

CAS review and submission to Government

MAXIMISING THE POTENTIAL OF AUSTRALIAN SPORT

Using Australian Sport for maximum health, social and economic benefit and to underpin a future National Policy Framework for Physical Activity



Confederation of Australian Sport

The Confederation of Australian Sport is an independent, not-for-profit industry voice committed to promoting the contribution of community sport and representing the interests of those organisations and peak bodies involved in community based Sport and Active Recreation.

Guided by the mantra of 'sport for all' CAS plays a key facilitation role and works strategically and collaboratively in the following areas in pursuing its goals and objectives.

- Collaboration: building industry collaboration
- Advocacy: issues analysis and advocacy
- Service: providing industry services

CAS will continue to foster and promote its key properties being:

- Australian Masters Games
- Australian Sport Awards

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Consultation Group

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James Ferguson, Greg Hartung, Dallas O'Brien, Paul Brettell, Don Knapp, Jason Hellwig, Phil Jones, Greg Doyle, Andrew Dee, Raymond Cher, Brett Pickett, Kate Palmer, Bill Pulver, Mark Rendell, Peter Marriott, Terry Cubley, Anne Gripper, Cam Vale.

Project Management

Robert Bradley (Confederation of Australian Sport)

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Any enquiries about, or comments on this publication should be directed to:

Robert Bradley

Confederation of Australian Sport

PO Box 3526 Manuka ACT 2603

Tel: 0412343651 Email: cas@sportforall.com.au

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Executive Summary

The contribution that Sport makes to the Australian community is dramatically underestimated – in scale, impact and potential. Sport makes an economic contribution of over \$22 billion every year to the Australian economy and provides a unique and highly significant contribution to the physical and psychological health and wellbeing of the community and to the social fabric of the nation.

It has been widely reported that Australia faces a huge challenge with ever creeping levels of ‘sedentary lifestyle illnesses’ - obesity, cardiovascular disease, diabetes and mental illness that are threatening the long term health and wellbeing of the population and the economy.

It is critical that the levels of physical inactivity of the Australian population are reversed in a most cost effective way. Leadership of a nationally coordinated response by the Australian Government is needed.

Confederation of Australian Sport, following broad industry consultation is seeking:

1. Development of a National Policy Framework for Physical Activity underpinned by additional research in the areas identified in this report.
2. Provision of financial support for the employment of physical education teachers in all Primary Schools.
3. Provision of additional resources and incentives to enable Australian sport and physical activity providers to increase community physical activity levels.
4. Implementation of measures to ensure affordability of sport and physical activity participation for all Australian families.

Two thirds of the Australian population already participate in sport every year to some extent. The task though is to elevate physical activity levels of more than 13 million Australians to meet the requirements of the **National Physical Activity and Sedentary Behaviour Guidelines**¹⁰ set as the benchmark by the Australian Government. The Australian sport system is ready to step in. It is an important asset ready to be employed in the fight for a healthy, active Australia.

This report demonstrates how the effective use of sport as a vehicle for increasing physical activity throughout the community will lead to major savings in future health budgets and will also lead to a wide range of additional social and economic benefits that will greatly enhance Australian society.

The Australian sporting system is a highly developed network that has the capacity to consistently foster and deliver engagement in moderate and vigorous physical activity and it has the capacity for expansion and scaling up. Sport provides a highly efficient way of achieving the levels of Moderate and Vigorous Physical Activity (MVPA) required for personal health improvement. The Confederation of Australian Sport estimates that over 50% of the MVPA undertaken by individuals meeting the physical activity guidelines is currently provided by sport.

At \$22 billion per year Sport’s economic contribution is 17 times greater than the combined total of national and state government funding of \$1.3 billion. CAS calculates that every Australian sport participant contributes almost \$1,600 to the economy each year at \$8 per sporting hour.

Australia’s sport participation contributes to the nation through: reduction in health costs; increases in workplace productivity; the building of social capital through volunteering; the elevation of personal wellbeing; and by paying taxation on sport services and products.

Despite the size of its contribution to the Australian community, Australian Sport is not being used to its maximum potential.

If the Australian Government is genuine in its intent to make Australia the healthiest nation by 2020, as stated in the *National Preventative Health Strategy – the roadmap for action*³⁷ the Confederation of Australian Sport believes that a major investment of \$5.5 billion a year in Sport and Physical Activity is essential.

The current situation

Over recent decades the health of the Australian community has seriously impacted by a range of factors including physical inactivity, inappropriate lifestyle choices, poor nutrition and over eating. Population obesity has risen to record highs with over 65% of adults classed as being overweight or obese. One in five Australian adults has cardio vascular disease. Childhood obesity is at unacceptable levels with over 25% of 5-17 year olds being overweight or obese.

Lifestyle pressures including social isolation are leading to mental health illnesses including depression, schizophrenia and dementia increasing at alarming rates.

Health costs are escalating to unsustainable levels. Physical inactivity contributes 6.6% of the overall health burden in Australia and 10% of all deaths. The NSW Government reported that in 2012 obesity cost the state \$19 billion or \$60 billion nationally.

Reversing the levels of Physical Inactivity is seen as a critical measure. In 2014 the Australian Government released the latest **National Physical Activity and Sedentary Behaviour Guidelines**¹⁰ to prescribe physical activity levels for children and adults.

According to the ABS⁶ in 2011-12 only 43% of adult Australians met the 'sufficiently active' threshold of 150 minutes of physical activity over five or more separate sessions per week. Only 19% of Australian children and young people (5-17 years) met the physical activity recommendation of 60 minutes of moderate and vigorous physical activity (MVPA) every day.

Consequently over 13.7 million (60%) of Australians do not meet the National Physical Activity guidelines.

Figure 1: Summary – Achievement of National Physical Activity and Sedentary Behaviour Guidelines (2014)¹⁰

Demographic	Achieving Guidelines	Not Achieving Guidelines	Total Population
Adults (18 years and over)	7.78m (43%)	10.32m (57%)	18.1m
Children (5-17 years)	0.76m (19%)	3.24m (81%)	4.0m
Children (2-4 years)	0.58m (72%)	0.22m (28%)	0.8m
Total	9.12m (39.8%)	13.78m (60.2%)	22.9m

The health, social, educational and economic contribution of Australian Sport

Australian Sport has a range of unique and powerful characteristics that combine to contribute to the nation from health, social, educational and economic perspectives. The beneficiaries of sport's contribution are government, business and individuals.

The Australian Sporting Menu provides a broad range of options available to cater for the widest variety of preferences and desires with over 90 sports available to the community nationally. Sport is coordinated and delivered by an extensive, intricate network that reaches across the nation from major cities to the smallest of country towns.

While the rates of physical inactivity and sedentary behaviour are unacceptably high it is clear that the majority of Australians are able and do access organised and non-organised sport each year. Over 14.1 million Australians age 5 years and over participate in organised or non-organised sport each year. This represents 64.1% of the population.

Health Contribution: Participating at moderate and vigorous levels of physical activity (MVPA) is essential to achieving improved health outcomes required within the National Physical Activity and Sedentary Behaviour Guidelines. Without sustained MVPA an individual will not improve their aerobic capacity or muscular strength.

CAS calculates that sport contributes over 50% of total Moderate and Vigorous Physical Activity (MVPA) in Australians who are currently achieving the benchmark. CAS estimates that there are between 1.84 – 2.82 billion hours spent in Moderate and Vigorous Physical Activity (MVPAH) in Australia each year.

From the available information CAS proposes that a saving in health costs in the order of \$1.5 billion per year is contributed by Australian sport.

Social Contribution: Sport makes a sustained contribution to the social wellbeing of Australians from three major perspectives through Elite sport; Community sport; and Volunteering.

- **Elite Sport** - Australia's elite sporting performances on the world stage make a valuable contribution to the quality of life and feeling of wellbeing of the community. In 2008 the contribution of elite sport was shown to increase the Australian Unity Wellbeing Index¹² by more than \$23 per household. The elite sport contribution is valued at \$184 million based on 8 million households x \$23 of increased wellbeing.
- **Community Sport** - Personal participation in sport at the community level contributes to improvements in physical and mental health, feelings of wellbeing, inclusion and connectedness.

Involvement in sport builds social capital within the community assisting individuals to develop useful and transferrable skills such as competitiveness, goal setting and self-discipline; empathy and understanding; relationships and team spirit. Sport assists in social integration - transcending race, religion, class and income. In the workplace sport contributes to improvement in the productivity of employees reducing absenteeism and improving job focus.

Sport and physical activity levels provide a productivity increase of 1% of GDP²³ which equated to \$12 billion in 2008-09.

- **Volunteering** - Volunteering to assist community organisations is a distinctive and highly regarded feature of Australian culture. Volunteering builds the social capital that allows thousands of community organisations to function effectively.

Volunteering in sport and recreation accounts for 33% of Australia's 7 million volunteers and contributes 26.5% of total volunteer hours. 2.3 million Australians volunteered in sport in 2013^{6,7} (14% of the adult population). The imputed value of volunteering is \$8.0 billion based on 2.0m volunteers x 4 hours per week (200 hours per year) x \$20 per hour.

Educational Contribution: Sport and physical education can make distinctive contributions to the development of children's fundamental movement skills and physical competences, which are necessary precursors of participation in later lifestyle and sporting activities. Sport and physical education can also support the development of social skills and social behaviours, self-esteem and pro-school attitudes, and, in certain circumstances, academic and cognitive development.

Calculating the economic contribution of Australian Sport

Sport makes a contribution to the Australian Economy through:

- Direct industry contribution
- Reduction in health costs
- Workforce productivity contribution
- Direct and intangible contribution to social capital
- Improving the quality of life and feeling of wellbeing in the community
- Contribution via taxation

In 2012-13 total revenue of the Australian Sport Industry was \$49.7 billion says IBIS World³⁰.

- Australian Sports Inputs - \$22.5b - Retail Sports and Camping Equipment (18.7%)
- Australian Sport Socialising - \$15.0b - Licensed Sports Clubs (51.1%); Sports Clubs (19.4%)
- Australian Sport Activity (excl volunteers) - \$7.11b - (Administration 49.3%); Fitness Centres (18.3%)

- Australian Sport Derivatives – \$5.2b - Sports Betting (64%); Sports Media (30.1%)

The sport industry contributed 1.2% of total Australian revenue of \$4.3 trillion or 2% of \$1.5 trillion GDP.

Figure 2: Summary of Australian Sport’s Economic Contribution

Category	Contribution	\$ (million per year)
Reduction in Health Costs	○ Reduction in costs to the health sector (net of injury costs)	\$1,500
Productivity gains	○ Increased worker wellbeing and productivity (at 1% GDP)	\$12,000
Volunteers in sport	○ Imputed value of volunteers (2.0m volunteers x 200 hours per year x \$20 per hour)	\$8,000
Elite Sport	○ Valued at \$23 per household in 2008 x 8.18m households.	\$180
Taxation	○ \$745m in GST paid on \$8.2b sales	\$750
Total		\$22,430

Sport contribution:

- **\$22.4 billion** = the economic contribution of Australian sport per year
- **\$1,588 per sports participant** = contribution per sports participant (organised and non-organised sport) based on \$22.4b divided by 14.1m participants
- **\$7.94 per hour** = generated from each hour of sports participation based on \$1,588 divided by the average sports participation of 200 hours per person per year.

Government contribution:

- **\$1.3 billion** = Australian and State/Territory Government funding of sport
- **\$92.20 per sports participant** = contribution per sports participant (organised and non-organised sport) based on \$1.3b divided by 14.1m participants
- **Government net return on investment in sport = \$21.1 billion** based on \$22.4b - \$1.30b
- **Government return on investment in sport (ROI) = 17:1**

The CAS calculation shows that sport contributes \$22.4 billion compared to \$1.3 billion in Government funding. This represents a disparity of over \$21 billion with a Government return on investment of over 17:1.

