MARTIN JENKINS

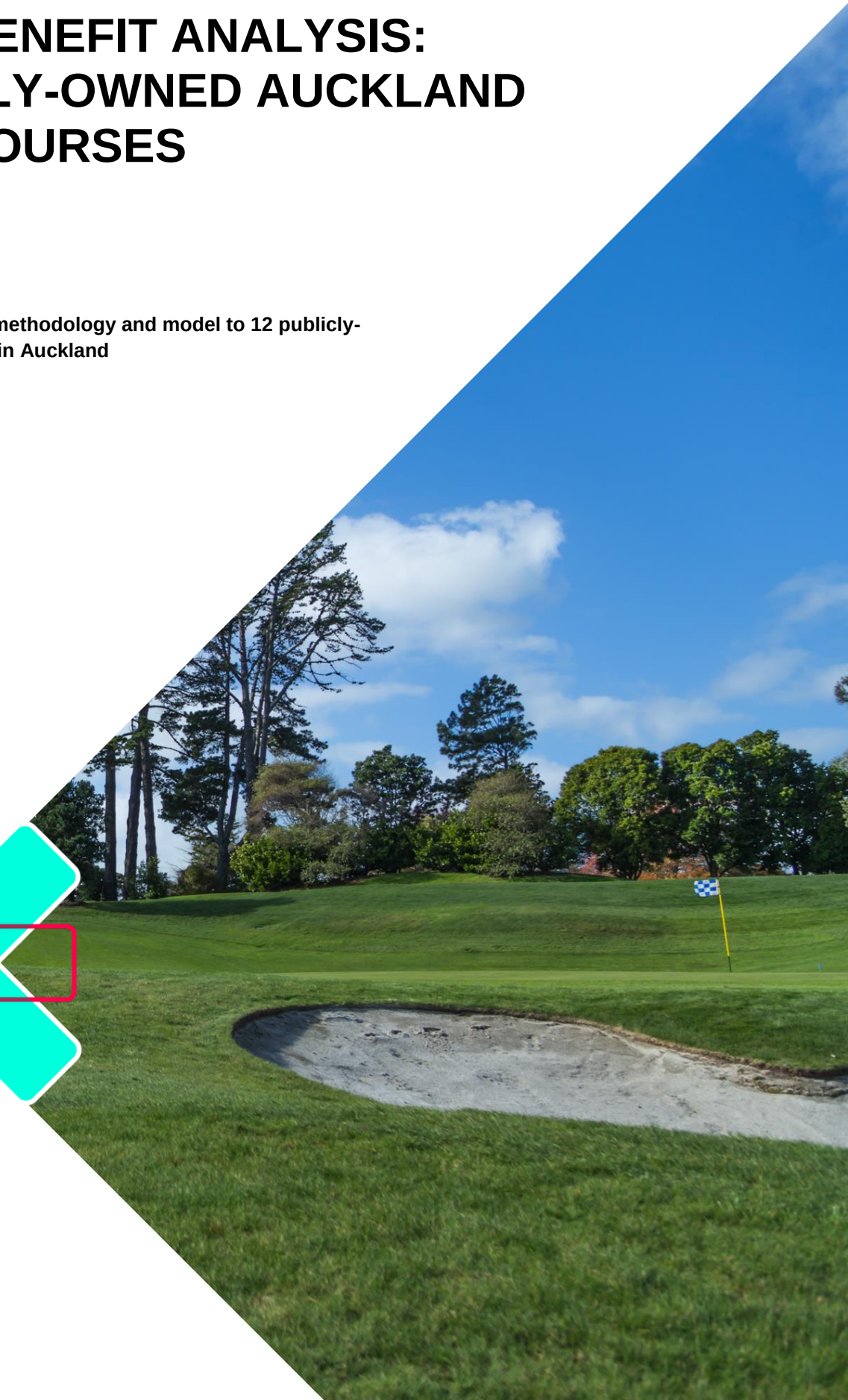
Attachment B. Not Auckland Council policy

COST-BENEFIT ANALYSIS: PUBLICLY-OWNED AUCKLAND GOLF COURSES

Final Report

Application of CBA methodology and model to 12 publicly-owned golf courses in Auckland

31 May 2018



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PREFACE

This report has been prepared for Auckland Council by Jason Leung-Wai and Tim Borren from MartinJenkins (Martin, Jenkins & Associates Limited).

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EXECUTIVE SUMMARY

Purpose

This report presents the application of MartinJenkins' cost-benefit analysis (CBA) methodology and model to 12 publicly-owned golf courses in Auckland.[1]

This report should be read in conjunction with MartinJenkins' (2018) report titled Cost-Benefit Analysis Methodology and Model for Publicly-Owned Auckland Golf Courses, which outlines the methodology and calculations underpinning the results presented here.

For each golf course, the CBA model is applied to the status quo scenario, which assumes the land continues to be used exclusively by the golf club it is currently leased to and the volume of use remains at current levels. The status quo scenario is based on 2015 usage data[2] (by club members and visitors), and on the current market valuation of the golf course land.

The model has been developed so it can be applied to assess future enhanced-use scenarios, in which the land is used for multi-purpose recreation (which could include golf), however, enhanced-use scenarios have not been analysed at this stage because Auckland Council and local communities have not yet determined what that enhanced-use picture might look like for each golf course, and the investment required to transition to enhanced-use. This work may be done at a later date.

Included in this report are the characteristics of each golf club, inputs to the analysis, assumptions regarding the status quo scenario, and the results of the analysis. Sensitivity analysis of the CBA results to variations in the potential sale price of the land is provided as an appendix.

Scope of this work

MartinJenkins has been engaged to develop an economic cost-benefit analysis (CBA) methodology and model, which has been applied to 12 individual publicly-owned golf courses in Auckland to assess the net benefit (or the net cost) of current land-use (status quo). Undertaking a comprehensive social CBA of a residential development option, or similar, was outside the scope of this work.

The intention of the work presented in this report is to support the development of the Council's Golf Facilities Investment Plan.

1 Nine golf courses owned by Auckland Council and three courses owned by the Crown, on whose behalf Auckland Council administers leases. Auckland Council owns a tenth course – Great Barrier Golf Club – but council did not have usage data for this course, so it has not been included in this analysis.

2 This data had already been compiled by Auckland Council. As there has been little growth in the number of rounds played in Auckland over the last three years, there is unlikely to be a material difference in golf course usage between 2015 and the present.

Context

Auckland Council has a significant interest in golf courses. It owns the land on which 10 golf courses operate. Of these, Auckland Council leases land to nine golf clubs and manages and operates the tenth. It also administers leases, on behalf of the Crown, to a further three golf clubs operating courses on Crown-owned land.

Auckland Council is cognisant there are potential alternative uses of the land, such as open-space or housing, that need to be considered.

To date, Auckland Council's development of its Golf Facilities Investment Plan has been framed around maximising the positive outcomes from Council's investment in golf through land it leases. However, preliminary work highlighted the value of taking a broader approach to its investment, which could include improving leases to provide for mixed-use of open space or consideration of alternative forms of support for golf other than leases.

The broader investment framework will enable decision-makers to balance priority outcomes and choose the investment tools most suited to achieving those outcomes. The framework will also enable Auckland Council to respond more flexibly to changes in the wider golf market and effectively access key information at a golf course-level when investment options might be considered.

Status quo cost-benefit analysis results summary

Table 1: Status quo cost-benefit analysis results summary

Golf course	Land value ($m)	Usage		Other factors		Environmental			Cost-Benefit Analysis Results			
		Members	Rounds played (annual)	Other courses in vicinity	Community need for open space	Sustainability score	Ecology value	Stormwater value	Annual Costs ($)	Annual Benefits ($)	Annual Net Cost ($)	Annual Net Cost per member ($)
Waitakere	19.6	344	13,990	Redwood Park, 6km	No	57%	Medium	Low	1,457,923	493,288	**(964,634)**	**(2,804)**
Āwhitu	43.5	113	2,356	Waiuku, 30 km	No	64%	Low	Low	2,365,694	62,233	**(2,303,461)**	**(20,385)**
Waiuku	53.1	322	14,379	Clarks Bch, 27 km Āwhitu, 30 km	No	64%	Low	Low	3,213,395	497,252	**(2,716,143)**	**(8,435)**
Waiheke	57.4	248	8,759	None	No	59%	Low	Low	3,209,133	346,245	**(2,862,888)**	**(11,544)**
Clarks Beach	140.1	420 playing 160 social	22,757	Waiuku, 27 km	No	62%	Low	Medium	8,076,048	925,103	**(7,150,945)**	**(12,329)**
Omaha Beach	200.9	453	23,349	Warkworth (13 km)	No	76%	Low	Low	11,406,915	1,484,545	**(9,922,369)**	**(21,904)**
Muriwai	250.9	705	37,879	Waitakere, 30 km	No	62%	High	Low	14,518,792	2,833,956	**(11,684,837)**	**(16,574)**
Waitematā	288.6	813	44,050	Takapuna, 8 km Pupuke, 12 km North Shore, 17 km	Yes	65%	High	High	16,046,795	1,957,547	**(14,089,248)**	**(17,330)**
Takapuna	342.3	342	27,588	Pupuke, 5 km Waitematā, 8 km	Yes	Not audited	Low	High	18,969,168	1,200,003	**(17,769,165)**	**(51,957)**
Pupuke	454.7	742	45,290	North shore, 8 km Takapuna, 5 km Waitematā, 12 km	Yes	66%	High	High	24,956,190	1,810,035	**(23,146,155)**	**(31,194)**
Chamberlain Park	470.2	292	24,911	Ākarana, 8 km Remuera, 12 km	Yes	67%	Low	High	25,724,802	1,335,784	**(24,389,018)**	**(83,524)**
Remuera	734.2	1,461	56,539	Ākarana, 11 km Pakuranga, 11 km Chamberlain Park, 12km	Yes	85%	High	High	42,940,759	3,988,527	**(38,952,232)**	**(26,661)**

INTRODUCTION

Status quo scenario assumptions

For each golf course, the status quo scenario assesses the benefits accruing both to the public and to individual golfers against the costs of continuing to use the land exclusively as a golf course. Under the status quo scenario:

- the land continues to be used exclusively for golf by the Golf Club the land is currently leased to with the same terms of lease as exist currently.
- the number of club members and the number of golf rounds played remains constant at present levels over the 30-year time period.

