

# An assessment of the economic importance of sport and active recreation in Aotearoa New Zealand

**FINAL REPORT**

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The Sport Industry Research Centre (SIRC) is part of Sheffield Hallam University, UK. SIRC comprises a team of researchers who commonly apply the principles of economics, management science and social science to solve real world problems. The SIRC team have pioneered the use of economics in sport and physical activity in three main areas: calculating the value of sport to the economy, measuring the economic impact of events, and valuing the wider social impacts achieved by sport. Research clients include national and local government, national governing bodies and agencies for sport, sports organisations and charities, both within the UK and from other countries. SIRC, in collaboration with AERU, Ihi Research and 4 Global, recently carried out a Social Return on Investment of recreational physical activity in Aotearoa New Zealand.



The Agribusiness and Economics Research Unit (AERU) at Lincoln University was created by a decision of the New Zealand Cabinet in 1962. Since then, the AERU has provided economic and social analysis for a wide range of public and private sector organisations. Its mission is to exercise leadership in research for sustainable wellbeing. It has previously completed research for Sport New Zealand on the economic contribution of the sport and recreation sector to the New Zealand economy. AERU, in collaboration with SIRC, Ihi Research and 4 Global, recently carried out a Social Return on Investment of recreational physical activity in Aotearoa New Zealand.

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**Disclaimer:**

While every effort has been made to ensure that the information herein is accurate, the authors do not accept any liability for error of fact or opinion which may be present, nor for the consequences of any decision based on this information.

This report was commissioned by, but does not necessarily represent the views of, Sport New Zealand Ihi Aotearoa.

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## EXECUTIVE SUMMARY

### **Context**

Sport New Zealand Ihi Aotearoa (Sport NZ) commissioned Sheffield Hallam University (United Kingdom) and the Agribusiness and Economics Research Unit (AERU) at Lincoln University (New Zealand) to conduct a programme of work on the economic importance of sport and active recreation in Aotearoa New Zealand. Sport NZ commissioned this research to complement a recent study on the Social Return on Investment (SROI) of recreational physical activity (Davies et al. 2023).

This second study is more extensive than the SROI, measuring the sector's economic value in its broadest sense. It includes community participation, spectating at events and elite sport. To enable Sport NZ to articulate the holistic economic and social value of community participation, we have separated out the economic value of this element for this study.

### **Methodology**

This study uses a National Income Accounting (NIA) framework to measure the economic importance of sport and active recreation in Aotearoa New Zealand in 2019. It uses the broad definition of the sport economy, including sectors that use sport as an input (such as sport gambling). The NIA methodology enables the sport and active recreation economy to be disaggregated into seven sectors: consumers; commercial sport; commercial non-sport; voluntary sports sector; local government; central government; and international trade. Income and expenditure accounts for these sectors are used to derive three key economic indicators: **consumer expenditure on sport and active recreation**; **sport and active recreation Gross Value Added (GVA)**; and **sport and active recreation employment**.

### **Key Findings**

#### Consumer expenditure

Consumer expenditure on goods and services related to sport and active recreation in Aotearoa New Zealand in 2019 was \$3,846m, or 2.1% of total consumers' expenditure in purchaser prices.

A large part of consumer spending on sport and active recreation is directed towards participation. For example, some of the biggest spending categories are: 'sport and recreational goods (other than yachts' (\$1,059.6m); 'charges to participants for recreational and sporting services' (\$315.9m); and 'clothing and footwear' (\$283.1m). The category 'sport and recreational goods' includes goods such as balls, protective equipment for sport and outdoor recreation, diving and fishing equipment, etc. Yachts are excluded from this category and considered separately. The community participation element of consumer spending is \$2,599.8m, corresponding to 68% of the total sport consumption.



## GVA

Sport and active recreation value added to the economy of Aotearoa New Zealand in 2019 was **\$3,957.8m**, or **1.4% of total output**. A large part of the GVA is generated outside the sport and active recreation sector (commercial non-sport), reflecting the strong connections of sport and active recreation industries to the rest of Aotearoa New Zealand's economy (i.e., to the non-sport economy). The community participation element of GVA is \$2,878m, corresponding to 73% of the generated sport GVA.

## Employment

Employment in sport and active recreation was 53,480 in 2019, or **2.5%** of all employment in Aotearoa New Zealand.

The share in employment (2.5%) is greater than the sport and active recreation share in GVA (1.4%). This implies that sport is an efficient generator of employment, in the sense that an investment in sport would generate more employment than in the average sector of the economy. Sport can become a policy tool to increase employment during recessions or a crisis such as COVID-19.

As in the case of GVA, a large contribution to employment is provided from the commercial non-sport sector (34%). This includes the remaining non-sport economy, such as construction, television and travel. The community participation element of employment is 39.1 thousand jobs, corresponding to 73% of sport employment.

## ***Conclusions and Recommendations***

The findings of this study demonstrate the importance of sport and active recreation to the economy Aotearoa New Zealand. From a policy perspective, we recommend that Sport NZ utilise this study, together with the findings of the SROI, to support the case to treasury for continued investment in sport and active recreation.

For future work, we recommend that Sport NZ consider creating a Sport and Active Recreation Satellite Account (with more detailed employment data), which is a more rigorous and comprehensive method for evaluating the economic activity associated with the sport sector sport, linked to the System of National Accounts.

## CHAPTER 1: INTRODUCTION

In December 2022, Sport New Zealand Ihi Aotearoa (hereafter referred to as Sport NZ) commissioned Sheffield Hallam University (United Kingdom) and the Agribusiness and Economics Research Unit at Lincoln University (New Zealand) to conduct a programme of work on the economic importance of sport and active recreation in Aotearoa New Zealand.

Sport NZ is a Crown agency created to act as a kaitiaki or guardian of the Aotearoa New Zealand play, active recreation, and sport system. It promotes and supports quality experiences to improve levels of physical activity and through this ensure the greatest impact on wellbeing for all New Zealanders. Sport NZ has made commitments to partnership with tangata whenua and protection of Māori culture and taonga. It affirms that Aotearoa New Zealand will realise its full potential in play, active recreation and sport when tangata whenua and all New Zealanders are able to participate and succeed as themselves (see <https://sportnz.org.nz/kaupapa-maori/te-tiriti-o-waitangi/>).

As part of its programme to better understand, demonstrate and communicate the contribution of recreational physical activity to the wellbeing of people living in Aotearoa New Zealand, Sport NZ commissioned this research to complement a recent study on the Social Return on Investment (SROI) of recreational physical activity (Davies et al. 2023). This second study is more extensive in scope than the SROI, measuring the economic value of the sector in its broadest sense. It includes community participation, spectating at events and elite sport. To enable Sport NZ to articulate the holistic economic and social value of community participation, we have separated out the economic value of this element (see chapter 6).

The present study has four objectives:

1. Provide updated estimates for the economic value of sport and active recreation in Aotearoa New Zealand using a National Income Accounting framework.
2. Identify key economic indicators for the sport and active recreation sector including sport-related Gross Value Added, employment and consumer spending.
3. Estimate the economic value of community level sport and active recreation to tangata whenua and all New Zealanders.
4. Provide evidence to support cross-government conversations on investment in sport and active recreation for wellbeing outcomes.

### 1.1 Research context / background to this report

This report focuses on activities within the national economy that support people engaging in sport and active recreation. These activities range from maintaining recreational facilities to providing equipment and clothing for physical exercise.

The United Nations System of National Accounts (UNSNA) is used to record total economic activity. StatsNZ is responsible for collecting, analysing and publishing the relevant data in Aotearoa New Zealand (see <https://www.stats.govt.nz/topics/national-accounts>). The aforementioned data provide the foundation for the results presented in later chapters of this report.

Two key concepts in the National Accounts are **gross domestic product** (GDP) and **gross value added** (GVA). Gross domestic product is the total economic value of the goods and services produced in a given geographical area (in this instance Aotearoa New Zealand) in a given time period (in this instance the year ending March 2019) according to the requirements of the UNSNA. Thus, in the year ended March 2019, New Zealand's GDP was \$306.2 billion (StatsNZ 2022).

GDP can be understood in three different ways. First, it is the value of total production, as just explained. Second, it is the value of total expenditure in the economy, since items are produced for sale (including investment in inventories awaiting sale). Third, it is the value of total income in the economy, since the proceeds of sales are distributed as wages, salaries, profits and taxes.

When calculating total production of the sectors in the national economy, it is important to avoid double-counting. This is achieved using the concept of gross value added. GVA is the difference between a sector's total output and the cost of inputs used in the production process (raw materials and externally supplied services). Suppose, for example, that the total output in a factory producing football boots is \$100m. Suppose also that the factory purchases leather, electricity and other inputs valued at \$30m. The factory's GVA is \$70m, which would be divided between wages, salaries, taxes and profits.

The first New Zealand estimates of the value of sport and active recreation using National Accounts were provided by Jensen et al. (1993), followed by further analysis by Frater et al. (1998) and Goodchild et al. (2000). Dalziel (2011) prepared a comprehensive report on the economic and social value of sport and active recreation, which he followed up with updated estimates (economic value only) for the year ending March 2013 using information from that year's national census (Dalziel 2015). That last analysis found that the gross value added of 17 core industries identified in the sport and active recreation sector had accounted for 1.5 per cent of gross domestic product.

It is important to note that GVA is an important measure of a sector's contribution to the national economy, but it is not a direct measure of wellbeing. The New Zealand Treasury, for example, has created a Living Standards Framework that identifies 12 domains of current wellbeing (Treasury 2021). One of these is 'leisure and play', although measures monitored in that domain are currently restricted to time use (Treasury 2022, p. 38). Sport New Zealand (2019) has aligned its work to an earlier version of the Living Standards Framework, which was an important contribution to the Social Return on Investment analysis reported in Davies

et al. (2023). For consistency between the reports this study is aligned to the same earlier version of the Living Standards Framework.

