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NEW CARISBROOK STADIUM DEVELOPMENT

FINANCIAL FEASIBILITY STUDY AND ECONOMIC IMPACT ASSESSMENT

Prepared for

CARISBROOK STADIUM TRUST

FEBRUARY 2007

Prepared by

CONSULTANTS TO THE HOTEL, TOURISM & LEISURE INDUSTRIES
A member of Horwath International

Abbreviations

"BERL"	Business & Economic Research Limited
"CBD"	Central Business District
"CEO"	Chief Executive Officer
"CST"	Carisbrook Stadium Trust
"CTO"	Community Trust of Otago
"EBITDA"	Earnings before Interest, Tax, Depreciation & Amortisation
"GST"	Goods & Services Tax
"HHTL"	Horwath HTL
"NPC"	National Provincial Competition
"NZRU"	New Zealand Rugby Union
"ODI"	One Day International
"ORC"	Otago Regional Council
"ORFU"	Otago Rugby Football Union
"RWC"	Rugby World Cup

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Executive Summary

Operational Feasibility

The operating projections for Options 1a and 1b for Year 1 and Year 15 are summarised in Table 1. As is illustrated by the results below, a new stadium on the Awatea Street site is projected to operate on a cash positive basis.

Table 1: Summary Financial Projections ($000s)

	Option 1a		Option 1b	
	2011	**2025**	**2011**	**2025**
Revenue	2,731	4,386	2,370	3,984
Variable Costs	715	1,397	680	1,381
Overhead Costs	1,563	2,858	1,436	2,512
EBITDA	453	131	254	91

(Source: HHTL)

The operating viability of the new stadium options (1a and 1b) is enhanced by the synergies that arise through co-location with the University. This is likely to assist in generating significant car park revenue for the stadium and is also likely to improve the level of day meeting and conference business.

The presence of the covered roof further improves the revenue-generating ability of Option 1a, which is projected to earn approximately $400,000 per annum more than Option 1b. This is primarily due to an increase in the number of events that are hosted but is also aided by an assumed increase in average attendance at events. The increased revenue-earning capability of Option 1a is off-set to some extent by higher overhead costs, particularly energy and ground maintenance, due to the roof.

Importantly, both Options 1a and 1b are projected to operate on a positive net cash flow basis. The cash flow surpluses under Option 1a are projected to average approximately $300,000 per annum.

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Economic Impact

Each of the stadium development options has been considered in terms of the positive economic impacts that are projected to be generated relative to the opportunity costs that arise as a result of the respective development option.

Positive economic impacts arise as a result of:

1. spending by additional visitors that attend events at the stadium (in the case of the Dunedin City economy, this includes visitors from elsewhere within the Otago region)
2. additional University students attracted to Dunedin due to the appeal of a campus stadium (under the Awatea Street options)
3. spending that is retained in the local economy as a result of residents no longer having to travel to attend events (this is off-set to some extent by increased local resident expenditure on tickets for events operated by non-local organisers (eg: NZRU)
4. spending in the local economy related to the initial construction of the facility
5. spending in the local economy related to the on-going capital maintenance requirements of the facility.

Opportunity costs arise as a result of local households and businesses altering their normal spending patterns in order to:

1. fund the initial capital costs of the stadium (via rates, as well as direct contributions through corporate suite premiums and ground memberships)
2. fund on-going capital maintenance requirements (via rates)
3. fund on-going operating losses, where relevant (via rates).

The economic impact analysis has considered expenditure over the 50 year life of the asset and has used discounted cash flows in order to provide present value figures in 2011 dollars.

Based on the operating projections, proposed development costs, and estimated on-going capital maintenance costs, the estimated economic impact for Dunedin City (in terms of value-added, or contribution to GDP) for each of the development options is summarised in Tables 7 and 8.

Table 7: Estimated Economic Impact for Dunedin City ($m)

	Option 1a	Option 1b
Positive Impacts		
Visitor Expenditure (incl. University students)	282.7	199.2
Capital Maintenance	3.1	1.6
Construction	116.8	87.9
Total	402.6	288.7
Negative Impacts		
Opportunity Cost – Households	74.7	52.3
Opportunity Cost – Businesses	59.8	46.2
Total	134.5	98.5

Net Economic Impact (Total Value Added)	**268.1**	**190.2**
Economic Impact Ratio	**3.0**	**2.9**

The estimated economic impact for Otago Region (in terms of value-added, or contribution to GDP) for each of the development options is summarised in Tables 9 and 10. The primary reason for a reduced economic impact at the Regional level is because expenditure by Otago visitors to Dunedin is considered to be transferred expenditure and does not have a positive impact at the Regional level.

Table 9: Estimated Economic Impact for Otago Region ($m)

	Option 1a	**Option 1b**
Positive Impacts		
Visitor Expenditure (incl. University students)	245.3	176.3
Capital Maintenance	3.4	1.8
Construction	116.8	87.9
Total	365.5	266.0
Negative Impacts		
Opportunity Cost – Households	79.5	57.0
Opportunity Cost – Businesses	62.6	49.0
Total	142.1	106.0
Net Economic Impact (Total Value Added)	**223.4**	**160.0**
Economic Impact Ratio	**2.6**	**2.5**

1. INTRODUCTION & KEY FINDINGS

1.1 BACKGROUND

Horwath HTL ("HHTL") has been commissioned by the Carisbrook Stadium Trust ("CST") to undertake a detailed financial feasibility and economic impact study in relation to (i) a proposed new Stadium adjacent to Logan Park, and (ii) a redeveloped Carisbrook Stadium, in accordance with our proposal dated 1 December 2006. This report focuses on the new development option at Awatea Street.

At the request of the CST, HHTL has undertaken annual cash flow projections for the first 15 years operation of the Stadium. These projections are supported by key assumptions as to development / redevelopment cost, funding, revenues and operating costs.

HHTL has prepared separate financial projections for a new Stadium with and without a roof to enable the CST to identify the cost-benefit of each development option. This analysis is also considered in the context of the associated economic impact analysis, which considers the broader benefits of the two development options to both the Dunedin and greater Otago economies.

This study has been undertaken as part of a project team lead by Arrow International. Our report is to be utilised by Arrow International in the compilation of a detailed feasibility study report for the new Stadium for the CST.

This report follows our preliminary financial feasibility report dated September 2006 in accordance with our proposal dated 25 August 2006.

1.2 SCOPE OF WORK

HHTL performed the following key tasks to fulfil CST's requirements:-

(i) Attendance at the Project Workshop held on 12 December 2006
(ii) Consultation with DCC (Jim Harland) and ORC (Graeme Martin) on methodology of the study
(iii) An indicative financial feasibility study for an upgraded (existing) Carisbrook Stadium
(iv) Refinement and expansion of our preliminary feasibility study in relation to a new-build Carisbrook Stadium

- more in-depth consultation with selected parties (taking into account feedback on our preliminary financial feasibility study report), liaising with Arrow as to who to consult and to what extent. Parties included:
    i. DCC
    ii. ORFU
    iii. Otago Regional Council
    iv. University of Otago
    v. PCOs

vi. Harbourside Development Company
vii. Dunedin Centre Management
viii. Tourism Dunedin
ix. University Student Association
x. NZRU
xi. Event Organisers
xii. The Dunedin Centre
xiii. Edgar Centre

- focus group meetings with 2 randomly sampled groups of 20 local residents to discuss past and future attendance trends, and critical success factors, in relation to a new Stadium and redeveloped Carisbrook
- refinement of a schedule of potential development funding sources for the development of the stadium including amounts and critical success factors
- refinement of an appropriate management model for a new stadium, in conjunction with ORFU and the Trust, including review of options
- consultation with managers of the Dunedin and Edgar Centres
- utilisation of our firm's knowledge, enquires with management, and research of stadiums and sports venues as appropriate
- refinement of an indicative 15 year event schedule for a new stadium (with and without roof) with assumed annual average attendances and ticket prices
- refinement of indicative annual event venue hire, food and beverage commission and other operating revenues and operating costs for the first 15 years operation of the new stadium (with and without roof)
- consultation with DCC and Otago Regional Council on sinking fund policy
- indicative estimate of returns from ancillary developments on the stadium precinct and agreeing with Arrow on specific development projects (eg: Otago University and related activities, hotel, student accommodation, offices, retail)
- particular matters raised in our preliminary feasibility study debrief that were addressed as part of this work include:
    i. allowance for relevant governance costs
    ii. further consideration of appropriate management salary costs
    iii. further consideration of the conference potential of a new stadium, including a high level consideration of the feasibility of new accommodation in the immediate stadium precinct
    iv. more detailed consideration of the impact of a roof on average achieved ticket prices

v. further consultation on the potential attendance uplift attributable to a roof

vi. sensitivity analysis of key assumptions to illustrate potential impacts on bottom-line cash flow performance

(v) Input into agreed project team's community consultation in order to obtain information relevant to the financial feasibility analysis of both the redevelopment and new-build options

(vi) Economic impact analysis in relation to the two stadium options. We sub-contracted Market Economics Ltd to assist us with the economic impact analysis. Key aspects of the economic impact analysis include:

- consideration of the incremental activity that could occur in the Dunedin / Otago economy as a result of each of the development options (ie: additional events, non-local attendees, retention of local attendees, visitor nights, incremental expenditure)
- consideration of expenditure out-flows from the local economy that could occur as a result of each of the development options (eg: increased expenditure by local residents on events organised by non-local promoters)
- analysis of how this net incremental activity converts into economic impact (eg: contribution to GDP, full time equivalent jobs supported, etc)
- consideration of the extent to which a "University stadium" could assist in leveraging student numbers to the overall benefit of the Dunedin economy.