As rounds played and costs are assumed to remain constant at present levels, the status quo net benefit (or net costs) are presented as a one-year snapshot in the results tables.

STATUS QUO COST-BENEFIT ANALYSIS RESULTS

Qualitative benefits

This section presents a discussion of the qualitative benefits attributable to the existence of a golf club, which are not quantified in the cost-benefit analysis.

Social and community benefits

Communities that participate in sport and recreation develop stronger social bonds, are safer places, and the people who live in them are generally healthier and happier than places where physical activity is not a priority.

Golf courses provide a place for people to meet, mix and socialise, giving members of the club a sense of community. They also attract visitors from outside of the local community, which further facilitates social connections. A literature review by Atherley (2006)[3] concluded that sport can help provide social benefits such as community integration, cohesion, cooperation, and community identity and pride. It is also evidenced that sport participation can contribute to crime reduction, community safety, education and lifelong learning.

In the case of some golf clubs, social benefits extend beyond golf players, as social memberships are offered which give members who do not play golf (or are no longer playing golf) access to the clubhouse, bar, restaurant and social events at the club. A good example of this is Clarks Beach Golf Club, whose social members make up almost 30 percent of total membership.

If a golf club has a large number of retired members, who in the absence of the golf club may experience a degree of isolation, this would likely increase the social benefit attributable to the club.

While there is undoubtedly a benefit both to the individual and the community from people being part of a club, a review of the literature has not identified a suitable method to quantify the value of community and social cohesion.

We see the benefits as being a function of the number of members and the type of members. The premise is that a growing, more diverse membership gives rise to greater social and community benefit.

In addition, there are benefits that arise from other types of social/community activities that occur using golf club facilities that are not necessarily related to membership of the golf club. Examples of this are charity events held at the course, functions such as weddings, school balls or local school prize-giving events, and meetings held by community organisations at the clubrooms.

[3] Atherley, K. (2006). Sport, Localism and Social Capital in Rural Western Australia

Environmental (ecology, biodiversity) benefits

Golf courses represent significant areas of green space that can serve as ecological and biodiversity corridors, act as buffers to natural environments and provide a valuable storm-water function. A well-managed golf course can provide substantial ecological and community benefits.

Several of the golf courses make significant contributions to the environment, whether as buffers to nature reserves, as corridor links for wildlife, or have ecological significance due to the plant and wildlife species that inhabit the land. Some courses also have cultural or historical significance.

Several of the courses are in urban or built-up areas and provide a storm-water function. Similarly, in urban areas there is often a need for open recreation spaces, which may influence the options for alternative use.

The environmental benefits are different for each golf course depending upon their location, current ecology and level of environmental activity. Investment to improve environmental outcomes would have different impacts on different courses.

If a given golf course was changed to mixed-use or to a public park, these environmental benefits would still be realised, so the potential loss of environmental benefits would only be a consideration if the golf course was to be converted to housing or other built development.

Ecological benefits

Golf courses provide a habitat for a variety of plant and bird species. Golf courses can also provide other benefits such as buffers to natural reserves, or corridors to allow the movement of species. It is extremely difficult to measure the ecological benefits.

Storm-water runoff

Golf courses act as collection and dispersal areas for surface water and runoff, mitigating flood risk in a major weather event, particularly in urban areas. This is particularly the case where a golf course is located in a relatively intensive built-up urban area.

The costs for dealing with storm-water in Auckland are large. Following the 100-year floods in March 2017, Infrastructure New Zealand's chief executive Stephen Selwood estimated the cost of bringing Auckland's storm-water infrastructure up to an appropriate standard would cost $15 - $20 billion over 30 years, and that Watercare have in excess of $5 billion in capital works planned.[4] In 2017, Auckland Council's budget for storm-water spending was $150 million.[5]

A 2011 Auckland Council report noted it would cost $5.4 billion to improve Auckland's storm-water system over the next 50 years and $4.5 billion to cope with growth.[6]

[4] https://www.radionz.co.nz/news/national/326509/water-infrastructure-needs-billions-in-investment

[5] http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11818146

[6] Ibid.

This shows storm-water collection and dispersal is a valuable function. However, it is expected that if land was used for alternative use (eg housing), the cost of ensuring hydraulic neutrality would be borne by the developer.

For the purposes of the CBA model, we have estimated the value of the storm-water function provided by the golf course as the cost of the equivalent infrastructure required if the land was developed for housing, including both capital and maintenance costs. The storm-water infrastructure required for the recent Scott Point subdivision in Hobsonville will cost $9.34/m^2 on average[7], which we have used as the basis for estimating the value of the storm-water function a golf course provides.

Option-value benefit

There is benefit to the local community and to the region in the Auckland Council owning the land which golf courses occupy as the Council retains full control over future land-use decisions. This is a clear benefit that would be lost if the land was sold to private interests.

[7] Phil Jaggard, Director, MPS Ltd.

Clarks Beach Golf Club

Table 2: Clarks Beach Golf Club characteristics and current use

Clarks Beach Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	34.11
Market value of land (if sold for development)	$140.1 million
Membership, 2018	420 playing members; 160 social members
Community	
Local board	Franklin
CAU population, 2013	6,222
CAU population forecast, 2028	9,129
Additional open space required in area	No
Other golf courses in the area:	Waiuku, (27 km); Āwhitu (59 km)
Rounds played, 2015	
Member rounds played, official	12,889
Estimated unofficial rounds played by members (10 percent of official member rounds)	1,289
Visitor (affiliated) rounds played	4,419
Visitor (non-affiliated) rounds played	4,160
Estimated total rounds played	22,757
Financial, 2016	
Revenue	$687,401
Operating expenses (excl depreciation)	$649,222
Green fee per round, affiliated visitor	$30
Green fee per round, non-affiliated visitor	$45
Lease	
Rent paid to Auckland Council (p.a.)	$1,415
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2017

Source: Auckland Council, Clarks Beach Golf Club Annual Report 2016

Clarks Beach GC: Status Quo (exclusive use by golf club)

Table 3: Clarks Beach golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	7,424,531	
less rent revenue received	1,415	
Net opportunity cost to AC of retaining land		7,423,116
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		649,222
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**8,076,048**
Benefits		
Quantified benefits		
Physical health		251,464
Visitor expenditure (GDP generated)		-
Environmental:		
Stormwater		83,000
Carbon sequestration		769
Recreation:		
Benefit to golfers (offsetting what they paid to play)		520,171
Consumer surplus gain to golfers		69,699
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**925,103**
Value unquantified benefits would need to be worth to break-even*		**(7,150,945)**

* Annual quantified costs less annual quantified benefits

What the status quo results mean

Table 3 shows that when the Clarks Beach land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $7.15 million per year, mainly due to the $7.4 million[8] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $7.15 million per year. To give a sense of scale to this figure, based on the club's current 580 members, unquantified benefits would need to exceed $12,300 per member per year. Put another way, based on the 22,757 rounds played per year, unquantified benefits would need to exceed $314 per round played for the benefits to match the costs under the status quo scenario.

[8] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation of $140.1 million.

Āwhitu Golf Club

Table 4: Awhitu Golf Club characteristics and current use

Āwhitu Golf Club	
Course	
Holes	9
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	15.45
Market value of land (if sold for development)	$43.5 million
Membership, 2015	113 members
Community	
Local board	Franklin
CAU population, 2013	2,493
CAU population forecast, 2028	3,704
Additional open space required in area	No
Other golf courses in the area:	Waiuku (30 km)
Rounds played, 2015	
Member rounds played, official	1,879
Estimated unofficial rounds played by members (10 percent of official member rounds)	188
Visitor (affiliated) rounds played	289
Visitor (non-affiliated) rounds played	0
Estimated total rounds played	2,356
Financial, 2016	
Revenue	$ 53,307
Operating expenses (excl depreciation)	$ 58,997
Green fee per round, affiliated visitor	$20
Green fee per round, non-affiliated visitor	$20
Lease	
Rent paid to Auckland Council (p.a.)	$1,500 or 2.5% of turnover (whichever is largest)
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2026

Source: Auckland Council, Awhitu Golf Club Annual Report 2016

Āwhitu GC: Status Quo (exclusive use by golf club)

Table 5: Awhitu golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	2,304,487	
less rent revenue received	1,500	
Net opportunity cost to AC of retaining land		2,302,987
Lease administration		3,710
Rates remissions		0
Rates postponements		0
LDI funding and community grants		0
Private costs		
Course operating costs		58,997
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**2,365,694**
Benefits		
Quantified benefits		
Physical health		26,033
Visitor expenditure (GDP generated)		0
Environmental:		
Stormwater		0
Carbon sequestration		386
Recreation:		
Benefit to golfers (offsetting what they paid to play)		30,895
Consumer surplus gain to golfers		4,920
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**62,233**
Value unquantified benefits would need to be worth to break-even*		**(2,303,461)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 5 shows that when the Awhitu land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $2.3 million per year, mainly due to the $2.3 million[9] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $2.3 million per year. To give a sense of scale to this figure, based on the club's current 113 members, unquantified benefits would need to exceed $20,355 per member per year. Based on the 2,356 rounds played per year, unquantified benefits would need to exceed $976 per round played for the benefits to match the costs under the status quo scenario.