## 1.2 Scope of the study

The scope of the study was agreed with Sport NZ at the start of the project. It was agreed that the year of study would be 2019, which reflects the most recent ‘typical’ year for which secondary data was realistically available before the disruptions created by the public health response to the COVID-19 outbreak. It is also the same year as the SROI study (Davies et al., 2023), providing the opportunity for Sport NZ to create a strong narrative around the social and economic value of the sector using the findings of the two studies. Sport NZ in 2023 prepared an unpublished bridging document entitled "Social and economic value of community sport and physical activity in Aotearoa New Zealand" to discuss the results of both studies and the link between them.

There is no standard definition of **sport and active recreation** used by Sport NZ or other stakeholder groups, although there is general agreement that physical exercise is an essential component. For the purposes of this study, the research team agreed a broad definition with Sport NZ, as follows:

Competitive sport, undertaken in an organised structure, for example, in a competition or tournament, or informally outside an organised structure; and non-competitive active recreation for enjoyment and wellbeing, that occurs in the built, landscape and natural environments. This may include activities such as kapa haka, fitness/exercise, dance, tramping, outdoor recreation and active play, but excludes household activities such as gardening, and other domestic activities. Active transport for work commuting was also excluded.

All activities falling within this definition are within the study’s scope. Note that in some tables and text, we refer to the sport sector as shorthand for the sport and active recreation sector.

## 1.3 Structure of this report

The report is structured as follows:

- Chapter 2 outlines the research approach.
- Chapter 3 presents the key indicators of GVA, employment, and consumer spending.
- Chapter 4 provides details of central and local government spending, voluntary clubs and international trade.
- Chapter 5 then compares the economic significance of recreational physical activity in Aotearoa New Zealand to other industrial sectors, and also presents the economic value of recreational physical activity using different statistical definitions of the sector.
- Chapter 6 summarises the key findings and outlines the limitations of the study.

## CHAPTER 2: RESEARCH APPROACH

This study uses a National Income Accounting (NIA) framework to measure the economic impact of recreational physical activity in Aotearoa New Zealand in 2019. The concepts of National Income Accounting were developed in the mid-20th century. The basic principle is that there is accounting equality between total output, total income and total expenditure. The NIA framework records how expenditure in one particular sector of the economy flows as income into other sectors and hence generates 'value-added' and employment.

Applied to sport and active recreation, the NIA framework focuses on seven sectors: consumers, commercial sport; commercial non-sport; the voluntary community club (and organisation) sector; local government; central government; and international trade. The seven sectors are outlined below:

- **Consumers:** includes the personal or household sector. This sector shows sport and recreation expenditure by households related to sport and active recreation, e.g., spending on sports club memberships and equipment, clothing and footwear for physically active recreational activities.
- **Commercial sport:** includes sport manufacturers and retailers. In this sector, we include sport companies such as Sportino (NZ) limited or Boost Coaching Ltd; we also include the section of the media associated with sport TV, sport publications, gyms under private ownership and clubs with substantial commercial presence.
- **Commercial non-sport:** includes other suppliers of relevant goods and services. This includes commercial companies that do not provide a sport or active recreation product themselves, but which supply inputs or finance to assist in the production of those products. Examples include: a non-sport business sponsoring a team or club (including volunteer teams); the supply of raw materials for construction of sport and active recreation facilities; legal, financial, IT, gambling and other business services; etc. In the case of sponsorship, the financial grant received by the club represents a flow from the commercial non-sport sector to the commercial or voluntary community club sector. The commercial non-sport sector captures much of the impact of a multiplier through the supply network of an economic activity.
- **Voluntary community club and organisation sector:** includes sport and active recreation organisations such as amateur sport clubs run by their participants. Volunteering is the backbone of this sector. The voluntary community club sector has by its nature few surpluses and wage expenses. As a result, the contributions it makes directly to employment and GVA are well below its true importance in the sport and active recreation economy. In this report any employment associated with the community sector is paid employment. While this employment is supported by non-paid labour, the latter is not part of the economic analysis of GVA.

- **Local Government:** includes income from sport and active recreation facilities operated by local government, sport-related grants from central government, and rates paid by the commercial and voluntary community club sectors. The sector has expenses such as wages for labour (a flow towards consumers) and capital investment.
- **Central Government:** includes tax revenue and public expenditure on items such as sport and active recreation grants and wages on sport and active recreation activities. For example, buying a ticket for a football match is recorded as two flows: one towards the government sector as Goods and Service Tax (GST), and another towards the commercial sport and active recreation sector for the remainder of the price. Central Government includes the financing of sport and active recreation education, including primary and secondary schools.
- **International trade sector:** includes all relevant transactions with economies outside Aotearoa New Zealand (e.g., inbound sport tourism). Although some of the international data are publicly available, mostly this sector is treated as a balancing item to 'close' the NIA in the double entry accounting system, and from this point of view the results of the international trade sector should be treated with caution.

The NIA sport and active recreation model of economic impact assessment primarily uses economic variables from official statistics and other secondary sources as its basic input. With the sole exception of the voluntary community club sector, there is not usually a need for collection of primary data. In this research, voluntary community club sector inputs were derived from published information in the National Sport Club Survey and some additional information provided by Sport NZ. The full list of data inputs used in this study is provided in Appendix A1. The NIA methodology is consistent with the National Accounts.

## 2.1 Sectoral accounts

The NIA methodology requires the creation of sectoral accounts (see Appendix A2). Income and expenditure accounts are derived for each sector, and flows between them are identified. Figure 2.1 shows the broad nature of the interactions between the seven sectors of the sport and active recreation economy. The 'double entry' accounting principle is applied, so every expenditure flow from sector A to sector B is also an income flow in the sector B accounts. Taking the first line of Figure 2.1 as an example, consumers spend money on:

- Commercial sport when they buy sport and active recreation equipment;
- Commercial non-sport when they travel to sport events (including accommodation);
- Voluntary community club sector when they pay a subscription to a volunteer sport club;
- Local Government when they pay entrance fees to public sport facilities;
- Central Government when they pay taxes on wages earned in the sector; and,

- International trade, when they purchase imported sport and active recreation clothing, or spending by tourists on sport related services.

Each time expenditure is recorded it becomes income to another sector generating new spending. There are two noticeable features in the pattern illustrated in Figure 2.1. First, the funds directed towards the consumers are usually in the form of wages and salaries, created within the sport and active recreation sector. Second, the Central Government receives its revenue primarily from taxes on profits, incomes and consumption of goods and services. For example, a company selling sports equipment would generate both sport-related profits and wages, providing tax revenues for the Government.

**Figure 2.1: Income and expenditure flows in the sport economy - NIA framework**

		INCOME TO						
		Consumer	Commercial sport	Commercial non-sport	Voluntary sport	Local Government	Central Government	International trade
EXPENDITURE FROM	Consumer		Sport goods	Events travel	Subscriptions	Subscriptions	Taxes	Imports
	Commercial sport	Wages		Raw materials	Sponsorship	Rates	Taxes	Imports
	Commercial non-sport	Wages	Advertising		Sponsorship	Rates	Taxes	Imports
	Voluntary sport	Wages	Equipment	Construction		Hire and rents	Taxes	Imports
	Local Government	Wages	Equipment	Construction	Grants		Taxes	
	Central Government	Wages		Capital spending	Grants	Transfers		
	International trade	Prize income	Admissions				Taxes	



## 2.2 Key economic indicators

The sectoral accounts discussed in section 2.1 are used to derive estimates for three economic indicators of the sport and active recreation economy: consumer expenditure related to sport and active recreation; sport and active recreation Gross Value Added (GVA); and sport and active recreation employment.

**Consumer expenditure** related to sport and active recreation refers to spending by households on sport and active recreation. It does not include spending by government, sport clubs or commercial companies. Examples of sport-related consumer expenditure include spending on sport and active recreation equipment, admission fees for sporting events, membership fees, spending on sport or leisure clubs, and purchases of sport and active recreation clothing and footwear. It does not include spending on sport advertising or investment in sport and active recreation infrastructure by central or Local Government.

Sport and active recreation **Gross Value Added** is the difference between the value of all goods and services produced in the sector and the value of all inputs purchased from other sectors and used to produce those goods and services. It measures the contribution of the sport and active recreation industry to the national economy. The sport and active recreation GVA, as a percentage of the total gross domestic product, is an important statistic to consider. Further, GVA equals the wages, profits and taxes generated in the sector. The greater the share of wages, the greater the association between GVA and employment.

Sport and active recreation **employment** estimates are derived from calculations based on total wage payments in the sector, divided by average earnings in the sector, as reported on official statistics.<sup>1</sup> An important ratio in this analysis is the number of sport and active recreation jobs as a percentage of total employment. A comparison of this ratio with the equivalent GVA ratio provides information on incomes in the sector compared to the national average and on the relative effectiveness of the sport and active recreation sector for generating employment in response to increased spending.

## 2.3 Scope

To maintain continuity with previous economic studies in Aotearoa New Zealand, we provide estimates for three different levels on inclusiveness, based on the Vilnius definition of sport that is widely used across the European Union and the United Kingdom for the construction of Sport Satellite Accounts as a supplement to National Accounts.<sup>2</sup> The three levels of inclusiveness are termed the core, narrow and broad definitions:

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<sup>1</sup> Labour Statistics, Stats NZ, downloaded through Infoshare.

<sup>2</sup> [https://ec.europa.eu/eurostat/documents/6921402/0/Vilnius+Definition+Sport+CPA2008+official+2013\\_09\\_19.pdf/30838d11-01ea-431f-8112-50786e187c1c](https://ec.europa.eu/eurostat/documents/6921402/0/Vilnius+Definition+Sport+CPA2008+official+2013_09_19.pdf/30838d11-01ea-431f-8112-50786e187c1c).