(vii) Detailed report on the study results including greater discussion on critical success factors and achievement of objectives.

Exclusions of Scope:
Our scope of work for this assignment excluded:-

- a physical feasibility study
- depreciation and tax assumptions
- detailed community and other consultation
- development cost build up
- zero based operating cost projections (other than that in our assumptions)
- strategic or business planning (the results of our 2 studies will be a base for development of such plans)
- detailed market and supply analysis (eg: visitor arrival growth, growth in performance of existing/new supply, market share analysis etc in respect to your stadium, conference function, commercial development components)
- social impact report study
- cost benefit study.

1.3 DISCLAIMERS

This report has been prepared by Horwath HTL for the Carisbrook Stadium Trust and is intended for your internal use. The report is based on estimates, assumptions and other information available to us, the sources of which are stated in the appropriate sections of the report. We did not carry out an audit or verification of the information supplied to us during the engagement, except to the extent stated in this report.

We understand that references to Horwath HTL and extracts from our report are to be incorporated into a feasibility study for the Trust by Arrow International. These references and extracts should be read in conjunction with, and in the context of, our report and our disclaimers.

Some assumptions inevitably will not materialise, and unanticipated events and circumstances may occur. Therefore, actual results achieved during the period covered by our analysis may vary from those described in our report (including forward looking statements and projections) and the variations may be material. We did not carry out an audit or verification of the information and comments supplied to us during the engagement, except to the extent stated in this report.

Horwath HTL assumes no responsibility whatsoever, except to the Carisbrook Stadium Trust, in respect to, or arising out of, or in connection with the contents of our report or work undertaken for you. If any other parties choose to rely in any way on any advice provided by Horwath HTL to the Trusts, they do so entirely at their own risk.

1.4 KEY FINDINGS

The key findings from our analysis are that:

1. A new Stadium will be a positive contributor to the Dunedin and Otago region economies, including attraction of more students in the case of a new stadium on the Awatea Street site
2. Options 1a and 1b are estimated to generate an economic impact ratio of 2.9 or better at the Dunedin City level. This means that for every dollar of opportunity cost, these options are estimated to deliver at least $2.90 in positive economic impact
3. A new Stadium, whether covered or uncovered, is projected to operate with a positive net cash flow if it is located on the Awatea Street site and able to benefit from the synergies with the University of Otago

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5. The proposed stadium roof will provide a significantly better environment and ambience for event attendees, increasing spectator and event numbers, for both sports and non-sports
6. The University's wish for its facilities (eg: Student Health Services, Unipol student recreation and gym services) to be generally stand-alone and

architecturally distinctive and consistent with the University campus restricts the Trust's ability to maximise development and operating synergies

7. Dunedin and Otago's relatively small population, its relatively close proximity to Christchurch, relatively high airfares, lack of direct flights to Queenstown and competition from the Dunedin and Edgar Centres means that the Stadium's hosting of large sport and non-sport events will be constrained to some extent
8. In most stadiums and large public assembly / event venues, annual operating subsidies are funded by local government
9. Maximising local support and attendance to events at the Stadium is a critical success factor according to resident focus groups that have been undertaken. This in turn means high entertainment value including pre-match and half time entertainment, easy transport access and car parking, exciting events and role models, international events, sports and non-sports events, high calibre sales and marketing and modern amenities for patrons (eg: toilets, seating, food and beverage)
10. Management of the Stadium should ideally be independent of the ownership of the Stadium and sports codes. Key performance indicators to ensure satisfactory operation and sales and marketing of the Stadium should be developed for the venue manager, sports code tenants and hirers
11. The projected key performance indicators for each of the Development Options is summarised in Table 1.1 on the following page.

Table 1.1: Summary of Development Options

1. CONCEPT & SWOT ANALYSIS

The first broad option is a new development on Awatea Street opposite Logan Park in north Dunedin. Within this first broad option there are two sub options (i) where the whole stadium will be enclosed by a permanent roof, (ii) the Stadium excludes a permanent roof.

1.1 CONCEPT OPTIONS

The proposed Option 1 stadium concepts, on which the financial feasibility and economic impact analysis is based, are as follows:

1.1.1 AWATEA STREET DEVELOPMENT WITH ROOF (OPTION 1A)

The key aspects of this development option are:-

1. the stadium will be located opposite Logan Park, in north Dunedin
2. the stadium will have a total permanent seating capacity of approximately 25,000, with additional temporary seating of approximately 5,000 giving a total capacity of 30,000
3. the stadium will feature a permanent roof structure that will enable sunlight to enter the stadium but which will protect the playing surface (and enable grass to grow normally) and spectators from the elements
4. the playing surface will be rectangular in shape to minimise development costs and accordingly the playing surface will not cater for cricket
5. the stadium will include 18 corporate boxes (with a capacity of 16 people per box) and a corporate lounge for up to 1,000 people
6. in addition to corporate boxes, there will be a Founders Club facility catering for up to 120 people and a hirers' suite capable of accommodating 48 people
7. the hospitality facilities in the main stand (i.e. the corporate lounge, corporate boxes, founders club room and hirers suite) will be available for meetings, conferences and functions, thereby providing a multi purpose facility
8. the development cost of the Stadium (excluding University facilities) will be approximately $188 million, including land costs
9. the development will create a hub of activity through the co-location of University departments and auxiliary services as well as a range of sport-focused tenancies and other organisations.

1.1.2 AWATEA STREET DEVELOPMENT WITHOUT ROOF (OPTION 1B)

The key aspects of this development option are:-

1. the stadium will be located opposite Logan Park, in north Dunedin
2. the stadium will have a total permanent seating capacity of approximately 25,000, with additional temporary seating of approximately 5,000 giving a total capacity of 30,000

3. the main stand and the north west stand will both have roofs and overall 90% of the seating capacity will be covered
4. the playing surface will be rectangular in shape to minimise development costs and accordingly the playing surface will not cater for cricket
5. the stadium will include 18 corporate boxes (with a capacity of 16 people per box) and a corporate lounge for up to 1,000 people
6. in addition to corporate boxes, there will be a Founders Club facility catering for up to 120 people and a hirers' suite capable of accommodating 48 people
7. the hospitality facilities in the main stand (i.e. the corporate lounge, corporate boxes, founders club room and hirers suite) will be available for meetings, conferences and functions, thereby providing a multi purpose facility
8. the development cost of the Stadium (excluding University facilities) will be approximately $144 million, including land costs, but excluding any allowance for the future provision of a roof.
9. the development will create a hub of activity through the co-location of University departments and auxiliary services as well as a range of sport-focused tenancies and other organisations.

1.2 SWOT ANALYSIS

The following Table summarises the key strengths, weaknesses, opportunities and threats associated with the development of a new Carisbrook Stadium at Awatea Street.