[9] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Chamberlain Park Golf Club

Table 6: Chamberlain Park Golf Club characteristics and current use

Chamberlain Park Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	32.32
Market value of land (if sold for development)	$470.2 million
Membership, 2015	292 playing members
Community	
Local board	Albert-Eden
CAU population, 2013	71,247
CAU population forecast, 2028	98,109
Additional open space required in area	Yes
Other golf courses in the area:	Ākarana (8 km); Remuera (12 km)
Rounds played, 2015	
Member rounds played, official	4,042
Estimated unofficial rounds played by members (10 percent of official member rounds)	404
Visitor (affiliated) rounds played	2,488
Visitor (non-affiliated) rounds played	17,977
Estimated total rounds played	24,911
Financial, 2016	
Revenue	$1,016,355
Operating expenses (excl depreciation)	$800,492
Green fee per round, affiliated visitor	$30
Green fee per round, non-affiliated visitor	$30
Lease	
Rent paid to Auckland Council (p.a.)	N/a (owned and operated by Council)
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	N/a

Source: Auckland Council, Chamberlain Park Golf Club Annual Report 2017

Chamberlain Park GC: Status Quo (exclusive use by golf club)

Table 7: Chamberlain Park golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	24,920,600	
less rent revenue received	-	
Net opportunity cost to AC of retaining land		24,920,600
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		800,492
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**25,724,802**
Benefits		
Quantified benefits		
Physical health		275,269
Visitor expenditure (GDP generated)		-
Environmental:		
Stormwater		268,256
Carbon sequestration		1,198
Recreation:		
Benefit to golfers (offsetting what they paid to play)		701,550
Consumer surplus gain to golfers		89,511
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**1,335,784**
Value unquantified benefits would need to be worth to break-even*		**(24,389,018)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 7 shows that when the Chamberlain Park land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $24.4 million per year, mainly due to the $24.9 million[10] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $24.4 million per year. To give a sense of scale to this figure, based on the club's current 292 members, unquantified benefits would need to exceed $83,561 per member per year. Based on the 24,911 rounds played per year, unquantified benefits would need to exceed $979 per round played for the benefits to match the costs under the status quo scenario.

[10] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Muriwai Golf Club

Table 8: Muriwai Golf Club characteristics and current use

Muriwai Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Advanced
Land area, hectares	86.45
Market value of land (if sold for development)	$250.9 million
Membership, 2015	705 members
Community	
Local board	Rodney
CAU population, 2013	3,852
CAU population forecast, 2028	5,380
Additional open space required in area	No
Other golf courses in the area:	Waitakere (30 km)
Rounds played, 2015	
Member rounds played, official	18,316
Estimated unofficial rounds played by members (10 percent of official member rounds)	1,832
Visitor (affiliated) rounds played	10,241
Visitor (non-affiliated) rounds played	7,490
Estimated total rounds played	37,879
Financial, 2016	
Revenue	$1,335,087
Operating expenses (excl depreciation)	$1,253,449
Green fee per round, affiliated visitor	$65
Green fee per round, non-affiliated visitor	$100
Lease	
Rent paid to Auckland Council (p.a.)	$38,713
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2094

Source: Auckland Council, Muriwai Golf Club Annual Report 2016

Muriwai GC: Status Quo (exclusive use by golf club)

Table 9: Muriwai golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	13,300,346	
less rent revenue received	38,713	
Net opportunity cost to AC of retaining land		13,261,633
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		1,253,449
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**14,518,792**
Benefits		
Quantified benefits		
Physical health		418,559
Visitor expenditure (GDP generated)		360,729
Environmental:		
Stormwater		-
Carbon sequestration		2,158
Recreation:		
Benefit to golfers (offsetting what they paid to play)		1,839,162
Consumer surplus gain to golfers		213,348
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**2,833,956**
Value unquantified benefits would need to be worth to break-even*		**(11,684,837)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 9 shows that when the Muriwai golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $11.7 million per year, mainly due to the $13.3 million[11] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $11.7 million per year. To give a sense of scale to this figure, based on the club's current 705 members, unquantified benefits would need to exceed $16,600 per member per year. Based on the 37,879 rounds played per year, unquantified benefits would need to exceed $308 per round played for the benefits to match the costs under the status quo scenario.

[11] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Omaha Beach Golf Club

Table 10: Omaha Beach Golf Club characteristics and current use

Omaha Beach Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	46.28
Market value of land (if sold for development)	$200.9 million
Membership, 2015	453 playing members
Community	
Local board	Rodney
CAU population, 2013	3,435
CAU population forecast, 2028	5,067
Additional open space required in area	Yes
Other golf courses in the area:	Warkworth (13km)
Rounds played, 2015	
Member rounds played, official	13,282
Estimated unofficial rounds played by members (10 percent of official member rounds)	1,328
Visitor (affiliated) rounds played	5,106
Visitor (non-affiliated) rounds played	3,633
Estimated total rounds played	23,349
Financial, 2016	
Revenue	$902,933
Operating expenses (excl depreciation)	$755,901
Green fee per round, affiliated visitor	$65
Green fee per round, non-affiliated visitor	$95
Lease	
Rent paid to Auckland Council (p.a.)	$5
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2021

Source: Auckland Council, Omaha Beach Golf Club Annual Report 2015

Omaha Beach GC: Status Quo (exclusive use by golf club)

Table 11: Omaha Beach golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	10,647,309	
less rent revenue received	5	
Net opportunity cost to AC of retaining land		10,647,304
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		755,901
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**11,406,915**
Benefits		
Quantified benefits		
Physical health		258,009
Visitor expenditure (GDP generated)		89,927
Environmental:		
Stormwater		-
Carbon sequestration		1,043
Recreation:		
Benefit to golfers (offsetting what they paid to play)		1,015,840
Consumer surplus gain to golfers		119,726
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**1,484,545**
Value unquantified benefits would need to be worth to break-even*		**(9,922,369)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 11 shows that when the Omaha golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $9.92 million per year, mainly due to the $10.6 million[12] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $9.92 million per year. To give a sense of scale to this figure, based on the club's current 453 members, unquantified benefits would need to exceed $21,900 per member per year. Based on the 23,349 rounds played per year, unquantified benefits would need to exceed $425 per round played for the benefits to match the costs under the status quo scenario.

[12] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Pupuke Golf Club

Table 12: Pupuke Golf Club characteristics and current use

Pupuke Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	45.63
Market value of land (if sold for development)	$454.7 million
Membership, 2015	742 playing members
Community	
Local board	Hibiscus and Bays
CAU population, 2013	44,793
CAU population forecast, 2028	54,296
Additional open space required in area	Yes
Other golf courses in the area:	North Shore (8 km); Takapuna (5 km); Waitematā (12 km)
Rounds played, 2015	
Member rounds played, official	35,263
Estimated unofficial rounds played by members (10 percent of official member rounds)	3,526
Visitor (affiliated) rounds played	2,671
Visitor (non-affiliated) rounds played	3,830
Estimated total rounds played	45,290
Financial, 2016	
Revenue	$905,062
Operating expenses (excl depreciation)	$856,038
Green fee per round, affiliated visitor	$45
Green fee per round, non-affiliated visitor	$55
Lease	
Rent paid to Auckland Council (p.a.)	$2,658
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2038

Source: Auckland Council, Pupuke Golf Club Annual Report 2016

Pupuke GC: Status Quo (exclusive use by golf club)

Table 13: Pupuke golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	24,099,100	
less rent revenue received	2,658	
Net opportunity cost to AC of retaining land		24,096,442
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		856,038
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**24,956,190**
Benefits		
Quantified benefits		
Physical health		500,458
Visitor expenditure (GDP generated)		-
Environmental:		
Stormwater		378,729
Carbon sequestration		1,692
Recreation:		
Benefit to golfers (offsetting what they paid to play)		812,696
Consumer surplus gain to golfers		116,460
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**1,810,035**
Value unquantified benefits would need to be worth to break-even*		**(23,146,155)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 13 shows that when the Pupuke golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $23.1 million per year, mainly due to the $24.0 million[13] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $23.1 million per year. To give a sense of scale to this figure, based on the club's current 742 members, unquantified benefits would need to exceed $31,130 per member per year. Based on the 45,290 rounds played per year, unquantified benefits would need to exceed $510 per round played for the benefits to match the costs under the status quo scenario.

