the quantified benefits presented represent a conservative estimate of the benefits of the policy, program, investment or entity relative to the costs.

2.3 Application of framework

The SROI framework developed for the WAFC is presented overleaf (**Figure 2.1**).

The large graphic presents each of the benefits considered for inclusion in the SROI framework, with the spheres of the circle representing the extent to which the benefit can be directly attributed to a participant's participation in organised club-based football. The two purple spheres are the benefits which have been included in the quantified SROI framework, while the two grey spheres include the benefits which have not been quantified. The framework itself is outlined below.

2.3.1 Economic benefits

The framework includes the economic benefit of football to the State, which has been calculated by ACIL Allen. This is considered an important part of the overall SROI framework as the direct and indirect economic contribution of the club-based football industry to the State provides employment and business opportunities, which may not otherwise materialise. It is also an important factor to offset the real cost of the football industry, as the cost is not simply sunk into the creation of social benefits as may be the case for individual projects or programs – it delivers real and tangible economic outcomes for Western Australia.

2.3.2 Social benefits framework

As discussed above, there are two tranches of social benefits considered in the SROI framework: quantified benefits (which are used to determine the SROI ratio) and unquantified benefits (which are attributable but are difficult to value). The benefits under each stream are listed below.

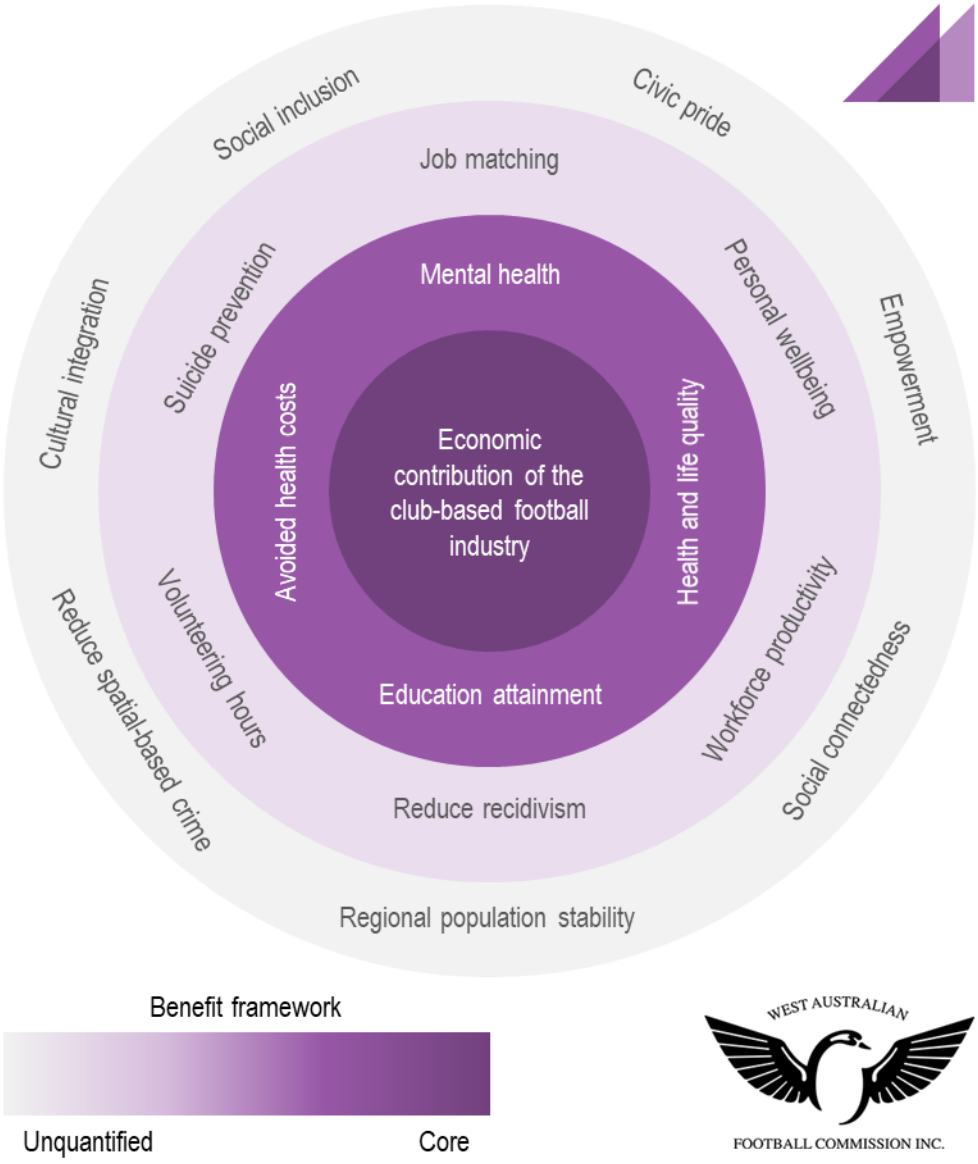
Quantified social benefits

The benefits quantified as part of the SROI framework are listed below. These are explained further in Section 4.

1. The realised economic value of the volunteer hours provided for free by those in the labour force (**volunteering hours**)
2. Lifetime earning benefits associated with increased education attainment for participants aged 17 or younger (**improved education attainment**)
3. Reduced early mortality and improvements in overall physical health (**reduced mortality**)

4. Avoided health costs associated with a reduction in non-communicable disease prevalence (**avoided health costs**)
5. Improved workforce productivity associated with improved health (**improved productivity**)
6. Improved job matching (ability to find work) for club participants (**improved job matching**)
7. Enhanced personal wellbeing associated with participation in an organised sports club (**personal wellbeing**)
8. Reduced rates of recidivism (return to prison) (**reduced recidivism**)
9. Suicide prevention associated with improved mental health (**suicide prevention**)
10. Improved mental health and the associated improvement in quality of life (**improved mental health**)

FIGURE 2.1 WAFC SROI FRAMEWORK



SOURCE: ACIL ALLEN CONSULTING

Unquantified social benefits

During its research and consultation, ACIL Allen considered an additional seven benefits associated with participation in organised club-based football in Western Australia that were considered real but

could not be quantified. These are briefly listed below, along with a brief reason they have not been included in the quantification framework.

- The benefits associated with **social inclusion**, being participants are able to better connect with those around them and feel more a part of their community as a result of the common ground provided by a football club. This was not quantified as this considered likely to be a subset of the personal wellbeing calculation which has been included in the quantification framework.
- The increased **civic pride** associated with being part of a cause such as a football club. While an important social benefit, which could manifest in many ways (such as increased engagement in local social issues, a desire to do more for the community, or be better engaged in local decision making processes) this was not considered a viable benefit to quantify.
- The **empowerment** associated with the confidence, sense of ownership and social skills bought upon by participation in a sporting club. Other studies have manifested this as a benefit associated with increased human capital (similar to the lifetime earnings benefit process ACIL Allen has used to derive a benefit for increased education attainment), however the link between increased empowerment and lifetime earnings is not clear in the research and so it was not taken further. However, this is a benefit which could be included in the SROI framework readily if additional individual data collection were to take place.
- Similar to social inclusion, **social connectedness**, is the benefits derived from the friendships and bonds fostered by a football club. It is considered likely this is captured as part of the personal wellbeing calculation included in the SROI framework.
- According to stakeholders in regional areas, a football club contributes to **regional population stability** by giving younger people a reason to stay in their community rather than relocate for employment. While this is likely to be true, it is not possible to quantify the impact in a straightforward, repeatable manner.
- The activation of club rooms and other public infrastructure is thought to lead to a **reduction in crime** in areas where there are football clubs and associated activities. While this is likely to be true, there are many factors which determine whether a crime takes place, meaning the direct link cannot be established. This is also the reason why a general crime-based benefit has not been included, with a much more targeted “reduced recidivism” benefit included in the framework.
- The **cultural integration** aspect of a club is important, and stakeholders provided a number of examples of this during consultation. However it is not possible to value this as a defined benefit, and it is considered likely to be a subset of the personal wellbeing calculation included in the SROI framework.

3 THE ECONOMIC CONTRIBUTION OF FOOTBALL IN WESTERN AUSTRALIA

3.1 Introduction

Football is a significant industry in Western Australia, with two AFL clubs, nine WAFL clubs and a raft of community competitions that produce local economic benefits. These benefits include spending in local businesses plus the jobs associated with the activities of the football industry and its spending. As such, an **economic contribution study** has been included as a component of the SROI framework.

An economic contribution study seeks to determine the extent of an entity's activities and how they flow through the economy in a given year. It takes revenue, expenditure and employment information and fits it into a uniform economic framework, to understand the extent of an entity's contribution to the economy. An economic contribution study only considers the real cashflow of an entity, which means balance sheet transactions such as depreciation and amortisation costs are excluded from the analysis.

In this case, the contribution of the football industry in Western Australia has been assessed on a consolidated basis. The revenue, expenses and assumed employment of each entity has been combined to form a single view for analysis. This has required careful analysis of revenue and expenditure to ensure there is no double counting associated with grants paid from one level of football to another level of football. The outcomes of this process are discussed in the section below.

The overall output of the economic contribution study is a view of the total economic contribution of an entity in a given year, including both the direct (associated with the entity itself) and indirect (associated with the flow on contribution of expenditure incurred and wages paid by the entity) contribution. The output of an economic contribution study can be expressed as a multiplier, being the total economic contribution divided by the direct economic contribution. This illustrates the extent of the flow on benefits relative to the size of the entity itself.

At the completion of the economic contribution study, the overall economic contribution of the football industry to Western Australia is added to the numerator of the SROI calculation as a means of representing the broad economic benefits (which are ultimately social benefits) of football in the State. The study has also been a useful exercise to understand what it costs to "run" the football industry and deliver social benefits to Western Australia.

3.1.1 Overarching assumptions

To complete the economic contribution study, a number of overarching assumptions were made regarding the finances of the football industry in Western Australia. These are presented below.

— The economic contribution study was completed for the **2016-17 football year**. This was the latest available year of full financial accounts, which are required for the analysis. For the purposes of the

SROI framework, the economic contribution study results are scaled up by the Perth CPI for June 2018 (1.1 per cent) to adjust the results to same frame of reference adopted for the SROI.