Table 1.1: New Carisbrook Stadium SWOT Analysis

Strengths	Weaknesses
▪ A full roof or 90% of seating will be covered ▪ Totally new facility ▪ Synergies with University improve the stadium's revenue earning capability ▪ Multi purpose facility ▪ Located closer to the CBD & University ▪ Increased comfort for attendees ▪ Higher priced seating on sideline perimeters compared to terraces at the existing Carisbrook ▪ Meets NZRU requirements for Category B rugby tests ▪ Includes 4,600 temporary seats ▪ Adequate capacity of 30,000 ▪ Walking distance to CBD / restaurants / bars / entertainment ▪ Directly opposite the university oval (cricket) ▪ Car parking for cricket, university, stadium attendees ▪ Home for the Academy of Sport ▪ Home for major sports codes	▪ Significant capital funding from Otago Regional Council / Dunedin City Council likely to be required ▪ Ongoing operating subsidy from Dunedin City Council may be required ▪ 15 minute walk to centre of student campus ▪ University buildings provides minimal development & operational costs synergies due to university's stand-alone / design requirements ▪ Location not overly attractive for conferences because more than several minutes walk from hotels / shopping / restaurants

Table 1.1: Continued

Opportunities	Threats
▪ Attract back attendees who had stopped going to the existing Carisbrook ▪ Increase in average attendee ticket price ▪ Increase in food and beverage sales and commission income ▪ Naming rights income ▪ Seat sales income ▪ Increased test matches due to generation of higher yields ▪ Positive community pride & enjoyment ▪ Captures non-sports events ▪ Captures banqueting functions ▪ Provide accommodation & cost savings for university physical education department, student health services, university (student gym) ▪ Capital funding priorities or diverted from Dunedin City Council's existing long term project plan ▪ Major draw card for students coming to Dunedin, especially physical education majors	▪ NZRU increasing its requirements for stadiums to host rugby tests ▪ Waikato Stadium's aggressive event strategy ▪ Lack of funding support from Councils ▪ Main city event organisers find Dunedin too small ▪ Dunedin City Council's reluctance to consent to office and retail developments on stadium site (preferring to keep them in the CBD) ▪ Small population (123,000) ▪ Relatively small catchment area for major sport and non-sporting events (compared with Hamilton & Christchurch) ▪ Lower socio – economic profile (students, elderly). According to Statistics NZ the average income of people in Dunedin City is $14,500 compared with $18,500 for all of New Zealand ▪ Very low population growth rate, forecasted to be 6% from 2001 – 2026 whereas Auckland, Christchurch and Wellington are forecast to increase by 44%, 16% & 19% respectively ▪ Time pressure, stadium must be completed by 2011 to host Rugby World Cup matches ▪ Loss of audience to Sky TV and big screen TV ▪ Competition from Dunedin / Edgar Centres

(Source: HHTL)

1.3 COMPARATIVE ANALYSIS

There are a number stadiums and indoor arenas throughout New Zealand that compete with Carisbrook Stadium. Table 1.2 compares these stadiums' strengths and weaknesses to the proposed new Carisbrook Stadium.

Table 1.2: New Carisbrook Stadium Comparative Analysis

Competitive Stadiums	Capacity	Why Included in Competitive Set	Weaknesses in Comparison to New Carisbrook	Strengths in Comparison to New Carisbrook
Vector Arena	12,000	Large Enclosed Venue Capacity similar to new Carisbrook's likely achievable attendance New Venue Population & catchment area	Smaller capacity in comparison to new Carisbrook mitigated by Ericsson, North Harbour & Eden Park	Larger population & catchment Located in a main centre for large international sport & non-sport events
Ericsson Stadium	26,000	Similar capacity Population & catchment area	No roof Residential location	Larger population & catchment Located in the main centre for large international sport & non-sport events
Eden Park	47,000	Large capacity Population & catchment area New Zealand's largest stadium	No roof Residential location	Larger population & catchment Located in the main centre for large international sport & non-sport events
North Harbour	25,000	Similar capacity Population & catchment area Aggressive marketing due to financial stress	Further out from Auckland central CBD	Larger population & catchment Located in the main centre for large sport & non-sport events
Waikato Stadium	26,350	Similar capacity New venue Population & catchment area	Not enclosed mitigated by weather not being as cold. Yields are likely to be lower	Larger population & catchment

Table 1.2: Continued

Competitive Stadiums	Capacity	Why Included in Competitive Set	Weaknesses in Comparison to New Carisbrook	Strengths in Comparison to New Carisbrook
Westpac Stadium	34,500	Multi-use venue Established positive reputation for sport & non-sport events Walking distance to CBD Population & catchment area	No roof	Larger population & catchment Located in main centre for large international sport & non-sport events Larger capacity
Jade Stadium	36,000	Only 3 hours from Dunedin Population & catchment area	No roof	Larger population & catchment Located in a main centre for large international sport & non-sport events
Westpac Centre Christchurch	9,100	Enclosed venue Population & catchment area	Smaller capacity Enclosed venue only, no flexibility with roof	Larger population & catchment Located in a main centre for large international sport & non-sport events
Waikato Events Centre	8,000	New venue Enclosed venue Population & catchment area	No stadium facilities	Larger population & catchment

(Source: HHTL)

Key findings from the comparison include:

- All of the stadiums and arenas are more modern than the existing Carisbrook
- All of the stadiums and arenas have territorial local authority funding for development cost & / or operational subsidy (except Eden Park)
- Some also have regional council funding
- All of the cities have a larger local population and wider regional catchment population and the populations are growing much faster than Dunedin
- Carisbrook Stadium will compete with Westpac Centre in Christchurch predominantly for international concerts
- Waikato Events Centre will not compete directly with Carisbrook Stadium since it does not have stadium facilities.

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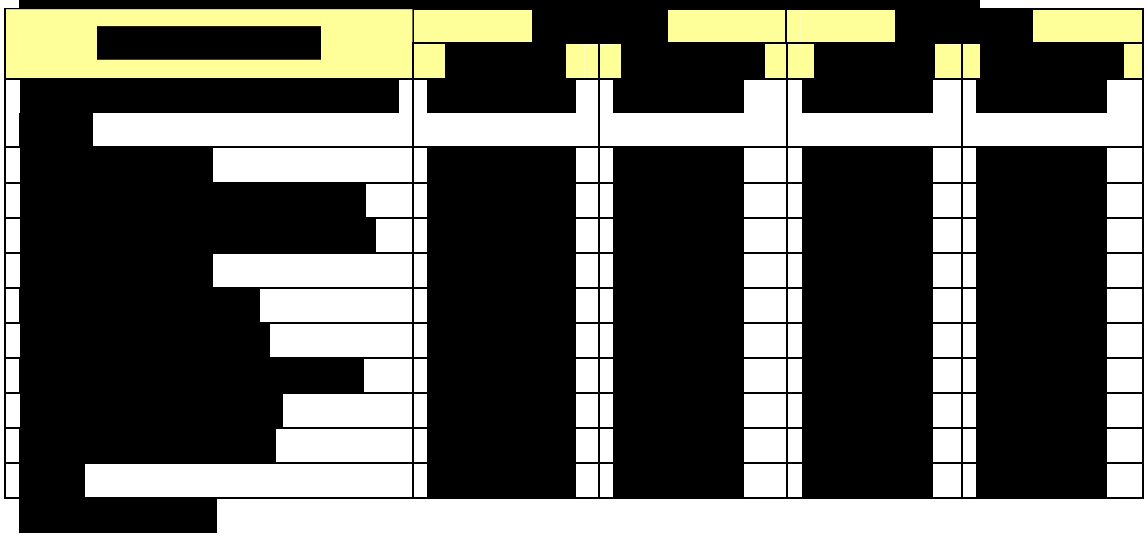


3. POTENTIAL ACTIVITY SCHEDULE

The Trust and other stakeholders in the new Carisbrook Stadium have emphasised the importance of the venue being multi-purpose in nature in order to best meet the community's needs. This aspiration has guided the identification of potential activity that could be catered for at the new Stadium.

The following organisations have been consulted to identify potential activity for the venue:

1. Otago Rugby Football Union ("ORFU")
2. Otago Cricket
3. Sport Otago
4. Tourism Dunedin
5. New Zealand Rugby Union
6. DMG Worldwide Media
7. Dunedin City Council (Events Management)
8. Pacific Entertainment
9. Otago United
10. Sports Impact
11. Otago University
12. Edgar Centre
13. Dunedin Centre
14. DCMS
15. AkB Conference Management

A broad review of events held at other major venues throughout New Zealand has been undertaken. This helps to provide a context for considering potential events for a new Carisbrook Stadium.

It is important to note that in terms of sports events, rugby and cricket are the only two sports codes that attract significant numbers of people to venues throughout New Zealand. This dynamic is highlighted by the fact that rugby and cricket accounts for anywhere between 56% and 100% of sport activity at the major sports venues of Eden Park, Westpac Stadium, Jade Stadium, Carisbrook, and Waikato Stadium. If Waikato Stadium, which hosts nine national league soccer matches per year and does not cater for cricket, was removed from consideration, rugby and cricket would account for approximately 90 – 100% of sport activity at the major grounds.

Most New Zealand stadiums have little non-sport activity on their turf surface. Westpac Stadium, which is widely regarded as New Zealand's premier multi-purpose venue, has hosted an average of 2 – 3 non-sport events per annum on their turf surface over the last three years.

The primary source of non-sport event activity at major stadiums in New Zealand relates to functions, exhibitions, and meetings under the Stadium's stands (rather than sports field events). It is understood that these events account for a significant level of revenue at Eden Park, Waikato Stadium, and Westpac Stadium.