CAS believes that at a 4:1 ROI across national and state/territory Governments funding for sport and physical activity should be increased from \$1.3 billion to \$5.5 billion per year.

Gap Analysis – opportunity for improvement

CAS has identified a number of gaps in the current system that if properly addressed with lead to a significant improvement in national physical activity participation rates. With an appropriate investment of resources an increase of 15% in sport participation is a realistic target to be achieved within a 5 year timeframe.

The Gaps identified in the report include:

- Gap 1: Addressing reasons why some people do not participate in physical activity
- Gap 2: Potential for increased participation in physical activity to meet National Guidelines
- Gap 3: Potential for increased participation in sport
- Gap 4: Socio-Economic disadvantage affecting sport participation
- Gap 5: Sport participation in the School Education system
- Gap 6: Further research and knowledge required to inform policy development and direction
- Gap 7: Addressing the financial disparity between Government funding of sport compared to the contribution that sport makes to the nation

Overview of Recommendations

CAS proposes the adoption and implementation of the following recommendations:

Recommendation 1: - National Policy Framework for Physical Activity

CAS recommends that a National Policy Framework for Physical Activity be developed as a matter of urgency, including healthy eating and nutrition. This policy development would include representation from the major stakeholder groups from the broader physical activity sector and have strong presentation from sport.

The national strategy should be ready for implementation by December 2015, should be nationally coordinated with buy-in from all State and Territory Governments.

A national media campaign should be implemented to educate the Australian public about the physical activity strategy and the benefits of behavioural change.

The National Policy Framework for Physical Activity to be funded in part by a significantly increased commitment to Preventative Health.

Recommendation 2: - Research

CAS recommends that a package of sport related interventions be identified and evaluated for cost effectiveness in reducing population physical inactivity.

It is recommended that the ACE- Assessment of Cost Effectiveness³⁶ methodology be used for consistency with previous assessments of health interventions. CAS offers to coordinate this part of the strategy.

Recommendation 3: Funding

CAS recommends that Government significantly increases the funding of sport and physical activity to address the \$20 billion disparity that currently exists with a Government return on investment of over 17:1.

At a 4:1 ROI across national and state/territory Governments funding for sport and physical activity should be increased from \$1.3 billion to \$5.5 billion per year from 2015-16.

The source of funding is naturally the prerogative of Government but CAS respectfully suggests the following:

Category	Purpose	Funding \$m	Potential Funding Source
Policy and Research	<ul style="list-style-type: none"> Policy development Research trials of sport interventions Media – public education campaign to explain the overall strategy 	\$400m	Additional funding for Preventative Health in Federal budget. <ul style="list-style-type: none"> Research via Dept of Health
School system	<ul style="list-style-type: none"> Provision of PE teachers (\$100k x 8,500 schools = \$850m) Additional facilities and equipment (\$150m) 	\$1,000m	Tied Australian Govt funding via Education budget allocation to States/Territories
Sports system	<ul style="list-style-type: none"> Maintain existing \$1,300m funding through ASC and jurisdictions Additional funding across sports system to achieve set KPIs (\$1,500m) Particular support for socio-economic disadvantage channelled through sport (\$100m) 	\$2,900m	\$1.3b funded by existing sources Additional \$1.6b: <ul style="list-style-type: none"> ASC budget increase \$200m By States from GST revenue \$900m \$500m from Prev Health budget
Individual participation	<ul style="list-style-type: none"> Rebate/subsidy system to be established to contribute \$150 x 7.3m towards sport participation of individuals and families 	\$1,200m	Funded by reduced income tax revenue
Total		\$5,500m	

Figure 3: Recommended allocation of funds to enhance population sport and physical activity.

Recommendation 4: - Delivery

CAS recommends that 100% of Australian children achieve the required 330 minutes of a total 420 minutes physical activity each week via the school education and community sport sectors. The remaining 90 minutes of MVPA per week to be the responsibility of the home environment.

CAS believes that the school system should commit to provide a minimum of 150 minutes of MVPA for 100% of students each week to contribute 35% of each individual physical activity requirement.

The two other major contributors to children's MVPA levels should be Sporting Clubs* and the home.

- Contribution by sporting clubs: 180 minutes = 2 x 60min training sessions + 60 minute match
- Home: minimum 90 minutes = household chores, free play, other MVPA activity

Contributor of Sport and Physical Activity (MVPA)	Time per week (minutes)
School education system	150
Sporting Clubs*	180
Home	90
Total	420

Figure 4: Suggested allocation for commitment to provide MVPA to school aged children

Note: Sporting Clubs* means community based sporting clubs, private providers or other local facility operators.

Recommendation 5: - Social Disadvantage

CAS recommends that measures are implemented to reduce the cost of participation in sport and physical activity for all members of the population, particularly those from disadvantaged sectors. Measures for consideration may include personal tax deductions, rebates to sporting clubs, subsidies to sporting associations or other equitable measures.

Conclusion

This report shows how the Australian Sporting system has the potential to address and overcome some of the major public health issues confronting the nation. Australian Sport has the structure, ability and desire to be successfully used as a central platform within a National Policy Framework for Physical Activity.

Using sport as proposed in this report is a highly efficient and cost effective way of improving participation in physical activity and will provide the underpinning skills, knowledge and desire required for every Australian to develop the lifetime habit of an active, healthy lifestyle.

As shown in this report a greater investment by government in sport will provide almost immediate returns in both health and economic terms and that an increase in participation by 15% over five years is realistic and achievable. If the target of 15% improvement is achieved 3.44 million more Australians will meet the national guidelines by 2020 (55% of the Australian population).

The reports further proposes that with a continued commitment to the strategy over the coming fifteen years 85% of the Australian population would be achieving the guidelines by 2030.

The Confederation of Australian Sport looks forward to working with all major stakeholders and policy makers to develop a National Physical Activity Strategy and to implementing the recommendations over the coming years.

Maximising the potential of Australian Sport

Section 1: Introduction

Australia faces a huge challenge with ever creeping levels of so called 'sedentary lifestyle illnesses' - obesity, cardiovascular disease, diabetes and mental illness threatening the long term health and wellbeing of the population and the economy.

This health burden is compounded by the fact that reducing levels of physical activity and physical skills in Australian children makes them less able and less interested in achieving an active, healthy lifestyle.

Australian Sport is uniquely positioned to spearhead an effective nationally coordinated response. Sport has the potential to provide the physical, psychological and aspirational elements required for successful acquisition and improvement of physical and emotional wellbeing throughout a lifetime.

The Confederation of Australian Sport (CAS) believes that the time is right to make a major long term commitment to improving the levels of physical activity of the Australian population by implementing a coordinated systematic approach to sport and active recreation. This proposal requires leadership by the Australian Government and a long term government and non-government commitment founded on the 3-pillars of Sport, Health and Education.

The benefits of a successful implementation will include significant improvements in the fitness, health, skill and wellbeing of individuals and the reduction of the financial and resource burden on Departments of Health nationally.

Section 2: The Problem

Over recent decades the health of the Australian community has been seriously impacted through increases in 'sedentary lifestyle illnesses' caused by a range of factors including insufficient physical activity, inappropriate lifestyle choices, poor nutrition and over eating.

This decline has led to population obesity rising to record highs with over 65% classed as being overweight or obese, of which 28% of the population are classed as obese or morbidly obese³. Cardiovascular disease, stroke, diabetes and some cancers are at unacceptably high levels. One in five Australian adults has cardio vascular disease.

Childhood obesity is unacceptably high with over 25% of 5-17 year olds being overweight or obese. Less than 19% of 5-17 year olds meet the Government's recommendations on physical activity.

*The 2014 Report Card on Physical Activity for Children and Young People*¹ grades overall physical activity levels of Australian children as a "D-". Today's children are 15% less aerobically fit than their parents were at the same age and are less physically skilful. Anecdotally there has been less emphasis on sport and physical activity in schools for the past three decades.

Lifestyle pressures including social isolation are leading to mental health illnesses including depression, schizophrenia and dementia increasing at alarming rates. The growth of illnesses such as early on-set dementia is of particular concern for an increasingly ageing population.

Health costs are escalating to unsustainable levels. Physical inactivity contributes 6.6% of the overall health burden in Australia and 10% of all deaths¹⁵. The NSW Government reports that in 2012 obesity cost the state \$19 billion. If similar expenditure was met in other states then obesity cost the nation over \$60 billion nationally in 2012.

Over 13,000 deaths annually are attributed to physical inactivity. There are over 45,000 new cases of physical inactivity every year.

From the plethora of research and statistics it is very clear that increasing the level of physical activity across the population is critical for Australia's future.

Research commissioned by Vic Health¹⁷ in 2009 states "Physical activity, which is increasingly being engineered out of our working and social lives, is important to maintaining health. Physical activity enhances muscle strength, aerobic capacity and psychological well-being, while moderating health risk factors such as obesity, high cholesterol and hypertension."

Using research available in 2009 the National Heart Foundation and private organisations such as Frontier Economics estimated that "if more Australians were more physically active for just 30 minutes per day the Australian healthcare system could save \$1.5 billion annually."²⁸

Part of the recent response from the Australian Government was to design a set of physical activity parameters for the population to achieve. The **National Physical Activity and Sedentary Behaviour Guidelines (2014)**¹⁰ prescribe that physical activity levels equivalent to 2.5 hours per week of moderate intensity activity (i.e. an effort equivalent to brisk walking, or approximately 4000 kJ/week) are considered important targets to achieve health benefits. Children 5-17 years of age should undertake 60 minutes of moderate to vigorous physical activity daily (420 minutes per week). Evidence suggests that walking for half an hour a day, five days a week, may increase life expectancy by 1.5 to 3 years depending on the intensity.

So the problem for the Australian Government and for State and Territory Governments is how to achieve the required increases in physical activity across the community in a timely and cost effective way.

Strong consideration should be made of maximising existing structures, systems and human resources as the foundation for the future strategy.

Australian Sport has the framework and basic infrastructure already in place by which the population can engage and effectively participate to achieve part of their physical activity requirements, particularly at levels of moderate and vigorous intensity.

"There is an inextricably link between sport and health," said The Hon John Alexander MP speaking on behalf of Minister for Sport Peter Dutton at the Business of Sport Summit (BOSS) on 2 April 2014. "Sport and physical activity is the prescribed medication for beating today's sedentary lifestyle illnesses."

CAS observes that while there are many individual Government and non-government initiatives of merit addressing elements of the issue there is no singly focused national policy framework or program currently in place to deal with the problem as a whole.

CAS proposes that a long-term strategy be established to ensure that all Australians are encouraged and have ready access to sources of physical activity, particularly with easy access to an enhanced, community based Australian sports system.

Desired Outcome

Every Australian must have the skills, knowledge and desire to live an active, healthy lifestyle incorporating sport and active recreation as 'the habit of a lifetime'.

Section 3: Australian Government direction – National Physical Activity and Sedentary Behaviour Guidelines

The Australian Government Department of Health has recognised the scale of the problem and has established the **National Physical Activity and Sedentary Behaviour Guidelines (2014)**¹⁰ as guidance for each of the life stage age brackets. A summary of the guidelines is shown in the table below.