- A **standard football year** runs from 1 November to 31 October. This is the same basis on which the football industry prepared its financial accounts. As a simplifying assumption, ACIL Allen has assumed all football activities occur in a single financial year.
- The level of granularity in financial information varied by entity subject to the economic contribution study. This meant a number of assumptions were made regarding how funds were spent by the football industry. The most significant of these are presented below:
  - Each WAFL club's football department spending was apportioned based on an average of the three clubs for which granular information was available (ie it was assumed each club's football department spent 30 per cent of its budget on staff wages)
  - For the AFL clubs, information on wages paid to players or football department staff was not available. Using the overall "football department" line item from each clubs' annual report, ACIL Allen assumed both clubs paid 100 per cent of the AFL salary cap (inclusive of additional service agreements) for the 2016-17 financial year, with the average listed player wage sourced from the AFL multiplied by the number of listed players at each club (44 for Fremantle and 48 for West Coast). High level assumptions were applied for the remainder of the football-related spend
  - All inter-entity grants were removed from consideration in the financial analysis. This means only revenue raised directly by the entity counted towards the total revenue of the industry, while grants paid from one entity to another were not counted as expenditure by the grant-giving entity. This is to ensure revenues and expenditure are not double counted.

The results of the financial analysis are presented below.

3.2 Consolidated football industry finances

ACIL Allen's financial analysis of the football industry was used for two purposes: it was the basis of the economic contribution study, and it was used to calculate the real cost of the football industry for the SROI framework. A summary of the financial outputs for each entity in the football industry is presented below. Where the terms "revenue" and "expenses" are used, this refers to own-source revenue and non-grant based expenditure only.

The scope of economic contribution study is limited to the activities undertaken by the WAFC, FFC, WCE, the WAFL clubs and community competitions as disclosed in their 2017 football year annual reports. This excludes the contribution of the operations of stadia and the "event" side of football (ie the game day expenditure of persons attending games), as this was outside of the scope of the study.

3.2.1 Football finances by entity group

West Australian Football Commission (WAFC)

The West Australian Football Commission is the caretaker of football in WA and is responsible for the overall development of the game. The role of the WAFC includes ownership of the licenses for the State's two AFL teams, overseeing the West Australian Football League (WAFL) and community football, managing umpiring, and driving participation through game development and the talent pathway. The WAFC plays a critical role in funding the ongoing development of football via affiliates, schools, competitions and academies across all WA communities.

In 2016-17, the West Australian Football Commission generated total revenue of $36 million and total expenses were $43 million. The gap was made up by licence fees and royalties paid by the two AFL clubs ($10.7 million in the study year).

AFL Clubs

There are two clubs in the Australian Football League (AFL) based in Western Australia. The West Coast Eagles joined the competition in 1987 and the Fremantle Dockers in 1995. Both clubs are in a strong financial positio. The transition to Optus Stadium in 2018 has further strengthened both club's large membership numbers. In 2017, the Fremantle Dockers were one of eight AFL clubs to have a team compete in the inaugural season of the AFLW competition.

In 2016-17, the two AFL Clubs generated total revenue of $123.7 million and total expenses were $96.5 million.

WAFL Clubs

The West Australian Football League (WAFL) commenced in 1885. The WAFL is the peak of State level football in Western Australia. In the 2018 season, there were nine clubs in the competition, two of which operated as affiliate clubs for the West Coast Eagles and the Fremantle Dockers. The competition is governed by the West Australian Football Commission.

In 2016-17, the nine WAFL Clubs generated total revenue of $18.7 million and total expenses were $22.8 million. The gap was made up by grants and distributions paid by the WAFC to each of the nine WAFL clubs ($4.8 million in the study year).

WA Amateur Football League (WAAFL)

Commencing in 1922, the WAAFL has grown from a six team competition to the largest single football competition in WA. The WAAFL caters for men and women from the age of 16 years, and is well supported by a large supporter and volunteer base. The league provides a high standard competition for players seeking competitive football but who are unable to commit to semi-professional training due to study and/or career commitments.

In 2016-17, the WA Amateur Football League generated total revenue of $1 million and total expenses were $1.6 million. The gap was made up by grants and in-kind support paid by the WAFC to the league.

WA Country Football League (WACFL)

The WACFL is comprised of 25 Senior Leagues, 150 Country Clubs and around 12,500 players, along with over 5,000 volunteers who help facilitate football each weekend. The WACFL has played a critical role in overseeing the structuring and management of country football leagues, the talent development pathway for country players and the development and representation of the code across WA.

In 2016-17, the WA Country Football League generated total revenue of $1.1 million and total expenses were $1 million. The WACFL also received grants and in-kind support from the WAFC.

WA Women's Football League (WAWFL)

Beginning in 1987, the WA Women's Football League caters for women and girls within the Perth metropolitan area. There are nine clubs involved in the competition. School competitions and female football programs have enabled player numbers to increase and the league to become one of the strongest women's football leagues in the country.

In 2016-17, the WA Women's Football League generated total revenue of $160,000 and total expenses were $150,000.

WA Masters Football League

The WA Masters Football League is designed to provide more mature players the opportunity to participate safely in football and compete with similarly aged players. Players who finished their involvement with the AFL, WAFL, Amateurs, Sunday League and Country Associations have enjoyed being able to continue playing football at a less competitive level. Since the first official season of Masters football in 1983, the competition has expanded to now represent 40 Clubs throughout WA.

In 2016-17, the WA Masters Football League generated total revenue of $130,000 and total expenses were $150,000. The WA Masters Football League also received in-kind support from the WAFC.

Metro Football League

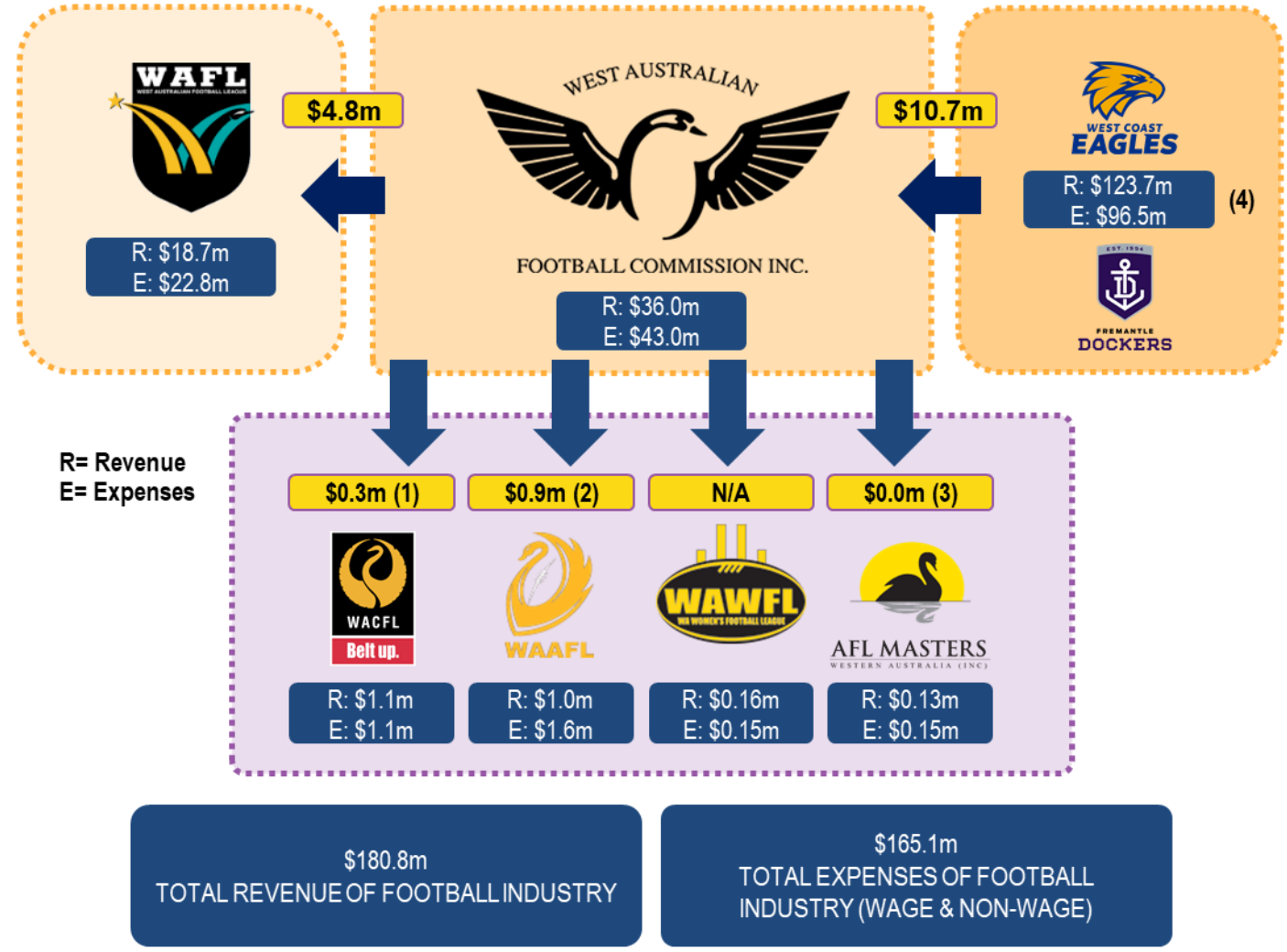
The Metro Football League (MFL) is a community football league based in the Perth Metropolitan Area, often referred to as "Sunday League". The MFL does not produce a consolidated set of financial results and so has not been formally included in the economic contribution study, though to the extent it receives funding from the WAFC this would be captured in its expenditure.

3.2.2 Overall football industry finances

The overall finances of the football industry in Western Australia are presented in the figure below (**Figure 3.1**). The analysis reflects the revenue raised and direct expenditure incurred by each entity. The figure includes grants that pass between entities – these are included for reference only, and are not included in the economic contribution study.