[13] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Remuera Golf Club

Table 14: Remuera Golf Club characteristics and current use

Remuera Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Advanced
Land area, hectares	60.57
Market value of land (if sold for development)	$734.2 million
Membership, 2015	1,461 playing members
Community	
Local board	Orakei
CAU population, 2013	42,968
CAU population forecast, 2028	53,028
Additional open space required in area	Yes
Other golf courses in the area:	Ākarana (11 km); Pakuranga (11 km); Chamberlain Park, (12km)
Rounds played, 2015	
Member rounds played, official	43,871
Estimated unofficial rounds played by members (10 percent of official member rounds)	4,387
Visitor (affiliated) rounds played	4,376
Visitor (non-affiliated) rounds played	3,905
Estimated total rounds played	56,539
Financial, 2016	
Revenue	$4,751,831
Operating expenses (excl depreciation)	$4,151,809
Green fee per round, affiliated visitor	$70
Green fee per round, non-affiliated visitor	$100
Lease	
Rent paid to Auckland Council (p.a.)	$130,000
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2091

Source: Auckland Council, Remuera Golf Club Annual Report 2016

Remuera GC: Status Quo (exclusive use by golf club)

Table 15: Remuera golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	38,915,240	
less rent revenue received	130,000	
Net opportunity cost to AC of retaining land		38,785,240
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		4,151,809
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**42,940,759**
Benefits		
Quantified benefits		
Physical health		624,757
Visitor expenditure (GDP generated)		154,140
Environmental:		
Stormwater		502,731
Carbon sequestration		1,512
Recreation:		
Benefit to golfers (offsetting what they paid to play)		2,419,505
Consumer surplus gain to golfers		285,881
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**3,988,527**
Value unquantified benefits would need to be worth to break-even*		**(38,952,232)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 15 shows that when the Remuera golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $38.95 million per year, mainly due to the $38.9 million[14] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $38.95 million per year. To give a sense of scale to this figure, based on the club's current 1,461 members, unquantified benefits would need to exceed $26,660 per member per year. Based on the 56,539 rounds played per year, unquantified benefits would need to exceed $690 per round played for the benefits to match the costs under the status quo scenario.

[14] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Takapuna Golf Club

Table 16: Takapuna Golf Club characteristics and current use

Takapuna Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	42.94
Market value of land (if sold for development)	$342.3 million
Membership, 2015	342 playing members
Community	
Local board	Kaipātiki
CAU population, 2013	82,494
CAU population forecast, 2028	89,918
Additional open space required in area	Yes
Other golf courses in the area:	Pupuke (5 km); Waitematā (8 km)
Rounds played, 2015	
Member rounds played, official	4,473
Estimated unofficial rounds played by members (10 percent of official member rounds)	447
Visitor (affiliated) rounds played	5,694
Visitor (non-affiliated) rounds played	16,974
Estimated total rounds played	27,588
Financial, 2016	
Revenue	$1,132,923
Operating expenses (excl depreciation)	$856,052
Green fee per round, affiliated visitor	$30
Green fee per round, non-affiliated visitor	$30
Lease	
Rent paid to Auckland Council (p.a.)	$31,500
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2025

Source: Auckland Council, Takapuna Golf Club Annual Report 2015

Takapuna GC: Status Quo (exclusive use by golf club)

Table 17: Takapuna golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	18,140,906	
less rent revenue received	31,500	
Net opportunity cost to AC of retaining land		18,109,406
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		856,052
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**18,969,168**
Benefits		
Quantified benefits		
Physical health		304,851
Visitor expenditure (GDP generated)		-
Environmental:		
Stormwater		-
Carbon sequestration		1,072
Recreation:		
Benefit to golfers (offsetting what they paid to play)		793,313
Consumer surplus gain to golfers		100,767
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**1,200,003**
Value unquantified benefits would need to be worth to break-even*		**(17,769,165)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 17 shows that when the Takapuna golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $17.8 million per year, mainly due to the $18.1 million[15] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $17.8 million per year. To give a sense of scale to this figure, based on the club's current 342 members, unquantified benefits would need to exceed $52,046 per member per year. Based on the 27,588 rounds played per year, unquantified benefits would need to exceed $645 per round played for the benefits to match the costs under the status quo scenario.

[15] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Waitakere Golf Club

Table 18: Waitakere Golf Club characteristics and current use

Waitakere Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	46.84
Market value of land (if sold for development)	$19.6 million
Membership, 2018	344 playing members
Community	
Local board	Waitakere
CAU population, 2013	9,876
CAU population forecast, 2028	12,419
Additional open space required in area	No
Other golf courses in the area:	Redwood Park (6 km)
Rounds played, 2015	
Member rounds played, official	8,468
Estimated unofficial rounds played by members (10 percent of official member rounds)	847
Visitor (affiliated) rounds played	2,101
Visitor (non-affiliated) rounds played	2,574
Estimated total rounds played	13,990
Financial, 2016	
Revenue	$420,591
Operating expenses (excl depreciation)	$416,780
Green fee per round, affiliated visitor	$30
Green fee per round, non-affiliated visitor	$40
Lease	
Rent paid to Auckland Council (p.a.)	$435
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2045

Source: Auckland Council, Waitakere Golf Club Annual Report 2015

Waitakere GC: Status Quo (exclusive use by golf club)

Table 19: Waitakere golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	1,037,868	
less rent revenue received	435	
Net opportunity cost to AC of retaining land		1,037,433
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		416,780
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**1,457,923**
Benefits		
Quantified benefits		
Physical health		154,587
Visitor expenditure (GDP generated)		0
Environmental:		
Stormwater		0
Carbon sequestration		1,169
Recreation:		
Benefit to golfers (offsetting what they paid to play)		296,965
Consumer surplus gain to golfers		40,567
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**493,288**
Value unquantified benefits would need to be worth to break-even*		**(964,634)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 19 shows that when the Waitakere golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $0.96 million per year, mainly due to the $1.04 million[16] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $0.96 million per year. To give a sense of scale to this figure, based on the club's current 344 members, unquantified benefits would need to exceed $2,790 per member per year. Based on the 13,990 rounds played per year, unquantified benefits would need to exceed $68 per round played for the benefits to match the costs under the status quo scenario.

[16] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Waitematā Golf Club

Table 20: Waitematā Golf Club characteristics and current use

Waitematā Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	26.81
Market value of land (if sold for development)	$288.6 million
Membership, 2018	813 playing members
Community	
Local board	Devonport/Takapuna
CAU population, 2013	50,382
CAU population forecast, 2028	69,000
Additional open space required in area	Yes
Other golf courses in the area:	Takapuna (8 km); Pupuke (12 km); North Shore (17 km)
Rounds played, 2015	
Member rounds played, official	30,432
Estimated unofficial rounds played by members (10 percent of official member rounds)	3,043
Visitor (affiliated) rounds played	3,732
Visitor (non-affiliated) rounds played	6,843
Estimated total rounds played	44,050
Financial, 2016	
Revenue	$795,850
Operating expenses (excl depreciation)	$747,733
Green fee per round, affiliated visitor	$40
Green fee per round, non-affiliated visitor	$45
Lease	
Rent paid to Auckland Council (p.a.)	$1
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2027

Source: Auckland Council, Waitemata Golf Club Annual Report 2011

Waitematā GC: Status Quo (exclusive use by golf club)

Table 21: Waitematā golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	15,295,353	
less rent revenue received	1	
Net opportunity cost to AC of retaining land		15,295,352
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		747,733
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**16,046,795**
Benefits		
Quantified benefits		
Physical health		486,755
Visitor expenditure (GDP generated)		-
Environmental:		
Stormwater		222,523
Carbon sequestration		-
Recreation:		
Benefit to golfers (offsetting what they paid to play)		1,103,675
Consumer surplus gain to golfers		144,595
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**1,957,547**
Value unquantified benefits would need to be worth to break-even*		**(14,089,248)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 21 shows that when the Waitematā golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $14.1 million per year, mainly due to the $15.3 million[17] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $14.1 million per year. To give a sense of scale to this figure, based on the club's current 813 members, unquantified benefits would need to exceed $17,340 per member per year. Based on the 44,050 rounds played per year, unquantified benefits would need to exceed $320 per round played for the benefits to match the costs under the status quo scenario.

[17] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Waiheke Island Golf Club

Table 22: Waiheke Island Golf Club characteristics and current use

Waiheke Island Golf Club	
Course	
Holes	9
Course type (based on "hierarchy" of courses)	Introductory
Land area, hectares	37.0
Market value of land (if sold for development)	$57.4 million
Membership, 2018	248 playing members
Community	
Local board	Waiheke
CAU population, 2013	8,253
CAU population forecast, 2028	10,176
Additional open space required in area	No
Other golf courses in the area:	None
Rounds played, 2015	
Member rounds played, official	4,865
Estimated unofficial rounds played by members (10 percent of official member rounds)	486
Visitor (affiliated) rounds played	454
Visitor (non-affiliated) rounds played	2,953
Estimated total rounds played	8,758
Financial, 2016	
Revenue	$233,259
Operating expenses (excl depreciation)	$161,843
Green fee per round, affiliated visitor	$30
Green fee per round, non-affiliated visitor	$30
Lease	
Rent paid to Auckland Council (p.a.)	$1
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2022

Source: Auckland Council, Waiheke Golf Club Annual Report 2017

Waiheke Island GC: Status Quo (exclusive use by golf club)

Table 23: Waiheke Island golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	3,043,581	
less rent revenue received	1	
Net opportunity cost to AC of retaining land		3,043,580
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		161,843
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**3,209,133**
Benefits		
Quantified benefits		
Physical health		96,781
Visitor expenditure (GDP generated)		0
Environmental:		
Stormwater		0
Carbon sequestration		834
Recreation:		
Benefit to golfers (offsetting what they paid to play)		219,840
Consumer surplus gain to golfers		28,789
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**346,245**
Value unquantified benefits would need to be worth to break-even*		**(2,862,888)**

* Annual quantified costs less annual quantified benefits

Source: MartinJenkins calculations

What the status quo results mean

Table 23 shows that when the Waiheke golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $2.9 million per year, mainly due to the $3.04 million[18] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $2.9 million per year. To give a sense of scale to this figure, based on the club's current 248 members, unquantified benefits would need to exceed $11,690 per member per year. Based on the 8,758 rounds played per year, unquantified benefits would need to exceed $330 per round played for the benefits to match the costs under the status quo scenario.