1. **Core definition:** corresponds mainly to industries within the National Accounts that are explicitly labelled as part of the sport and recreation services classification.
2. **Narrow definition:** includes the core definition above, and other economic activities that are necessary for sport and active recreation. Examples include sport footwear, physical education, active recreation equipment, etc.
3. **Broad definition:** includes the narrow definition and other economic activities that requires sport as an input (but without being necessary for sport and active recreation to take place). A good example is sport gambling.

Following the convention of previous national and international economic studies, including those using the NIA methodology and Sport Satellite Accounts, the main analysis presented in this report adopts the broad definition. However, Chapter 5 also presents disaggregated results using all three definitions, with a further analysis of community level participation.

## CHAPTER 3: KEY ECONOMIC INDICATORS

This section presents estimates for consumer spending, GVA and employment related to the sport and active recreation sector in Aotearoa New Zealand, based on the broad definition described in section 2.3 above. This broad definition is most comparable to the scope of previous work in Aotearoa New Zealand.

### 3.1 Consumer expenditure on sport and active recreation

The estimates for total consumer expenditure in Aotearoa New Zealand were derived using the 2019 Household Expenditure Survey,<sup>3</sup> together with other surveys and information, such as the gambling operators' key financial statistics, the tourism satellite account, and the Sky annual report. The Household Expenditure Survey made it possible to build a detailed picture of consumption, with some missing figures estimated through additional modelling.

Table 3.1 summarises the major elements of consumers' expenditure for 2019 on goods and services related to sport and active recreation. The estimates include GST and any subsidies that might be offered. The total value of sport-related consumer spending was \$3,846.0m, or 2.1% of total spending (using purchaser prices). A more detailed description of this expenditure is provided in Appendix A2.

A large part of consumer spending on sport and active recreation is directed towards sport and recreational goods (\$1,060.0m), charges to participants for recreation and sport services (\$315.9m), international sport events (\$279.0m), subscriptions and donations to fitness clubs (\$246.6m), and bicycle equipment and repairs (\$246.6). Spending on horse and greyhound racing gambling is also high (\$331.8m),<sup>4</sup> which is not unusual (sport gambling is one of the major sectors in the UK Sport Satellite Account).

With the exceptions of sport gambling, spectating and broadcasting, consumer spending is driven by the participation elements of sport and active recreation. This suggests that an increase in participation rates, particularly by people engaging in new physical activity, could have a strong impact on sport-related economic activity, as more participation would imply more purchases of equipment, clothing, footwear, membership fees and the like.<sup>5</sup>

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<sup>3</sup> <https://www.stats.govt.nz/information-releases/household-expenditure-statistics-year-ended-june-2019/>.

<sup>4</sup> In previous studies sport gambling has been excluded, but it is usually included in international studies of the sector.

<sup>5</sup> <https://www.mdpi.com/1660-4601/17/17/6193>.

**Table 3.1: Consumer spending related to sport and active recreation in Aotearoa New Zealand, 2019**

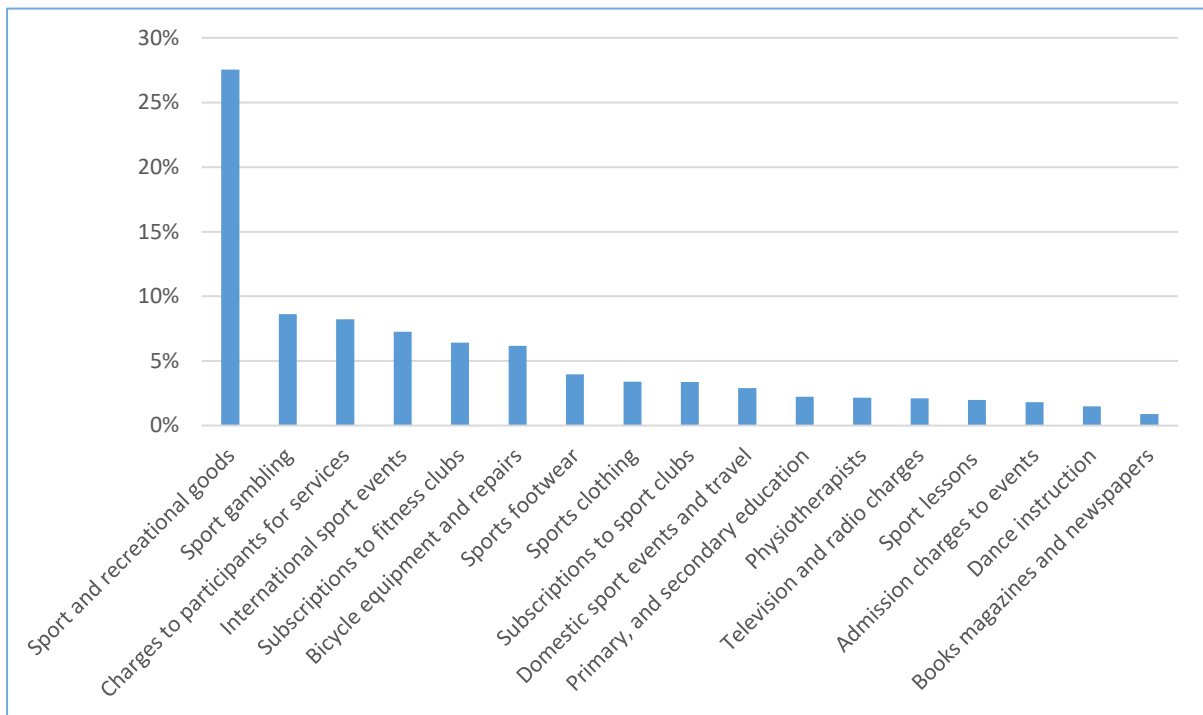
	(\$million)
	<b>2019</b>
<b>Sport and recreational goods (other than yachts)</b>	1,059.60
<b>Other sport-related spending</b>	364.4
<b>Gambling on horse and greyhound racing</b>	331.8
<b>Charges to participants for recreation and sport services</b>	315.9
<b>International sport events</b>	279
<b>Subscriptions and donations to fitness clubs</b>	246.6
<b>Bicycle equipment and repairs</b>	237.5
<b>Sports footwear</b>	152.5
<b>Sports clothing</b>	130.6
<b>Subscriptions to sport clubs</b>	129.7
<b>Domestic sport events and travel</b>	111.1
<b>Primary, intermediate, and secondary education</b>	85.9
<b>Physiotherapists</b>	83
<b>Television and radio charges</b>	80.6
<b>Sport lessons</b>	76.6
<b>Admission charges to recreation and sport events</b>	69.3
<b>Dance instruction</b>	57.2
<b>Books magazines and newspapers</b>	34.7
<b>Total</b>	<b>3,846.0</b>

Based on the Household Expenditure Survey, or example, it is possible to separate admission fees paid for participation (e.g., to stadia or leisure facilities for participation) and admission fees to watch sport events. ‘Other sport-related spending’ includes smaller categories such as ‘other sport betting’, ‘hire of sport goods and premises’, ‘yachts (for racing and sails)’, or residual items such as ‘other charges for sport services’.

Figure 3.1 shows the distribution of this consumer spending. Among the categories presented, the greatest share is attributed to sport and recreational goods (29%), followed by gambling on horse and greyhound racing (9%), charges to participants for recreation and sport services (8%), international sport events (7%), subscriptions and donations to fitness clubs (6%), bicycles equipment and repairs (6%), sport footwear (4%), sport clothing (4%), and subscriptions to sport clubs (3%).

Figure 3.1 highlights the importance of the participation categories through the purchase of sport equipment (in order to participate), subscriptions and fees, sport education and medical expenses.

**Figure 3.1: Consumer expenditure on sport and active recreation in Aotearoa New Zealand, 2019, % shares**



We generally expect the participation element, which clearly drives consumer spending, to have sport and active recreation as an output, while on the other side sport gambling or sport TV use sport as an input. For example, one needs sport equipment, sport subscriptions or sport footwear to participate in physical activity (sport and active recreation as output); on the other hand, sport is required to produce sport TV broadcasting or to gamble on sport outcomes (sport as input).

### 3.2 Sport and active recreation GVA

To calculate sport and active recreation GVA, total wages and operating surpluses (or profits) are estimated in each sector. The estimation of GVA usually starts from turnover, as indicated by the flows of income and expenditure. Shares for wages and profits are applied using the National Accounts National Input Output tables. In the case of the public sector, no surpluses enter the calculation. As noted earlier, the value added to the economy through the production of goods and services has significant implications for employment in the sport and active recreation sector.

Table 3.2 shows the figures for GVA in the different sectors of the sport and active recreation economy. In 2019, sport and active recreation economic activity added \$3,957.8m to the Aotearoa New Zealand economy, which is equivalent to 1.4% of the country’s generated gross value added.

**Table 3.2: Sport and active recreation GVA in Aotearoa New Zealand, 2019**

	(\$million)
	<b>2019</b>
Commercial non-sport	1,440.2
Commercial sport	934.9
of which	
Retailing	619.6
Participation clubs	129.4
Other	125.7
Spectating sport	60.2
Central Government	727.1
Voluntary community club sector	629.0
Local Government	226.7
<b>Total</b>	<b>3,957.8</b>

Most of this economic activity is generated by the commercial non-sport sector (\$1,440.2m, or 36%). The next largest sector is the commercial sport sector (\$934.9m, 24%) followed by the Central Government sector (\$727.1m, 18%). The former includes spectating sport and participation clubs as well as retailing, broadcasting and manufacturing. More than half of the GVA generated in commercial sport can be attributed to retailing, including sport and active recreation clothing and footwear, sport and active recreation equipment, yachts and publications.

Sports clubs and leisure centres are distributed among the community sector, the local government sector and the commercial sector. Generally, the participation-related categories of sport and active recreation expenditure would lead to participation-related GVA. However, both GVA and employment include elements not related directly to consumer spending, such as the construction of sport and active recreation facilities.