Where grants pass from one entity to another, the grant value should be added to the expenditure of the entity the grant is flowing from, and to the revenue of the entity receiving the grant. The figures below also exclude depreciation and amortisation charges as these do not result in any economic activity – removal of these aspects of revenue and expenditure should not be interpreted as an assessment that any one entity is making large accounting profits, as the analysis required to complete the economic contribution study is not prepared on that basis.

FIGURE 3.1 WA FOOTBALL INDUSTRY FINANCIAL FRAMEWORK (2016-17)



Notes: (1) Includes ~$200,000 of assumed wages (2) Includes ~$300,000 of assumed wages (3) Includes ~$14,000 grants in total
(4) All figures exclude depreciation and amortisation charges, which result in the appearance of a very large "profit" made by the AFL clubs

SOURCE: ACIL ALLEN CONSULTING

3.3 Economic contribution study results

ACIL Allen estimates that the WA football industry directly contributed $110.4 million in economic output (measured in gross value added[4] terms) to Western Australia in 2016-17 (refer to **Figure 3.2** overleaf). This level of direct value added in turn generated flow-on (or indirect) value add of $109.9 million.

Overall, ACIL Allen estimates that the **WA football industry contributed $220.3 million to the WA economy in 2016-17**. This is equivalent to 0.1 per cent of the State's economy (Gross State Product) or 17.2 per cent of the Arts and Recreation Services sector.

The implied economic value added multiplier is 2.00 (the actual multiplier is 1.966), which means that for every dollar spent by the WA football industry in Western Australia, additional spending of $1.00 is generated across Western Australia's economy.

In terms of employment, the WA football industry directly accounted for 715 FTE jobs in 2016-17. A further 762 indirect FTE jobs were generated throughout the economy as a result of the WA football industry.

Overall, the **WA football industry accounted for 1,477 direct and indirect FTE jobs in 2016-17**. The implied employment multiplier is 2.06, meaning that for every direct FTE job generated by the WA football industry in Western Australia, a further 1.06 FTE jobs were generated throughout the economy.

This is considered to be a conservative estimate of the economic benefits derived from the football industry in Western Australia, as it does not consider the indirect contribution of match attendance at any level of football. A previous study completed by ACIL Allen for the City of Vincent on the Leederville Oval precinct suggested the economic benefits of the Oval when the indirect contribution of match attendance (spending at cafes, restaurants and retailers) was included, the Oval's economic multiplier increased to over 4:1. In the case of the two AFL clubs, the multiplier impact of this indirect contribution may be significantly larger, particularly if there is an inducement of interstate or international tourism visitation.

However, an economic multiplier of 2.00 (1.996) is a significant outcome, driven by the fact the football industry spends most of what it earns. As a result, the benefit for every dollar that goes into the industry is larger than most other industries ACIL Allen has completed an economic contribution study in. By way of comparison, a selection of four economic multipliers for other entities or industries that ACIL Allen has analysed recently are presented below (**Table 3.1**). The mineral sands project has a high multiplier as it involves the capital investment in the establishment of a new mine with high local content (investment project-based multipliers tend to be >2.0).

TABLE 3.1 COMPARATOR MULTIPLIERS

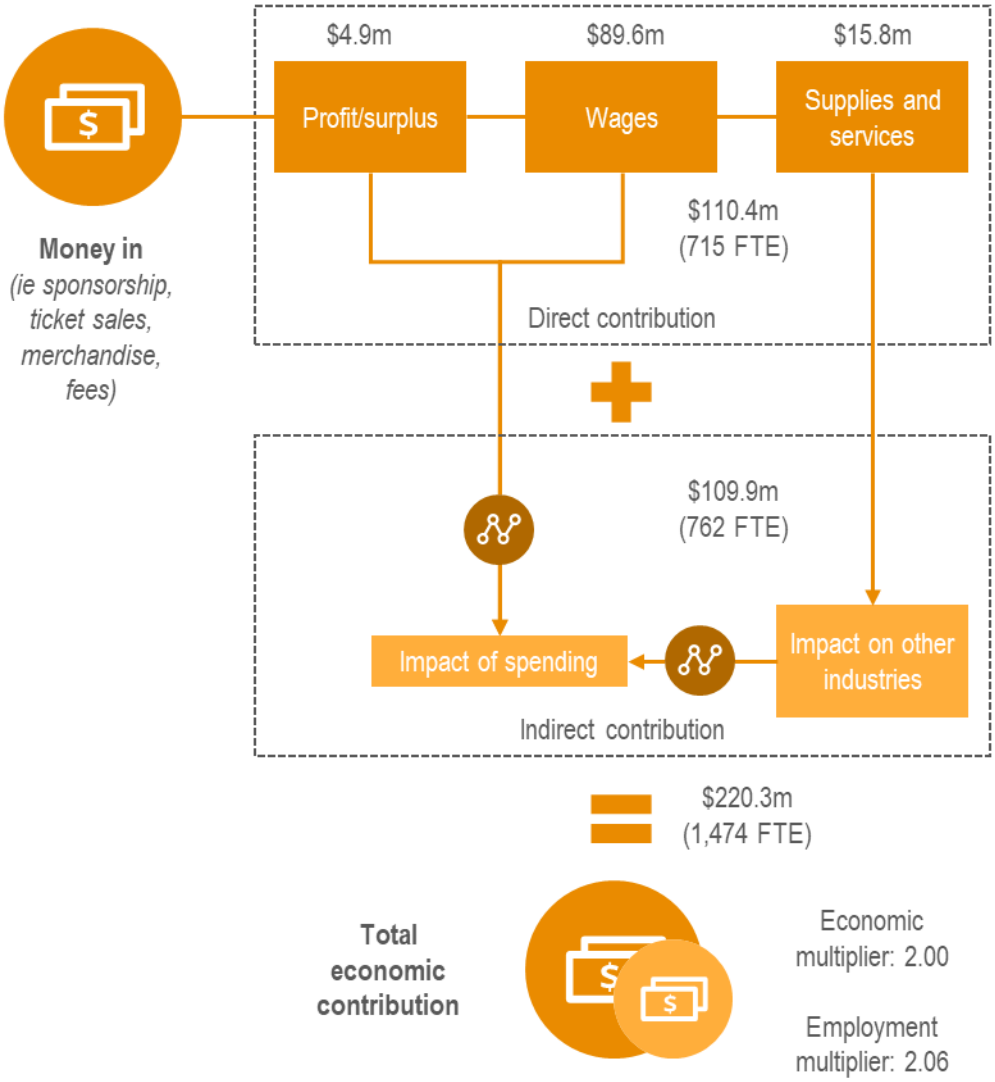
Heading	Economic multiplier
WA Football Industry	**2.00**
Major mining company in regional communities	1.43
Mineral sands project in Peel region	2.33
WA-based financial services company	1.26
WA home ported cruise ship industry	1.62

SOURCE: ACIL ALLEN CONSULTING

The results of this analysis highlight the significant economic contribution made by the football industry to Western Australia. However when considered alongside the social benefits induced by organised club-based football participation the true scale of the benefits of the industry can be seen.

[4] Gross Value Added (GVA) is the output of an industry or sector minus intermediate consumption. GVA therefore represents the value of all goods and services produced, minus the cost of all inputs and raw materials used to produce that good or service.

FIGURE 3.2 DIRECT AND INDIRECT ECONOMIC CONTRIBUTION OF WEST AUSTRALIAN FOOTBALL COMMISSION TO THE WA ECONOMY, 2016-17



SOURCE: ACIL ALLEN CONSULTING

4 THE QUANTIFIED SOCIAL BENEFITS OF FOOTBALL IN WESTERN AUSTRALIA

4.1 Introduction

This chapter of the report presents ACIL Allen's SROI framework quantification in full, including underlying assumptions, modelling methodologies, cited research and data sources for each benefit. The overarching SROI methodology is discussed in more detail in Section 2.

ACIL Allen has included ten quantifiable benefits in its SROI framework. These are explained in detail in the table at the end of the section (**Table 4.3**). The table includes the benefit, the rationale for its inclusion, the research that confirms the benefit is able to be claimed, the method of quantification, and the data sources used to quantify the benefits. The table includes a flag for where it is recommended a case study be included in WAFC's public report to help build the case for benefits.

The baseline participation data used for the current SROI study are outlined below. The WAFC provided conservative estimates for the hours of direct engagement in football activities by 16 types of participant, which give regard to the 12 SROI framework participant categories introduced in Section 2.2. It was decided to stratify the levels of engagement for umpires, coaches and male participants that were involved in high performance (WAFL-level) football as distinct from those involved in community football, to better reflect their level of engagement by way of hours of contact (higher than community football). Similarly, a cohort of junior coaches were stratified to better reflect their level of engagement (lower than community and high performance football).

These assumptions were developed by the WAFC in consultation with industry experts, and reflect a conservative estimate of actual hours of contact by individuals, which are likely to vary significantly on a case by case basis. ACIL Allen suggests these estimates be refined via industry survey as the SROI framework is bed down by the WAFC

Baseline participation under each of these 16 types of participant is presented below (**Table 4.1**).

TABLE 4.1 WAFC SROI FRAMEWORK PARTICIPATION LEVELS

WAFC Participant Type	SROI Framework Category	Number of participants	Assumed hours of participation per annum
Primary School Age Participant	Primary School Age Child	22,997	60
High School Age Participant	High School Age Child	16,920	120
Coach (community)	Coach	1,368	450
Coach (junior)	Coach	1,368	180
General volunteer	Volunteer	2,076	90
Club administrator/board member	Volunteer	2,280	360

WAFC Participant Type	SROI Framework Category	Number of participants	Assumed hours of participation per annum
Umpire (general community)	Umpire	1,838	150
Coach (high performance)	Coach	9	1,140
Umpire (high performance)	Umpire	33	300
Male participant (high performance)	Male - 25-34	1,405	600
Female participant (18-24)	Female - 18-24	1,170	210
Male participant (18-24)	Male - 18-24	10,306	210
Female participant (25-34)	Female - 25-34	865	210
Male participant (25-34)	Male - 25-34	8,689	210
Female participant (35+)	Female - 35+	264	120
Male participant (35+)	Male - 35+	4,353	120

SOURCE: ACIL ALLEN CONSULTING, BASED ON WAFC PARTICIPATION DATA

As discussed in Section 2, not all SROI benefits are applicable to each of the 12 demographic groups (the SROI Framework categories, which the WAFC participant types are then mapped to) that participation data has been stratified into. A benefits matrix, presented below provides an overview of which benefits apply to each demographic group **Figure 4.1**.