[18] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

Waiuku Golf Club

Table 24: Waiuku Golf Club characteristics and current use

Waiuku Golf Club	
Course	
Holes	18
Course type (based on "hierarchy" of courses)	Development
Land area, hectares	36.33
Market value of land (if sold for development)	$53.1 million
Membership, 2018	322 playing members
Community	
Local board	Franklin
CAU population, 2013	8,190
CAU population forecast, 2028	12,438
Additional open space required in area	No
Other golf courses in the area:	Clarks Beach (27 km); Āwhitu (30 km)
Rounds played, 2015	
Member rounds played, official	8,561
Estimated unofficial rounds played by members (10 percent of official member rounds)	856
Visitor (affiliated) rounds played	2,461
Visitor (non-affiliated) rounds played	2,501
Estimated total rounds played	14,379
Financial, 2016	
Revenue	$423,437
Operating expenses (excl depreciation)	$396,830
Green fee per round, affiliated visitor	$25
Green fee per round, non-affiliated visitor	$35
Lease	
Rent paid to Auckland Council (p.a.)	$1,050
Auckland Council lease admin cost	$3,710
Rates remissions (annual)	$0
Rates postponements	$0
Local Development Initiative (LDI) funding	$0
Lease expiry	2017

Source: Auckland Council, Waiuku Golf Club Annual Report 2016

Waiuku GC: Status Quo (exclusive use by golf club)

Table 25: Waiuku golf course status quo CBA results, 1-year snapshot

Annual	Status quo scenario	
Costs		
Public costs		
Cost to AC of retaining golf course land:		
Opportunity cost to AC of retaining land	2,813,905	
less rent revenue received	1,050	
Net opportunity cost to AC of retaining land		2,812,855
Lease administration		3,710
Rates remissions		-
Rates postponements		-
LDI funding and community grants		-
Private costs		
Course operating costs		396,830
Unquantified costs		
Pesticide run-off		Unquantified
Total annual quantified costs		**3,213,395**
Benefits		
Quantified benefits		
Physical health		158,889
Visitor expenditure (GDP generated)		0
Environmental:		
Stormwater		0
Carbon sequestration		907
Recreation:		
Benefit to golfers (offsetting what they paid to play)		296,621
Consumer surplus gain to golfers		40,835
Unquantified benefits		
Mental health		Unquantified
Social / community benefits		Unquantified
Ecological benefits		Unquantified
Total annual quantified benefits		**497,252**
Value unquantified benefits would need to be worth to break-even*		**(2,716,143)**

* Annual quantified costs less annual quantified benefits

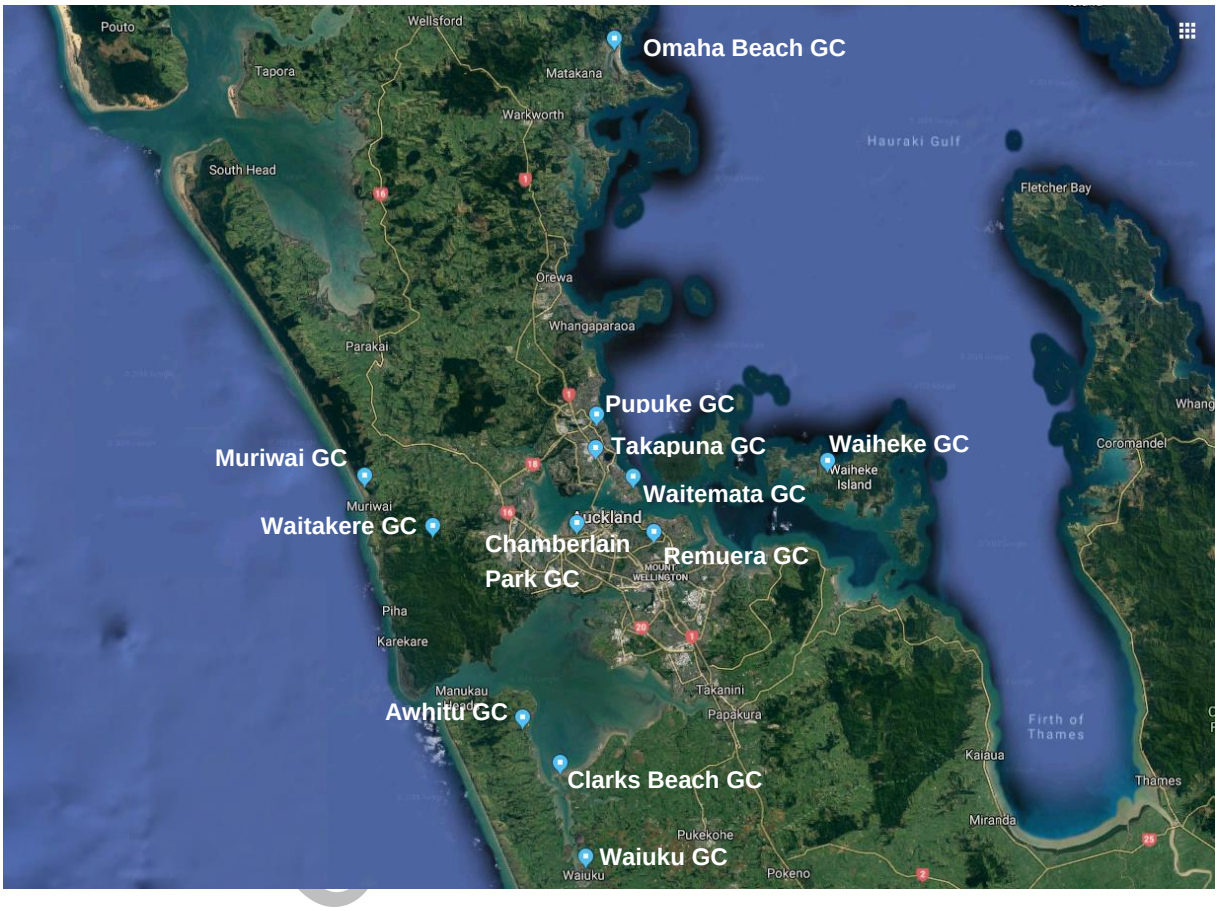
Source: MartinJenkins calculations

What the status quo results mean

Table 25 shows that when the Waiuku golf course land is used exclusively by the golf course, quantified costs outweigh the quantified benefits by $2.7 million per year, mainly due to the $2.8 million[19] annual opportunity cost of retaining the land in public ownership. However, this does not necessarily mean selling the land is the optimal option for the Council, the community and the region. The decision-makers must determine whether the value of the unquantified or intangible net benefits (social/community, ecological benefits and mental health benefits less the environmental cost of pesticide/fertiliser run-off) exceed $2.7 million per year. To give a sense of scale to this figure, based on the club's current 322 members, unquantified benefits would need to exceed $8,385 per member per year. Based on the 14,379 rounds played per year, unquantified benefits would need to exceed $188 per round played for the benefits to match the costs under the status quo scenario.

[19] Auckland Council's weighted average cost of capital (5.3%) multiplied by the land valuation.

APPENDIX 1: GOLF COURSE LOCATIONS



APPENDIX 2: SENSITIVITY ANALYSIS

Sensitivity testing showed the results of the status quo CBA are most sensitive to changes in the valuation of golf course land, as this determines the annual opportunity cost of retaining the land as a public asset[20]. For that reason, sensitivity of the results to changes in land valuation are presented in this section.

[20] The annual opportunity cost is calculated by multiplying the golf course land valuation by Auckland Council's weighted average cost of capital (WACC), which is 5.3 percent p.a.