Table 1: Summary of recommended National Physical Activity and Sedentary Behaviour Guidelines (2014)¹⁰

Age group	Physical activity recommendations	Sedentary behaviour and screen time recommendations
Infants (Birth to 1 year)	Physical activity should be encouraged from birth, especially supervised floor-based play	Children (0-5 years) should not be sedentary, restrained or kept inactive for more than 1 hour at a time, with the exception of sleeping.
Toddlers (1-3 years) and Pre-schoolers (3-5 years)	Toddlers and pre-schoolers should accumulate at least 3 hours of physical activity (light, moderate or vigorous) every day.	Children (less than 2 years) should not take part in any screen time activities. Children (2-5 years) should be limited to less than one hour per day of screen time.
Children (5-12 years) and Young People (13-17 years)	Children and young people should accumulate at least 60 minutes of moderate to vigorous activity every day. (420 minutes per week) A variety of aerobic activities should be undertaken, including some physical activities that are vigorous in intensity. Physical activities that strengthen muscles and bones should be included on at least 3 days per week. For additional health benefits, children and young people should engage in more physical activity (up to several hours) every day.	Children (5-12 years) and young people (13-17 years) should minimise the time spent being sedentary every day and break up long periods of sitting as much as possible. Children (5-12 years) and young people (13-17 years) should limit their screen time to no more than 2 hours per day.
Adults (18-64 years)	Adults 18-64 years should be active on most, preferably all, days every week. Adults 18-64 years should accumulate 150 to 300 minutes (2½ to 5 hours) of moderate intensity physical activity or 75 to 150 minutes (1¼ to 2½ hours) of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week. Adults 18-64 years should do muscle strengthening activities on at least 2 days each week.	Adults 18-64 years should minimise the amount of time spent in prolonged sitting. Break up long periods of sitting as often as possible.
Older People (65+ years)	Older people 65+ years should do some form of physical activity, no matter what their age, weight, health problems or abilities. Older people should be active every day in as many ways as possible, doing a range of physical activities that incorporate fitness, strength, balance and flexibility. Older people should accumulate at least 30 minutes of moderate intensity physical activity on most, preferably all, days.	Older people who have stopped physical activity, or who are starting a new physical activity, should start at a level that is easily manageable and gradually build up the recommended amount, type and frequency of activity.

Definitions in above table:

- *Screen time refers to time spent using electronic media such as television, seated electronic games, portable electronic devices or computers for entertainment.*
- *Moderate intensity physical activity will cause a moderate increase in the heart rate and breathing but the individual should still be able to speak easily (eg: brisk walking, active play, riding a bike or approximately 4000 kJ/week)*
- *Vigorous intensity physical activity is activity undertaken for fitness, recreation or sport that causes a large increase in the heart rate or breathing*

Section 4: Measuring progress against National Physical Activity Guidelines

The following initial results show progress against the benchmark guidelines in 2011-12. The results are reported in the Australian Bureau of Statistics (ABS) *Perspectives on Sport - Let's Get Physical: How do Australians Measure Up?* Cat no: 4156 (Nov 2013)⁶.

4.1 Adults

In 2011-12 only 43% of adult Australians met the 'sufficiently active' threshold of 150 minutes of physical activity over five or more separate sessions per week. A slighter higher percentage of males (45%) were sufficiently active compared to 41% of females.

There are 18.1 million adult Australians (18 years and older) which means that 7.78 million (43%) are achieving the guidelines and 10.32 million are not.

Around 20% of males and females were classed as 'inactive' while around 36% of adult Australians were classed as 'insufficiently active'.

Within the adult demographic Australians aged 18-24 years were more likely to meet the guidelines than any other age group at 53%. Percentages of ages meeting the guidelines declined with age and at 75 years only 25% met the guidelines

Other factors influencing the achievement of the guidelines include:

- Household income – 57% from the highest income households compared to 35% in the lowest income quartile
- Index of Relative Socio-economic Disadvantage (IRSD) – 52% achievement from those from the lowest disadvantage compared to 34% from those in areas of greatest disadvantage
- Occupation - higher % achievement from those working as Professionals (59%) compared to trade workers and labourers (36%)

Evidence from three ABS³ national health surveys conducted between 1995 and 2011 suggest that the proportions of Australians reporting sedentary or low exercise levels have not changed markedly over the last fifteen years.

4.2 Children and Young People

According to the *Australian Health Survey: Physical Activity 2011-12*³ cat no: 4364 only 19% of Australian children and young people (5-17 years) meet the physical activity recommendation of 60 minutes of moderate and vigorous physical activity (MVPA) every day. The *Active Healthy Kids Australia 2014 Report Card on Physical Activity for Children and Young People*¹ reports that only 15% of those aged 12-17 years achieve the standard.

There are 4 million children 5-17 years meaning that 760,000 are achieving the guidelines and 3.24m are not.

Sixty minutes of MVPA can be approximated to 12,000 steps per day for children and young people¹. On average Australians aged 5-17 years take 9,140 steps each day (about 75% of the requirement).

In general, physical activity in the 5-17 years age group decreased and screen-based activity increased as age increased. For example, while children aged 5–8 years did an average 2 hours of physical activity per day, the 15–17 year olds did half that amount (1 hour). Conversely, 15–17 year olds spent an average three hours per day engaged in screen-based leisure activity, compared to 98 minutes for the 5–8 year olds.

In addition to the level of physical activity changing with age, so did the contribution of the types of activities. In younger age groups, the overwhelming majority of physical activity was moderate to vigorous. By age 15–17 years, as overall physical activity has declined, active transport such as walking and bike riding formed a more significant portion of young people's overall physical activity (39% for 15–17 year olds).

While boys and girls in younger ages had similar levels of daily physical activity, by age 12–14 years females averaged 21 minutes less than males with virtually all of that difference coming from girls' reduction in moderate to vigorous activity. At 15–17 years, the gap was 17 minutes (in favour of males) with both sexes this age doing considerably less moderate to vigorous physical activity than the 12–14 years age group.

The sources of physical activity of children according to the 2007 National Children's Nutrition and Physical Activity Survey²¹ are: Free Play (non-organised activity) 42%; Sport 34%; Cycling and Walking 15% and Other activities 9%. Children expend 45% of their daily activity 'energy budget' playing sport. This is because the average intensity of sport is higher than other types of physical activity.

Children expend 45% of their daily activity 'energy budget' playing sport. This is because the average intensity of sport is higher than other types of physical activity

In the 2-4 years age group 72% of Australian parents reported that their child met the physical activity guidelines of 180 minutes of physical activity each day. Whilst the 72% figure is difficult to accurately confirm it will be used for the purpose of this paper.

4.3 Summary – Achievement of National Physical Activity and Sedentary Behaviour Guidelines (2014)

Demographic	Achieving Guidelines	Not Achieving Guidelines	Total Population
Adults (18 years and over)	7.78m (43%)	10.32m (57%)	18.1m
Children (5-17 years)	0.76m (19%)	3.24m (81%)	4.0m
Children (2-4 years)	0.58m (72%)	0.22m (28%)	0.8m
Total	9.12m	13.78m	22.9m

Figure 1: Summary – Achievement of National Physical Activity and Sedentary Behaviour Guidelines (2014)¹⁰

- **CAS calculation: The Gap for potential improvement in levels of inactivity is 13.78 million Australians.**

4.4 Definitions of sport, physical recreation and physical activity

For the purpose of this paper Sport has been given a broad definition as proposed by the Australian Bureau of Statistics (Cat: 4149.0.55.001) *Information Paper: Defining Sport and Physical Activity, a Conceptual Model* (2008). The ABS notes that 'sport' is difficult to define for measurement purposes.

- Sport: an activity involving physical exertion, skill and/or hand-eye coordination as the primary focus of the activity, with elements of competition where rules and patterns of behaviour governing the activity exist formally through organisations.
- Physical Recreation: An activity or experience that involves varying levels of physical exertion, prowess and/or skill, which may not be the main focus of the activity, and is voluntarily engaged in by an individual in leisure time for the purpose of mental and/or physical satisfaction.
- Physical Activity: Any bodily movements performed by skeletal muscles that result in an increase in energy expenditure.

The ABS remarks that the idea of 'what is sport' will always vary over time and will reflect popular culture. Sport activities are constantly evolving, with new sports emerging and others receding and with considerable variation across countries. Emerging sports may begin with popular physical recreation activities, like skateboarding and rollerblading, now developing as a sport governed by rules and competition.

Section 5: Participation in Australian Sport

Australian Sport has a range of unique and powerful characteristics that combine to benefit the nation from health, social and economic perspectives. Sport is an integral, inclusive and traditional part of the fabric of Australian society; sport is inspirational and aspirational; and Australia’s participation rates are high compared to many other countries. For many Australians sport is their most valued form of self-expression.

Benefits of Australian Sport		
○ Improves cardio-metabolic health, body composition, musculoskeletal health, and cardiorespiratory fitness	○ Reduces overweight, obesity and related long-term conditions	○ Increases muscle strength and coordination – reducing slips and falls
○ Contributes to mental health and wellbeing, inclusion and connectedness - reducing social isolation and depressive illness	○ Improves academic performance of children	○ Improves the productivity of employees in the workplace
○ Increases the use of community facilities and infrastructure	○ Builds self-discipline, relationships and team spirit	○ Transcends physical disabilities
○ Assists in social integration and cohesion - transcending race, religion, class and income	○ Opportunity for philanthropy and volunteerism	○ Builds international understanding and friendships
○ Encourages competition and goal setting	○ Is broadly available and accessible to all	○ Provides a career and income for more than 300,000 Australians
○ Provides the inspiration that comes from success in sporting competitions at international and domestic levels	○ Enshrines the Australian ethos and fabric of society and galvanises the Australian community	○ Can be connected to other essential health concepts – such as nutrition and healthy eating
○ sport is fun		

5.1 The Australian Sporting Menu

One of the major characteristics of sport in Australia is the broad range of options available to cater for the widest variety of preferences and desires.

There are over 90 sports available to the community nationally with varying styles, intensities and traditions to suit a broad range of tastes.

Sport in Australia provides opportunities in team and individual sports; professional or community sports; single or mixed gender; international or domestic sport; sports that require speed, power, strength, agility or cunning and guile. Some sports require high levels of fitness and intensity while others require flawless technique and concentration to succeed.

Inclusiveness in sport with the variety options for athletes with a disability continues to improve.

The opportunity to access specific sports in every locality is, of course limited by availability of facilities and whether a local club or competitions exists but in general sport is widely available.

Coordination and delivery of sport in Australia

Sport is coordinated and delivered by an extensive network that reaches across the nation from major cities to the smallest of country towns:

Access to sport is available through:

- 90+ National Sporting Organisations (NSOs)
- 700+ State/Territory Sporting Organisations (SSOs)
- 50,000+ Clubs, Schools, higher education institutions) + commercial providers and community groups

5.2 Participation Rates

While the rates of Physical Inactivity and Sedentary behaviour are unacceptably high it is clear that the majority of Australians are able and do access organised and non-organised sport each year.

Over 14.1 million Australians age 5 years and over participate in organised or non-organised sport each year. This represents 64.1% of the population.

The following table presents data from the 2011-12 Survey of Participation in Sport and Physical Activity⁵ (cat. no. 4177.0); 2012 Children's Participation in Cultural and Leisure Time Activities 2003-2012⁹ (cat no: 4901.0); ABS Involvement in Organised sport and physical activity 2010⁴ (cat no: 6285); and from the Committee of Australian Sport and Recreation Officials Exercise, Recreation and Sport Survey 2011 ERASS²⁰ data.