FIGURE 4.1 SROI BENEFITS MATRIX

	Volunteering hours	Education attainment	Reduced mortality	Avoided health costs	Productivity	Job matching	Personal wellbeing	Recidivism	Suicide prevention	Improved mental health
Pre-primary School Age Child										
Primary School Age Child		X	X							
High School Age Child		X	X					X		
Coach	X					X	X	X		
Umpire	X		X	X	X	X	X	X		
Volunteer	X					X	X	X		
Female - 18-24			X	X	X	X	X	X	X	X
Male - 18-24			X	X	X	X	X	X	X	X
Female - 25-34			X	X	X	X	X	X	X	X
Male - 25-34			X	X	X	X	X	X	X	X
Female - 35+			X	X	X	X	X	X		
Male - 35+			X	X	X	X	X	X		

SOURCE: ACIL ALLEN CONSULTING

The results of the quantification methods outlined at the end of this section are presented below.

4.2 Gross social benefits

Overall, ACIL Allen estimates the football industry in Western Australia delivered gross social benefits (prior to attribution) of **$377.4 million** to the **75,941 participants** involved in organised club-based football in the State. These participants were active for a total of **11.4 million hours**, of which 2.2 million were provided by coaches, umpires, administrators and other general volunteers involved in clubs.

The largest share of benefits (40.2 per cent) is derived from the physical and mental health benefits of participation, with ACIL Allen valuing this at **$151.9 million** in gross terms. Mental health benefits for younger participants ($74.6 million) are the largest benefit in this sub-group, followed by physical health benefits ($67.8 million), suicide prevention ($8.6 million) and the cost savings associated with reduced prevalence of non-communicable diseases ($0.8 million).

Indirect economic benefits of involvement in organised club-based football are the second largest category, creating **$103.7 million** of gross benefits for participants (27.5 per cent of total). Job matching benefits are the largest benefit in this sub-group, creating $51.8 million of benefits. Other benefits include the realised economic value of volunteering hours donated by persons engaged in the labour force ($32.6 million) and workforce productivity benefits ($19.2 million).

Personal wellbeing is the third largest benefit, creating **$82 million** of social value for participants (21.7 per cent). This is calculated as a single benefit, using a subjective wellbeing approach that determines how much "free utility" is captured by participants in organised club-based football by measuring how much a participant would be willing to pay if faced with the requirement to do so. Subjective wellbeing means different things to different people. More information on this approach is included in the table below.

The remaining quantified benefits account for **$39.8 million** of social value (10.5 per cent). The majority of this is attributed to the education-related benefits which are captured by participants under the age of 18 ($38.3 million), while there are $1.5 million of cost savings that result from reduced recidivism.

4.3 Attributed social benefits

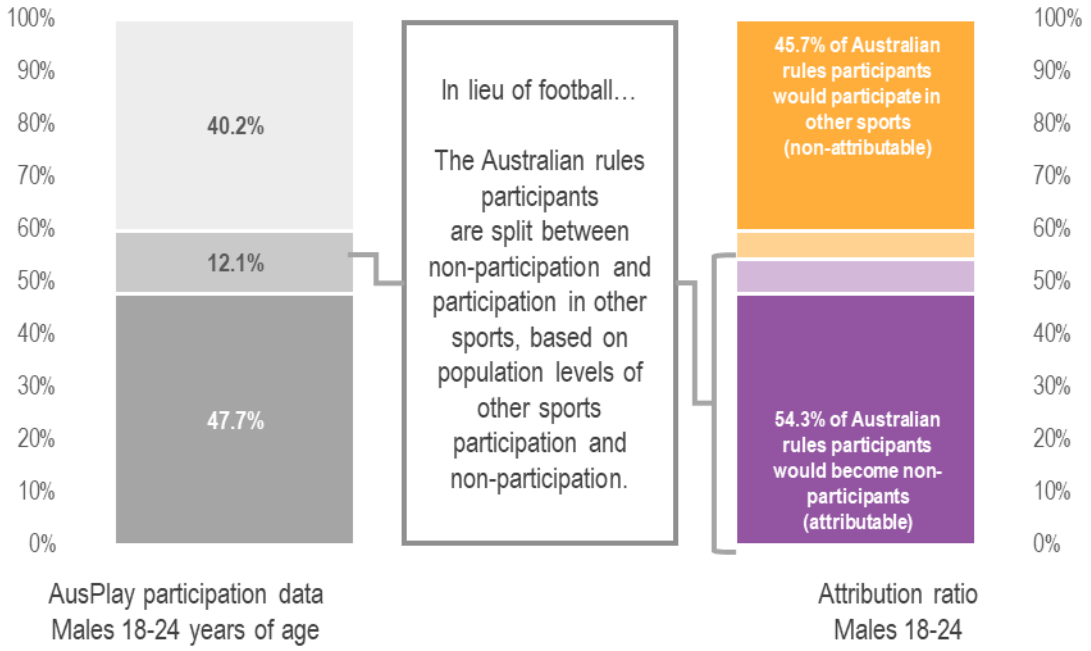
As discussed in Section 2, an SROI framework should only consider the social benefits which arise that can be attributed to the particular policy, program, investment or entity. In this case, it is assumed there is a baseline level of participation in organised club based sports that would occur with or without the football industry's efforts. These participants receive the social benefits outlined above with or without the football industry. While these benefits are real and tangible for participants, under an SROI framework they should be set aside.

To complete this attribution, ACIL Allen has used the Australian Sports Commission's AusPlay data, which sets a baseline level of participation in organised club-based by demographic group, and the share of club based participation attributable to Australian rules football (at an overall, male and female level).

To calculate the attribution, ACIL Allen has made an overarching assumption that in lieu of the availability of football as a club-based sport for participation that those currently involved in football would either substitute it for a different club-based sport or cease participating in club based sport. To calculate the split, ACIL Allen used the AusPlay data above to determine three participation splits for the population at large: participation in an Australian rules club, participation in another sports club, and not participating in a sports club. To estimate what would happen in lieu of football, ACIL Allen remove the Australian rules club share from the above group of three and calculated a share of the non-participants as a share of the total non-Australian rules club affiliated population. It is assumed that in lieu of football being available this share of the population would otherwise not be participating in club-based sport, and so would not realise the social benefits calculated above.

A diagram summarising this overarching assumption is presented below (**Figure 4.2**).

FIGURE 4.2 SROI BENEFITS: ATTRIBUTION PROCESS



SOURCE: ACIL ALLEN CONSULTING

The baseline rates of participation assumed for each of the 12 demographic groups in the SROI framework, and the attribution ratio (which is 100 per cent less the baseline participation, which in itself is the baseline participation multiplied by 100 per cent less the share of club-based participation attributed to Australian rules football) is presented in **Table 4.2**. These ratios reflect the attributable uplift in organised club-based participation.

TABLE 4.2 WAFC SROI FRAMEWORK: ATTRIBUTION RATIOS

Demographic group	Australian rules club based participation (A)	Other sports club based participation (B)	No sports club based participation (C)	Attribution ratio C / (B+C)
Primary School Age Child	13.5%	43.7%	42.8%	**49.5%**
High School Age Child	13.2%	42.8%	44.0%	**50.7%**
Female 18-24	0.9%	31.9%	67.3%	**67.8%**
Male 18-24	12.1%	40.2%	47.7%	**54.3%**
Female 25-34	0.6%	20.9%	78.5%	**79.0%**
Male 25-34	9.7%	32.3%	57.9%	**64.2%**
Female 35+	0.6%	23.6%	75.8%	**76.3%**
Male 35+	11.6%	38.6%	49.8%	**56.4%**
Female (no age)	0.7%	26.3%	72.9%	**73.5%**
Male (no age)	11.2%	37.3%	51.6%	**58.1%**
No age no gender	6.1%	32.0%	61.9%	**65.9%**
Coach, Umpire or Volunteer	Data not available, assumed 100% attribution as off field roles are more specific to the club rather than the sport.			**100.0%**

SOURCE: AUSTRALIAN SPORTS COMMISSION, ACIL ALLEN CONSULTING

The ratios developed here are based on high level assumptions, reflecting the desktop nature of this engagement. The WAFC should consider gathering evidence to support or modify these assumptions in an industry survey (discussed in Section 6). Applying the ratios above to individual participant benefits yields the attributable social benefit of organised club-based football participation in Western Australia. These are discussed below.

Overall, ACIL Allen estimates the football industry in Western Australia delivered attributable social benefits of **$224.6 million** to the **75,941 participants** involved in organised club-based football in the State. These participants were active for a total of **11.4 million hours**, of which 2.2 million were provided by coaches, umpires, administrators and other general volunteers involved in clubs. The attributable social benefits of football participation are summarised below (**Figure 4.3**).