3.1 CRICKET

Discussions have been held with Ross Dykes, the CEO of Otago Cricket. The existing Carisbrook Stadium has not been used for international cricket in recent years primarily because of difficulty in confirming bookings, the poor standard of the players' facilities, and the poor media facilities.

The proposed rectangular field at the new stadium precludes any cricket activity and the projections exclude cricket accordingly.

However, Ross Dykes confirmed that it is Otago Cricket's intention to develop University Oval to a standard that could host test cricket and potentially ODIs. This will require further embankment work, installation of lights, and general improvements so as to provide a capacity for approximately 10,000 people.

Once University Oval is developed to this standard there would be the potential to host one test match per year in addition to approximately eight domestic cricket matches (encompassing one day matches, four day matches, and 20 Twenty matches).

There could be the potential for the new stadium to work jointly with the University Oval to realise cost efficiencies in relation to ground maintenance and also to potentially secure better catering contract terms on the basis of improved revenue potential. We have not, at this preliminary stage, factored these aspects in to our financial projections.

The CEO also advised that an indoor cricket training facility located under one of the Stadium stands would be attractive to Otago Cricket. However, their limited ability to pay rental for such a facility means it is unlikely to be the best use of the available space.

Because of the current uncertainty surrounding the planned developments at University Oval, Otago Cricket expressed strong interest in the Option 2a development on the existing Carisbrook site. Assuming the upgrade of the main stand satisfactorily addressed the players' facilities and media facilities. Otago Cricket would encourage New Zealand Cricket to use the venue for test cricket and ODIs. Otago Cricket anticipates that under the Option 2a upgrade Carisbrook could host a test match every second year and ODI each year.

3.2 RUGBY

Extensive consultation has been undertaken with the Otago Rugby Football Union as well as discussions with the New Zealand Rugby Union in relation to potential rugby activity at the new venue.

The proposed new Stadium is viewed positively by both Unions and seen as potentially assisting in addressing a number of issues in relation to rugby matches in Dunedin. At a high level, it is believed that the new Stadium will assist in:

1. securing Rugby World Cup matches for Dunedin
2. securing category B All Black test matches (ie: all matches other than Australia and the Lions)
3. securing a Lions provincial match
4. securing the Otago / Southland regions' continued presence in Super 14 rugby
5. lifting average crowd attendance
6. lifting average achieved ticket prices
7. increasing food and beverage income to the Trust.

However, it is important to note that a number of people we consulted with raised issues that will impact on the extent to which the above can be achieved. These include:

1. Dunedin's relatively low income levels ($14,500, compared with a national average of $18,500), which impact on the ability to pay to attend rugby matches
2. Dunedin's relatively low population (120,000) and the low population in the surrounding regions to support major rugby fixtures
3. The increasing corporatisation and commercialisation of rugby, which is likely to result in major rugby events increasingly being focused on Auckland, Wellington, and Christchurch
4. The long term viability of the Highlanders franchise will be critical if the activity projections are to be realised
5. A general tendency for reduced attendance levels at rugby matches in New Zealand, which has been particularly noticeable in 2006. The NZRU believes that general attendance levels in 2006 have been impacted by the Lions tour in 2005 which resulted in a significant increase in rugby matches at premium price levels
6. The increase in rugby coverage on Sky Television is believed to be contributing to reduced attendance levels throughout New Zealand.

Key points to note in relation to match allocations by the NZRU (for All Black tests, RWC, Lions matches, and Junior All Blacks matches) include:

1. The NZRU will not guarantee match allocations to venues in advance
2. New Zealand has more test capable grounds than the number of test matches that are hosted in any one year
3. The NZRU is committed to supporting rugby in the Otago / Southland regions and believes that allocating test matches and RWC matches to suitable venues in the region is an important part of this support
4. In allocating test matches to grounds, the NZRU adheres to its Test Match Allocation Policy which states that in order for a venue to host Category B tests, it must have (as a minimum):
    a. 25,000 seats
    b. 7,500 covered seats
    c. Appropriate facilities for teams, coaches, match officials, TMO, Citing Commissioner, judicial officials, medical and drug testing
    d. Appropriate pitch quality and drainage
    e. 3 TV broadcaster positions
    f. 3 radio broadcaster positions
    g. 30 print media positions indoors and up to 50 outdoors
    h. Permanent clean big screen
    i. Clean from signage rights below 1.2 metres
    j. Onsite lounge available for NZRU VIP hosting (150 capacity)
    k. Hospitality able to be managed by NZRU
    l. 2,000 prime seats available for NZRU use
    m. Ability to comply with NZRU pourage requirements
5. The NZRU's test allocation policy also takes into consideration the yield opportunities that are offered by the different venues. Typically the grounds that offer superior yield have a higher ratio of covered seating in prime viewing areas, have areas available for NZRU to use for commercial hospitality, and have strong regional patronage ensuring good ticket sales
6. A key component of the Junior All Blacks annual programme is the new Pacific Five Nations tournament. The NZRU is committed to this tournament as long as the IRB continues to financially support the tournament. However, the number of games held in New Zealand is likely to reduce over time. In the inaugural year Samoa and the Junior All Blacks both played their home games in New Zealand. The NZRU believes that long term it will be preferable to play more games within the Pacific Islands.

3.3 SOCCER

Otago United is one of the eight teams that participate in the New Zealand Football Championship ("NZFC"). Otago United has traditionally been based at the Caledonian Ground, which it shares with athletics. However, it has been experiencing difficulty in gaining access to the ground for its preferred kick-off times and has therefore started using Carisbrook for its home matches.

The existing Carisbrook facility meets Otago United's requirements and is well regarded for its great playing surface. The main facility requirements are a small food and beverage offering and media facilities (primarily print media but also radio and television highlights).

The NZFC season runs from October to March and Otago United has 10-11 home games per season. Otago United can adjust its match schedules to fit in around rugby and they therefore do not anticipate any problems in using the venue through the early stages of Super 14 in February and March. They typically attract 800 – 1,000 spectators to their matches.

Otago United's main reasons for having interest in the new stadium include ground availability and the anticipated good playing surface.

3.4 OTHER SPORT

Consultation with organisations including Sport Otago has not identified any other significant sport use for the venue.

3.4.1 RUGBY LEAGUE

Rugby League is not a major sport in Dunedin and therefore the most likely means of attracting rugby league to the venue would be to bid for either a New Zealand Warriors pre-season match or an Australian club's "home match" against the New Zealand Warriors.

In order to attract these matches, the venue would need to act as a promoter and take the financial risk on the event as the club's require the venue to pay all expenses and pay an appearance fee to the clubs. It is our understanding that a crowd of approximately 15,000 is required to make these events viable.

The Hamilton City Council has recently cancelled its contract to host Parramatta Eels "home matches" at Waikato Stadium as it had cost the Council $200,000 over three years.

For these reasons rugby league has not been considered as a potential use for the venue.

3.4.2 OTHER SPORT EVENTS

In discussing other possible sports uses with Sport Otago, it was identified that if the venue had a roof, the Stadium could be a suitable venue for Sport Otago's "Have a Go" event.

Sport Otago prefers a stadium environment so as to provide a secure environment for children and has traditionally used the Edgar Centre because the indoor venue provides protection against inclement weather.

A new Stadium with a roof could host a "Have a Go" event for suitable turf-based activities but the event would not provide any venue hire revenue.

Other potential sport uses including netball, basketball, tennis, beach volleyball and boxing have been considered because the Stadium will have the flexibility in seating to accommodate such events. However, preliminary consultation has not identified a strong demand for these events at the new Stadium. Key factors that are likely to inhibit the hosting of such events include:

1. the cost of set-up compared to the cost of "purpose-built" facilities
2. the adequacy of the Edgar Centre for existing requirements
3. the impact on the atmosphere / ambience of such events when staged within such a large facility that can not easily be sub-divided.

3.5 DAY MEETINGS AND FUNCTIONS

Many New Zealand stadiums, in particular Eden Park, Waikato Stadium, and Westpac Stadium, have developed a significant day meetings and functions business.

The Dunedin Convention Activity Survey, undertaken for Tourism Dunedin, identifies that there were 355 day meetings in Dunedin in the year ended June 2006, which was an increase of approximately 72% from the 206 meetings reported in 2004. These day meetings had an average size of 38 attendees. It is important to note that these figures exclude University meetings held on-site as the University does not contribute to the survey.