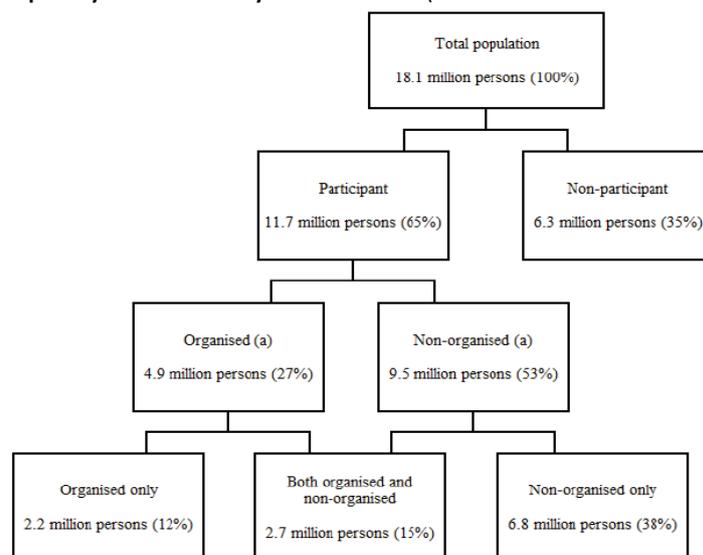
Table 2: Participation in Sport and Physical Activity by population segment

Participation in Sport and Physical Activity 2011-12	Activity	% Population	No. of people	Reference
Australians 15 years and over	Organised sport and physical activity	27%	4.9m	ABS
Australians 15 years and over	Non-organised sport and physical activity	53%	9.5m	ABS ERASS
Australians 15 years and over	Organised and Non-organised sport and physical activity	65% (of 18.1m)	11.7m	ABS⁵
Children and young people 5-17 years	Organised sport – playing	64% (of 4.0m)	2.39m	ABS
Children 5-14 years	Organised sport – playing – inside or outside school	66%	1.86m	ABS
Children and young people 12-17 years	Organised sport – playing – inside or outside school in winter or summer	85%	1.28m	ABS
Australians 5 years and over	Organised and non-organised sport and physical activity	64.1% (of 22.1m)	14.1m	

Total Moderate and Vigorous Physical Activity Hours (MVPAH):

Between 9.12 million and 14.1 million Australians are physically active for an average of 200 hours per year. This means that between **1.84 – 2.82 billion hours** are spent in Moderate and Vigorous physical activity (MVPAH) in Australia each year.

Figure 5: Participation in sport by Australians 15 years and over - (Source: ABS Cat No: 4156.0⁶)



(a) The categories of organised and non-organised sport and physical recreational activity are not mutually exclusive as some people who participated in an organised activity also participated in non-organised physical activity.

5.3 Socio-Economic disadvantage affecting sport participation

CAS is concerned that affordability to play sport is negatively impacting on participation rates, particularly that of children. Many individuals and families struggle to pay for sport participation. Estimates for sport participation for children range from \$1,000-\$5,000 per year taking into account club fees, coaching fees, travel, equipment and competition fees.

The ABS *Information Paper: An Introduction to Socio-Economic Indexes for Areas (SEIFA)*⁸ identifies a relationship between the rate of participation in sport and physical recreation and the level of socio-economic disadvantage, with the participation rate increasing with each successive quintile in the index. Of those in the lowest quintile of the index, 63% of people participated in sport or physical recreation activity, while 84% of those in the highest quintile participated.

In addition, the proportion of participants in the highest quintile of the index of relative socio-economic disadvantage (26%) is nearly twice that of those in the lowest quintile (15%).

No child should miss out on playing sport because their parents cannot afford to pay the cost of participation.

5.4 Sport and physical activity through the school education system

The excellent research paper by Active Healthy Kids Australia¹ (2014) provides an insightful look at physical activity issues in the education system.

Key findings of the report show there are shortfalls in the provision of sport and physical education to all Australian school children, particularly in primary schools.

- 70% of primary schools report that their students have access to a specialist physical education teacher, but there was no indication of the level of qualification attained, whether they taught the scheduled physical education classes to all students or whether they were employed full-time by the school or an external provider.
- 35% and 57% of secondary schools (urban and rural respectively) report having a specialist physical education teacher who delivers physical education classes, but there was no indication of the level of qualification attained.
- 64% of primary schools report providing at least 120 minutes of physical education per week to students.
- 51% of secondary schools report providing at least 80 minutes of physical education per week to students.
- A high proportion of primary and secondary (rural and urban) schools report having physical activity facilities on school grounds (hard courts: 100%; playing fields: 50-100%; indoor play space: 70-91%; and playground: 86-100%).
- A high proportion of primary and secondary (rural and urban) schools report that most of their physical activity facilities/equipment are available to students during school hours (including recess and lunch) (hard courts: 71-100%; playing fields: 86-100%; indoor play space: 20-50%; playground: 91-100%; and sports/ physical activity equipment: 50%)

The linkages between school sport and physical education and opportunities for continuing activity through community club structures and other providers is an important one. The Australian Sports Commission report on *Market Segmentation for Sport Participation*¹² indicated that 52% of primary school children are engaged in club sport. The report further advises that over 1.1 million primary school aged children would play sport if key barriers to their participation were satisfactorily addressed.

Some 85% of secondary school aged students aged 12-17 years participated in organised sport or physical activity during summer and/or winter terms, both in and outside school.

5.5 Sport through the Adult Life stages

The ABS⁵ reports that in 2011-12 the proportion of adults meeting the Physical Activity Guidelines remains at similar levels across the adult age groups. The proportion peaks at 46% in the 25-34 age group and gradually declines to 38% in the 65-74 age group. The ABS⁴ reports that in terms of playing sport regularly (ie: over 105 times per year) participation was consistent for each of the adult life stages at around 50%.

Engagement with individuals during their adult life stages is a challenge for policy makers and providers of sport and physical activity. Attraction options, participation and needs trends have changed over time and the traditional sporting structure has come under pressure to respond. Personal exercise has grown in popularity with significant growth of the fitness industry emerging over the past two decades. Many adults are time poor and would be interested in playing sport if options modified and less structured.

The *Market Segmentation for Sport Participation*¹¹ report further advises that over 3.8 million adult Australians would play sport if key barriers to their participation were satisfactorily addressed.

*Over 3.8 million adult Australians
would play sport if key barriers to
their participation were
satisfactorily addressed*

Masters sport: Reaching 40 years of age is not too late to start vigorous exercise according to the European Society of Cardiology²⁸. “Despite biological changes with age, the heart still seems – even at the age of 40 – amendable to modification by endurance training. Endurance training is also beneficial for bone density, for muscle mass, for oxidative stress. And these benefits are known to be greater than if training was started early in life,” says author David Matelot.

The time lag between increasing physical activity and observing health benefits is relatively short.

Other benefits of sport and physical activity for older Australians include reductions in slips and falls; late onset diabetes; and early onset dementia. Sports participation promotes enjoyment, self-confidence and inclusiveness and is shown to assist many people who are vulnerable to mental illness caused by social isolation and depression.

Many older Australians continue their sporting lives through Masters Sport. Sporting opportunities for older people exist in most national sports with the type of competition varying greatly. National competition is available through events like the Australian Masters Games held every two years. The Australian Masters Games is Australia largest multi-sport event. Over 10,000 participants compete in their choice of 50 sports over a week long program that includes competitive and social elements.

Friendship, camaraderie and the enjoyment of competition are key motivations for participating in sport. The CAS research into *Retaining the Membership of Women in Sport*²² learned that the main reasons masters aged women play sport are:

- For 85% of respondents, participation in sport is for the physical factors – fitness and feeling healthy.
- For 71% of survey respondents, social factors are a major reason for participating
Playing sport:
 - Gives a sense of achievement - it gives me confidence
 - I love being part of a team - I enjoy the camaraderie - it makes you feel great afterwards
 - A sports club makes it easy to get together with friends.
- For 51% of respondents, the competitive factors were important with the thrill of competition and the desire to improve personal and team performances mentioned.

Over 65% of respondents said they would like to play more sport than they currently do and would like to try new sports.

Section 6: Health, social and educational contribution of Australian Sport

Australian Sport has a range of unique and powerful characteristics that combine to contribute to the nation from health, social, educational and economic perspectives.

The beneficiaries of sport's contribution include government, business and individuals.

Government will benefit from sport participation through reduced costs of health care in the future with savings made on treatment for preventable disease, through reductions in future welfare payments and from increased taxation. Businesses will benefit from greater productivity emanating from reduced absenteeism from work and from less recruitment and training costs associated with replacing staff that die or retire prematurely from ill health. Individuals will benefit from increased income, reduced absenteeism from work or home duties and from increased quality of life.

Traditionally sport is one of the ways in which Australia identifies itself in the world. The level of Australia's sporting success is far greater than should be expected of a nation of 23 million people. Using this reputation and positive attitude Australia sport has been as a 'bridge to the world' in building international relationships and achieving foreign affairs and diplomacy objectives. Sport has been used as vehicle to achieve international business objectives in tourism, trade, education, engaging major trading partners and showcasing our nation.

6.1 Health Contribution

As highlighted earlier in this report Physical Inactivity is a major contributor to the burden of chronic disease which includes the obesity related illnesses, cardio vascular disease, diabetes, hypertension leading to stroke, some cancers and contributes to a range of mental illnesses such as dementia. Over 13,000 deaths annually are attributed to physical inactivity. There are over 45,000 new cases of physical inactivity every year.

Participating in sport and regular physical activity at Moderate and Vigorous intensity (MVPA) provides individuals with a range of positive benefits including health gains in muscle strength, aerobic capacity, improved mental health, feelings of wellbeing and improved quality of life.

If **Australia's Physical Activity and Sedentary Behaviour Guidelines**¹⁰ represent the necessary targets for reducing obesity and other physical inactivity related illnesses then sport is ideally placed to assist in the achievement of the inherent goals.

Provision of Moderate and Vigorous Physical Activity

Participating at moderate and vigorous levels of physical activity (MVPA) is essential to achieving improved health outcomes required within Australia's Physical Activity and Sedentary Behaviour Guidelines. Without sustained MVPA an individual will not improve their aerobic capacity or muscular strength.

Those children meeting the activity guidelines spend 45% of their daily activity 'energy budget' playing sport with a higher percentage of MVPA time spent during practice sessions than in games¹.

Individual time commitment to playing sport

A typical time commitment for those participating in organised sport is 3-5 hours per week from:

- Practice sessions 1 to 1.5 hour per week on two separate days
- Competition Match x 1 hour

Similar time commitments and exercise intensity (MVPA) is expected for both children and adults when playing organised sport. During this time individuals are also developing useful physical, social and personal skills in a disciplined, nurturing environment.

The MVPA benefits from all sports are equal. For example: the MVPA undertaken in netball is equal to the same amount of MVPA in tennis or rowing in terms of their ability to contribute to meeting the guidelines.

CAS contends that children spend a proportion of their non-organised activities and free-play time emulating their sporting heroes or improving their own sporting prowess and that the total amount of MVPA attributable to sport is well in excess of 50%. The MVPA directly attributable to sport may be as high as 60%-70%.



Figure 6: The performance of elite sports people has a strong influence on children and young people to emulate their heroes and play sport both organised and non-organised. (Daily Telegraph, 20 June 2014)

- **CAS calculation: Sport contributes more than 50% of total Moderate and Vigorous Physical Activity in Australians achieving the established physical activity and sedentary behaviour benchmarks.**

There is no other national system available that can so readily deliver the required levels of MVPA than sport can. The sporting system is highly developed and has the capacity for expansion and scaling up.

6.2 Social Contribution

Sport makes a solid contribution to the social wellbeing of Australians from three major perspectives through Elite Sport; Community Sport; and Volunteering.

Elite Sport:

High performance sport and Australian sporting heroes have the ability to inspire the population, to influence and to achieve behavioural change. For the purpose of this paper Elite Sport is sport played at the national and international level and includes athletes that receive payment as professionals or semi-professionals.

The impact of Elite Sport is to inspire some members of the population to become elite sportspeople themselves or for others, those elite sporting deeds and performances generate a sense of satisfaction and pride. Frontier Economics²³ suggests that the main contribution that elite sport makes is the elevation of wellbeing of Australians following the success of elite sportspeople or national teams in international competition. Success by Australian athletes and teams at the Olympics, Commonwealth Games, World Cups or in traditional rivalries such as “Ashes” cricket against England generate the highest levels of national satisfaction and pride in performance. Few activities capture the imagination and galvanise the Australian community like the pursuit of success at major international sporting events.