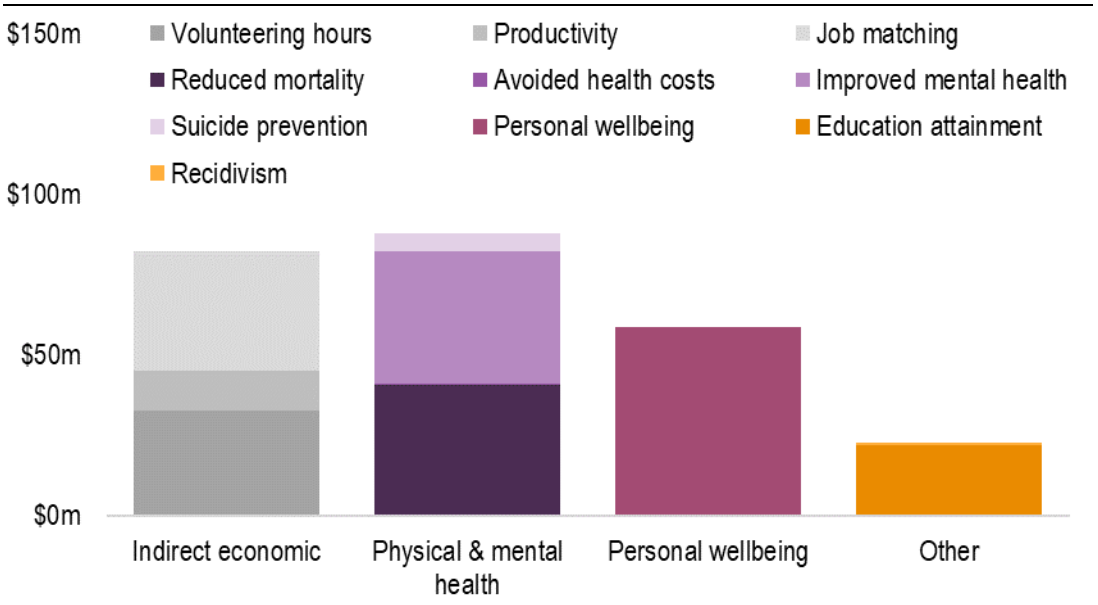
The largest share of benefits is derived from the physical and mental health benefits of participation, with ACIL Allen valuing this at **$78.6 million** in gross terms. Mental health benefits for younger participants ($41.0 million) are the largest benefit in this sub-group, followed by physical health benefits ($32.6 million), suicide prevention ($4.6 million) and the cost savings associated with reduced prevalence of non-communicable diseases ($0.4 million).

Indirect economic benefits of involvement in organised club-based football are the second largest category, creating **$76.4 million** of gross benefits for participants. Job matching benefits are the largest benefit in this sub-group, creating $33.2 million of benefits. Other benefits include the realised economic value of volunteering hours donated by persons engaged in the labour force ($32.6 million) and workforce productivity benefits ($10.6 million). The volunteering hours benefit does not change from the gross analysis as it is assumed 100 per cent of volunteer hours are an attributable benefit.

Personal wellbeing is the third largest benefit, creating **$52.0 million** of social value for participants. This is calculated as a single benefit, using a subjective wellbeing approach that determines how much "free utility" is captured by participants in organised club-based football by measuring how much a participant would be willing to pay if faced with the requirement to do so. Subjective wellbeing means different things to different people. More information on this approach is included in the table below.

The remaining quantified benefits account for **$17.5 million** of social value. The majority of this is attributed to the education-related benefits which are captured by participants under the age of 18 ($16.7 million), while there are $0.9 million of cost savings that result from reduced recidivism.

FIGURE 4.3 QUANTIFIED SOCIAL BENEFITS OF FOOTBALL, BY TYPE OF BENEFIT



SOURCE: ACIL ALLEN CONSUTLING

TABLE 4.3 WAFC SROI: QUANTIFIED BENEFITS

Benefit	Rationale	Research/evidence base	Method of quantification	Data sources used
Realised economic value of volunteering hours	The volunteering hours provided by persons who are otherwise engaged in the workforce provided a benefit to society as these persons are providing labour for free, thus allowing for the creation of benefits which would otherwise be reduced if this labour was provided at its true cost. As such this benefit does not apply to persons not engaged in the labour force as it is assumed their time is available for volunteering by their labour force status.	This is considered an important benefit specific to a sports-related mission-based organisation, as without the provision of volunteering hours many of the other benefits would not materialise.	Estimated volunteering hour benchmarks provided by the WAFC by type of participant were applied to each participant in a given category (ie administrator, coach, general volunteer). An assumed labour force participation rate was then applied as a way of accounting for the provision of hours by those not engaged in the labour force (only a portion of total volunteer hours qualify for this benefit). To monetise the benefit, a minimum wage rate was applied to reflect the lowest marginal cost of an additional unit of labour being applied to the provision of the volunteering hours (as is standard practice in SROI).	WAFC participation data WAFC assumed volunteer hour benchmarks WA labour force participation rate, by age and gender. (ABS Cat. 6291.0.55.001, Data Cube LM1) Australian Minimum Wage (Fair Work Commission, 2018)
Increased education attainment for children and adolescents	Participation in organised sporting clubs and sporting activities has been shown to increase the rate of attentiveness at school and to reduce the rate of truancy. This manifests in improved educational outcomes for students. The link between sports participation and education levels is well established.	Intergenerational Review of Sport (2017). Prepared by Boston Consulting Group for the Australian Sports Commission Brain Boost: How Sport and Physical Activity Enhance Children's Learning (2015). Prepared by the Centre for Sport and Recreation Research, Curtin University for the WA Department of Sport and Recreation	ACIL Allen has modelled this as a conservative one pre cent boost to assumed average weekly earnings (a proxy measure for higher wages earned as a result of improved education attainment) over an average working life of 43 years. The one per cent assumption is a conservative estimate and could be refined via survey. The working life of a primary school student is estimated to begin on average 14 years into the future, while the working life of an average high school student begins on average nine years into the future. An assumed employment to population ratio for the working age population (15-64) is applied so only this portion of the cohort capture a benefit.	WA average weekly earnings, full-time AWOTE (ABS Cat. 6302.0, Table 12E) WA labour force employment to population ratio (ABS Cat. 6202.0, Table 8) 20 per cent discount rate: ACIL Allen assumption

Benefit	Rationale	Research/evidence base	Method of quantification	Data sources used
			AWE is scaled up by 2.5 per cent per annum (the long term rate of inflation). The one per cent differential is calculated each year into the future, and discounted at 20 per cent per annum to reflect the uncertainty of this future estimate. The discounted value is then applied to each school-level participant to reflect a modelled boost to their education attainment.	
Reduced early mortality and improved health-related quality of life	Participation in organised club based sport results in improved physical health when compared to not participating in any physical recreation. It is assumed for most participants that the participation in their football club is a critical element of their overall physical health and so benefits are assumed to accrue to them.	Intergenerational Review of Sport (2017). Prepared by Boston Consulting Group for the Australian Sports Commission After the Siren: The Community Benefits of Indigenous Participation in Australian Rules Football (2017): Prepared by the Bankwest Curtin Economics Centre, Curtin University More Than Winning: The real value of sport and recreation in Western Australia (no date): Prepared by the WA Department of Sport and Recreation The Value of a Community Football Club (2014): LaTrobe University Centre for Sport and Social Impact for AFL Victoria	Using Australian Institute of Health and Welfare data, ACIL Allen calculated the Age Standardised Rate of Disability Adjusted Life Years Lost (which account for early death and poor quality of life associated with disease) for all ill-health, and the portion of this the AIHW attributes to physical inactivity (2.5 per cent in the case of men, and 2.7 per cent in the case of women, and 2.6 per cent for when gender data was not available). It was assumed that all participants did not suffer from this inactivity-related DALY impact due to their participation, resulting in a benefit to them and society at large. The benefit was valued using the Australian Government's Value of a Statistical Year of Life benchmark for 2014, scaled up to 2018 using the CPI.	Age-standardised rate (ASR) of Disability Adjusted Life Years (DALY) Lost: Australian Burden of Disease Study (2011) Total DALY attributable to physical inactivity: Impact of physical inactivity as a risk factor for chronic conditions, Australian Burden of Disease Study (2017) Value of a Statistical Life Year: Department of Prime Minister and Cabinet (2014) Scaled to current year using RBA target rate of inflation (2.5 per cent)
Avoided health system costs of non-communicable diseases	Participation in organised club based sport results in reduced incidence of non-communicable diseases (ie diseases which are developed primarily as a result of lifestyle and/or genetic factors). Previous studies have suggested physical activity helps reduce the incidence of Coronary Heart Disease (CHD),	Intergenerational Review of Sport (2017). Prepared by Boston Consulting Group for the Australian Sports Commission More Than Winning: The real value of sport and recreation in Western Australia (no date): Prepared by the WA Department of Sport and Recreation	ACIL Allen applied the methodology used in *Ding, D. et al. 2016. The economic burden of physical inactivity: a global analysis of major non-communicable diseases*. A number of assumptions were made to develop broad benchmarks for the annual	Actual average annual health expenditure of management of an incidence of coronary heart disease, breast cancer, colon cancer and stroke: The Lancet economic burden of physical inactivity study (2013 data).

Benefit	Rationale	Research/evidence base	Method of quantification	Data sources used
	breast cancer, colon cancer, stroke and Type 2 Diabetes. The reduced incidence of these diseases among those that live active lifestyles results in a cost saving to the health system, freeing up resources for other uses.		treatment cost for an incidence of each of the five non-communicable diseases. The assumptions include: converting international dollars to Australian dollars, scaling up costs to the current year (using the growth rate in average health sector costs over the past five years) and scaling to the cost of health care per separation in Western Australia (which is higher than Australia). Australian Institute of Health and Welfare data was used to attribute a portion of the incidence of each disease to physical inactivity. Then a cost saving per participant was derived by applying the rate of incidence, the annual cost of the disease per incidence, and the assumed rate of attribution to physical inactivity. This is a similar approach taken to the BCG's *Value of Sport* study, however ACIL Allen's estimates are significantly smaller than BCG's.	Actual average annual health expenditure of management of an incidence of type II diabetes: International Diabetes Foundation Diabetes Atlas 8th edition PPP to AUD: OECD Purchasing Power Parities (2017 edition) Converting Australian average health care costs to WA average health care costs: Productivity Commission Report on Government Services (2018) Incidence and attribution of non-communicable diseases: Australian Burden of Disease Study: Impact and causes of illness and death in Australia, 2011, Chapter 6: Contribution of risk factors to burden (report) and Detailed burden estimates for Australia, 2011 (data table: 5. DALY by disease)
Increased workforce productivity	Participation in organised club based sport results in reduced absenteeism for those in the workforce, owing to better physical and mental health. This creates additional labour resources for the economy.	The Value of a Community Football Club (2014): LaTrobe University Centre for Sport and Social Impact for AFL Victoria Intergenerational Review of Sport (2017). Prepared by Boston Consulting Group for the Australian Sports Commission	As a simplifying assumption, it was assumed that each participant assumed to have one less sick day per annum. This could be refined via survey. This was valued at the rate of Gross State Product per Hour Worked in Western Australia for the relevant year.	WA labour force employment to population ratio, by age and gender (ABS Cat. 6291.0.55.001, Data Cube LM1) WA Gross State Product per Hour Worked calculated using two sources: WA Gross State Product, Current Prices (ABS Cat. 5220.0, Table 6) and WA monthly hours worked (summed to financial year total) (ABS Cat. 6202.0, Table 19) Additional productive hours of work: ACIL Allen assumption