Clarks Beach

Table 26: Clarks Beach: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$140.1m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**5,939,624**	**7,424,531**	**8,909,437**
less rent revenue received	1,415	1,415	1,415
Net opportunity cost to AC of retaining land	5,938,209	7,423,116	8,908,022
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	649,222	649,222	649,222
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**6,591,141**	**8,076,048**	**9,560,954**
Benefits			
Total annual quantified benefits	**925,103**	**925,103**	**925,103**
Value unquantified benefits would need to be worth to break-even*	**5,666,039**	**7,150,945**	**8,635,851**

Table 27: Clarks Beach: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$140.1m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	104,742,207	130,927,759	157,113,311
less rent revenue received	24,953	24,953	24,953
Net opportunity cost to AC of retaining land	104,717,255	130,902,806	157,088,358
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	11,448,694	11,448,694	11,448,694
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**116,231,373**	**142,416,925**	**168,602,476**
Benefits, NPV			
Quantified benefits			
Physical health	4,434,433	4,434,433	4,434,433
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	1,463,662	1,463,662	1,463,662
Carbon sequestration	32,771	32,771	32,771
Recreation:			
Benefit to golfers (offsetting what they paid to play)	9,172,947	9,172,947	9,172,947
Consumer surplus gain by all recreational users	1,229,110	1,229,110	1,229,110
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**16,332,922**	**16,332,922**	**16,332,922**
Net benefits (NPV)	**(99,898,451)**	**(126,084,003)**	**(152,269,554)**

Āwhitu

Table 28: Āwhitu: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$43.5m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**1,843,590**	**2,304,487**	**2,765,384**
less rent revenue received	1,500	1,500	1,500
Net opportunity cost to AC of retaining land	1,842,090	2,302,987	2,763,884
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	58,997	58,997	58,997
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**1,904,797**	**2,365,694**	**2,826,591**
Benefits			
Total annual quantified benefits	**62,233**	**62,233**	**62,233**
Value unquantified benefits would need to be worth to break-even*	**1,842,563**	**2,303,461**	**2,764,358**

* Annual quantified costs less annual quantified benefits

Table 29: Āwhitu: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$43.5m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	32,510,749	40,638,437	48,766,124
less rent revenue received	26,452	26,452	26,452
Net opportunity cost to AC of retaining land	32,484,298	40,611,985	48,739,672
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	1,040,382	1,040,382	1,040,382
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**33,590,103**	**41,717,790**	
Benefits, NPV			
Quantified benefits			
Physical health	459,073	459,073	459,073
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	0	0	0
Carbon sequestration	16,439	16,439	16,439
Recreation:			
Benefit to golfers (offsetting what they paid to play)	544,817	544,817	544,817
Consumer surplus gain by all recreational users	86,762	86,762	86,762
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**1,107,091**	**1,107,091**	**1,107,091**
Net benefits (NPV)	**(32,483,012)**	**(40,610,699)**	**(48,738,386)**

Chamberlain Park

Table 30: Chamberlain Park: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$470.2m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**19,936,480**	**24,920,600**	**29,904,720**
less rent revenue received	0	0	0
Net opportunity cost to AC of retaining land	19,936,480	24,920,600	29,904,720
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	800,492	800,492	800,492
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**20,740,682**	**25,724,802**	**30,708,922**
Benefits			
Total annual quantified benefits	**1,335,784**	**1,335,784**	**1,335,784**
Value unquantified benefits would need to be worth to break-even*	**19,404,898**	**24,389,018**	**29,373,138**

* Annual quantified costs less annual quantified benefits

Table 31: Chamberlain Park: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$470.2m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	351,569,519	439,461,898	527,354,278
less rent revenue received	0	0	0
Net opportunity cost to AC of retaining land	351,569,519	439,461,898	527,354,278
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	14,116,263	14,116,263	14,116,263
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**365,751,205**	**453,643,585**	**541,535,964**
Benefits, NPV			
Quantified benefits			
Physical health	4,854,222	4,854,222	4,854,222
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	4,730,556	4,730,556	4,730,556
Carbon sequestration	51,075	51,075	51,075
Recreation:			
Benefit to golfers (offsetting what they paid to play)	12,371,472	12,371,472	12,371,472
Consumer surplus gain by all recreational users	1,578,480	1,578,480	1,578,480
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**23,585,805**	**23,585,805**	**23,585,805**
Net benefits (NPV)	**(342,165,400)**	**(430,057,780)**	**(517,950,159)**

Muriwai

Table 32: Muriwai: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$250.9m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**10,640,277**	**13,300,346**	**15,960,416**
less rent revenue received	38,713	38,713	38,713
Net opportunity cost to AC of retaining land	10,601,564	13,261,633	15,921,703
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	1,253,449	1,253,449	1,253,449
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**11,858,723**	**14,518,792**	**17,178,862**
Benefits			
Total annual quantified benefits	**2,833,956**	**2,833,956**	**2,833,956**
Value unquantified benefits would need to be worth to break-even*	**9,024,767**	**11,684,837**	**14,344,906**

* Annual quantified costs less annual quantified benefits

Table 33: Muriwai: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$250.9m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	187,635,786	234,544,732	281,453,679
less rent revenue received	682,684	682,684	682,684
Net opportunity cost to AC of retaining land	186,953,102	233,862,049	280,770,995
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	22,103,925	22,103,925	22,103,925
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**209,122,451**	**256,031,398**	**302,940,344**
Benefits, NPV			
Quantified benefits			
Physical health	7,381,063	7,381,063	7,381,063
Visitor expenditure (GDP generated)	6,361,269	6,361,269	6,361,269
Environmental:			
Stormwater	0	0	0
Carbon sequestration	91,982	91,982	91,982
Recreation:			
Benefit to golfers (offsetting what they paid to play)	32,432,671	32,432,671	32,432,671
Consumer surplus gain by all recreational users	3,762,279	3,762,279	3,762,279
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**50,029,265**	**50,029,265**	**50,029,265**
Net benefits (NPV)	**(159,093,186)**	**(206,002,133)**	**(252,911,079)**

Omaha Beach

Table 34: Omaha Beach: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$200.9m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**8,517,847**	**10,647,309**	**12,776,770**
less rent revenue received	5	5	5
Net opportunity cost to AC of retaining land	8,517,842	10,647,304	12,776,765
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	755,901	755,901	755,901
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**9,277,453**	**11,406,915**	**13,536,376**
Benefits			
Total annual quantified benefits	**1,484,545**	**1,484,545**	**1,484,545**
Value unquantified benefits would need to be worth to break-even*	**7,792,908**	**9,922,369**	**12,051,831**

* Annual quantified costs less annual quantified benefits

Table 35: Omaha Beach: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$200.9m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	150,207,825	187,759,782	225,311,738
less rent revenue received	88	88	88
Net opportunity cost to AC of retaining land	150,207,737	187,759,693	225,311,650
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	13,329,923	13,329,923	13,329,923
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**163,603,084**	**201,155,041**	**238,706,997**
Benefits, NPV			
Quantified benefits			
Physical health	4,549,849	4,549,849	4,549,849
Visitor expenditure (GDP generated)	1,585,814	1,585,814	1,585,814
Environmental:			
Stormwater	0	0	0
Carbon sequestration	44,463	44,463	44,463
Recreation:			
Benefit to golfers (offsetting what they paid to play)	17,913,813	17,913,813	17,913,813
Consumer surplus gain by all recreational users	2,111,312	2,111,312	2,111,312
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**26,205,251**	**26,205,251**	**26,205,251**
Net benefits (NPV)	**(137,397,833)**	**(174,949,790)**	**(212,501,746)**

Pupuke

Table 36: Pupuke: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$454.7m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**19,279,280**	**24,099,100**	**28,918,920**
less rent revenue received	2,658	2,658	2,658
Net opportunity cost to AC of retaining land	19,276,622	24,096,442	28,916,262
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	856,038	856,038	856,038
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**20,136,370**	**24,956,190**	**29,776,010**
Benefits			
Total annual quantified benefits	**1,810,035**	**1,810,035**	**1,810,035**
Value unquantified benefits would need to be worth to break-even*	**18,326,335**	**23,146,155**	**27,965,975**

* Annual quantified costs less annual quantified benefits

Table 37: Pupuke: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$454.7m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	339,980,136	424,975,170	509,970,204
less rent revenue received	46,872	46,872	46,872
Net opportunity cost to AC of retaining land	339,933,264	424,928,298	509,923,332
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	15,095,788	15,095,788	15,095,788
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**355,094,475**	**440,089,509**	**525,084,544**
Benefits, NPV			
Quantified benefits			
Physical health	8,825,315	8,825,315	8,825,315
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	6,678,690	6,678,690	6,678,690
Carbon sequestration	72,109	72,109	72,109
Recreation:			
Benefit to golfers (offsetting what they paid to play)	14,331,474	14,331,474	14,331,474
Consumer surplus gain by all recreational users	2,053,715	2,053,715	2,053,715
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**31,961,302**	**31,961,302**	**31,961,302**
Net benefits (NPV)	**(323,133,173)**	**(408,128,207)**	**(493,123,241)**

Remuera

Table 38: Remuera: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$734.2m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**31,132,192**	**38,915,240**	**46,698,288**
less rent revenue received	130,000	130,000	130,000
Net opportunity cost to AC of retaining land	31,002,192	38,785,240	46,568,288
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	4,151,809	4,151,809	4,151,809
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**35,157,711**	**42,940,759**	**50,723,807**
Benefits			
Total annual quantified benefits	**3,988,527**	**3,988,527**	**3,988,527**
Value unquantified benefits would need to be worth to break-even*	**31,169,184**	**38,952,232**	**46,735,280**

* Annual quantified costs less annual quantified benefits

Table 39: Remuera: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$734.2m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	549,000,116	686,250,145	823,500,174
less rent revenue received	2,292,483	2,292,483	2,292,483
Net opportunity cost to AC of retaining land	546,707,633	683,957,662	821,207,691
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	73,215,005	73,215,005	73,215,005
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**619,988,062**	**757,238,091**	**894,488,120**
Benefits, NPV			
Quantified benefits			
Physical health	11,017,268	11,017,268	11,017,268
Visitor expenditure (GDP generated)	2,718,183	2,718,183	2,718,183
Environmental:			
Stormwater	8,865,401	8,865,401	8,865,401
Carbon sequestration	64,446	64,446	64,446
Recreation:			
Benefit to golfers (offsetting what they paid to play)	42,666,720	42,666,720	42,666,720
Consumer surplus gain by all recreational users	5,041,370	5,041,370	5,041,370
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**70,373,388**	**70,373,388**	**70,373,388**
Net benefits (NPV)	**(549,614,674)**	**(686,864,703)**	**(824,114,732)**