The sense of national satisfaction and pride at the performance of elite athletes is what economists consider to be a ‘pure public good’. Australian Unity, in partnership with the Australian Centre on Quality of Life at Deakin University, periodically computes a personal wellbeing index based on various components. There is a strong correlation between movements in this index and performance of elite sportspeople. While the index is generally relatively stable, sporting achievements appear to be one of the few factors associated with significant shifts between surveys. In 2008 Australia’s international elite sporting performance was shown to increase the *Australian Unity Personal Wellbeing Index*¹³ by more than \$23 per household (which more than covered the \$167m allocated by the Australian Government in grants towards Elite Sport that year).

In 2014-15 the Australian Sports Commission will allocate \$120m in pursuit of the Winning Edge program targets for Australia to be a top five nation at the Olympics and Paralympics, in the top 15 at the winter Olympics and Paralympics, to be number one at the Commonwealth Games and have more than 20 world champions annually.

Successful elite sportspeople are held in high esteem within the Australian community. The Australian public understands and values the traits required for sports people to succeed at the national and international levels. The traits of dedication, perseverance, enthusiasm, drive, integrity and maximising individual talent, are valued not only in the sporting context but more broadly as ingredients for success at work, business and general life.

Elite sportspeople are routinely used to promote community causes, endorse products and assist campaigns designed to achieve behavioural change. Adam Goodes, the 2014 Australian of the Year is a highly successful AFL player for the Sydney Swans and is also active in anti-racism and youth work. Worldwide, governments use sport to improve international relations and promote peace and prosperity.

Sport as a means of entertainment and engagement is also an important factor. There were 7.6 million people aged 15 years and over (43% of the adult population) who attended at least one sporting event as a spectator during 2009–10. A greater percentage of men (50%) attended at least one sporting event compared to women (37%)⁷. Television and online viewership of sport is measured in the hundreds of millions each year with Sporting events filling 7 of the top 15 highest rating TV shows in 2013 (26 of the top 100).

Community Sport:

Personal participation in sport at the community level contributes to improvements in physical and mental health, feelings of wellbeing, inclusion and connectedness.

Research estimating the economic value on reducing Health costs is approaching \$1.5b per year is discussed in section 7.

Involvement in sport builds social capital within the community assisting individuals to develop useful and transferrable skills such as competitiveness, goal setting and self-discipline; empathy and understanding; relationships and team spirit. Sport assists in social integration - transcending race, religion, class and income.

By increasing participation rates in healthy, active pursuits there will also be greater use of community facilities and infrastructure.

Sport has the ability like no other activity to provide a sense of identity and to unite the passions of supporters around the success of their team. The challenge for 'our team' to 'win the title' binds supporters together in a loose tribalism that inspires, motivates and builds a strong sense of identity and community pride.

Sport has shown it can contribute to reducing social isolation and depressive illness. Inclusive practices within sport have led to greater participation opportunities for those with physical and intellectual disabilities.

In the workplace sport contributes to improvement in the productivity of employees reducing absenteeism and improving job focus. The scale of this contribution has been calculated at 1% of gross domestic product (GDP) which equated to \$12 billion in 2008-09²³.

As mentioned the social elements of community sport generate feelings of wellbeing, belonging, enjoyment and enhance the quality of life. These benefits are largely intangible but they are significant in building a healthy active community.

Just as elite sportspeople have the ability to inspire others so do everyday community sportspeople. Insights from *Retaining the Membership of Women in Sport*²² (2014) shows that some of the most powerful motivation for others to join or continue playing community sport is provided by those who are already playing. The strong sense of joining an established group to achieve personal health, friendship and/or sporting goals is a major motivator.

Sport has been successfully used as a diversionary strategy to engage 'at risk' populations, particularly disaffected youth in positive activity, rather than leaving them unattended to engage in drugs, crime or anti-social behaviour. The Police and Citizens Youth Clubs (PCYC) have many case studies to support the success of using sport in this way.

Sport provides a range of protective factors for children. Sport can strengthen the resilience of children, reduce their vulnerability and make them less likely to partake in binge drinking or drugs. This is just as important for children in rural settings as it is for their city counterparts.

Sport has been successfully used as an aspirational vehicle to elevate young people from disadvantaged backgrounds onto successful career paths. This strategy has not solely led to careers playing professional sport but the major traits required to be successful in sport are also used to position young people on other career paths.

The existing community sport structure is capable of dealing with increased numbers of participants. Greater participation numbers will permit economies of scale and organisational efficiencies for associations and clubs. Greater availability of local sport will reduce travel time and associated costs for individuals and families.

The link between elite and community sport is also an important one. Sporting ability starts at an early age and a nation that neglects community sport will not be successful internationally. Talent identification and development pathways are critical aspects in maximising sport's potential.

Volunteering:

Volunteering to assist community organisations is a distinctive and highly regarded feature of Australian culture. The economic value of volunteer work is measured in the billions of dollars per year as it builds the social capital that allows thousands of community organisations to function effectively. Volunteering makes a major contribution to building healthy, active communities.

Volunteering in sport and recreation accounts for 33% of Australia's 7 million volunteers and contributes 26.5% of total volunteer hours. 2.3 million Australians volunteered in sport in 2013^{6,7} (14% of the adult population).

Volunteering provides benefits to the individual volunteer through feelings of wellbeing and self-satisfaction. Volunteers feel a sense of purpose and connectedness to their organisation and community. They feel that they are making a valuable and valued contribution and that they 'are making a difference'.

Volunteering plays an important role in implementing community building initiatives and causes. It encourages increased participation, welcomes those from ethnic and other populations and enhances the use of community facilities.

Volunteers are often the first point of contact within organisations and as 'the human face of sport' their efforts are critical to encouraging other community members to participate and belong.

Volunteering in Australian Sport

- 2.3 million Australians volunteered in sport in 2013⁶
- Representing 33% of all Australian volunteers
- Contributing 26.5% of all volunteer hours⁵
- Sports volunteers contribute 5-6 hours per week on average to their sporting interests
 - 54% of volunteers are involved in coaching, refereeing or judging
 - 37% of volunteers involved in administrative and clerical roles
 - 32% of volunteers involved in management and committee positions
 - 93% of sport and physical recreation organisation volunteers participated in organised sport as a child.
- Sport volunteers were involved in a range of volunteering organisations – about half volunteered for another type of organisation in addition to sport and recreation. (ABS 2010, Cat No: 4917.0 - Sport and social capital, Australia)
- Volunteering participation rates have decreased by over 1.0% over the past 15 years⁵

6.3 Educational Contribution

All children should be physically active, it improves their sleep, concentration, memory, cognitive functioning, behaviour and reduces the likelihood of them becoming overweight or obese. Children need to develop the skills, understanding and tactical appreciation so that they enjoy and value their sport participation and integrate it into their personal lifestyles.

Much research and scientific evidence has been gathered on the contributions and benefits of physical education and sport in schools for both children and for educational systems.

Professor Richard Bailey PhD¹⁴ presents evidence of children's development in a number of domains: physical, lifestyle, affective, social, and cognitive. The review suggests that sport and physical education have the potential to make significant and distinctive contributions to development in each of these domains. Sport and physical education can make distinctive contributions to the development of children's fundamental movement skills and physical competences, which are necessary precursors of participation in later lifestyle and sporting activities. Sport and physical education can also support the development of social skills and social behaviours, self-esteem and pro-school attitudes, and, in certain circumstances, academic and cognitive development.

Overall the evidence suggests that increased levels of physical activity in school does not interfere with pupils' academic achievement (even though the time spent on subjects may be consequently reduced) and in many instances is associated with improved academic performance. Sport is a useful vehicle for addressing social isolation, relationships and managing the difficult transition for many children through school-life and adolescence.

For many Australian schools sport plays a key role in building school spirit and pride in performance. Inter-school sport provides the additional opportunity to compete against local schools and those further afield. These opportunities build the skill levels and confidence of individual students and create the opportunity for character building through experiencing success and defeat.

The education system is the logical and best place to build a child's foundation in physical activity and sport. CAS believes that 100% of Australian children should receive a structured Physical Education and Sport education throughout their school years from year K-12.

In-school Physical Education and Sport should go hand-in-glove with the community club sporting structure offered by community based organisations after-school and on weekends. Some 52% of primary school aged children are currently engaged in club sport¹². This collaborative approach will maximise the potential for all children receive the knowledge, skills and abilities to reinforce physical activity as a 'life-long habit'.

This has been the traditional structure of children's sport in Australia for many years and the existing framework is largely in place, ready for additional resources and support to improve delivery and quality.

100% of Australian children should receive a structured Physical Education and Sport education throughout their school years from year K-12.

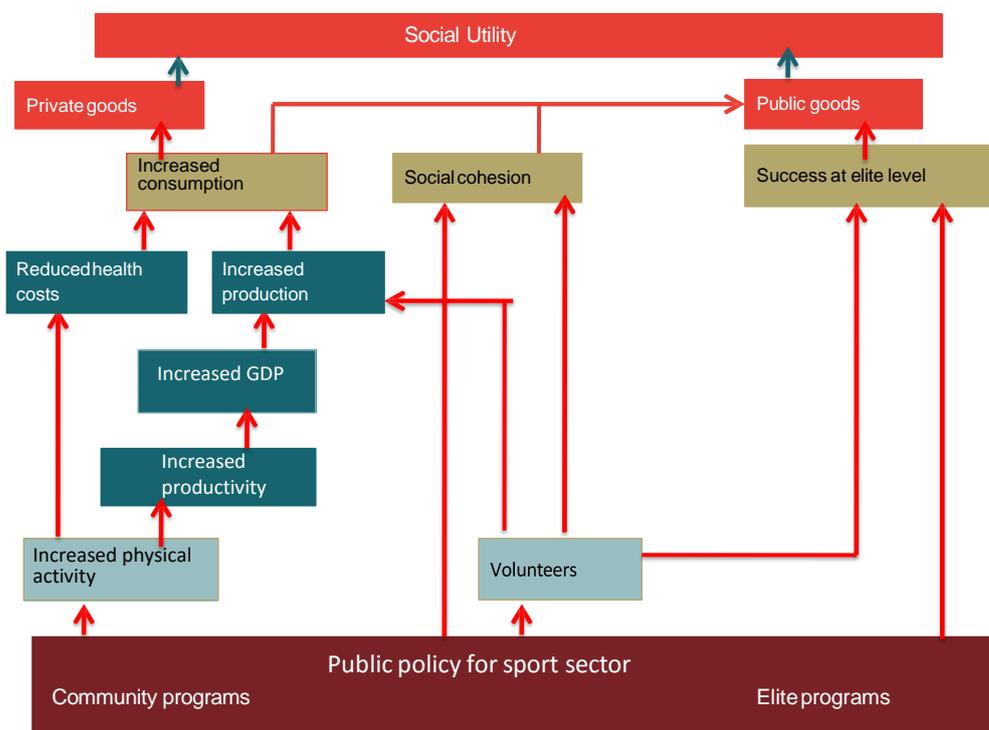
Section 7: Calculating the economic contribution of Australian Sport

The Sport Industry makes a financial and economic contribution to the Australian Economy providing a range of direct and indirect; tangible and intangible benefits. As highlighted in Section 6 the benefits of sport and physical activity are enjoyed by government, business and by individuals.

Sport makes a contribution to the Australian Economy through:

- Direct industry contribution
- Reduction in health costs
- Workforce productivity contribution
- Direct and intangible contribution to social capital
- Improving the quality of life and feeling of wellbeing in the community
- Contribution via taxation

Figure 7: Economic contribution of sport to Australia – flow chart (Source: Frontier Economics²³)



7.1 Direct Industry Contribution

In 2012-13 the Australian Sporting Industry generated the following revenue and contribution to GDP:

In 2012-13 total Australian Sport revenue was \$49.7 billion (\$66.3 billion including imputed value for Volunteers) says IBIS World³⁰.