Benefit	Rationale	Research/evidence base	Method of quantification	Data sources used
Improved job matching	The LaTrobe University/Centre for Sport and Social Impact *Value of a Football Club* study reported that football club participants were able to source employment from contacts at their club that they would have otherwise struggled to source.		ACIL Allen assumes a one per cent increase in the employment to population ratio for the particular cohort, with the value of employment set at the rate of average weekly earnings for the relevant year. This was adopted as a conservative assumption which could be refined via survey. This is a simple assumption, which could be refined with a survey of participants that included questions regarding labour market outcomes.	WA labour force employment to population ratio, by age and gender (ABS Cat. 6291.0.55.001, Data Cube LM1) WA Gross State Product per worker calculated using two sources: WA Gross State Product, Current Prices (ABS Cat. 5220.0, Table 6) and WA total employment (summed to financial year total) (ABS Cat. 6202.0, Table 8)
Improved personal wellbeing	Participation in organised sport has significant wellbeing benefits, which can manifest in a number of ways. In a general sense, the study of such matters centres on the notion of "subjective wellbeing", which seeks to measure how individuals perceive their wellbeing before and after an event or experience. The concept has been widely studied in the United Kingdom, where regression analysis has been used to determine through revealed preference the real value participants place on participation in their chosen sport – or what they would value it at if they were required to pay a market rate. This is a concept known as revealed preference, and can be used to quantify subjective wellbeing.	A Review of the Social Impacts of Culture and Sport (2015): Prepared by the UK Culture and Sport Evidence (CASE) Programme Intergenerational Review of Sport (2017). Prepared by Boston Consulting Group for the Australian Sports Commission The Value of a Community Football Club (2014): LaTrobe University Centre for Sport and Social Impact for AFL Victoria	ACIL Allen applied the average rate of value placed on an additional unit of participation in organised sport derived by the UK Culture and Sport Evidence programme, converted to Australian dollars and scaled up to the current year. Other studies have used the gross value of sports participation, which is approximately five times the rate of participation at the margin. ACIL Allen has elected for the marginal participation value as a conservative assumption as it is not possible to determine how many sports each participant plays.	Subjective wellbeing value: Dolan, P., D. Fujiwara, and L. Kudrna. 2014. Quantifying and Valuing the Wellbeing Impacts of Culture and Sport. Accessed online at www.gov.uk/ AUD/GBP swap (2014): RBA historical currency data Scaled to current year using RBA target rate of inflation (2.5 per cent)
Reduced recidivism	A number of studies show the important role sporting clubs can play to assisting in the social rehabilitation process for persons exiting the criminal justice system. The main benefit is a reduction in the rate of recidivism – or return to jail within a two year period.	Australian Institute of Criminology.(2000) Crime Prevention Through Sport and Physical Activity After the Siren: The Community Benefits of Indigenous Participation in Australian Rules Football (2017): Prepared by the Bankwest Curtin Economics Centre, Curtin University	ACIL Allen initially estimated a ratio of recidivism risk participants by using estimates of the rate of incarceration and rate of prisoner release per annum. Data on the average rate of recidivism in Western Australia was then used to determine how many recidivism risk prisoners would return to jail in a given	Cost of day of imprisonment (Adult & Juvenile): WA State Budget, Budget Paper 2, Volume 2, Department of Justice Cost of Services Recidivism rate (Adult & Juvenile): WA State Budget, Budget Paper 2, Volume 2, Department of Justice Cost of Services

Benefit	Rationale	Research/evidence base	Method of quantification	Data sources used
			year. Finally, an estimated 50 per cent reduction in recidivism risk was assumed (in line with previous albeit dated studies), in lieu of specific information on the quantum of risk reduction. Data on the average prison stay and cost per day of prison were sourced from WA Government agencies to determine the cost savings associated with reduced recidivism.	Incarceration rate (Male & Female): ABS Cat. 4517.0, Table 15 Incarceration rate (Juvenile): Australian Institute of Health and Welfare (2017) Youth detention population in Australia, Table 5.1 Incarceration rate (Population): ABS Cat. 4517.0, Table 24 Release rate per annum: ACIL Allen assumption Recidivism reduction: Australian Institute of Criminology. 2000. *Crime Prevention Through Sport and Physical Activity*.
Suicide prevention associated with improved mental health	Participation in sport improves mental health and wellbeing. The ultimate negative consequence of mental health challenges is suicide. By improving mental health outcomes, participation in organised sport can help reduce the rate of suicide by at-risk cohorts of the population.	More Than Winning: The real value of sport and recreation in Western Australia (no date): Prepared by the WA Department of Sport and Recreation The Relationship Between Organised Recreational Activity and Mental Health (no date): Prepared by the Mentally Healthy WA Centre for Behavioural Research in Cancer Control, Curtin University Lifeline (2010) Breaking the Silence: Suicide and suicide prevention in Australia	ACIL Allen calculated the rate of suicide per 100,000 people in the most at-risk demographic groups (age 18-24 and 25-35, regardless of gender, though the rate of suicide was significantly higher for males), the estimates attribution of suicides to mental health issues, and a reduction in psychological stress related with organised sports participation. To determine the social benefit of reduced suicide, ACIL Allen applied the Australian Government's Value of a Statistical Life to the reduced rate of suicide per 100,000 people.	Suicide rate (Male & Female): ABS Cat. 3303.0, Table 6 Attribution of suicide to identified or unidentified mental health issue: Lifeline. 2010 *Breaking the Silence: Suicide and suicide prevention in Australia* Reduction in psychological stress associated with organised club-based sports participation: WA Department of Sports and Recreation. 2018. *The relationship between organised recreational activity and mental health*. Accessed online at www.dsr.wa.gov.au Value of a Statistical Life: Department of Prime Minister and Cabinet (2014) Scaled to current year using RBA target rate of inflation (2.5 per cent)

Benefit	Rationale	Research/evidence base	Method of quantification	Data sources used
Improved mental health-related quality of life	Participation in sport improves mental health and wellbeing. This results in quality of life improvements, which can be as significant as the physical health benefits associated with participation.	Intergenerational Review of Sport (2017). Prepared by Boston Consulting Group for the Australian Sports Commission After the Siren: The Community Benefits of Indigenous Participation in Australian Rules Football (2017): Prepared by the Bankwest Curtin Economics Centre, Curtin University The Value of a Community Football Club (2014): LaTrobe University Centre for Sport and Social Impact for AFL Victoria More Than Winning: The real value of sport and recreation in Western Australia (no date): Prepared by the WA Department of Sport and Recreation The Relationship Between Organised Recreational Activity and Mental Health (no date): Prepared by the Mentally Healthy WA Centre for Behavioural Research in Cancer Control, Curtin University	ACIL Allen adopted the methodology used to calculate the savings associated with physical health to this calculation, using different rates of DALY per 1,000 participants and a higher rate of attributed gain to mental health associated with organised sports participation.	DALY by age cohort, mental health and substance abuse (2011): Australian Burden of Disease Study, Impact and Causes of Illness and Death Reduction in psychological stress associated with organised club-based sports participation: WA Department of Sports and Recreation. 2018. *The relationship between organised recreational activity and mental health*. Accessed online at www.dsr.wa.gov.au Value of a Statistical Life Year: Department of Prime Minister and Cabinet (2014) Scaled to current year using RBA target rate of inflation (2.5 per cent)

SOURCE: ACIL ALLEN CONSULTING

5 OVERALL SOCIAL RETURN ON INVESTMENT

As discussed in Section 2, the SROI of the organised club based football industry in Western Australia can be calculated in a number of ways. These are presented below. Prior to the calculation of SROI ratios, the cost of the industry must be determined.

5.1 The cost of the football industry for SROI purposes

ACIL Allen has calculated the real cost of the football industry in Western Australia in the 2016-17 football year was $164.8 million. This represents the actual expenditures of the WAFC, WCE, FFC, WAFL clubs and the community competitions governed by the WAFC. This has been scaled up by the WA CPI for the year to June 2018 (1.1 per cent), to yield a total real cost of $166.7 million. As a minimum these costs should be used as the denominator in an SROI ratio, or subtracted from total benefits (gross or attributable) for the purpose of calculating net benefits.

It is important to recognise that a significant portion (approximately $96.5 million, or 59 per cent of total costs) are incurred by the two AFL clubs, without the achievement of any direct calculated social benefits as part of the SROI framework. These costs have been included in the initial calculation of SROI as they are responsible for the generation of revenue for the WAFC via royalties and AFL club licence fees (which are then spent on activities which do generated a direct social benefit), and it is considered likely the AFL clubs contribute to overall football participation levels in the State. The activities of the AFL clubs also make up a significant share of the overall economic contribution of the football industry, which is included in the SROI framework (and could be considered an offsetting benefit).

It is also important to consider non-real, hidden or “social” costs. In this study, ACIL Allen has limited the calculation of social costs to the valuation of the volunteer hours provided by coaches, umpires, administrators and volunteers to the football industry. These hours have a social cost, as they could be deployed to an alternative use. To value the hours, ACIL Allen has applied the minimum wage rate ($18.93 per hour) to the total estimated hours of volunteering provided to the football industry. This yields an additional social cost of $40.6 million.

As such, the total calculated cost base for SROI purposes is **$207.2 million**.

5.2 Gross and net benefits

The Gross Benefits of the football industry in Western Australia in the 2018 football year are calculated at **$600.1 million**. This comprises $222.7 million of economic benefits (being the economic contribution of the football industry in 2016-17, scaled up by 1.1 per cent to bring the benefit to the 2018 football year), and $377.4 million in gross social benefits.