Takapuna

Table 40: Takapuna: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$342.3m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**14,512,725**	**18,140,906**	**21,769,087**
less rent revenue received	31,500	31,500	31,500
Net opportunity cost to AC of retaining land	14,481,225	18,109,406	21,737,587
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	856,052	856,052	856,052
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**15,340,987**	**18,969,168**	**22,597,349**
Benefits			
Total annual quantified benefits	**1,200,003**	**1,200,003**	**1,200,003**
Value unquantified benefits would need to be worth to break-even*	**14,140,984**	**17,769,165**	**21,397,346**

* Annual quantified costs less annual quantified benefits

Table 41: Takapuna: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$342.3m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	255,924,400	319,905,500	383,886,600
less rent revenue received	555,486	555,486	555,486
Net opportunity cost to AC of retaining land	255,368,914	319,350,014	383,331,114
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	15,096,034	15,096,034	15,096,034
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**270,530,372**	**334,511,472**	**398,492,572**
Benefits, NPV			
Quantified benefits			
Physical health	5,375,885	5,375,885	5,375,885
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	0	0	0
Carbon sequestration	45,688	45,688	45,688
Recreation:			
Benefit to golfers (offsetting what they paid to play)	13,989,665	13,989,665	13,989,665
Consumer surplus gain by all recreational users	1,776,981	1,776,981	1,776,981
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**21,188,218**	**21,188,218**	**21,188,218**
Net benefits (NPV)	**(249,342,154)**	**(313,323,254)**	**(377,304,353)**

Waitakere

Table 42: Waitakere: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$19.6m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**830,294**	**1,037,868**	**1,245,441**
less rent revenue received	435	435	435
Net opportunity cost to AC of retaining land	829,859	1,037,433	1,245,006
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	416,780	416,780	416,780
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**1,250,349**	**1,457,923**	**1,665,496**
Benefits			
Total annual quantified benefits	**493,288**	**493,288**	**493,288**
Value unquantified benefits would need to be worth to break-even*	**757,061**	**964,634**	**1,172,208**

* Annual quantified costs less annual quantified benefits

Table 43: Waitakere: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$19.6m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	14,641,808	18,302,259	21,962,711
less rent revenue received	7,671	7,671	7,671
Net opportunity cost to AC of retaining land	14,634,137	18,294,588	21,955,040
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	7,349,700	7,349,700	7,349,700
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**22,049,260**	**25,709,712**	**29,370,164**
Benefits, NPV			
Quantified benefits			
Physical health	2,726,067	2,726,067	2,726,067
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	0	0	0
Carbon sequestration	49,837	49,837	49,837
Recreation:			
Benefit to golfers (offsetting what they paid to play)	5,236,824	5,236,824	5,236,824
Consumer surplus gain by all recreational users	715,371	715,371	715,371
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**8,728,099**	**8,728,099**	**8,728,099**
Net benefits (NPV)	**(13,321,161)**	**(16,981,613)**	**(20,642,065)**

Waitematā

Table 44: Waitematā: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$288.6m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**12,236,282**	**15,295,353**	**18,354,423**
less rent revenue received	1	1	1
Net opportunity cost to AC of retaining land	12,236,281	15,295,352	18,354,422
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	747,733	747,733	747,733
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**12,987,724**	**16,046,795**	**19,105,865**
Benefits			
Total annual quantified benefits	**1,957,547**	**1,957,547**	**1,957,547**
Value unquantified benefits would need to be worth to break-even*	**11,030,177**	**14,089,248**	**17,148,318**

* Annual quantified costs less annual quantified benefits

Table 45: Waitematā: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$288.6m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	215,780,511	269,725,639	323,670,767
less rent revenue received	18	18	18
Net opportunity cost to AC of retaining land	215,780,493	269,725,621	323,670,749
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	13,185,885	13,185,885	13,185,885
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**229,031,802**	**282,976,930**	**336,922,058**
Benefits, NPV			
Quantified benefits			
Physical health	8,583,668	8,583,668	8,583,668
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	3,924,078	3,924,078	3,924,078
Carbon sequestration	0	0	0
Recreation:			
Benefit to golfers (offsetting what they paid to play)	19,462,738	19,462,738	19,462,738
Consumer surplus gain by all recreational users	2,549,849	2,549,849	2,549,849
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**34,520,333**	**34,520,333**	**34,520,333**
Net benefits (NPV)	**(194,511,469)**	**(248,456,597)**	**(302,401,725)**

Waiheke

Table 46: Waiheke: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$57.4m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**2,434,864**	**3,043,581**	**3,652,297**
less rent revenue received	1	1	1
Net opportunity cost to AC of retaining land	2,434,863	3,043,580	3,652,296
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	161,843	161,843	161,843
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**2,600,416**	**3,209,133**	**3,817,849**
Benefits			
Total annual quantified benefits	**346,245**	**346,245**	**346,245**
Value unquantified benefits would need to be worth to break-even*	**2,254,172**	**2,862,888**	**3,471,604**

* Annual quantified costs less annual quantified benefits

Table 47: Waiheke: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$57.4m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	42,937,576	53,671,969	64,406,363
less rent revenue received	18	18	18
Net opportunity cost to AC of retaining land	42,937,558	53,671,952	64,406,346
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	2,854,018	2,854,018	2,854,018
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**45,857,000**	**56,591,393**	**67,325,787**
Benefits, NPV			
Quantified benefits			
Physical health	1,706,690	1,706,690	1,706,690
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	0	0	0
Carbon sequestration	35,547	35,547	35,547
Recreation:			
Benefit to golfers (offsetting what they paid to play)	3,876,765	3,876,765	3,876,765
Consumer surplus gain by all recreational users	507,685	507,685	507,685
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**6,126,688**	**6,126,688**	**6,126,688**
Net benefits (NPV)	**(39,730,312)**	**(50,464,706)**	**(61,199,100)**

Waiuku

Table 48: Waiuku: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (annual)

Status quo scenario (annual)	Sale price of golf course land:		
	- 20%	$53.1m	+ 20%
Costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	**2,251,124**	**2,813,905**	**3,376,686**
less rent revenue received	1,050	1,050	1,050
Net opportunity cost to AC of retaining land	2,250,074	2,812,855	3,375,636
Lease administration	3,710	3,710	3,710
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	396,830	396,830	396,830
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total annual quantified costs	**2,650,614**	**3,213,395**	**3,776,176**
Benefits			
Total annual quantified benefits	**497,252**	**497,252**	**497,252**
Value unquantified benefits would need to be worth to break-even*	**2,153,362**	**2,716,143**	**3,278,924**

* Annual quantified costs less annual quantified benefits

Table 49: Waiuku: Sensitivity to sale price of golf course land - CBA results for the status quo scenario (NPV over 30 years)

Status quo scenario (30 year time period, NPV)	Sale price of golf course land: - 20%	$53.1m	+ 20%
Costs, NPV			
Public costs			
Cost to AC of retaining golf course land:			
Opportunity cost to AC of retaining land	39,697,408	49,621,760	59,546,112
less rent revenue received	18,516	18,516	18,516
Net opportunity cost to AC of retaining land	39,678,892	49,603,244	59,527,596
Lease administration	65,424	65,424	65,424
Rates remissions	0	0	0
Rates postponements	0	0	0
LDI funding and community grants	0	0	0
Private costs			
Course operating costs	6,997,892	6,997,892	6,997,892
Unquantified costs			
Pesticide run-off	Unquantified	Unquantified	Unquantified
Total quantified costs (NPV)	**46,742,208**	**56,666,560**	**66,590,912**
Benefits, NPV			
Quantified benefits			
Physical health	2,801,926	2,801,926	2,801,926
Visitor expenditure (GDP generated)	0	0	0
Environmental:			
Stormwater	0	0	0
Carbon sequestration	38,655	38,655	38,655
Recreation:			
Benefit to golfers (offsetting what they paid to play)	5,230,758	5,230,758	5,230,758
Consumer surplus gain by all recreational users	720,098	720,098	720,098
Unquantified benefits			
Mental health	Unquantified	Unquantified	Unquantified
Social / community benefits	Unquantified	Unquantified	Unquantified
Ecological benefits	Unquantified	Unquantified	Unquantified
Total quantified benefits (NPV)	**8,791,437**	**8,791,437**	**8,791,437**
Net benefits (NPV)	**(37,950,771)**	**(47,875,123)**	**(57,799,475)**