- Australian Sports Inputs - \$22.5b - Retail Sports and Camping Equipment (18.7%); Sports Transport (14.2%); Marine Retail Equipment (13.3%)
- Australian Sport Socialising - \$15b - Licensed Sports Clubs (51.1%); Sports Clubs (19.4%)
- Australian Sport Activity (excluding volunteers) - \$7.11b - (Administration 49.3%); Fitness Centres (18.3%); Cricket (7.3%)
- Australian Sport Derivatives – \$5.2b - Sports Betting (64%); Sports Media (30.1%)

This contribution is 1.2% of total Australian revenue of \$4.3 trillion or 2% of \$1.5 trillion GDP. Revenue is forecast to increase at 2.7% pa over 5 years to 2018-19.

Over \$8.3b spent on sport and recreation products alone in 2009-10 (1.5% of total product purchases)⁷.

Comparison with other industries

Sport's \$66.3 billion revenue ranks with many other prominent industry sectors including:

- Agriculture, forestry and fishing \$74b (ABS, 2011-12)
- Information media and telecommunications \$73.3b (ABS, 2011-12)
- Education and training \$60.7b (ABS, 2011-12)

Australia's Sporting Workforce:

- Over 330,000 people are employed in the sport industry (excluding volunteers) (IBIS World 2012³⁰)
- 95,590 people have their main job in sport and physical recreation (2011 ABS Census). This figure is 21% higher than in the 2006 ABS Census.
- On average people in sport and physical recreation are more likely to be working part-time and more likely to have a lower income than the general workforce⁷.

While the Australian Sporting industry is now a major industry it is really still in its fledgling stages. The sporting industry should be nurtured as it has potential to develop a major international reputation in areas including sports technology and sport education.

7.2 Contribution to reducing Health costs:

In July 2014 CAS commissioned Deakin Health Economics to undertake an evaluation of the health status, economic and financial benefits that will accrue if the prevalence of physical inactivity in the Australian adult population is reduced by 15% from current levels in the 2018 adult population. *Assessing the benefits of reducing the prevalence of physical inactivity in Australia*² results indicate that if the full 15% reduction in the prevalence of physical inactivity in 2018 was achieved; it will result in the avoidance of over 10,000 new cases of disease, 3,000 deaths and 38,000 DALYs over the remaining life time of the Australian population in 2018.

The economic benefits arising from the reductions in disease and deaths will lead to 100,000 fewer days lost due to ill health in the 15-65 year old workforce, over 1 million fewer days lost from home based production and over 2 million fewer days lost from leisure production. Achieving the reduced prevalence of physical inactivity in the Australian adult population will lead to total opportunity cost savings of \$434 million arising from health sector expenditure savings of \$190 million and total production gains of a further \$244 million.

The aims of the study were to estimate the 'health status', 'economic' and 'financial' benefits of reducing the prevalence physical inactivity as a behavioural risk factor. The 'health status' benefits were measured as changes in the incidence of disease, deaths and Disability Adjusted Life Years (DALYs) associated with the risk factor reduction. The 'economic' benefits were measured as changes in workforce participation rates, absenteeism and early retirement from the workforce, as well as days of increased household and leisure activities that could be associated with improvements in health status. The 'financial' benefits were defined in this project as the dollar value of the estimated economic benefits and represent opportunity cost savings rather than immediately realisable cash savings.

Note: The DALY (Disability Adjusted Life Years) is a measure used by Health Economists. A DALY is one year of healthy life lost due to premature mortality and years lost due to disability.

The findings support the claims made by the National Heart Foundation and private organisations such as Frontier Economics based on 2009 Vic Health¹⁷ research that estimated that "if more Australians were more physically active for just 30 minutes per day the Australian healthcare system could save \$1.5 billion annually."²⁸

In 2010 a major study *Assessing Cost-Effectiveness in Prevention (ACE-Prevention)*³⁶ was released by ACE-Prevention Team that assessed the cost- effectiveness of 120 health interventions. These were grouped into combined intervention packages which addressed 15 different health risk factors. Physical Activity was one of the intervention categories. The benefit of multiple interventions is a broader assessment and the potential for multiplied impact.

Results of the study assessed and ranked the interventions as being one of 5 categories:

- **Dominant:** interventions that both improve health and achieve net cost savings

- **Very Cost Effective:** interventions that improve health at a cost of less than \$10,000 per DALY prevented;
- **Cost Effective:** interventions that improve health at a cost of between \$10,000 and \$50,000 per DALY prevented;
- **Not cost effective:** interventions that improve health at a cost over \$50,000 per DALY prevented;
- **Dominated:** better alternatives are available

Only interventions that are Dominant or Very Cost Effective seem likely to be considered for funding by Government. There may be some exceptions with funding of Cost Effective interventions.

A package of six (6) physical activity interventions was assessed as part of the project by Dr Linda Cobiac¹⁹.

The six physical activity interventions were:

- **GP prescription.** Patients are screened opportunistically when visiting their general practice; inactive patients receive a physical activity prescription from the GP and follow-up phone call(s) from an exercise physiologist.
- **GP referral to exercise physiologist.** Screening questionnaires are mailed to all patients on the GP patient list; inactive patients are invited to attend a series of counselling sessions with an exercise physiologist at their local general practice.
- **Mass media-based campaign.** A six-week campaign combines physical activity promotion via mass media (television, radio, newspaper, etc.), distribution of promotional materials, and community events and activities.
- **TravelSmart.** An active transport program targets households with tailored information (e.g., maps of local walking paths, bus timetables) and merchandise (e.g. water bottles, key rings) as an incentive and/or reward for reducing use of cars for transport.
- **Pedometers.** A community program encourages use of pedometers as a motivational tool to increase physical activity (e.g., to 10,000 steps per day).
- **Internet.** Participants are recruited via mass media to access physical activity information and advice across the internet via a Web site and/or email.

Results of the evaluation indicated that the package could be offered at less than \$50,000 per DALY, thereby being Cost Effective. In financial terms cost offsets (savings) in the order of \$3.05b could be achieved with expenditure of \$850m to conduct the interventions. This would provide a net offset (benefit) of \$2.2b per year.

The Physical Activity intervention package was not endorsed by the ACE research team because there were concerns raised over the reliability and robustness of the information collected.

CAS does not dispute the ACE decision or recommendations but it does raise the issue of whether evaluating a different package of Sport-related interventions would have led to Dominant or Very Cost Effective rankings being achieved.

CAS believes that a package of sport related interventions should be identified and evaluated for cost effectiveness in reducing population physical inactivity.

Proposed projects for consideration may include evaluation of:

- The effectiveness of sport x to increase activity levels in a target group
- The effectiveness of increasing the vigorousness of PE classes
- The effectiveness of increasing the amount of time spent in PE classes
- The effectiveness of adult community sport (including masters aged sport) in achieving sustainable sport participation

CAS acknowledges that costs are created through sport-related injury and problem gambling that have been considered but not quantified. While it is difficult to reach a specific dollar figure for the Health cost savings provided by Australian sport from the studies mentioned above it is clear that the contribution is substantial.

From the available information CAS proposes that savings in the order of \$1.5 billion per year is a reasonable estimate of the contribution by Australian Sport. CAS also recommends that a series of sport specific interventions should be analysed using the ACE Assessing Cost Effectiveness method.

- **CAS calculation = \$1.5 billion in saved health costs**

7.3 Workforce Productivity gains:

In addition to reduced health costs sport and physical activity elevates workforce productivity by reducing absenteeism and increasing employee wellbeing and productivity while they are at work.

As highlighted in Section 6: Social Contribution sport and physical activity levels provide a productivity increase of 1% of GDP which equated to \$12 billion in 2008-09²³.

As highlighted in Section 6.3: Education System sport and physical activity contributes to the productivity of children in the school education system.

Calculations made in the *Economic Value of Prevention*³³ estimates a 2% improvement in GDP but this paper will rely on the more conservative estimate of 1% of GDP.

- **CAS calculation = \$12 billion in workforce productivity gains**

7.4 Direct and intangible contribution to Social Capital

Contribution from Volunteers in sport – as highlighted in section 6.2 Social Contribution (Volunteering).

- There are over 2.0m sport and physical recreation volunteers (14% of the adult population in 2010)⁷ involved in volunteering for sport at some level.
 - Volunteers contribute an average 5-6 hours per week.
 - Economic value of volunteering differs – The ABS 2010⁴ valued the contribution of 2.3 million Volunteers at \$4 billion per year.
 - IBIS World 2012 calculated a \$17b contribution based on ‘over 1.7m Australian volunteers in sport (at an average of 5-6 hours per week) at an imputed value of \$37.40 per hour.’ This is a \$17 billion contribution³⁰.
- **CAS calculation = \$8.0 billion based on 2.0m volunteers x 4hrs per week (200 hrs per year) x \$20 per hr.**

7.5 Contribution of elite sport to increasing public wellbeing

Australia’s elite sporting performances on the world stage make a valuable contribution to the quality of life and feeling of wellbeing of the community. As mentioned in Section 6: Social Contribution (Elite Sport) in 2008 the contribution of elite sport was shown to increase the Australian Unity Wellbeing Index¹³ by more than \$23 per household which was greater than the \$167m of public funds allocated by the Australian Government in grants towards Elite Sport.

The ABS 2011 Census shows there are 8.18 million households and 5.68 million families in Australia.

- **CAS calculation = \$184 million based on 8 million households x \$23 of increased wellbeing.**

7.6 Taxation contribution

The Australian Sporting public accesses a wide range of products and services that were assessed by IBIS World³⁰ to generate revenue of \$49.7b in 2012-13.

Many of these items are subject to taxation which flows to the national, state and/or territory governments.

For the purpose of this study CAS will not attempt to estimate the taxation paid on items such as sports betting, sport travel related fuel excise, alcohol taxation, personal income tax, company tax or taxation on exports of sport and recreation products.

An estimate of GST collected on the sale of Sport and Recreation products and services is presented as follows.

Sales of sporting related goods and services purchased in 2012-13 (GST taxable) were estimated at \$10.4b by IBIS World³⁰ and at \$8.2b by the ABS⁷ for that year.

Sport Input Expenditure	\$ sales	\$ tax revenue
Household expenditure on sport and recreation products including: <ul style="list-style-type: none"> \$4.4b on sport and recreation services \$2.9b sport and recreation equipment, including swimming pools 	\$8.2b	\$745m (GST)

- CAS calculation = \$745 million taxation collected by government based on GST on \$8.2b sales

7.7 Summary of Australian Sport's Economic Contribution

Industry Revenue

The Australian Sporting Industry generates more than \$49.7 billion per year³⁰ excluding Volunteer contribution. The calculation rises to over \$60b with the imputed value for volunteers.

The Sporting industry employs over 330,000 Australians and contributes 2% of GDP⁷.

Economic Contribution

Category	Contribution	\$ (million per year)
Reduction in Health Costs	○ Reduction in costs to the health sector (net of sport injury costs)	\$1,500
Productivity gains	○ Increased worker wellbeing and productivity while at work and reduced absenteeism (at 1% GDP)	\$12,000
Volunteers in sport	○ Imputed value of volunteers (based on 2.0m volunteers x 200 hours per year x \$20 per hour)	\$8,000
Elite Sport	○ As measured by the Australian Unity Wellbeing Index. Valued at \$23 per household in 2008 x 8.18m households.	\$180
Taxation	○ Government revenue from taxation includes: ○ \$745m in GST paid on \$8.2b sales	\$750
Total		\$22,430

Figure 2: Summary of Australian Sport's Economic Contribution

Australian Sport's economic contribution to the economy

CAS calculates that the value of sport's contribution to the Australian economy is \$22.4 billion.

- **\$22.4 billion** = the economic contribution of Australian Sport per year
- **\$1,588 per sports participant** = contribution per sports participant (organised and non-organised sport) based on \$22.4b divided by 14.1m participants
- **\$7.94 per hour** = generated from each hour of sports participation based on \$1,588 divided by the average sports participation of 200 hours per person per year.
- **Total MVPA Hours per year = over 2 billion hours:** 9.12 million people met the requirements of the National Physical Activity guidelines and 14.1 million people participated in organised and non-organised sport during the year. At an average of 200 hours per person there are between **1.84 – 2.82 billion hours** spent in Moderate and Vigorous Physical Activity (MVPAH) in Australia each year.