The consultation has identified strong support for the belief that the new Stadium could be a significant participant in Dunedin's day meeting and functions market. This view is based on:-

1. the high level of utilisation in Dunedin's existing meeting rooms, particularly the mid-size rooms at Dunedin's hotels (eg: Mercure, Scenic Circle City Hotel)
2. the desire for modern facilities to offer a contrasting option to many of Dunedin's facilities that are contained within Heritage buildings
3. the lack of larger function / banquet options in Dunedin resulting in organisers needing to either incur significant costs "dressing up" large venues or limiting the size of their functions
4. physical co-location with the University.

The success of the new facility as a day meeting and function venue will be dependent upon:-

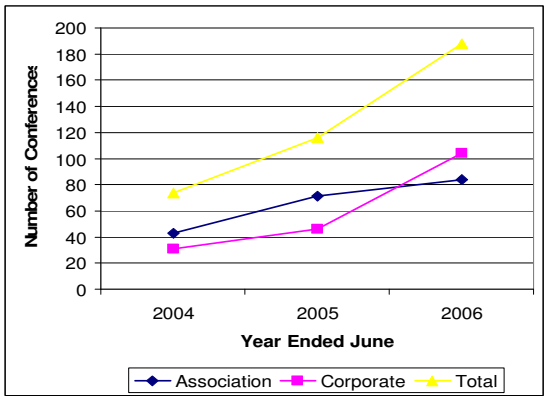
1. the mix and flexibility of the meeting / function space
2. the high quality and ambience of the available space
3. the ease of access to the space (i.e. attendees not getting lost within the larger stadium complex)
4. the quality and reputation of the in-house caterer
5. the availability of adequate car park spaces
6. The Edgar Centre's ability to maximise its potential given its limited in-house catering facilities, (a feasibility study proposed for this facility to be incorporated)
7. The Dunedin Centre's ability to compete prior to and after its proposed refurbishment.

3.6 CONFERENCES

According to the Dunedin Convention Activity Survey (year end June 2006), undertaken for Tourism Dunedin, multi-day conference activity has grown significantly in the past two years and there has also been a dramatic shift in the type of conference attracted to Dunedin.

Figure 3.1 shows evidence of dramatic movement in the Dunedin conference market for multiple day events held in the last three years.

Figure 3.1: Dunedin Activity – Multi Day Events



(Source: Angus & Associates)

For the year end June 2006, Dunedin hosted a total of 188 multiple day events, this represents an increase of 152% since the year ended June 2004. 55% of this conference activity was stimulated by corporate events, up 235% on 2004. The most significant industry sectors contributing to this activity included Training / Education (18%), Agriculture (14%) and Management / PR (12%).

The size of conferences held in Dunedin is above the average for New Zealand as a whole. In the year ended June 2006, the average size of a conference in Dunedin was 75 delegates, compared with 70 delegates for the overall New Zealand market.

Dunedin is very much a domestic conference destination. This is highlighted by the fact that in the year ended June 2006, 73% of conference attendees came from the domestic market, with 22% from the local Dunedin market, and only 5% from the international market.

New Zealand stadiums have not tended to be significant participants in the multi-day conference market because:

1. the available space often lacks the necessary flexibility and flow for conferences
2. stadiums are generally located some distance from major hotel accommodation
3. the meeting space often does not have the high technical requirements sought by conference organisers.

The consultation has identified widely varying views as to the role a new Carisbrook Stadium would play in the conference market. It is acknowledged that the Stadium's distance from the city's major hotels is a disadvantage. Some Professional Conference Organisers ("PCOs") believe that this factor removes the venue from consideration because the strength of Dunedin as a conference destination is that "everything is within the city centre". Others, however, believe it is an aspect that can be overcome through the use of buses providing a pick up & drop off service.

Some PCOs expressed concern that stadiums do not work as conference venues because they are so large and even big conferences struggle to develop any atmosphere when the overall venue looks empty. Other PCOs though pointed to the fact that the Stadium would provide a modern alternative to the heritage options (including the Dunedin Centre) that currently exist in the city.

On balance, it is believed that the Stadium could have a role to play in the Dunedin conference market. However, this is likely to be as a "support" venue, rather than as Dunedin's primary conference venue. As well as the Stadium's distance from major hotels, its limited break-out room flexibility, limited exhibition space (particularly if UNIPOL is based on the ground level of the southeast stand), and reluctance of many PCOs to use Stadium facilities means that it is likely to attract a relatively low level of activity compared to the Dunedin Centre, for which a major upgrade, and expansion is being proposed.

Discussions with the Dunedin Centre suggest they have up to 28 conferences a year of 100 or more delegates.

The conference projections for the Stadium are based on an assumption that the Dunedin Centre will be upgraded and will remain as Dunedin's primary convention facility.

3.7 CONCERTS / EVENTS

The existing Carisbrook Stadium has staged concerts and events on several occasions. It is understood that these have generally not been financially successful due to the low attendance levels. As part of the consultation process many people have identified concerts and events as potential activities for a new Stadium with a roof. These people have identified the inclusion of a roof as being a critical success factor that would:-

1. provide a unique covered venue with a capacity twice the size of New Zealand's next largest covered venue (Vector Arena)
2. ensue attendees enjoy a more comfortable environment thereby assisting ticket sales
3. provide promoters confidence that the event will not be weather affected

The success of the Stadium in the concert / event market will be highly dependent on the capability and networks of the Stadium management. Promoters have even suggested the stadium may need to establish their own in-house production company in-order to maximise activity levels and the venue's share of event revenue. This would, however, require the venue to accept a high level of commercial risk which could see the Trust exposed to significant losses if events do not run successfully.

Westpac Stadium is often cited as an example of a New Zealand Stadium that is successful in securing concerts. Westpac has averaged 2-3 concerts per annum over the last three years, including an annual community concert. The proposed Stadium would have the advantage of a roof but compared to Westpac it will face a number of significant competitive disadvantages. These include:-

1. a relatively small local population base with a very low population base in neighbouring centres
2. a local population base with relatively low household income
3. a greater dependence on non-local attendees to achieve required audience sizes but Dunedin has relatively inferior air links and a high average cost of travel
4. absence of a well-funded and coordinated city event strategy and associated event bid fund.

It is understood that Sportsimpact will soon be commencing development of an events strategy for Dunedin. The consultation for this project has included an initial discussion with Sportsimpact to assess the potential roles a Stadium might play in the city's events market. Given the event strategy consultation is yet to commence, specific event opportunities were not able to be identified. However, the discussion did reinforce the fact that it will be vital for the Stadium to be an active participant in the implementation and delivery of the event strategy if the Stadium's event potential is to be optimised. The Stadium would be likely to have a role to play in relation to community level events, "city well being" events, and icon events.

On balance it is believed that the Stadium with a roof could have the ability to host up to three concerts or commercial events a year, including a community related event.

3.8 EXHIBITIONS

Dunedin currently has a relatively small public exhibitions market and the primary venue for these events is the Edgar Centre. The Edgar Centre hosts approximately eight exhibitions a year, the largest being the Women's Lifestyle Expo, which attracts approximately 14,000 people over two days.

It is our understanding that, while this venue is not purpose-built for exhibitions, it is generally regarded as being adequate for the purpose. The main limitation with the venue is that it has a high utilisation for community sport and we understand that this can impact on its availability for public exhibitions from time to time.

With Unipol currently proposed to occupy the space under the East stand, the new stadium will not have any dedicated exhibition space. If the stadium has a roof, we believe there may be an opportunity for some public exhibition activity. However, the ambience of this space is likely to mean that it would be more suited to large format shows, such as a boat show. Given the popularity of the Edgar Centre for exhibitions and the new stadium's limited facilities, limited exhibition activity has been provided for under Option 1a.

3.9 ANNUAL EVENT ACTIVITY PROJECTIONS

Based on the consultation outlined above, the following event activity projections have been prepared. Separate projections have been prepared depending on whether or not the Stadium includes a complete roof.