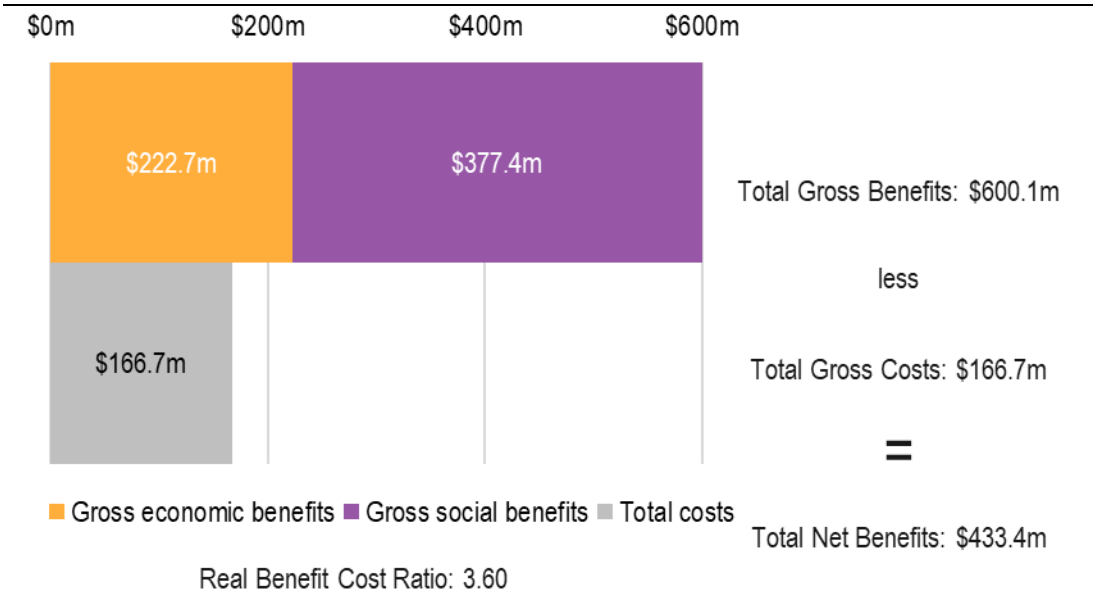
As stated in Section 2, ACIL Allen recommends this figure be used as part of the overall discussion regarding the benefits of football to the State. This is because it is the maximum benefit that can be linked to the football industry, given it does not consider the attribution issue, nor does it net off the costs of delivering the social benefits.

The Net Benefits of the football industry in Western Australia in the 2018 football year are calculated at **$433.5 million**. This comprises the $600.1 million of gross benefit, and subtracting the $166.7 million of real costs incurred by the football industry to produce the benefits. This does not include the social costs of the industry (being the value of volunteering hours.

The Real Benefit Cost Ratio of the football industry – being the gross benefits divided by the real costs – is 3.6. This implies that every dollar of real expenditure by the football industry in Western Australia in the 2018 football year produced $3.60 of social returns for the State. However, as previously discussed, this is considered to represent the maximum ratio of benefits to costs, as it does not consider the attribution of social benefits, and does not consider the social costs.

A summary of the results presented above is below (**Figure 5.1**).

FIGURE 5.1 GROSS AND NET REAL BENEFITS OF THE WA FOOTBALL INDUSTRY



SOURCE: ACIL ALLEN CONSULTING

The Real Benefit Cost Ratio can be cited as a measure of the benefits of the football industry to the State, but should be caveated in line with the discussion included in Section 2 and above. The SROI analysis included below is considered to be the more robust metric, and is recommended as the metric the WAFC uses for its own internal measurement.

5.3 Social Return on Investment

Overall, ACIL Allen calculates the gross SROI of the football industry in Western Australia is **$447.3 million**, bring $222.7 million of economic benefits and $224.6 million of attributable social benefits.

At an individual participant level, the attributable social benefits included in the SROI framework total $2,957 per participant, which is equivalent to a 5.2 per cent increase in the estimated mean equivalised household disposable income for a typical Western Australian household in the 2017-18 financial year.[5]

[5] The ABS' Household Income and Wealth series produces a metric known as equivalised household disposable income, which is a measure of the overall income position of a typical household adjusted for all of the major underlying differences in household formation (such as number of persons employed, number of child dependents, number of adult dependents and level of income). (cont. next page).

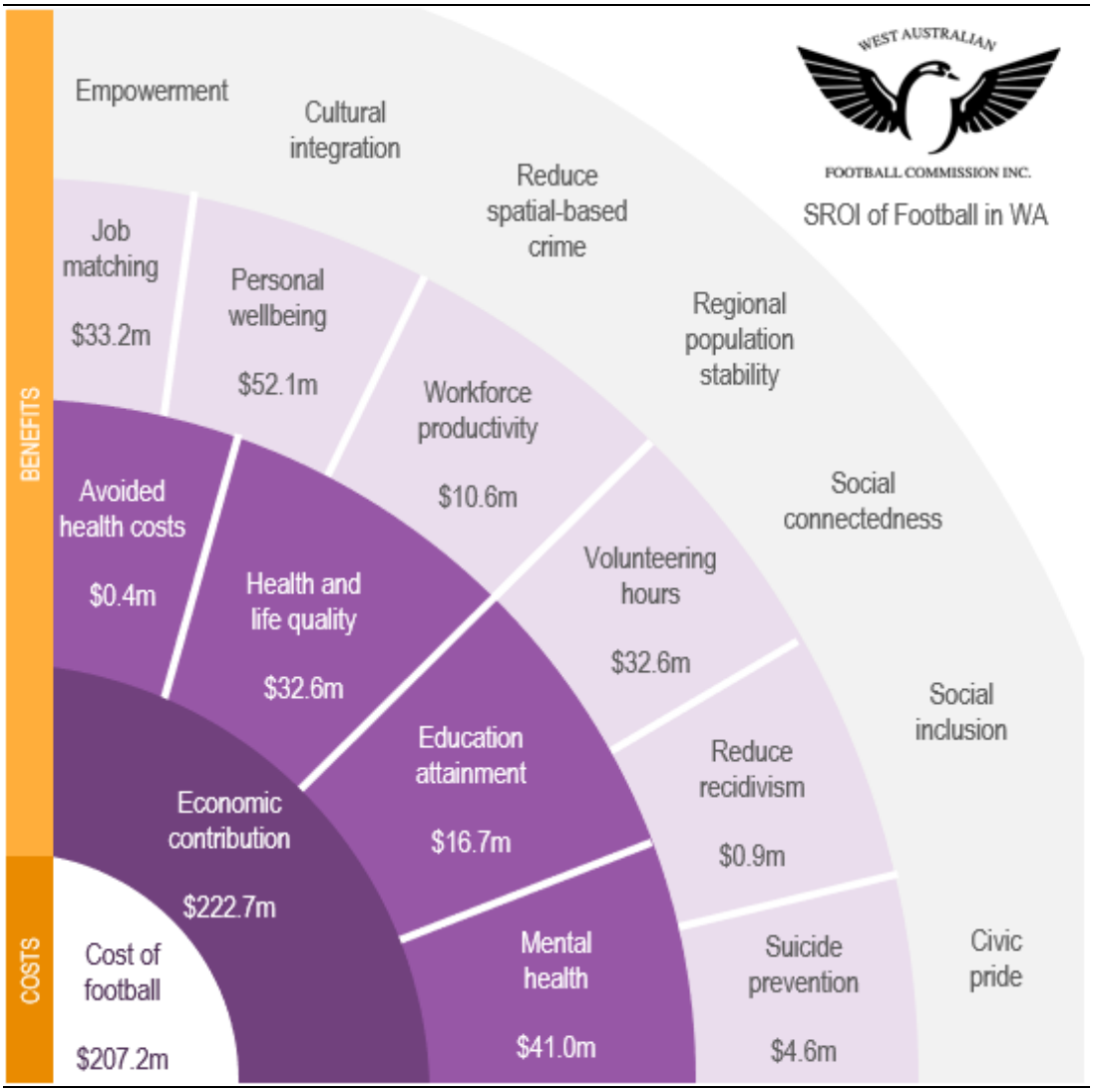
In net terms, the SROI of the football industry in Western Australia is **$240.0 million**. This compares the economic and attributable social benefits less the real and social costs incurred to produce the benefits. Given this figure is positive, it implies the football industry in Western Australia produces a benefit which exceeds the overall cost to society of the provision of the activities that deliver benefits.

Using the above, ACIL Allen estimates **the SROI of the football industry in Western Australia is 2.16**, implying for every dollar of inputs the football industry produces $2.16 worth of economic and attributable social benefits for Western Australia. This is lower than the gross benefits discussed in Section 5.2, as it only considers the attributable social benefits, and accounts for both the real and social costs of the football industry in the State.

A summary of the results presented above is included in the figure below (**Figure 5.2**).

The SROI ratio presented above includes the quantified benefits of club-based football only. It does not include the seven unquantified benefits which are considered real and attributable to participation in organised club based football, but for which reliable quantitative metrics could not be developed. These are also included in the overall framework below.

FIGURE 5.2 OVERALL SROI OF THE FOOTBALL INDUSTRY IN WESTERN AUSTRALIA



SOURCE: ACIL ALLEN CONSULTING

It is used as a measure of the overall economic "health" of the household sector. In this case it has been used as a way to contextualise the social benefits of the football industry captured by each participant. The latest data was produced for the 2015-16 financial year, and scaled up using the Perth CPI to the 2017-18 year.

6 SUGGESTED REFINEMENTS

Overall, the study shows there are clear economic and social benefits created by the football industry in Western Australia. Based on ACIL Allen's conservative approach, we estimate the Western Australian football industry returns $2.16 of economic and social value for every dollar of resources invested.

The SROI framework has been developed using a rigorous methodology and sound assumptions. However, it has been largely a desktop exercise, relying on published research rather than observed outcomes. Given this, ACIL Allen has a number of suggestions regarding potential refinement of the SROI framework the WAFC could consider as it beds down the model and begins to use it as an internal metric. These are summarised briefly below.