Most GVA generated in the Central Government sector is associated with either sport and active recreation education or with the administration of sport and active recreation, which is essential for the participation element. The public sector is instrumental in providing funds for construction projects, although the associated GVA is often generated within the commercial sector. The public sector also includes the GVA generated by transport projects, such as cycleways, and support to walking access.

International sport tourism influences the sport and active recreation economy, ranging from the voluntary community club sector to the commercial non-sport and public sector. Additional value from tourism is generated by domestic travel, for example. Finally, all economic activity around sport clubs in the community sector is associated with participation and spectating.

It is important to acknowledge that the GVA generated by the commercial non-sport sector represents a multiplied impact of sport and active recreation on the wider economy that results from links through the production network (i.e., a non-sport business sponsoring a team or club (including volunteer teams); the supply of raw materials for construction of sport and active recreation facilities; legal, financial, IT and other business services). The fact that this is the most important sector in terms of generating GVA implies that the links of the sport and active recreation sector to the rest of the economy is important for generating added value. In other words, the initial direct demand generates more output through the supply connections of sport and active recreation with the other sectors of the economy, as more goods and services are required to produce the final output.

### 3.3 Sport and active recreation employment

Sport and active recreation employment estimates are derived from calculations based on total wage payments and average salaries in the sector, as reported in the StatsNZ 'Infoshare' database.<sup>6</sup> Estimated employment is total sport and active recreation wages divided by weekly average earnings scaled to annual values. Since the wage bill is a significant component of GVA, the pattern developed in GVA closely reflects the one in employment.

Table 3.3 provides estimates for sport and active recreation employment in Aotearoa New Zealand. Overall, the sport and active recreation economy in 2019 generated approximately fifty-three and a half thousand jobs, corresponding to 2.5% of total employment.

**Table 3.3: Sport and active recreation employment in Aotearoa New Zealand, 2019**

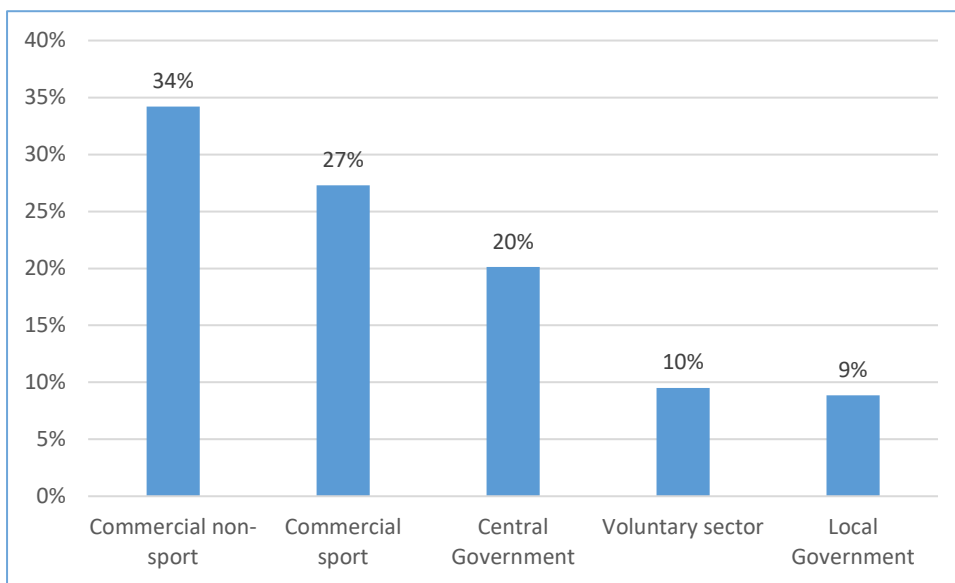
	(000s)
	<b>2019</b>
Commercial non-sport	18.28
Commercial sport	14.60
of which	
Retailing	10.36
Participation sports	2.01
Other	1.29
Spectating sports	0.94
Central Government	10.77
Voluntary community club sector	5.09
Local Government	4.74
<b>Total</b>	<b>53.48</b>

<sup>6</sup> [Browse - Infoshare - Statistics New Zealand \(stats.govt.nz\)](https://www.stats.govt.nz/browse-by-topic/infoshare).

The number of jobs in Central Government is due mainly to public spending on physical education in schools and on administration. The sport educational sector is often the largest generator of employment in the Pan-European Sport Satellite Accounts (among categories presented in the Input Output Tables). Central Government also contributes to the sport and active recreation economy through the employment of individuals in funded projects associated with transport and facilities.

Figure 3.2 below shows the distribution of sport and active recreation employment among the major sectors in the year 2019. The largest sector is the commercial non-sport sector, supporting 18,280 jobs or 34% of all sport and active recreation employment in Aotearoa New Zealand. This is followed by the commercial sport sector, generating 14,600 jobs (27%). . Next is the Central Government sector, generating 10,770 jobs (20%). Most of the jobs in the commercial sphere are associated with retailing.

**Figure 3.2: Sport and active recreation employment in Aotearoa New Zealand (2019), % shares**



The share of sport and active recreation jobs in the national economy (2.5%) is higher than the equivalent GVA share (1.4%). This has two implications. It indicates that the sport and active recreation sector has relatively low incomes compared to other sectors in the economy. On the other hand, it also means the sector can be considered a very efficient employment generator. This can be a very useful tool in times of economic recession when the focus shifts into efficient and effective job generation.



### 3.4 Summary of key estimates

Table 3.4 summarises our estimates of the three key indicators for the calendar year 2019 associated with the broad definition of sport. A number of key points arise from the table.

- Consumer expenditure on sport and active recreation goods and services in Aotearoa New Zealand in 2019 was \$3,846.0m, or 2.1% of total consumers' expenditure. Sport and active recreation participation is the dominant category that drives consumer spending.
- Sport and active recreation value added to the Aotearoa New Zealand economy in 2019 was \$3,957.8m, or 1.4% of total output. There are strong contributions from the commercial non-sport sector, commercial sport, and the government, illustrating the importance of the supply networks and education in the sport economy.
- Employment in sport and active recreation was estimated to be 53,480 in 2019, or 2.5% of all employment in Aotearoa New Zealand. The employment pattern is associated closely to GVA, through the underlying dimension of wages and salaries.

**Table 3.4: Main sport and active recreation economic indicators for Aotearoa New Zealand, 2019**

	2019
<b>Consumer expenditure on sport and active recreation (\$million)</b>	<b>3,846.0</b>
<i>Total consumer expenditure in Aotearoa New Zealand, purchaser prices (\$million)</i>	<i>181,710</i>
<b>Sector's share of total consumer expenditure (%)</b>	<b>2.1%</b>
<b>Sport and active recreation GVA (\$million)</b>	<b>3,957.8</b>
<i>Total GVA in Aotearoa New Zealand (\$million)</i>	<i>291,492</i>
<b>Sector's share of total GVA (%)</b>	<b>1.4%</b>
<b>Sport and active recreation employment (000s)</b>	<b>53.48</b>
<i>Total employment in Aotearoa New Zealand (000s)</i>	<i>2,113</i>
<b>Sector's share of total employment (%)</b>	<b>2.5%</b>

By comparing GVA and employment, the strongest presence of sport and active recreation has been in employment, which is consistent with the previous experience in Aotearoa New Zealand and in Europe.<sup>7</sup> Employment generation in sport and active recreation happens mainly through the network of sport clubs and from the commercial non-sport sector, which corresponds to a very high multiplier associated with sport and active recreation services and construction.

As has been observed in most European Union (EU) countries, the percentage of sport and active recreation employment as a proportion of total employment is greater than the equivalent share of sport and active recreation GVA. This reflects two things. First, the sport and active recreation industry provides lower salaried jobs than average; and second, jobs in sport and active recreation are more people based (they cannot easily be substituted by technology). Sport and active recreation can be used as a policy tool to increase employment and increase convergence among regions where high unemployment rates are concentrated in some parts of the country.

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<sup>7</sup> SIRC and SportsEconAustria (2018). Study on the economic impact of sport through sport satellite accounts. [online]. <https://publications.europa.eu/en/publication-detail/-/publication/865ef44c-5ca1-11e8-ab41-01aa75ed71a1/language-en/format-PDF/source-71256399>.

## CHAPTER 4: ECONOMIC SECTORS

### 4.1 Central Government funding

Central Government has a major role in the development and growth of the sport and active recreation economy in Aotearoa New Zealand. It finances a wide range of programmes, including physical education in schools, investment in the country's conservation estate for recreational opportunities, and funding of high-performance sport. A detailed list of government spending is presented in Table 4.1 below.

**Table 4.1: Central Government spending on sport and active recreation, 2019**

Vote	Programme	\$m
Education	Secondary Education	385.8
Education	Primary Education	329.3
Conservation	Management and recreational opportunities	79.3
Sport and Recreation	High Performance sport	62.2
Sport and Recreation	Sport and Recreation programmes	19.2
Sport and Recreation	Prime Minister's Sport Scholarships	4.3
Sport and Recreation	Sport anti-doping	3.2
Sport and Recreation	Purchase, advice and monitoring of Sport and Recreation Crown Entities	0.5
Sport and Recreation	Miscellaneous grants	0.0
Transport	Urban cycleways	19.1
Transport	Urban cycleways-Crown assets	0.5
Transport	Search and Rescue and Recreational Boating Safety Activities	10.3
Transport	Search and Rescue activities	1.1
Agriculture	Support for walking access	1.8
Finance	Christchurch stadium operating	2.6
<b>Total</b>		<b>919.2</b>

Source: *The Treasury*, accessed at <https://www.treasury.govt.nz/publications/supplementary-estimates/vote-finance-supplementary-estimates-2018-19-html>.