Table 3.1: Event Activity Projections

Events	With Roof	Without Roof
Rugby Tests	3 tests every 4 years	2 tests every 3 years
RWC	5 games in 2011	Same as with roof
Junior All Blacks	1 match every 2 years	Same as with roof
Lions Provincial Match	1 match in 2017	Same as with roof
Super 14	5 - 6 games per year	Same as with roof
Super 14 Finals	1 finals match every 5 years	Same as with roof
Air NZ Cup	5 games annually	Same as with roof
Air NZ Cup Finals	2 semi-final matches every 3 years and one final every 3 years	Same as with roof
Club Rugby Finals	1 game annually	Same as with roof
Soccer	10-11 games per year	Same as with roof
Community Concert	1 concert every year	No concert
Commercial Concert	2 concerts every year	1 concert every year
Other	1 event every year	No event
Day Meeting - Small	60 in year 1, lifting to 90 per year by 2014	Same as with roof
Day Meeting - Medium	20 in year 1, lifting to 30 per year by 2014	Same as with roof
Day Meeting - Large	9 in year 1, lifting to 14 per year by 2014	Same as with roof
Conference - Small	3 conferences (75 pax) per year	Same as with roof
Conference - Large	2 conferences (200 pax) per year	Same as with roof
Exhibitions	1 exhibition per year	No exhibitions
Functions	12 in Year 1, lifting to 15 from 2013	Same as with roof

(Source: HHTL)

Based on discussions with the NZRU, the new stadium would compete with other "second tier" venues, such as North Harbour Stadium, Waikato Stadium, and Yarrow Stadium for test matches. The provision of a roof would not, in itself, guarantee the venue a test match every year, but would likely achieve a total of three matches over four years, these being a premier match played on a bi-annual basis with 'other test' matches being played once every fours years (on alternate years from a premier match). Without a roof, this could potentially drop to one premier match and one 'other test' being played at the stadium every three years, due to the lack of differentiation relative to competing venues and the lower revenue generating capability that an open air stadium would have.

The NZRU is not in a position to commit to the allocation of matches for RWC 2011. For the purpose of the projections it has been assumed that a new Stadium in Dunedin would capture approximately 10% of the available matches, which equate to five matches. Based on discussions with the NZRU, the number of games allocated to Dunedin is unlikely to be influenced by whether or not the venue has a roof.

It has been assumed that the new Carisbrook Stadium will be able to capture a Junior All Blacks test every second year, as part of the Pacific Five Nations tournament. This assumption remains if the venue does not have a roof.

The Lions are scheduled to tour New Zealand again in 2017. Dunedin would likely require a new venue in order to host a provincial match as part of the Lions Tour. The NZRU has advised that the inclusion of a roof is unlikely to influence this decision.

The number of Super 14 matches reflects the current tournament structure and assumes one match per year is hosted at Rugby Park. The hosting of finals matches is reliant on the Highlanders finishing in the top two after the round robin competition. Based on historical trends, we have allowed for this to occur once every five years.

The number of Air NZ Cup matches reflects the current tournament structure and assumes the Otago team hosts an average of one "top 6" match and one quarter final each year. The hosting of finals matches is reliant on the Otago team finishing in the top two after the round robin competition. Based on historical NPC trends, the model allows for two semi finals matches and one finals match to be played every three years.

For the purpose of the projections, it has been assumed that one weekend of club rugby finals will be held at the new Stadium each year.

It is assumed that Otago United will move from the existing Carisbrook to play home games and any subsequent championships at the new stadium. Soccer games to be held at the stadium have been projected to be 10-11 per year.

The concert projections are based on the assumptions outlined in Section 3.6. One other event, being a "Have a Go" event has been assumed. As discussed with Sport Otago, it is likely that this would be contingent on the Stadium having a roof.

The day meeting activity is based on an assumption that the stadium will capture approximately 10% of general Dunedin day meetings in Year 1 supplemented by University-related meetings business, increasing up to 15% of general Dunedin day meetings by Year 5, also supplemented by University-related meetings business. The level of day meeting business will not be influenced by whether the Stadium has a roof.

A provision for one exhibition per annum has been made assuming the venue has a roof and that exhibition organisers would be able to utilise the playing surface.

Provision has also been made for 12 to 15 evening functions / banquets each year. It is assumed that these would include annual sports awards, gala functions, fundraising events, etc. The level of functions business will not be influenced by whether the Stadium has a roof.

3.10 PROJECTED AVERAGE EVENT SIZE

Based on the consultation outlined above, we have prepared the following average event size projections. Separate projections have been prepared depending on whether or not the Stadium includes a complete roof.

Table 3.2: Projected Average Attendance at the New Carisbrook Stadium per Event

Events	With Roof	Without Roof
Tests – Premier Category B	30,000	30,000
Tests – Other Category B	22,500	21,375
RWC	22,180	20,794
Junior All Blacks	8,000	7,200
Lions Provincial Match	30,000	30,000
Super 14	16,000 – 18,000	14,400 – 16,200
Super 14 Finals	22,500	21,375
Air NZ Cup	10,000	9,000
Air NZ Cup Finals	14,000 (semi final) 18,500 (final)	12,600 (semi final) 16,650 (final)
Soccer	1,000	900
Club Rugby Finals	4,000	3,600
Community Concert	15,000	15,000
Commercial Concert	15,000 – 18,000	12,500
Other	2,000	-
Day Meeting - Small	30	30
Day Meeting - Medium	100	100
Day Meeting - Large	150	150
Conference - Small	75	75
Conference - Large	225	225
Exhibitions	5,000	-
Functions	250	250

(Source: HHTL)

It has been estimated that the new Stadium, with a roof, will average 100% capacity for premier test rugby and 75% for 'other tests'. This allows for the fact that the mix of tests is likely to fluctuate with some having stronger spectator appeal than others. If the stadium does not have a roof, it has been predicted that attendance to premier matches will remain constant, but a 4% dilution in attendance for 'other tests' has been assumed.

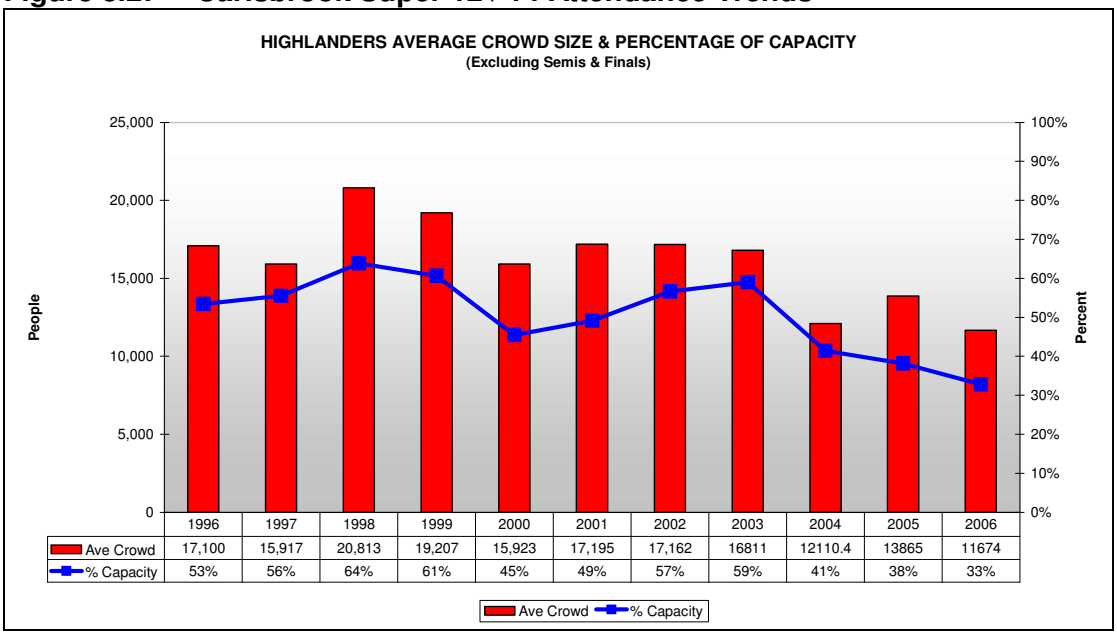
The RWC estimates of average attendance are based on an assumed match profile. As noted in Section 3.2, there is currently no commitment as to where matches will be allocated. The average attendance projection of 22,180 (74% capacity) assumes the ground will host one All Blacks match, one other top tier match, and three other matches featuring teams with lesser drawing power. A 70% capacity (20,794) is assumed if the stadium does not have a roof.

The Junior All Blacks matches in 2006 attracted relatively modest crowds. We have assumed that these would achieve 27% capacity (8,000) with 3% dilution if the stadium does not have a roof.

The 2005 DHL Lions Tour achieved sell-out crowds in most venues (although Carisbrook was an exception). It is assumed that the 2017 tour will achieve a capacity crowd irrespective of whether the Stadium has a roof.

Figure 3.2 illustrates the Super Rugby attendance trends at Carisbrook over the last eleven years.

Figure 3.2: Carisbrook Super 12 / 14 Attendance Trends



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Ave Crowd	17,100	15,917	20,813	19,207	15,923	17,195	17,162	16811	12110.4	13865	11674
% Capacity	53%	56%	64%	61%	45%	49%	57%	59%	41%	38%	33%

(Source: ORFU)

As is shown above, Carisbrook achieved good growth in spectator attendance during the first four years of the Super 12 with average attendances reaching a high of 21,500 in 1999. However, Carisbrook experienced a sharp decline in attendances in 2000 and again in 2004. Since 2004 Carisbrook has achieved an average crowd of 12,500. Traditionally, Carisbrook attracts a larger crowd for Crusaders home matches, and these occur on a bi-annual basis.