6.1 Update schedule

ACIL Allen suggests the WAFC update the SROI model once a year, to reflect changes to underlying data used to calculate benefits (such as labour force information), levels of participation as measured by the WAFC, and changes to assumed State-wide organised sports participation according to the Australian Sports Commission's AusPlay data.

AusPlay data is released by the Australian Sports Commission bi-annually, in October and April. Data released in October reflects the prior financial year (ie October 2018 data is participation data for the 2017-18 financial year), while the April release reflects the previous calendar year (ie April 2018 is participation data for the 2017 calendar year). ACIL Allen suggests the WAFC work around one of these releases as the basis for its annual update of the SROI model.

The SROI model has a flag next to any data which should be updated annually. Other data is sourced from reports or long-term studies, which are not necessarily updated annually. However ACIL Allen suggests the WAFC proactively monitors the Australian Institute of Health and Welfare who release reports on an ad-hoc basis.

It is also important for the WAFC to ensure the cost base of the football industry is updated on an annual basis, to account for any changes (increases or reductions) in the level of expenditure required to deliver its programs and run competitions. ACIL Allen has outlined the process for this in Section 4. In a simple sense, ACIL Allen's cost base has been calculated assuming grants paid from one level of football to another are not counted in each entity's expenditure, as these grants are then ultimately spent by the recipient entity. For example, when calculating the expenditure of the AFL clubs, licence fees and royalties paid to the WAFC should be removed from the total expenditure value.

6.2 Economic contribution study

An important component of the overall SROI framework is the economic contribution of the football industry to the State. Best practice would suggest this be updated on an annual basis to reflect any changes to the underlying structure of revenue or expenditure by the football industry.

ACIL Allen notes there has been one significant change to the structure of the football industry in the year after the economic contribution study was conducted, being the two AFL clubs' move to Perth Stadium to play home and away and finals games. This coincided with the advent of the Future Funding Model for football in Western Australia. Additional changes set to come in over the next 12 months include the addition of a tenth WAFL team plus the move of the West Coast Eagles to the club's new facilities in Lathlain. ACIL Allen suggests the WAFC conduct a revised economic contribution study at the conclusion of the first football year post conclusion of these changes to reflect the changes to the structure of the football in the State.

In lieu of an annual study, ACIL Allen suggests at a minimum the WAFC completes an economic contribution study once every three to five years, to ensure information regarding the economic contribution of the football industry is contemporary. In between these estimates, ACIL Allen suggests the WAFC scale up the gross economic contribution total ($222.7 million in 2017-18) by the Perth Consumer Price Index.

6.3 Industry survey

Regarding SROI benefits, ACIL Allen is confident the benefits quantified in the framework are robust and conservative but reflect realistic proxy measures for the benefits that are created by the football industry. However, we would suggest the WAFC completes a comprehensive survey of football participants to understand the full range, scope and attribution of benefits created by the football industry. This was the approach taken by the Centre for Sport and Social Impact in its study for AFL Victoria. A well designed and well subscribed participant survey would help strengthen the WAFC's SROI framework.

ACIL Allen suggests the WAFC complete an industry-wide benefits survey on an annual basis, centred on building a detailed understanding of the type and scale of benefits observed by participants in organised club-based football in Western Australia. The survey should be targeted at participants in the first instance, but could also include survey questions asked of individuals on behalf of the club or clubs they are involved in.

As a priority, the WAFC should survey participants to gather evidence regarding the attribution issue discussed in Section 5.3. This could be achieved with two questions:

1. "In addition to participation in your community football club, did you actively participate in any other organised club-based sporting activities in the past year?" (and potentially following up with a question regarding which other sports participated in)
2. "If Australian football did not exist, would you (one choice only):
    a) Join an organised sporting club but in another sport
    b) Substitute this with another form of unorganised but regular sports participation (such as regularly attending a gym or running club)
    c) Cease participating in sport all together"

Questions of this nature would provide the WAFC with an evidence base to adjust the attribution ratios used for this study.

The first survey should be completed in the 2019 season, and centre on understanding and/or confirming the benefits currently included in the scope of the SROI framework, and to gather additional qualitative feedback regarding the benefits of football (using free text questions). Second and subsequent surveys should centre on determining the scale of those benefits quantified in the framework, and the development of metrics that would allow for the bringing in of presently unquantified benefits into the quantified framework.

6.4 Model refinements

Regarding costs, ACIL Allen has costed the football industry on an "all in" basis, being that expenditure associated with all WAFC programs is included in the cost base. This means expenditure on schools-based programs, AusKick and AFL 9s counts towards costs, but does not create any measurable benefit in the SROI framework. The WAFC may consider removing these costs when calculating the overall cost of the industry.

An additional refinement to the model on the expenditure side could be to gather a more comprehensive understanding of the localised financial footprint of community clubs via a standardised set of financial reporting tools. Such tools could be simple in nature and rolled out alongside the industry survey. This information could then be fed into an annual view of the expenditure of the football industry in the State for SROI purposes, and included in future economic contribution studies (as it has been assumed outside of scope in this initial study).

A ABOUT INPUT-OUTPUT ANALYSIS

Overview

I-O models capture the direct and indirect effects of expenditure by capturing, for each industry, the industries it purchases inputs from and also the industries it sells its outputs to. For example, the I-O model for Western Australia captures purchases from and sales to industries located in Western Australia, as well as imports from outside of Western Australia.

As a worked example, the figure below depicts how expenditure from a tourist traced through a (very simple) economy:

1. A tourist **directly** spends money on tourism related products, such as airlines, cruise ships, food, beverages and accommodation.
2. These tourism products are then **indirectly** supplied in part by other companies, these companies provide goods and services that go into final product that tourist purchase. For example, a food manufacturing business as well as a catering business could provide inputs into food and beverages that a tourist purchases.
3. This direct and indirect demand for goods and services requires labour, and the flow of money from tourist to business and business to business allows for wages and salaries to be paid to employees, profits to be earned and taxes to be paid to government.
4. In turn, results in **flow-on** or induced economic activity.

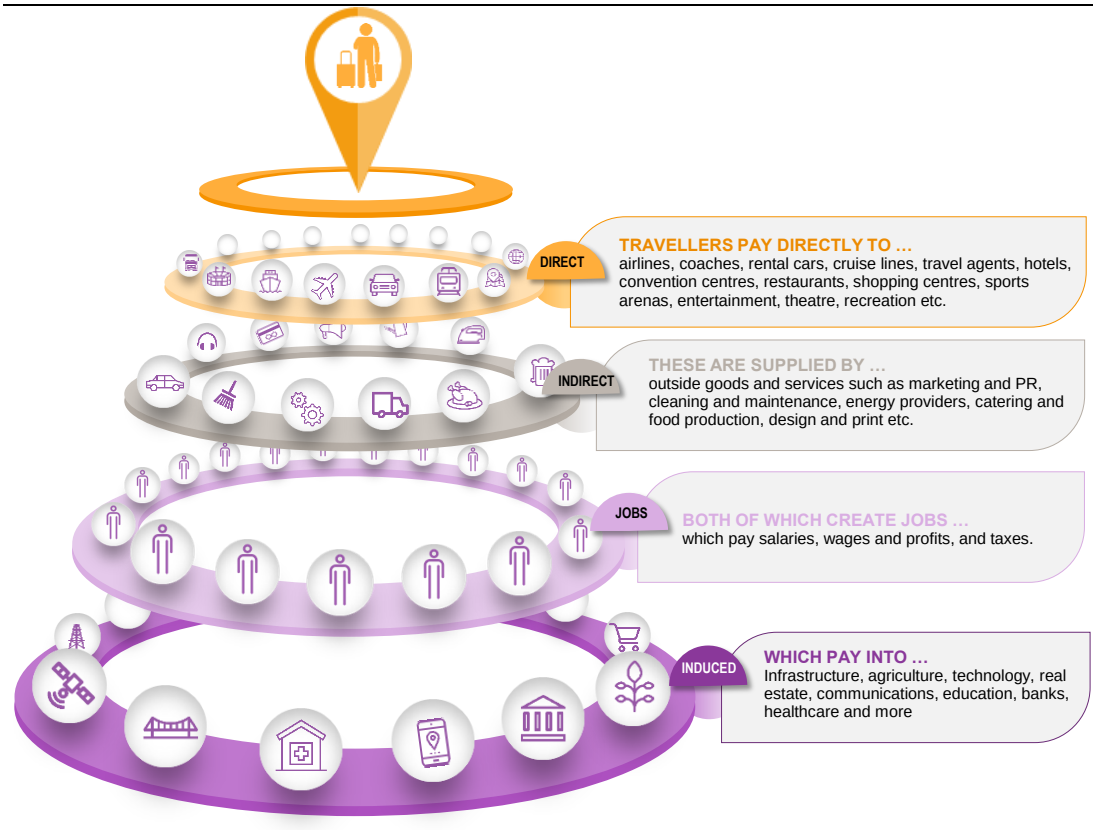
Results of I-O Modelling

I-O tables are able to produce results for a range of key economic indicators. For example:

- real economic output;
- industry Gross Value Added;
- real exports;
- real incomes;
- real taxation; and
- employment.

Another advantage of using I-O tables can be the level of industry specific results the tables can produce.

FIGURE A.1 "TRACE THROUGH" OF TOURISM EXPENDITURE IN AN INPUT-OUTPUT MODEL



SOURCE: ACIL ALLEN CONSULTING

ACIL ALLEN CONSULTING PTY LTD
ABN 68 102 652 148

ACILALLEN.COM.AU

ABOUT ACIL ALLEN CONSULTING

ACIL ALLEN CONSULTING IS THE LARGEST INDEPENDENT, AUSTRALIAN OWNED ECONOMIC AND PUBLIC POLICY CONSULTANCY.

WE SPECIALISE IN THE USE OF APPLIED ECONOMICS AND ECONOMETRICS WITH EMPHASIS ON THE ANALYSIS, DEVELOPMENT AND EVALUATION OF POLICY, STRATEGY AND PROGRAMS.

OUR REPUTATION FOR QUALITY RESEARCH, CREDIBLE ANALYSIS AND INNOVATIVE ADVICE HAS BEEN DEVELOPED OVER A PERIOD OF MORE THAN THIRTY YEARS.