The overall spending identified through the Treasury amounts to \$919.2m. Three observations can be noted.

1. Sport and active recreation may be only a part of a programme of public expenditure. Education (primary and secondary) is an example, where physical education represents only a share of the teaching budget, according to the number of hours taught. In this, we follow the methodology of the Pan-European Sport Satellite Accounts. We set the school-based physical education time to 2.5 hours per week, which reflects the upper-end of physical education duration observed internationally (Mizdrak et al., 2021).
2. This level of expenditure is only the starting point, other elements of lesser importance often enhance the overall spending in a year. Some sport-related elements may exist elsewhere which have not been identified. Best efforts have been made to identify lesser sport-related elements outside the overall Treasury spending on sport dataset. Further, the pattern may not be identical from year to year; this is especially true in the case of construction which is likely to be high if a major event must be organised.
3. The items in the table are gross spending, which does not make allowance for returns on spending in the form of GST paid on purchases of sport and active recreation goods and services or on personal and company taxation from wages and profits in the sector. Government revenue is likely to increase when sport and active recreation participation increases, as a result of more GST on consumption and more income tax revenue on increased employment.

## 4.2 Local Government Funding

Local Government in Aotearoa New Zealand is made up of 11 regional councils and 67 territorial authorities. It provides facilities for sport and active recreation targeting local communities. The sport and active recreation expenditure by Local Government is associated with the maintenance of natural and built facilities for physical activity. The annual Local Authority Census provides data on Local Government finance, reported in 'infoshare'.<sup>8</sup> In our analysis, recreation and sport includes aquatic and sports facilities, zoological and botanical gardens, parks, reserves and playgrounds, bike and walking tracks, parks and trails, marine recreational facilities, berths, moorings, and access ways to water for sport and recreation activities.

Table 4.2 below shows the operating income and expenditure of Local Authorities that is associated with sport and active recreation. In this case, the income associated with recreation and sport is provided directly from the Local Authority Census, rather than being generated from the NIA model. The total sport and active recreation income amounts to \$1,209.7m; its most important component is 'rates' valued at \$1,000.4m. Other less sizeable sources of income include 'sales' (\$180.1m), 'grants and subsidies' (\$22.2m) and 'regulatory income' (\$7.1m).

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<sup>8</sup> <https://infoshare.stats.govt.nz/Default.aspx>.

**Table 4.2: Local Authority income and expenditure on sport and active recreation, 2019**

	\$m
<b>Income</b>	
Rates	1,000.4
Regulatory income and petrol tax	7.1
Current grants, subsidies, and donations income	22.2
Sales and other operating income	180.1
<b>Total operating income</b>	<b>1,209.7</b>
<b>Expenditure</b>	
Employee costs	226.7
Depreciation and amortisation	229.3
Current grants, subsidies, and donations expenditure	38.3
Interest expenditure	55.0
Purchases and other operating expenditure	488.9
<b>Total operating expenditure</b>	<b>1,038.1</b>
<b>Operating surplus</b>	<b>171.6</b>

Source: Local Authority Census, Infoshare.

Similarly, total expenditure amounts to \$1,038.1m. The most important expenditure categories associated with sport and active recreation are: purchases and other expenditure (\$488.9m), depreciation and amortisation (\$229.3m) and employee cost (\$226.7m). This wage bill is equivalent to the GVA generated by Local Government (assuming it operates on a non-profit basis), generating employment of 4,740.

### 4.3 Clubs

The sport clubs are recorded in two sectors, the voluntary community club sector, and the commercial sport sector. Both sectors generate some employment, the latter more extensively than the former. Clubs in the voluntary community club sector conduct operations primarily through volunteers. This means their value is not recorded in the System of National Accounts. In the current study the GVA generated in the voluntary community club sector is mainly through some wages paid and indirect expenses generated and processed through the supply network. However, one can make a strong case that this underestimates the true value of the club activities which can be monetised by attaching a proxy wage on the work of volunteers and by estimating the wellbeing benefits (both as happiness and social capital) as well as any health benefits associated with sport volunteering. This value is captured in the SROI study by Davies et al. (2023).

Although the commercial sector can be reliably identified through flows of income and expenditure, the voluntary community club sector ordinarily requires a survey of clubs or modelling based on past experience. In this study the voluntary community club sector was modelled using the 'national sport club survey' of the Amateur Sport Association.<sup>9</sup> Table 4.3 below summarises some important aspects of clubs and results generated by the NIA model.

**Table 4.3: Sport and recreation clubs, 2019**

	\$m
<b>Important statistics</b>	
56% of clubs breakeven	
39% of clubs produce a surplus	
5% of clubs operate at a loss	
Average membership per participating club	190
Average annual membership:	227
On average, each club has 2.1 sponsors that provide more than \$1,000 each.	
<b>Employment statistics</b>	
Spectator Clubs	940
Participation Clubs	2,010
Voluntary network	5,090
<b>Total</b>	<b>8,040</b>

It is important to note that most clubs breakeven while 39% produce some surplus and 5% operate at a loss. That means that in most cases (over 60%) any surpluses produced are 'recycled' almost immediately through the clubs. This can be done through generating employment positions or through purchases of equipment or construction.

According to the survey, the average membership per club is 190 people and the average value of annual membership is \$227. Each club has extra financing from sponsors, mostly from the commercial sport or non-sport sectors. Employment in clubs amounts to 8,040 people, most of whom are employed in what we consider a voluntary network of clubs. This number corresponds to 15% of total employment in sport and recreation in Aotearoa New Zealand. However, the actual number working is likely to be much higher when the number of volunteers is taken into account.

Thus, volunteering plays an important role in clubs and allows most clubs to break even. If clubs were required to employ these volunteers, then they would be required to increase revenue. In Europe, the Collaborative Partnership on the Economic Dimension of

<sup>9</sup> <https://sprinz.aut.ac.nz/areas-of-expertise/sport-leadership-and-management/national-sport-club-survey>.

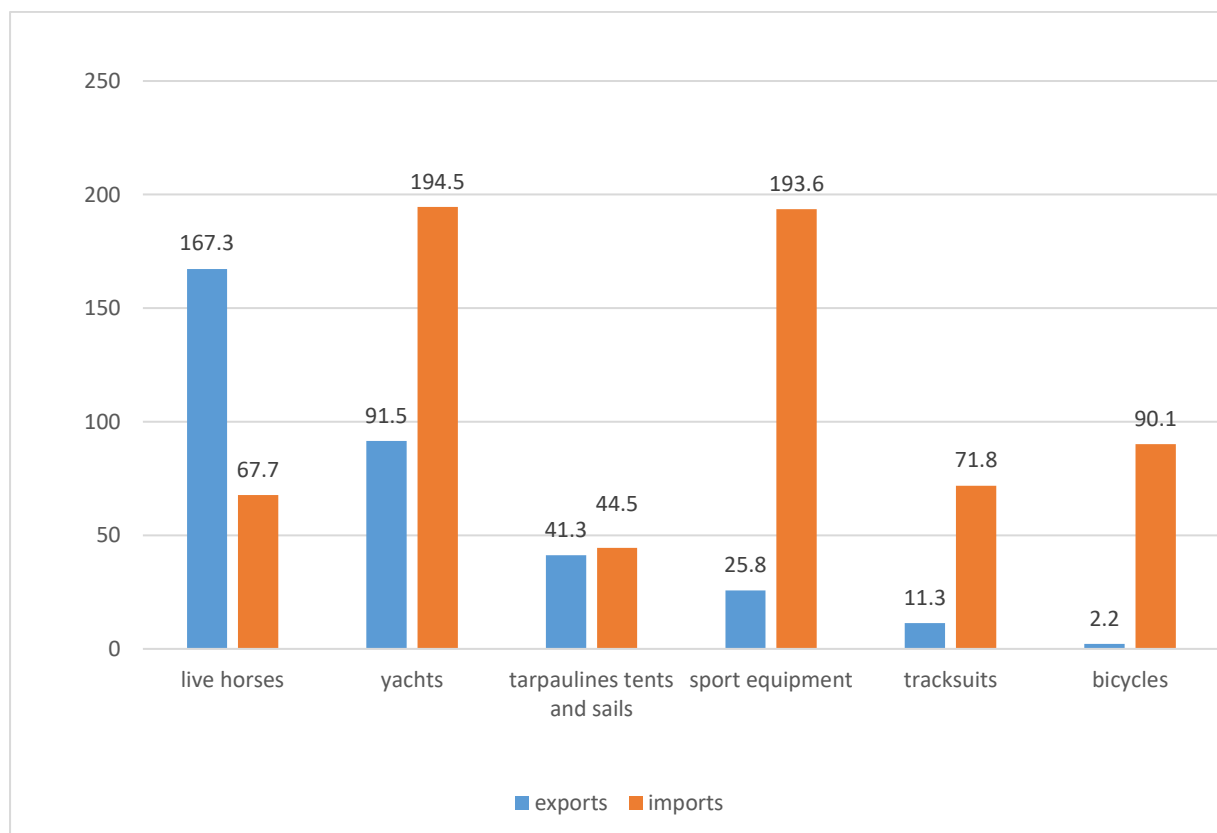
Volunteering in Sport reports that if volunteers were taken away, clubs would have a rise of at least 50% in expenses to provide the same services (see <https://evisproject.eu/>). Lower prices for sport services can facilitate greater participation and contribute to reduce inequalities among participants and sport volunteers.

#### 4.4 International Trade

In the NIA method, international trade operates as a balancing act of the input-output system. Where information is known it can be used to verify the generated information from the model. Data on international trade can be found in United Nations trade datasets and are also available in the Infoshare dataset of Stats NZ. In general, there is information on the international trade of some sport and active recreation goods, but in the case of relevant services most data are suppressed, making it very difficult to generate a reliable dataset that could represent the sport and active recreation industry as a whole.