Under the scenario of the new Stadium having a roof, we have allowed for the Stadium having an average attendance of 18,000 people for the years which feature the Crusaders and 16,000 for the years that do not host Crusaders matches. This compares to an average attendance of approximately 16,000 that has been achieved at Waikato Stadium for Super 12 matches since it opened.

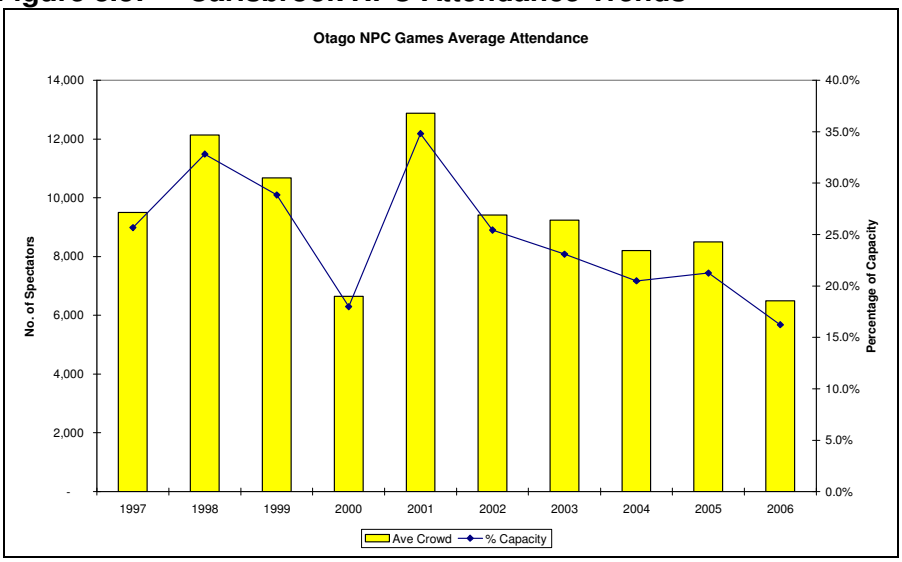
An average crowd of 18,000 equates to approximately 60% capacity. In comparison, the percentage capacities achieved at the other four franchise home venues are:

- Eden Park: 75 – 77%
- Waikato Stadium: 60 – 70%
- Westpac Stadium: 80 – 88%
- Jade Stadium: 75 – 85%.

If the stadium does not have a roof, we have allowed for a 6% dilution factor. For Super 14 finals matches we have allowed for 75% capacity with a 4% dilution factor if the Stadium does not have a roof.

Figure 3.3 below illustrates the average attendance at Carisbrook for NPC / Air New Zealand Cup matches over the last ten years.

Figure 3.3: Carisbrook NPC Attendance Trends



(Source: ORFU)

As is shown, attendance levels fluctuate strongly between 1997 and 2001. However, in three of those five years average attendance levels were above 10,500 people. A strong decline was experienced in 2002 and since this time the attendance has continued to decline to approximately 6,500 in 2006.

Under the scenario of the new Stadium having a roof, we have allowed for an average attendance of 10,000 people. This is a 54% increase on the 2006 attendance level. The average attendance for Air New Zealand Cup at the other major stadiums in 2006 was:

- Eden Park: 13,550
- Waikato Stadium: 11,300
- Westpac Stadium: 13,050
- Jade Stadium: 17,600.

Therefore, we are projecting that the new Stadium would have an attendance below that of the other major venues but we believe this is justified given the local population base and the significant lift in attendance that we are projecting relative to current actual attendance at Carisbrook.

If the stadium does not have a roof, we have allowed for a 5% dilution in attendance.

For Air NZ Cup Finals, we have allowed for a 47% capacity crowd, with a 5% dilution if the stadium does not have a roof.

At this stage an assumption of an average 15,000 people has been made for community concerts, and 15,000 to 18,000 for commercial concerts on the basis that every second year the commercial concert is likely to be a "second tier" concert. An 8% dilution in "second tier" concerts and an 18% dilution for major concerts have been provided for if the Stadium does not have a roof.

An average attendance of 2,000 people has been assumed for an annual "Have a Go" event.

We have modelled three different categories of day meetings from small at 30 people, up to large at 150 people. These categories broadly reflect the profile of the overall day meetings market. While the overall day meeting market in Dunedin has an average attendee size of 38 people, we have allowed for an overall average meeting size of 93 (across the three categories) on the assumption that the venue will target the larger end of the day meetings market.

We have made an assumption that exhibitions will attract an average of 5,000 people per day.

Functions and banquets are assumed to average approximately 250 people.

The stadium will face strong competition from the proposed upgraded Town Hall and Edgar Centres.

4. FINANCIAL PROJECTIONS

The financial projections have been prepared on the basis of the Trust independently operating the stadium. It is noted that the Stadium will face a significant overhead structure and, in order to realise efficiencies of scale, it may be desirable for a single entity to be established to operate a number of Dunedin's public assembly facilities (eg: Carisbrook, the Dunedin Centre / Town Hall, Edgar Centre) in a similar way in which Vbase manages Jade Stadium, the Christchurch Town Hall, Christchurch Convention Centre and the Westpac Centre Trust. The financial projections do not include any provision for such an arrangement.

Summary projections for the new Carisbrook Stadium are summarised in Table 4.2 for Years 1 and 15. Separate projections have been prepared depending on whether or not the Stadium includes a complete roof.

Table 4.2: Summary Financial Projections ($000s)

	Option 1a		Option 1b	
	2011	2025	2011	2025
Revenue	2,731	4,386	2,370	3,984
Variable Costs	715	1,397	680	1,381
Overheads	1,563	2,858	1,436	2,512
EBITDA	453	131	254	91

(Source: HHTL)

As is illustrated in Table 4.2, the Stadium is projected to have greater revenue earning capability with a roof than without. Despite slightly higher operating costs under the roof scenario, a higher EBITDA performance is projected. However, as noted in Section 4.3, there is a higher degree of uncertainty surrounding the incremental operating costs that will be attributable to the roof.

4.1 REVENUE ASSUMPTIONS

The key assumptions on which the revenue projections are based are summarised in the following sub-sections.

4.1.1 VENUE HIRE

Venue hire for ticketed events has been modelled as a percentage of ticket revenue. The assumed average ticket prices for the Stadium are summarised in Table 4.3.

Table 4.3: Assumed Average Year 1 Ticket Prices (excl GST)

Events	With Roof ($)	Without Roof ($)
Tests – Premier Category B	70	65
Tests – Other Category B	55	52
RWC	37	35
Junior All Blacks	24	23
Lions Provincial Match	69	65
Super 14	23	22
Super 14 Finals	27	26
Air NZ Cup	15	14
Air NZ Cup Finals	17	15
Club Rugby Finals	4	4
Soccer	4	4
Commercial Concert	53	53

(Source: HHTL)

At a high level, the average ticket prices have been estimated by taking into account:

1. current ticket prices at Carisbrook Stadium
2. current prices at other New Zealand venues
3. the number of complimentary seats that will need to be made available to hirers
4. the proportion of premium seating that will be available between the 22 metre lines
5. the pricing increases that could be achieved due to improved spectator comfort as a result of the proposed roof
6. the need to ensure prices remain affordable so as to improve attendance levels at events.

For Rugby World Cup 2011, the following specific assumptions were made in order to derive an overall average ticket price:

1. The ticket price for the assumed All Black's match would be 30% above a standard Carisbrook test match
2. The ticket price for the "Category A" match would be the same as for a standard Carisbrook test match
3. The three other matches would have ticket prices in line with Air NZ Cup prices in order to encourage high attendance.

The assumed venue hire rates are summarised in Table 4.4 below.

Table 4.4: Assumed Average Venue Hire per Event Day

Events	Venue Hire ($ / day or % of Total Revenue)
Rugby - Tests	7.5%
RWC	6.0%
Junior All Blacks	7.5%
Lions Provincial Match	8.0%
Super 14	10.0%
Air NZ Cup	12.5%
Club Rugby Finals	12.5%
Commercial Concert / Event	8.0%
Other*	$0
Soccer	$1,000
Community Concert / Event	$5,000
Day Meeting - Small	$275
Day Meeting - Medium	$400
Day Meeting - Large	$600
Conference – Small	$1,800
Conference - Large	$5,000
Exhibitions	$5,500
Functions	$900

(Source: HHTL)

The venue hire percentages for ticketed events reflect existing commercial arrangements in the New Zealand market.