Section 8: Current Government funding of sport in Australia?

To fully appreciate the contribution sport makes to the Australian economy it is necessary to understand the extent of Government support for sport and where it is allocated. It is also important to assess the extent of Australian Government funding for Preventative Health as an ingredient of its public health approach.

CAS is seeking to promote the potential of Australian sport being used in a much greater and more targeted way within the Government's preventative health strategy.

In the 2013 essay *The Economic Value of Prevention* Professor Alan Shiell³³ reports that Australia spends less within the health sector on prevention than most other OECD countries, ranking in 21st place. In 2010-11, spending on prevention and public health by national, state and territory governments was \$1.95 billion, equivalent to \$85 per person. This was just 1.7% of total health spending and less than 0.2% of GDP.

The essay did point out that some spending on preventative measures such as road safety were not included in the calculation as they are funded outside of the health system.

Figure 8: Comparison of spending on prevention and public health by OECD country 2010-11.

Nation	Spending on prevention as % of all health care expenditure		Spending on prevention as % of GDP		Per capita spending on prevention (US\$)	
	Value	Rank	Value	Rank	Value	Rank
New Zealand	6.96	1	0.74	2	211.09	4
Canada	6.55	2	0.75	1	291.75	1
Finland	5.18	3	0.46	5	168.36	5
Slovakia	5.04	4	0.45	6	105.65	10
Netherlands	4.46	5	0.54	4	226.23	3
Hungary	4.35	6	0.34	8	69.60	17
Slovenia	3.64	7	0.33	9	88.47	12
USA	3.48	8	0.61	3	286.11	2
Sweden	3.41	9	0.33	9	128.13	8
Germany	3.13	10	0.36	7	135.86	6
Korea	3.09	11	0.22	15	62.92	18
Estonia	2.72	12	0.17	20	35.13	21
Norway	2.42	13	0.23	14	130.25	7
Czech Republic	2.41	14	0.18	19	45.36	22
Switzerland	2.37	15	0.27	11	124.63	9
Denmark	2.22	16	0.25	12	99.28	11
France	2.06	17	0.24	13	81.48	13
Portugal	2.02	18	0.22	15	55.15	19
Belgium	1.97	19	0.21	17	78.09	15
Poland	1.93	20	0.14	22	26.78	23
Australia	1.70	21	0.16	21	79.96	14

Source: GAO Report to Congressional Requesters, adapted to include data from Australia³³

Preventative health measures have the potential to yield substantial social dividends with recent success stories including returns from coronary heart disease (\$9.3b); HIV/AIDS (\$3.15b); measles (\$8.5b); and road traffic accidents (\$8.7b).

CAS believes that the Government should significantly increase expenditure on preventative health measures and should include sport and physical activity specific interventions as part of future measures. A doubling of Australia's commitment by \$2.0b per year (0.32% of GDP) would only elevate the ranking to 11th place.

Current Funding of Sport by Government in Australia

Government funding for sport is typically allocated across three major categories: 1. Elite, high performance sport; 2. Participation/community sport; and 3. Facilities, venues, infrastructure and events.

Funding is also allocated for administration, development of policy and on priority issues that arise such as anti-doping, governance, integrity and match-fixing.

Table 3: Government funding of sport (estimates from recent financial years)

State/Territory Government Funding for Sport	\$m Elite Sport	\$m Participation/Community sport	\$m Facilities/Infrastructure/Events	\$m Admin/Other	\$m Total
Australian Government (via ASC and Dept 2012-13)	120.0	110.0	68.0	40.0	338.0
Australian Capital Territory (2014-15)	8.0	4.1	14.9	7.2	34.2
New South Wales (2012-13)	39.0	71.0	65.0	8.0	185.0
Northern Territory (2012-13)	3.6	10.8	13.3	3.7	31.4
Queensland (2012-13)	36.0	38.0	45.0	6.0	125.0
South Australia (2013-14)	4.4	11.0	15.3	9.1	39.8
Tasmania (2012-13)	4.0	12.9	11.0	4.0	31.9
Victoria (2012-13)	37.0	60.0	150.0	10.0	257.0
Western Australia (2013-14)	38.0	42.0	20.5	8.0	88.5
Total					\$1,130.8m

Source: Figures gleaned from relevant departmental officials, annual reports and budget papers where available.

Table 3 shows that \$1.13 billion was allocated as annual expenditure on Sport by the Australian and State/Territory Governments in recent financial years. CAS's estimate for 2013-14 is \$1.3 billion which would cover any undeclared funding.

Local Government contribution to sport and recreation facilities and amenities:

The ABS calculated in 2001 that 49% of sport and recreation funding was provided by local governments. Of this \$1.05 billion most of the funds were directed to venues and sports grounds (\$410m) and recreation parks and waterways (\$587m).

Local government funding is principally derived from ratepayers and so the public is contributing directly to this funding through council rates.

- **CAS calculation = Australian and State/Territory Government 2013-14 funding of sport is \$1.3 billion**
- **\$92.20 per sports participant** = contribution per sports participant (organised and non-organised sport) based on \$1.3b divided by 14.1m participants

Government receives an extremely favourable return on its investment in sport with a net return in excess of \$21 billion at a ratio of 17:1

- **Government net return on investment in sport = \$21.1 billion** based on \$22.4b - \$1.30b
- **Government return on investment in sport (ROI) = 17:1**

Section 9: Gap Analysis – opportunity for improvement

Thus far this paper has analysed a range of parameters and issues that impact on the achievement of the Australian Government’s Physical Activity and Sedentary Behaviour Guidelines. The paper looked further to analyse issues relating to participation in Australian sport and the structure, qualities and benefits that the Australian Sport Industry currently provides.

This section looks at identifying realistic goals and opportunities for improvement across a number of the key parameters aimed at reducing the gaps and shortcomings that currently exist.

CAS believes that with an appropriate investment of resources an increase of 15% in sport participation is a realistic target to be achieved within a 5 year timeframe.

Gap 1: Addressing reasons why some people do not participate in physical activity

Around 36% of the Australian population do not currently participate in any regular physical activity. The three main barriers appear to be time limitations, affordability and dissatisfaction, since many do not enjoy exercise.

These are all valid considerations that need to be addressed by policy makers and the presenters of sport and organised physical activity.

Australian Sports Commission^{11,12} research indicates that 1.1 million children (5-17 years) and 3.8 million adults would participate in sport if the barriers to participation were addressed.

In addition the *Retaining the Membership of Women in Sport*²² study highlighted that 65% of women surveyed would like spend more time playing more sport than they currently do and they would like to try new sports.

Gap 2: Potential for increased participation in physical activity

As presented in section 4 Australian Bureau of Statistics research⁵ shows that

- 3.24 million (81%) of children 5-17 years are not meeting the guidelines
- 10.32 million (57%) of adults over 17 years are not meeting the guidelines

Table 4: Target 15% improvement in achievement of National Physical Activity and Sedentary Behaviour Guidelines by 2020

Demographic	Achieving Guidelines (2013)	Improvement of 15% by 2020 (New achievers)	Not Achieving Guidelines in 2020	Total Population (at 2013 levels)
Adults (18 years and over)	7.78m (43%)	2.72m (15%)	7.6m (42%)	18.1m
Children (5-17 years)	0.76m (19%)	0.6m (15%)	2.64m (66%)	4.0m
Children (2-4 years)	0.58m (72%)	0.12 (15%)	0.10m (13%)	0.8m
Total	9.12m (40%)	3.44m (15%)	10.34m (55%)	22.9m

- **CAS Target = if 15% improvement is achieved 3.44 million more Australians will meet the national guidelines by 2020. (55% of the Australian population)**

Further targets to be set for 2025 and 2030.

If 15% reduction targets were successfully achieved for 2025 and 2030 then 85% of the Australian population would be achieving the guidelines by 2030.

Gap 3: Potential for increased participation in sport

As presented in section 5 ABS and ERASS²⁰ figures indicate 64% of the population participate in organised sport or non-organised sport during the year.

- 6.3 million (35%) of Australians over 5 years do not participate in sport

Table 5: Target 15% increase in participation in organised and non-organised sport by 2020

Participation in Sport and Physical Activity 2011-12	Activity	Participating (2013)	Improvement of 15% by 2020 (New participants)	Non – participants (2020)	Total population (at 2013 levels)
Australians 15 years and over	Organised and non-organised Sport and physical activity	11.7m (64%)	2.7m (15%)	3.7m (21%)	18.1m
Children and young people 5-17 years	Organised Sport and physical activity	2.39m (64%)	0.6m (15%)	1.01m (21%)	4.0m
Australians 5 years and over	Organised and non-organised sport and physical activity	14.09 (64%)	3.3m (15%)	17.39m (21%)	22.1m

- **CAS Target = if 15% improvement is achieved 3.3 million more Australians will be playing organised or non-organised sport in 2020**
- **Further targets to be set for 2025 and 2030.**

It should be noted that an increase in participation numbers will also result in an increase in volunteers to further support the system. At this point it is difficult to estimate the likely increase in volunteer numbers or the time contribution that these people would make.

Gap 4: Socio-Economic disadvantage affecting sport participation

As highlighted in section 5 ABS research⁸ shows that the costs required to play sport is negatively impacting on participation rates, particularly of children. Many individuals and families are struggling to pay for sport participation.

Of those in the Socio-economic lowest quintile of the index, 37% of people did not participate in sport or physical recreation activity, while only 16% of those in the highest quintile did not participate.

Steps to reduce the cost of participation for all members of the population need to be investigated and implemented, particularly those from disadvantaged sectors. Measures for consideration may include personal tax deductions, rebates to sporting clubs, subsidies to sporting associations or other equitable measures. We could learn from the 'Children's Fitness Tax Credit'²⁶ system, trialled in Canada from 2009 and rather than a tax deduction that inherently advantages higher income earners a specific rebate amount could be used (eg: \$150 cash back) to ensure the benefit is equitable. The current Northern Territory Government funded Sport Voucher Scheme provides \$75 per participant and may also provide some important insights.

CAS strongly believes that no child should miss out on playing sport because their parents cannot afford to pay the cost of participation.

Gap 5: Sport participation in the School Education system

Sport and physical activity provided through the school education system should be part of the foundation of a National Physical Activity strategy. This commitment should include all schools being approximately 6,000 primary schools and 2,500 secondary schools.

As highlighted in section 5.4 there are currently shortfalls in the key parameters required for Australian children 5-17 years of age to achieve the 420 minutes per week required by the national physical activity guidelines¹⁰.

CAS is not suggesting that the school system is responsible for the achievement of the guidelines. However, CAS is recommending that the School system provides for 100% of students the foundation skill development, the knowledge and appreciation of physical activity, and that at least 120 minutes of physical education is provided, along with further opportunities for 30 minutes of moderate and vigorous physical activity each week. Funding should be provided to individual schools to allow achieve the required outcomes.

CAS believes that the school system should commit to provide a minimum of 150 minutes of MVPA for 100% of students each week to contribute 35% of each individual physical activity requirement.

The two other major contributors to children's MVPA levels should be community Sporting Clubs* and the home.

- Contribution by sporting clubs: 180 minutes = 2 x 60min training sessions + 60 minute match
- Home: minimum 90 minutes = household chores, free play, other MVPA activity

Contributor of Sport and Physical Activity (MVPA)	Time per week (minutes)
School education system	150
Community Sporting Clubs*	180
Home	90
Total	420

Figure 4: Suggested allocation for commitment to provide MVPA to school aged children

Note: Sporting Clubs* means community based sporting clubs, private providers or other local facility operators.