Figure 4.1 below illustrates the international trade in some sport and active recreation goods in Aotearoa New Zealand for the year 2019.

**Figure 4.1: International trade on selected items, 2019**



These were the only sport and active recreation goods that could be identified fully through infoshare. Some further information existed for sport footwear but could not be used for the industry as a whole. According to the above information, among the sport and active recreation goods considered, only trade in live horses generated a trade surplus for Aotearoa New Zealand. The remaining sectors of yachts, tarpaulins, tents and sails, sport equipment, tracksuits and bicycles all produced deficits. Note however that the value of exports in the case of yachts is sizeable (\$91.5m) and the trade of tarpaulins, tents and sails is almost in balance, generating \$41.3m and \$44.5 of exports and imports respectively.



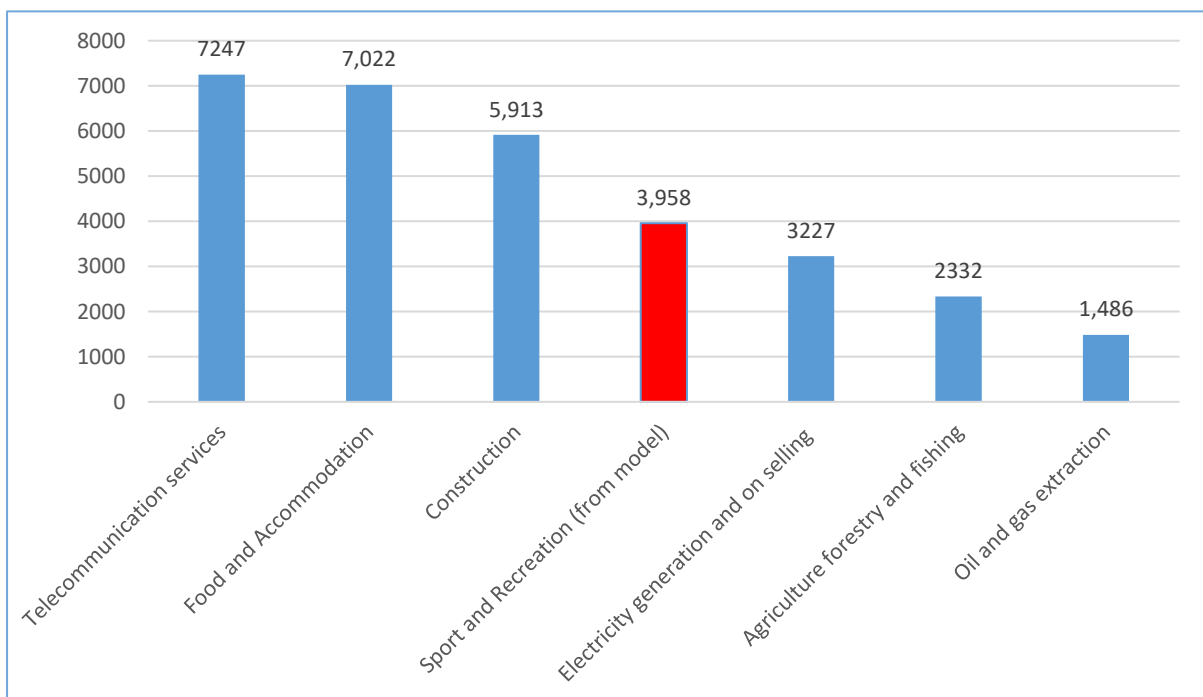
## CHAPTER 5: FURTHER ANALYSIS AND CONTEXT

This chapter has three sections. The first compares the sport and active recreation sector with the GVA (defined in section 1.1 above) of other sectors in the national economy. The second disaggregates the analysis using the three Vilnius definitions of sport (Chapter 2.3). The third section introduces the definition of community sport which is often used to assess the social impact of sport, as it relates much closer to sport and active recreational participation.

### 5.1 Context

To place the sport and active recreation economy in Aotearoa New Zealand into context, we have compared its GVA to the GVA produced by other sectors. The data is from the National Accounts Input Output tables. This comparison is illustrated in Figure 5.1.

**Figure 5.1: GVA of selected industries in Aotearoa New Zealand, \$m (2019)**



We compared sport and active recreation with the following economic sectors: construction; accommodation and food services; telecommunications; electricity generation and on-selling; agriculture, forestry, and fishing; and oil and gas extraction. Note that this is a selection of economic sectors in Aotearoa New Zealand to illustrate the comparative size of the sport and active recreation economy. These are the sectors around the sport economy, so that the sport economy can be 'framed' in terms of its importance.

For the year 2019, sport and active recreation GVA was \$3,957.8m. Among the selected categories, only telecommunications, construction and accommodation and food service activities exceed sport and active recreation in terms of their generated GVA. These comparisons with significant economic sectors underline the importance of sport and active recreation in Aotearoa New Zealand as an economic activity.<sup>10</sup> This pattern in general can also be seen in many EU countries through the Pan-European Sport Satellite Accounts (Eurostat, 2019).

It may be useful to offer a comparison with the sport economy in England, which has been assessed by the same methodology (Kokolakakis, Christy and Davies, 2020). Aotearoa New Zealand compares favourably in terms of employment: the Aotearoa New Zealand sector accounts for 2.5 per cent of employment, compared to 2.3 per cent in England. On other indicators, Aotearoa New Zealand is slightly smaller. GVA for Aotearoa New Zealand is 1.4 per cent, compared to 1.7 per cent for England. Share of consumption spending is 2.1 per cent in Aotearoa New Zealand and 2.5 per cent in England respectively.

## 5.2 Broad, Narrow and Core Definitions of Sport and Active Recreation

Chapter 2 introduced the Vilnius definitions of sport that move from a core definition to a narrow definition, and then to a broad definition. All the results presented in this report so far correspond to the philosophy of the broad definition of sport. Despite the differences of the current methodology from the Satellite Accounts, a distinction can be made among the aforementioned definitions following the logic above.

Table 5.1 illustrates the three definitions in terms of generated GVA, a category that closely corresponds to the logic of the Vilnius definition.

**Table 5.1: Core, narrow and broad sport related GVA, 2019**

	% of total	\$m
Core definition	20.7%	818.6
Narrow definition	61.7%	2,441.9
Broad definition (Total)	100%	3,957.8

Core sport is calculated to be \$818.6m corresponding to 20.7% of the generated GVA. This is mainly attributed to the voluntary community club sector, and the clubs classified under the commercial sport sector. This core activity gives rise to a much more expanded 'narrow' GVA of \$2,441.9m, corresponding to 61.7% of the sport related GVA. The step from the core definition to the narrow definition, where we include all the activities that serve as inputs to

<sup>10</sup> Note that sport may also be included in some of the other categories; hence the comparison is indicative only.

sport is the most important one, as it more than triples the associated GVA. It includes economic activities such as sport related education, sport equipment, sport clothing and footwear, sport construction etc. From this base we expand to the totality of the broad definition which includes the remaining activities such as gambling, sport publications, most of the commercial non-sport sector etc.

### 5.3 Community Sport and Active Recreation

Another definition of sport and active recreation to consider is the one attached to community-level participation. This includes all activity in the core definition above, together with some elements of the narrow definition that are necessary for participation. Table 5.2 uses this definition from the point of view of consumer spending and estimates the percentage of sport and active recreation spending that is associated with community participation.<sup>11</sup>

**Table 5.2: Participation-related consumer spending, 2019**

	(\$million)	Participation %	Participation \$m
<b>Sport clothing and footwear</b>	283.1	67%	189.7
<b>Sports goods and bicycles</b>	1,388.6	100%	1,388.6
<b>Participation subscriptions and fees</b>	692.3	100%	692.3
<b>Admissions to events</b>	69.3	0%	0
<b>Sport-related gambling</b>	348.6	0%	0
<b>TV and media expenses</b>	96.3	0%	0
<b>Other sport-related spending</b>	967.7	34%	329.3
<b>Total</b>	<b>3,846.0</b>	<b>68%</b>	<b>2,599.8</b>

The table shows that the majority of sport and active recreation spending (68%) relates to participation, representing \$2,599.8 million in value. By definition, some of the categories considered explicitly in Table 5.2 relate only to participation. For example, sport goods, bicycles and participation subscriptions and fees are expenses that are incurred for the purpose of participation and because of that they are 100% within the participation category. On the other hand, expenses such as admissions to events, sport-related gambling and media expenses are associated with watching the sport and do not relate directly to community sport participation, although they may inspire the latter to grow. For this reason, these categories are fully placed outside the participation context (0% in Table 5.2).

<sup>11</sup> Clothing and footwear are bought either in order to practice sport or as fashion.

The remaining categories contain some elements of sport participation. In sport clothing and footwear, 67% of the expenses are associated with sport participation whilst the remainder has as its main motivation fashion and lifestyle.<sup>12</sup> Similarly, the category 'other sport-related spending' contains items such as boats (100% within participation), sport publications and sport-related travel (0% of participation), etc. Overall, 34% of consumer spending within this category is associated with participation. In reality most people use sportswear in both ways.

The overall percentage of community participation within overall consumer spending on sport and active recreation is calculated at 68%.

Finally note that this calculation largely depends on the definitional view we take on participation spending. Our perspectives were guided using the Vilnius definition of sport and the discussion of the participation element in the construction of national European SSAs. However, there is not a strictly right or wrong answer. We generally expect the participation element to be an input in sport, while on the other side sport gambling or sport TV use sport as an input. In addition, we expect that the main consuming motivation should be to participate and not just attend a sport event or watch sport on TV. Having said that, a lot of sport TV and sport gambling expenses are invested back to the existing sport infrastructure, helping clubs to grow and increase their participation.