APPENDIX 3: CBA PARAMETERS

Golf Course	**Clarks Beach**	
CBA time period, years	30	
		Source
Discount rate		
Standard discount rate	4%	Auckland Council CBA Primer
Alternative discount rate 1	6%	Auckland Council CBA Primer
Alternative discount rate 2	8%	Auckland Council CBA Primer
Auckland Council Weighted Average Cost of Capital (WACC)	5.30%	Auckland Council
Course		
Holes	18	
Course type (based on "hierarchy" of courses)	Development	As defined by O'Connor Sinclair 2013 report
Land area, hectares	34.11	Auckland Council
GIS valuation (for rating)	$2,830,000	Auckland Council
Valuation as open space	$2,830,000	Auckland Council
Community		
Local board	Franklin	
CAU population, 2013	6,222	Auckland Council
CAU population forecast, 2028	9,129	Auckland Council
Additional open space required in area	No	Auckland Council Excel w orkbook *"2.1 Assessment of open space provision"*
Other golf courses in the area:		
Waiuku GC, km drive from Clarks Beach	27	Google Maps
Āw hitu GC, km drive from Clarks Beach	59	Google Maps
		Google Maps

	Scenario			Source
	Status quo	Enhanced use		
Membership				
Playing members, 2016	420			Clarks Beach Golf Club
Social members, 2016	160			Clarks Beach Golf Club
Play				
Member rounds played, 2015	12,889			Auckland Council Excel w orkbook *"5.1 Auckland Council Golf Course Participation rates"*
Visitor (affiliated) rounds played, 2015	4,419			Auckland Council Excel w orkbook *"5.1 Auckland Council Golf Course Participation rates"*
Visitor (non-affiliated) rounds played, 2015	4,160			Auckland Council Excel w orkbook *"5.1 Auckland Council Golf Course Participation rates"*
Estimated total rounds, 2015	21,468			Auckland Council Excel w orkbook *"5.1 Auckland Council Golf Course Participation rates"*
Estimated additional non-official golf played (% of official member r	10%	10%		
Financial, golf club				
Revenue	$687,401			
Operating expenses (excl depreciation)	$649,222	$649,222		Clarks Beach Golf Club Financial Statement, 2016. Note: excludes depreciation and loss on dispersal of assets.
Membership income (ie total subscriptions paid by members)	$200,401			
Green fee per round, affiliated player	$30			Clarks Beach Golf Club w ebsite
Green fee per round, non-affiliated player	$45			Clarks Beach Golf Club w ebsite
Lease				
Rent paid to Auckland Council (p.a.)	$1,415	$17,185		Auckland Council, for Enhanced use scenario, rent paid by club is assumed to equal 2.5% of turnover
Auckland Council lease admin cost	$3,710	$3,710		Auckland Council
Rates remission (annual)	$0	$0		Document provided by Auckland Council show ed all rates remissions are to privately ow ned golf courses.
Opportunity cost of land				
Value if land sold on open market			$140,085,483	Cameron Partners (2015), *Auckland Council: Review of alternative sources of financing, pp 52.* Adjusted to 2018 values based on Auckland Council rates increases: http://ourauckland.aucklandcouncil.govt.nz/media/15804/graphs-for-report_spreads_w ith-table-title_2017.pdf See MartinJenkins (2018) *Auckland Council Golf Facilities Investment Plan: Cost-Benefit Analysis Methodology and Model* for details on this valuation.

Health and wellbeing (including consumer surplus gain from recreation)

	Scenario			Source
	Status quo	Enhanced use		
Consumer surplus				
Consumer surplus proportion	10%			10% was applied in the NZ Cycle Trails CBA, adjusted from 20% applied by MBIE in their Major Events CBA model, which was based on 2 studies: 1) ACT Auditor-General's Office, (2002) V8 Car Races in Canberra – Cost and Benefit performance audit report, Canberra ACT, 2) Access Economics (2010) Cost Benefit Analysis of the 2022 FIFA World Cup, Report for Deparment of Resources, Energy, and Tourism, Canberra ACT
Average golfers' travel time from home to course and back, hrs			0.50	Estimate
Average value of time, $ per hour			$15.54	Public holiday value of time, NZTA Economic Evaluation Manual 2016
Golf use				
Average distance walked per round, km	8.50			http://www.insidegolf.com.au/news/how-far-do-you-really-walk-during-18-holes/
Value of walking, in saved health costs, per km	$2.60			NZTA Economic Evaluation Manual 2016
Health benefit of walking attributable to the golf course	50%			Estimate. This assumes people currently playing golf would only walk half as far in the absence of the golf course
Rounds played growth rate (p.a.)	0%	0%		
Multifunctional use				
Cycling:				
Value of cycling, in saved health costs, per km		$1.30		NZTA Economic Evaluation Manual 2016
Cyclists per week		200		Estimate
Cyclists growth rate, p.a.		2%		Estimate
Average distance cycled per user, km		2.90		Assuming a cycle path is created around the coastal perimeter of Clarks Beach golf course
Health benefit of cycling attributable to the golf course land		50%		Estimate
Cycling average speed, km/hr		15.00		

Sports fields:

Value of jogging/running, in saved health costs, per km	$2.60	Based on NZTA Economic Evaluation Manual 2016, conservatively estimated to be the same as walking per kilometre.
Number of new sports fields	0	Not applicable in Clarks Beach case as community is assessed as not requiring additional sports facilities currently
Number of trainings/games per week per field	18	Assumes 2 trainings per day Monday-Friday, and 8 games played over Saturday-Sunday
Average number of participants per training/game	20	Estimate
Average distance run/jogged per person per training/game, km	5	Estimate. This assumes that if a sports field is constructed, an average user of the field would run 5 km per training or game played on the field.
Health benefit of other sports attributable to the golf course land	50%	Estimate
Average time spent playing other sports, per person, per training/game, hours	1.5	Estimate

Tennis court

Number of users per week	100	Estimate
Average distance run/jogged per person per use, km	5	Estimate
Average time spent playing tennis, per person, per use, hours	1	Estimate
Health benefit attributable to the golf course land	50%	Estimate

Mental health benefits

Mental health benefits as proportion of physical health benefits	60%	White, Alcock, Wheeler & Depledge (2013). *Would you be happier living in a greener urban area? A fixed effects analysis of panel data.* Psychological Science Journal. The results in the above study were used in an analysis of the benefits of public greenspace in London by Vivid Economics (2017) *Natural capital accounts for public green space in London.*

Environmental

	Scenario		Source
	Status quo	Enhanced use	
Environmental and operational sustainability score	62%	81%	Sports Surface Design & Management (2017). *Auckland Council Golf Courses: Key Environmental Issues.*
Target environmental and operational sustainability score	85%	85%	Sports Surface Design & Management (2017). *Auckland Council Golf Courses: Key Environmental Issues.*
Proportion of target	0.73	0.95	Calculation: current/target score. Assumes under "Enhanced use" scenario the golf course reaches 95 percent of target sustainability score over time
Inherent ecology value	Low		eg. Course may form part of a wildlife corridor, or buffer for a nature reserve
Stormwater collection/dispersal value	Low		eg. Courses in heavily developed urban areas will be more valuable in coping with stormwater runoff than a more rural course.
Carbon sequestration			
CO2 absorption rate of turfgrass, tonnes per Ha per year	0.896		Qian & Follett (2002). *Assessing soil carbon sequestration in turfgrass systems using long-term soil testing data.* Agronomy Journal.
Carbon absorption rate of shrubs/trees, tonnes per Ha per year	1.975		http://sustainability.tufts.edu/carbon-sequestration/
Current value of Carbon, $ per tonne	$20.80		Retrieved from https://www.commtrade.co.nz/ on 18 December 2017. Price of carbon dioxide equivalent, NZD.
Proportion of site, turfgrass	90%		Estimate based on Google Earth
Proportion of site, shrubs/trees	10%		Estimate based on Google Earth
Stormwater			
Indicative cost of stormwater infrastructure, $ per m2 catchment a	$10		Phil Jaggard, Director, MPS Ltd. Based on average cost per sqaure metre for stormwater at Scotts Point development.
Clarks Beach catchment area served by the golf course land, Ha	10		Estimate
Annual maintenance cost of stormwater infrastructure	3%		Estimate

Economic

		Source
Attracting visitors to region		
Ability of course to attract out-of-region visitors to Auckland	Low	MartinJenkins assessment
Are national events played at the course?	No	
Visitor (affiliated) rounds played, 2015	4,419	
Proportion of affiliated visitors that are from outside Auckland	0%	Assumes that a golf course rated as having "High" ability to attract out-of-region golfers, then 40% of affiliated visitor rounds are played by out-of-region visitors. "Medium" = 20%, "Low" = 0%.
Average daily spend, domestic visiting golfers	$238	Average daily spend of domestic golfers was calculated in MartinJenkins (2016) report *Economic Impact of Golf Courses in Auckland*. The calculation was based on data in New Zealand Tourism (2013) *New Zealand International Golf Tourism Strategy.*
GDP component of visitor expenditure	37%	Tourism Satellite Account, Statistics New Zealand (2016)

Social and community

Merger with the Clarks Beach bowling club and Tennis club and creation of "Community Hub"

Clarks Beach golf club combining with Clarks Beach bowling club, as outlined in the Community Hub Feasibilty Report (2015), would see the bowling club relocate to the golf club site permanently.
While this may result in a small increase in the volume of golf and lawn bowls played, we expect the major value will be the social and community benefit of more connections between people within the Clarks Beach community.
The better utilisation of shared facilities will also likely improve the financial sustainability of both clubs by reducing costs.

A short term development option of a half-size artificial bowling green built at the golf club site is expexted to cost $100,000 - $150,000.
The long term development option proposed in the feasibility report includes a 800 sqm community hub building, full size bowling green and a hard court with lighting. Expected cost is $3.3 - $3.5 million.