Areas for improvement in the School education system (as recommended by Active Healthy Kids Australia¹):

- Proportion of schools that have a specialist physical education teacher to take physical education lessons.
 - Address the 30% of primary schools without a specialist physical education teacher, ensuring that all PE teachers have relevant qualifications.
 - Address the 65% and 43% of secondary schools (urban and rural respectively) without a specialist physical education teacher, ensuring that all PE teachers have relevant qualifications.
- Proportion of schools that schedule the delivery of at least 120 minutes of physical education per week to students
 - Address the 36% of primary schools report not providing a mix of at least 120 minutes of physical education and sport per week to students.
 - Address the secondary school system not providing a mix of at least 120 minutes of physical education and sport per week to students.
- Proportion of schools that have physical activity facilities/equipment available to students.
 - Address the shortfall in the provision of school based facilities and equipment throughout the school system. Boosting access from the current levels: grounds (hard courts: 100%; playing fields: 50-100%; indoor play space: 70-91%; and playground: 86-100%).

- Proportion of schools allowing children to use physical activity equipment/facilities during school hours
 - Address the issue of providing access to facilities and equipment to students for their use at appropriate times during the school day.

Steps should also be taken to educate, encourage and enable Primary School classroom teachers to undertake supplementary physical activity lessons with their classes on a regular basis as part of the broader strategy.

Steps should be taken by Schools and respective local sporting clubs/providers to liaise to develop a combined strategy whereby students can achieve 80% of the weekly requirements of the national physical activity guidelines through the combination of School-Club sport and physical activity.

Gap 6: Further research and knowledge required to inform the direction and policy development

Policy: As mentioned earlier in the paper there is no currently overarching policy or strategy for addressing physical inactivity and sedentary behaviour that includes the major stakeholders and deliverers.

CAS believes that a National Policy for Physical Activity should be developed as a matter of urgency, including healthy eating and nutrition. This policy development should include representation from the major stakeholder groups from the broader sector and should have strong presentation from sport.

Sport must be an integral part of the strategy because of the evidence proposed in this paper. As highlighted there is no other national system in place that can so readily deliver the required levels of MVPA than sport can. The sporting system is highly developed and has the capacity for expansion and scaling up.

Research: Research is required in a number of key areas including that of assessing the ability of sport-related interventions to provide the savings in DALYs and health costs highlighted in section 7.2. CAS believes that a package of sport related interventions should be identified and evaluated for cost effectiveness in reducing population physical inactivity.

It is recommended that CAS coordinate the research process which would incorporate the ACE- Assessment of Cost Effectiveness methodology be used for consistency with previous assessments of health interventions.

Gap 7: Financial Gap

Sections 7 and 8 have illustrated the financial gap that exists between the contribution that Sport makes to the nation compared to the funding for sport provided by the Australian and State/Territory Governments.

CAS believes that if this gap in funding is addressed it will enable the Sporting system to provide even greater results in the future and will significantly reduce costs to the Health system in the years ahead.

Australian Sport's economic contribution to the economy

Sport contribution:

- **\$22.4 billion** = the economic contribution of Australian Sport per year
- **\$1,588 per sports participant** = contribution per sports participant (organised and non-organised sport) based on \$22.4b divided by 14.1m participants
- **\$7.94 per hour** = generated from each hour of sports participation based on \$1,588 divided by the average sports participation of 200 hours per person per year.

Government contribution:

- **\$1.3 billion** = Australian and State/Territory Government funding of sport
- **\$92.20 per sports participant** = contribution per sports participant (organised and non-organised sport) based on \$1.3b divided by 14.1m participants
- **Government net return on investment in sport = \$21.1 billion** based on \$22.4b - \$1.30b
- **Government return on investment in sport (ROI) = 17:1**

The CAS calculation shows that Sport contributes \$22.4 billion compared to \$1.3 billion in Government funding. This represents a disparity of over \$21 billion with a Government return on investment of over 17:1.

CAS believes that a fair return on investment for Government is 4:1 ROI.

CAS is aware of many Government funded programs and initiatives that are funded on ROI's of 4:1 or less.

At a 4:1 ROI across national and state/territory Governments funding for Sport and physical activity should be increased from \$1.3 billion to \$5.5 billion per year; (ie: increased by \$4.2 billion per year).

If Sport and physical activity was funded at \$5.5 billion the Government's net return on investment would be \$16.75 billion.

The following components of the National Physical Activity Strategy could be funded by:

- Australian Government via increased commitment to Preventative Health; tied allocation of funds to State/Territories for use in schools; additional allocation to the Australian Sports Commission for use by National Sporting Organisations; and by reduced Income Tax.
- State and Territory Governments via targeted use of funds collected from GST.

The source of funding is naturally the prerogative of Government but CAS respectfully suggests the following:

Category	Purpose	Funding \$m	Potential Funding Source
Policy and Research	<ul style="list-style-type: none"> • Policy development • Research trials of sport interventions • Media – public education campaign to explain the overall strategy 	\$400m	Additional funding for Preventative Health in Federal budget. <ul style="list-style-type: none"> • Research funded via Dept of Health
School system	<ul style="list-style-type: none"> • Provision of PE teachers (\$100k x 8,500 schools = \$850m) • Additional facilities and equipment (\$150m) 	\$1,000m	Tied Australian Govt funding via Education budget allocation to States/Territories
Sports system	<ul style="list-style-type: none"> • Maintain existing \$1,300m funding through ASC and jurisdictions • Additional funding across sports system to achieve set KPIs (\$1,500m) including facilities • Particular support for socio-economic disadvantage channelled through sport (\$100m) 	\$2,900m	\$1.3b funded by existing sources Additional \$1.6b: <ul style="list-style-type: none"> • ASC budget increase of \$200m • By States from GST revenue \$900m • \$500m from Preventative Health budget
Individual participation	<ul style="list-style-type: none"> • Rebate/subsidy system to be established to contribute \$150 x 7.3m towards sport participation of individuals and families 	\$1,200m	Funded by reduced Commonwealth income tax revenue
Total		\$5,500m	

Figure 3: Recommended allocation of funds to enhance population sport and physical activity.

Achievement of 15% increase in sports participation:

If the proposed measures are successful at increasing sport participation by 15% by 2020 there will be 3.3 million more participants.

At a contribution of \$1,588 per participant this will result in an additional \$5.24 billion return to the Australian economy in 2020. This is on the proviso that future participation will have the same value as those currently contributing. If so the total contribution of sport to the Australian economy would grow to \$27.5 billion in 2020 (measured in 2014 dollars).

Section 10: Recommendations

CAS proposes the adoption and implementation of the following recommendations:

Recommendation 1: - National Policy Framework for Physical Activity

CAS recommends that a National Policy Framework for Physical Activity should be developed as a matter of urgency, including healthy eating and nutrition.

Sport must be an integral part of the strategy because of the evidence proposed in this paper. This policy development should include representation from the major stakeholder groups from the broader physical activity sector and have strong presentation from sport.

The national strategy should be ready for implementation by December 2015, should be nationally coordinated with buy-in from all State and Territory Governments. The strategy should have a long term perspective with the initial increased participation target being set at a 15% increase by 2020. Government input and buy-in should be provided from Sport, Health, Education and Local Government portfolios.

A national media campaign should be implemented to educate the Australian public about the physical activity strategy and the benefits of behavioural change.

The National Policy Framework for Physical Activity to be funded in part by a significantly increased commitment to Preventative Health.

Recommendation 2: - Research

CAS recommends that a package of sport related interventions be identified and evaluated for cost effectiveness in reducing population physical inactivity.

It is recommended that the ACE- Assessment of Cost Effectiveness methodology be used for consistency with previous assessments of health interventions. CAS offers to coordinate this part of the strategy.

Recommendation 3: Funding

CAS recommends that Government significantly increases the funding of sport and physical activity to address the \$21 billion disparity that currently exists with a Government return on investment of over 17:1.

At a 4:1 ROI across national and state/territory Governments funding for sport and physical activity should be increased from \$1.3 billion to \$5.5 billion per year from 2015-16.

This increase in funding would allow issues highlighted in section 9: Gaps to be adequately addressed and to achieve a 15% increase in the rate of sport and physical activity participation.

As shown in Figure 3 CAS recommends that the \$5.5 billion per year budget be allocated to fund the following areas:

- Policy development, research and public awareness campaign \$0.4 billion
- School system support – PE teachers in all Primary schools \$1.0 billion
- Sport system support – additional funds to achieve MVPA KPIs \$2.9 billion
- Individual financial support – subsidy/rebates for sport participation - \$1.2 billion

Recommendation 4: - Delivery

CAS recommends that 100% of Australian children achieve the required 330 minutes of a total 420 minutes physical activity each week via the school education and community sport sectors. The remaining 90 minutes of MVPA per week to be the responsibility of the home environment.

This will contribute to the goal that all children receive the knowledge, skills and abilities to instil physical activity as a 'life-long habit'.

To achieve this outcome policy direction and funding will need to be targeted at achieving set KPI's:

Education System:

- That 100% of Australian children receive a structured Physical Education and Sport education throughout their school years from year K-12.
- Increased proportion of primary and secondary schools that have a specialist physical education teacher to take physical education lessons.
- Increased proportion of schools that ensure that every child will achieve 150 minutes of MVPA in physical education and sport per week
- Increased availability and use of sporting facilities, equipment and coaching at each school

Sport System:

- That the increased funding be used to make community sport more accessible, convenient, affordable with options for modified participation.
- That the increased funding be used to improve the management, coaching and officiating standards of community sport delivery
- That all community sport providers ensure that every child will achieve 180 minutes of MVPA per week.

Steps should be taken by Schools and respective local sporting clubs/providers to liaise to develop a combined strategy whereby students can achieve the requirements of the National Physical Activity guidelines through the combination of School-Club sport and physical activity.

Volunteer training, support, recognition and development strategies to be implemented through the community sport sector to maximise this valuable resource

Recommendation 5: - Social Disadvantage

CAS recommends that measures are implemented to reduce the cost of participation in sport and physical activity for all members of the population, particularly those from disadvantaged sectors.

Measures for consideration may include personal tax deductions, rebates to sporting clubs, subsidies to sporting associations or other equitable measures.

CAS strongly believes that no child should miss out on playing sport because their parents cannot afford to pay the cost of participation.

Section 11: Conclusion

This report shows how the Australian Sporting system has the potential to address and overcome some of the major public health issues confronting the nation. Australian Sport has the structure, ability and desire to be successfully used as a central platform within a National Policy Framework for Physical Activity.

Using sport as proposed in this report is a highly efficient and cost effective way of improving participation in physical activity and will provide the underpinning skills and knowledge required for every Australian to develop the lifetime habit of an active, healthy lifestyle.

As shown in this report a greater investment by government in sport will provide almost immediate returns in both health and economic terms and that an increase in participation by 15% over five years is realistic and achievable. If the target of 15% improvement is achieved 3.44 million more Australians will meet the national guidelines by 2020 (55% of the Australian population).

The reports further proposes that with a continued commitment to the strategy over the coming fifteen years 85% of the Australian population would be achieving the guidelines by 2030.

The Confederation of Australian Sport looks forward to working with all major stakeholders and policy makers to develop a National Policy Framework for Physical Activity and to implementing the recommendations over the coming years.

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Figures and Tables

Figures:

Figure 1: Summary – Achievement of National Physical Activity and Sedentary Behaviour Guidelines (2014)⁹

Figure 2: Summary of Australian Sport’s Economic Contribution

Figure 3: Recommended allocation of funds to enhance population sport and physical activity.

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Figure 5: Participation in sport by Australians 15 years and over

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Table 1: Summary of recommended National Physical Activity and Sedentary Behaviour Guidelines (2014)⁹

Table 2: Participation in Sport and Physical Activity by population segment

Table 3: Government funding of sport (estimates from recent financial years)

Table 4: Target 15% improvement in achievement of National Physical Activity and Sedentary Behaviour Guidelines by 2020

Table 5: Target 15% increase in participation in organised and non-organised sport by 2020