As in the case of consumer expenditure, we can construct the percentage of sport and active recreation GVA that is associated with community participation. Generally, the participation-related categories of consumer expenditure would lead to participation-related GVA. In addition, most GVA generated in the public sector is associated either with sport education (100% participation) or with the administration of sport which is essential for the sport and active recreation participation element. Finally, all economic activity around sport clubs in the voluntary community club sector is considered to be associated with participation.

Table 5.3 shows that 73% of sport and recreation GVA is associated with participation. As in the case of consumption, in the commercial sport sector, spectator sports are not associated with participation, whilst the majority of retailing (96%) is. The latter is derived from buying motivations. For example, all sport equipment companies are associated with participation, whilst only a part of sport footwear production is used primarily for participation. The high share of participation motivations in retailing is mainly because of the dominance of sport equipment in the sector. Overall, the participation percentage of GVA in the commercial sport sector is 79%. Similarly, the participation percentages associated with the commercial non-sport sector, the public sector and the voluntary community club sector are 40%, 98% and 100% correspondingly. The part of GVA that is associated with participation is estimated at \$2,878m, representing a share of 73% of total sport GVA.

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<sup>12</sup> This is derived in a model built by SIRC on the basis of past findings.

**Table 5.3: Participation related GVA, 2019**

	Total GVA (\$m)	Participation %	Participation (\$m)
<b>Commercial non-sport</b>	1,440.2	40%	576.1
<b>Commercial sport</b>	934.9	79%	738.6
<b>of which</b>			
<b>Spectator sports</b>	60.2	0%	0
<b>Participation sport</b>	129.4	100%	129.4
<b>Retailing</b>	619.6	96%	594.8
<b>Public sector</b>	953.7	98%	934.6
<b>Voluntary community club sector</b>	629.0	100%	629.0
<b>Total</b>	<b>3,957.8</b>	<b>73%</b>	<b>2,878.3</b>

The participation insights behind GVA reflect exactly the methods used to derive participation-related employment. However, whilst in the case of GVA the participation rates were applied on the total value added, in the case of employment they are applied on the wages.

Table 5.4 below illustrates that 73% of sport and active recreation employment is associated with participation. In the case of the voluntary community club sector, by definition, all employment generated (5100 jobs) is associated with participation. As in the case of GVA, 98% of the public sector sport and active recreation jobs relate to participation, corresponding to 15,200 jobs. The commercial sectors of sport and non-sport are associated with participation shares of 79% and 40% respectively.

**Table 5.4: Participation related employment, 2019**

	Total Employment ('000)	Participation %	Participation ('000)
<b>Public sector</b>	15.5	98%	15.2
<b>Commercial sport</b>	14.60	79%	11.5
<b>Commercial non-sport</b>	18.3	40%	7.3
<b>Voluntary community club sector</b>	5.1	100%	5.1
<b>Total</b>	<b>53.5</b>	<b>73%</b>	<b>39.1</b>

## CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Summary

The results of this research demonstrate the importance of sport and active recreation to the economy of Aotearoa New Zealand. This report shows that sport and active recreation generated significant consumer expenditure, GVA and employment for Aotearoa New Zealand in 2019. It also revealed that related employment has a greater market share than sport and active recreation GVA in Aotearoa New Zealand, underlining the role of sport and active recreation in generating and sustaining jobs and output. The following bullet points summarise the key findings presented in this report:

- The total value of consumer spending related to sport and active recreation was \$3,846m in 2019. In comparison with consumer spending for Aotearoa New Zealand as a whole, the sport and active recreation consumption corresponds to 2.1% of the economy.
- A large part of consumer spending on sport and active recreation is directed towards participation. For example, some of the biggest spending categories are sport and recreational goods (\$1,060.0m), charges to participants for recreation and sport services (\$315.9m), international sport events (\$279.0m), subscriptions and donations to fitness clubs (\$246.6m), and bicycle equipment and repairs (\$246.6). Hence, other than gambling and broadcasting, the market is driven by the participation elements of sport and active recreation and is likely to grow following any increases in participation.
- Sport and active recreation GVA in 2019 was \$3,957.8m. Significant parts of GVA are generated by the commercial non-sport sector, commercial sport and the Central Government.
- In 2019, the level of employment in sport and active recreation was 53,480, corresponding to 2.5% of total employment.
- The sport and active recreation share of employment (2.5%) is greater than the related share in GVA (1.4%). This is consistent with the European experience, showing that the sport and active recreation sector has lower salaried jobs than average, and is therefore an effective policy tool for generating employment. This is likely to be particularly effective during periods of recession or a crisis such as COVID-19.
- The largest sector of sport and active recreation employment in 2019 was the commercial non-sport sector (34% of all sport and active recreation employment in Aotearoa New Zealand). It highlights the importance of the links of the sport and active recreation industry with the remaining economy, generating high multipliers. Other

important sectors are the commercial sport sector, the Central Government sector and the clubs.

- Since the participation element of the sport and active recreation economy is particularly dominant, the implication is that any rise in the participation rates is likely to have a strong effect in the employment, GVA and consumer spending estimates.
- Employment generation in sport and active recreation happens mainly through the network of sport clubs and from the commercial sector, which has a very high multiplier associated with sport services and construction. The Central Government sector contributes mainly through sport and active recreation education and administration.
- The characteristics of the sport and active recreation economy in Aotearoa New Zealand imply that investment in sport and active recreation can be used to converge the economic development of diverse and unequal regions.

## 6.2 Limitations of the study

This study was aided by extremely rich data in Aotearoa New Zealand. The wealth of information at our disposal has significantly limited any reservation one may have about assumptions and modelling. However, by its nature the NIA methodology presents limitations which can be addressed in further research.

First, it is a pragmatic exercise based on income and expenditure flows of what is usually available in the national statistics. By comparison, a methodology such as the Sport Satellite Accounts (SSA) is based on an operational definition of sport using the Classification of Products by Activity (CPA codes) imposing a research discipline in the method and asking for data that may not be available in the usual national data sources. An SSA would uncover, or model data associated with sport and active recreation that are beyond the current NIA methodology using published data. Therefore, the results of the current report, even those defined most broadly, should be treated as a conservative estimate of the importance of sport and active recreation in Aotearoa New Zealand.

Second, another limitation is the modelling of the commercial non-sport sector through the flows and the input-output tables. In essence, this sector is a first approximation of the multiplier process through the supply network. However, the existing modelling approximates the multiplier through one or two sets of transaction rather than the extensive range assumed by a multiplier. By contrast an SSA would calculate direct demand and then identify the additional demand by multiplying with the indirect multiplier.

A final limitation of the study is that it was not possible to generate a detailed dataset of private company annual reports that could inform directly of their employment, wages and profits by sport. These limitations can be addressed in future updates of this research.

### 6.3 Recommendations

There are three areas where we suggest further research could be prioritised to improve understanding and get a more accurate picture of the economic value of sport and active recreation in Aotearoa New Zealand.

To analyse the full effect of sport and active recreation in Aotearoa New Zealand, future work could create a Sport Satellite Account following the Vilnius definition, which is a more rigorous and comprehensive method of estimating sport (and active recreation). Such an account, which ideally would be supported with more detailed employment data, could be updated regularly whenever Aotearoa New Zealand produces new Input Output Tables, and could link the direct effects of sport, through the multipliers to the whole economy.

Satellite accounts or satellite systems are extensions to the System of National Accounts (SNA). The Input Output Tables form the core of an SNA. When we construct a Sport Satellite Account, we investigate each category of the SNA for sport content. Sport is contained in many industrial categories; for example, sport journalism is within media production, sport shoes manufacturing is classified within clothing etc. Extracting the sport content from each activity of the Input Output Tables (following the Vilnius definition of sport) is the essence of the method. The Sport Satellite Account is likely to give higher values than any other methodology because it does not start from the available surveys where sport and active recreation is present. Rather, it begins with the economy as a whole, which must be modelled for sport active recreation content.<sup>13</sup>

There is already some evidence that has been captured in this report and in previous research about the link between sport tourism and major events; however, we recommend that a research framework is developed, backed up by primary data collection, to enable the full evaluation of events and sport travel. Outside the events framework, international tourism can be classified as sport-related if its major motivation is to do sport or if it is based in a sport resort such as a golf resort or skiing resort. Hence, another avenue for this research in the future is to gather primary data on the most important travelling motivation of tourists in order to capture any sport-related impacts.

The voluntary community club sector and the totality of the sport club sector should be regularly surveyed to produce reliable estimates of its size and employment. The current survey provides relative information but does not extrapolate the actual size of the sector. This part can be combined with the voluntary community club sector to extend the economic impact of sport and active recreation.

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<sup>13</sup> An example of a SSA can be seen in the EU report: [Study on the economic impact of sport through sport satellite accounts - Publications Office of the EU \(europa.eu\)](#).





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## APPENDIX A1: DATA SOURCES

Athletics New Zealand, Annual Report 2019-2020

Average wages and international statistics are derived from 'Infoshare'.

Business employment data, Stats NZ

Eurostat, PanEuropean SSA report, 2018

Gambling Operators' key financial statistics, Te Tari Taiwhenua / Department of Internal Affairs

Household Expenditure Survey <https://www.stats.govt.nz/information-releases/household-expenditure-statistics-year-ended-june-2019/>

Household Labour Force Survey, December 2020, Stats NZ

International Visitor Survey, Ministry of Business Innovation and Employment: [International Visitor Survey - Tourism Evidence and Insights Centre \(mbie.govt.nz\)](https://www.mbie.govt.nz/visitorsurvey)

Investment Listing Dataset, 2019-2020

Labour Statistics, Stats NZ, downloaded through Infoshare

List of sport companies in: <https://www.lusha.com/company-search/sports/43/new-zealand/83/>

Local Authority Statistics, March 2020, Stats NZ

Local Authority Statistics, Dataset, December 2019, Stats NZ

Local Authority Finance: Stats NZ Infoshare, <https://infoshare.stats.govt.nz/Default.aspx>

National Accounts datasets Stats NZ: [National accounts | Stats NZ](https://www.stats.govt.nz/national-accounts)

National Accounts, Input Output Tables of New Zealand,

National Sport Club Survey, NZ Amateur Sport Association

New Zealand International Trade [https://statisticsnz.shinyapps.io/trade\\_dashboard/](https://statisticsnz.shinyapps.io/trade_dashboard/)

New Zealand International Trade, Infoshare

New Zealand Median Annual Household Disposable Income: [New Zealand Median Annual Household Disposable Income | Economic Indicators | CEIC \(ceicdata.com\)](https://www.ceicdata.com/new-zealand)

Provider Based Enrolments Field of Study Dataset

Sky annual report, 2019

Sport NZ annual report, 2019

Sport New Zealand, Remuneration Report, 2019

Sport New Zealand, My HR, Monthly Report

Sport New Zealand, Not For profit, Remuneration Report, 2019

Sport New Zealand, Sport and Recreation Sector, Remuneration Report, 2022

Stats NZ, CSV files for download: [CSV files for download | Stats NZ](#)

Tourism Research and Data, Ministry of Business Innovation and Employment: [Tourism research and data | Ministry of Business, Innovation & Employment \(mbie.govt.nz\)](#)

Tourism Satellite Account, 2019

Treasury: Vote Agriculture, Biosecurity, Fisheries and Food Safety, 2018/19

Treasury: Vote Conservation, 2018/19

Treasury: Vote Education, 2018/19

Treasury: Vote Sport and Recreation Supplementary Estimates 2018/19;  
<https://www.treasury.govt.nz/publications/supplementary-estimates/vote-sport-and-recreation-supplementary-estimates-2018-19-html>

Treasury: Vote Finance Supplementary Estimates 2018/19  
<https://www.treasury.govt.nz/publications/supplementary-estimates/vote-finance-supplementary-estimates-2018-19-html>

## APPENDIX A2: SECTORAL ACCOUNTS

<b>Consumer expenditure on sport-related goods &amp; services, 2019</b>	
	\$ million
Admissions: spectators	69.3
Sports and recreation goods (other than boats)	1,059.6
Bicycles equipment and repairs	237.5
Boats (racing and sails)	52.3
Charges to participants for services	315.9
Clothing sales	130.6
Footwear sales	152.5
Physiotherapist, occupational therapist	83.0
Hire of sport goods and premises	39.2
Books	7.5
Newspapers and magazines	27.2
Recording Media	15.8
Other charges for sport services	143.1
Veterinary services for horses and ponies	14.2
Television and radio charges and hire of equipment	80.6
Insurance of bicycles and recreational vehicles	26.9
Online gaming subscriptions	6.9
Domestic sport event travel (petrol)	111.1
Rail	2.1
International sport event travel	279.0
Sports energy drinks, body building drinks	19.8
Swimming pool and spa pool maintenance and repair services	14.9
Primary, intermediate and secondary education	85.9
University tuition fees	9.5
Fees to leisure classes (dance)	57.2
Subscriptions to sport clubs	129.7
Subscriptions to fitness clubs	246.6
Sport lessons	76.6
Gambling on horse and greyhound racing (TAB expenditure)	331.8
Other sport gambling	16.9
<b>Total</b>	<b>3,846.0</b>

<b>Commercial sport income, 2019</b>	
	\$ million
<b>Spectator clubs:<sup>14</sup></b>	
Admissions	63.6
Sponsorship & advertising	48.3
Corporate entertainment	16.3
<b>Participation clubs:</b>	
Subscriptions & fees	202.6
Sport lessons	66.6
Stadium operation	2.6
Other	6.1
<b>Retailers (net of GST):</b>	
Equipment	1,119.4
Clothing and footwear	88.5
Books, newspapers and magazines & videos	30.2
<b>Exports and manufacturers' sales of</b>	
Clothing, footwear & equipment	66.9
Other	6.7
<b>TV and radio:</b>	
TV and radio charges and hire of equipment	113.5
Commercial	34.1
Physiotherapists	72.1
<b>Total income</b>	<b>1,937.5</b>

<sup>14</sup> Definition for when a club relies a lot on spectator admissions for sport matches.

<b>Commercial sport expenditure, 2019</b>	
	\$ million
<b>Current factor expenditure</b>	
<b>Spectator clubs:</b>	
Wages	44.8
Other inputs	67.9
<b>Participation:</b>	
Wages	96.4
Other inputs	145.9
<b>Retailers:</b>	
Wages	396.8
Other inputs	618.4
<b>Manufacturers:</b>	
Wages	23.5
Other inputs	36.8
<b>TV and radio:</b>	
Wages	54.9
Other inputs	131.8
<b>Total factor expenditure</b>	
Total wages	617.0
Total factor surplus	317.9
Total value added	934.9
<b>Current transfers</b>	
Corporation tax	95.8
Rates and other LA Tax	357.2
<b>Capital expenditure</b>	
Investment	62.9
<b>Total expenditure leaving sector</b>	<b>2,040.5</b>



<b>Voluntary community club sector income, 2019</b>	
	\$ million
<b>Factor income (monetary)</b>	
Players' subscriptions and match fees	445.6
Equipment	3.3
Sponsorship and advertising	3.5
Sport betting (other than TAB)	16.9
Bar receipts	212.2
<b>Subtotal (factor income)</b>	<b>681.5</b>
<b>Other monetary income</b>	
Grants	149.0
Other charges for sport services	143.1
<b>Total monetary income (excluding bar receipts)</b>	<b>761.4</b>

<b>Voluntary community club sector expenditure, 2019</b>	
	\$ million
<b>Factor expenditure</b>	
Wages	243.6
Ground hire and rents	17.5
Equipment	5.8
Other	18.7
(Bar purchases)	10.5
<b>Subtotal (factor expenditure)</b>	<b>296.1</b>
Rates	150.1
Insurance and audit fee	7.0
Investment	37.3
Utilities	9.3
<b>Total monetary expenditure (excluding bar purchases)</b>	<b>513.8</b>

<b>Commercial non-sport income, 2019</b>	
	\$ million
<b>Receipts net of tax from consumer spending:</b>	
Travel	193.7
Gambling	288.5
Schools	85.9
TV related spending	55.4
<b>Sales of current inputs to:</b>	
Central government	106.3
Local government	419.8
Commercial sport	807.9
Voluntary community club sector	29.5
<b>Sales of capital inputs to:</b>	
Local government	254.3
Commercial sport	46.6
Voluntary	38.9
<b>Total income</b>	<b>2,322.9</b>

<b>Commercial non-sport expenditure, 2019</b>	
	\$ million
<b>Producers of inputs to sport:</b>	
Wages	975.6
Imports	567.7
(factor surplus)	464.6
(value added)	1,440.2
Corporation tax	130.1
Rates	500.2
<b>Purchases of inputs from sport:</b>	
Sponsorship and advertising	51.8
TV and radio advertising	34.1
Corporate entertainment at sports events	16.3
Other	50.0
<b>Total expenditure leaving sector</b>	<b>2,325.7</b>

<b>Central government income, 2019</b>	
	\$ million
<b>Taxes:</b>	
on expenditure	610.0
on incomes generated in:	
commercial sport	70.0
voluntary community club sector	25.0
commercial non-sport	236.7
local government	23.3
Rail	2.1
<b>Total income</b>	<b>967.0</b>

<b>Central government expenditure, 2019</b>	
	\$ million
<b>Transfer payments</b>	
Grants for sport and recreation	132.9
Grants for transport	31.0
Christchurch stadium operating	2.6
Support for walking access	1,789.0
<b>Factor expenditure</b>	
Sport NZ: wages and other inputs	70.4
Capital spending	37.9
Education, wages	643.6
Equipment	71.51
Management and recreation opportunities wages and inputs	79.3
Rail wages and inputs	2.1
<b>Total</b>	<b>1,074.6</b>

<b>Local government income, 2019</b>	
	\$ million
<b>Local authority sports facilities:</b>	
Fees and charges	79.5
Hire of sport goods and premises	31.8
Ground hire	8.7
Competition/ sport event expenses	13.1
Other income	7.1
<b>Grants from central government:</b>	
Current grants	22.2
Capital funding	31.0
<b>Rates:</b>	
voluntary community club sector	150.1
commercial sport	350.1
commercial non-sport	500.2
<b>Total income</b>	<b>1,193.7</b>

<b>Local government expenditure, 2019</b>	
	\$ million
<b>Current expenditure</b>	
Direct gross expenditure:	
Wages	226.7
Other current expenditure	488.9
Grants to voluntary clubs	38.3
Interest expenditure	55.0
<b>Capital expenditure</b>	229.3
<b>Total expenditure</b>	<b>1,038.1</b>

<b>Value added by sport and active recreation economic activity, 2019</b>		
	\$ million	Index
<b>Commercial sport:</b>		
Wages	617.0	
Surplus	317.9	
Total	934.9	23.6
<b>Voluntary community club sector:</b>		
Wages	243.6	
Surplus	385.4	
Total	629.0	15.9
<b>Commercial non-sport:</b>		
Wages	975.6	
Surplus	464.6	
Total	1,440.2	36.4
<b>Central government:</b>		
Wages (including education)	727.1	18.4
<b>Local government:</b>		
Wages (sports facilities)	226.7	5.7
<b>Total value added</b>	<b>3,957.8</b>	<b>100.0</b>

<b>Employment, 2019</b>	
	Employment ( <i>'000s</i> )
<b>Sector</b>	
<b>Commercial sport</b>	
Spectator clubs	0.9
Participation clubs	2.0
Retailers and construction	10.4
Manufacturing (exports)	0.4
TV and Radio	0.9
Subtotal	14.6
Voluntary sport	5.1
Commercial non-sport	18.3
Central government	10.8
Local government	4.7
<b>Total</b>	<b>53.5</b>