With NZRU matches (eg: tests, RWC, Junior All Blacks, and Lions), the NZRU contracts the local provincial union to run the match on its behalf. As part of this commercial arrangement the NZRU has traditionally paid the local union 15% of the ticket revenue. The local rugby union then contracts with the local venue and negotiates its own venue hire. For test matches and Junior All Blacks matches, it is assumed that this traditional model will continue and the Otago Rugby Union will pay half of the 15% to the new Stadium as venue rental.

With the 2005 DHL Lions Tour, we understand the NZRU negotiated lower venue rental percentages than the traditional 15%. It is assumed that the NZRU will again pay a lower venue rental percentage for the 2017 tour and we have assumed this to be 10%, with the ORFU paying 80% of this to the venue.

It is anticipated that the precedent set with the DHL Lions Tour will result in lower venue rental percentages being paid for the RWC and pressure from a wide variety of regions to host matches will result in venue rentals being lower than those for the DHL Lions tour. Accordingly, it is assumed that a total venue rental of 8% will be paid, with the ORFU paying 75% of this to the new Stadium as venue rental.

For concerts, a venue rental of 8% of ticket revenue has been assumed, in line with current market levels for concert events.

The venue rental prices for day meetings, exhibitions, and functions have been set on the basis of benchmarking against other major New Zealand venues.

4.1.2 FOOD AND BEVERAGE COMMISSION

The operating projections assume that the venue will appoint a caterer with an exclusive contract for all events and functions. In return, it is assumed that the caterer will pay commission equating to 15% of total annual food and beverage revenue. This commission percentage is in line with the levels currently being paid by catering companies for venues of this size and revenue levels projected.

In reviewing current food and beverage sales at Carisbrook, it is evident that revenue is well below that achieved at many other stadiums. In part this is because there is no exclusive catering arrangement. To project food and beverage revenues for the new stadium, benchmarking has been undertaken using available information in relation to other New Zealand stadiums.

Based on this benchmarking, our assumed average food and beverage spend per head for each event type, is summarised in Table 4.5.

Table 4.5: Assumed Average Food & Beverage Spend per Person per Event (excl GST) (Year 1)

Events	General	Corporate / Ground Membership
Tests – Premier Category B	9.50	60.00
Tests – Other Category B	8.75	55.00
RWC	11.00	90.00
Junior All Blacks	8.00	50.00
Lions Provincial Match	9.50	80.00
Super 14	7.15	50.00
Super 14 Finals	7.15	50.00
Air NZ Cup	5.35	45.00
Air NZ Cup Finals	5.35	45.00
Club Rugby Finals	2.00	35.00
Community Concert / Event	2.00	
Commercial Concert / Event	5.35	50.00
Other	-	-
Day Meeting - Small	10.00	-
Day Meeting - Medium	12.50	-
Day Meeting - Large	15.00	-
Conference – Small	70.00	
Conference - Large	62.00	
Exhibitions	2.50	-
Functions	85.00	-

(Source: HHTL)

Food and beverage commission of 15% would be earned on all of the above expenditure except RWC, where clean stadium requirements will mean the venue will forego any rights to catering commission.

4.1.3 SIGNAGE REVENUE

The new Stadium will be entitled to revenue from the sale of permanent signage located above 1.2 metres from ground level. Signage located below this level is traditionally available for the venue hirer.

The existing Carisbrook Stadium earns approximately $156,000 from permanent signage. It is anticipated that the new Stadium should have the capability to materially increase this level of signage revenue. This is especially so, if the stadium has a roof, as it will provide the venue with an additional point of difference in the market.

Based on limited benchmark information, an allowance has been made for signage revenue of $275,000 assuming the Stadium has a roof, reducing down to $250,000 if it does not have a roof.

4.1.4 CORPORATE SUITES

The new Stadium will earn annual revenue from corporate suite licences. The existing Carisbrook Stadium earns an average of approximately $23,500 per annum on each of its 42 boxes although it did not charge an initial premium. Based on benchmarking against other major stadiums, and taking into account the likely range of events at the Stadium, it is believed that there should be an opportunity to lift the annual licence fee from the existing Carisbrook level.

The extent to which the premium can be lifted will be constrained by the anticipated lease terms, which will enable the venue to use corporate suites for hosting day meetings and as support venues for conferences.

It is believed that the presence of a roof is likely to positively impact the annual corporate suite licence as it will provide the venue with a point of difference. Therefore an allowance for corporate suite licence revenue of $40,000 per suite per annum has been made assuming a roof. This is assumed to reduce to $37,500 per annum without a roof.

4.1.5 CLUB MEMBERSHIPS

As noted in Section 2.2, it will be prudent for the Stadium to provide for a club membership subscription fee after five years to protect the venue against the risk of escalating ticket prices and numbers of events. Under the scenario of a roof, an allowance has been made for a club membership subscription fee of $300 per member to commence in Year 6. Assuming no roof, the subscription fee has been reduced to $275 per member.

4.1.6 LEASE RENTALS

The concept plans provide for ancillary space that will be available for lease within the stand structure.

The ORFU has indicated that it could utilise office space at the Stadium for its 20 staff but that it is not a fundamental requirement and it could lease space elsewhere. Assuming the ORFU does become a tenant of the Stadium, an allowance has been

made for 300m^2 at $150 per square metre. This will provide annual revenue of $45,000.

In addition both Sport Otago and the Academy of Sport have indicated potential interest in becoming tenants. Assuming both of these two organisations do become tenants, a provision has been made for a further $100,000 in lease rental revenue, based on their existing premises costs.

4.1.7 DEVELOPMENT LEVY

It is understood that Westpac Stadium operates a development levy system in order to raise funds to assist in the repayment of debt and provision for future building development. Eden Park is also proposing to implement a development levy scheme to assist in repaying debt on its proposed expansion.

For the purpose of this analysis, it has been assumed that the Carisbrook Stadium Trust will implement a development levy scheme. Under this scheme the stadium will levy a $1 charge on all ticketed events.

4.1.8 CAR PARK REVENUE

Provision has been made for 300 car parks on the stadium site. It is assumed that 100 of these will be non-revenue generating and used by the Stadium for corporate-suite holders, Founders club members, functions, day meetings, and internal requirements.

The other 200 car parks will be revenue generating with the University of Otago assumed to have a lease over the car parks for five days a week for 40 weeks of the year. On the assumption of $25 per week per car park, this will provide revenue of $200,000 per annum.

In addition, the car parks will be available for event days and it is assumed they will be sold for an average of $15 per car park.

4.1.9 RESIDENT'S FOCUS GROUP

Two randomly selected groups of 10 Dunedin residents each discussed the relative merits of the new Stadium and an upgraded Carisbrook. The general concerns were that:-

1. high entertainment value events were critical to attracting back local attendees. This included international sports and non-sports (eg: concert) events
2. transport access and car parking needed to be readily available
3. rugby matches needed to be of an attractive style, include pre-match and half time entertainment and involve role models for locals
4. toilets, food outlets, seating and other basic spectator facilities needed to be modern
5. events should focus on attracting Dunedin residents, rather than out of city visitors, to increase local support and commitment to the Stadium
6. a roof was not considered as important as high value entertainment events attractive to Dunedin residents.

4.2 VARIABLE COST ASSUMPTIONS

The primary variable costs that will be incurred by the new Stadium relate to non-recoverable event costs and rebates in relation to ground member and corporate suite tickets (as referred to in Section 2.2).

Most costs related to the staging of events are recovered from the venue hirer, in addition to the venue rental charge. However, some direct costs are absorbed by the venue and the extent of these often depends upon the size of the venue rental charge. Examples of non-recoverable costs can include:

- Ushers
- Incidental energy costs
- A component of security costs
- Gate keepers.

The assumptions in relation to non-recoverable costs per event day are summarised in Table 4.6.

Table 4.6: Non-Recoverable Costs per Event Day – Year 1

Events	Cost
Rugby - Tests	7,500
RWC	5,000
Junior All Blacks	7,500
Lions Provincial Match	7,500
Super 14	15,000
Super 14 Finals	15,000
Air NZ Cup	12,500
Air NZ Cup Finals	12,500
Club Rugby Finals	300
Soccer	300
Community Concert / Event	4,000
Commercial Concert / Event	12,500
Other	2,000
Day Meeting - Small	60
Day Meeting - Medium	75
Day Meeting - Large	100
Conference – Small	150
Conference - Large	250
Exhibitions	1,500
Functions	90

(Source: HHTL)

The non-recoverable costs for Super 14 and NPC are assumed to be significantly higher than for NZRU events because the venue receives a higher venue hire percentage and is therefore assumed to be liable for a higher proportion of event costs.

Ticket revenue rebates to venue hirers in relation to pre-sold ground member seats and corporate suites will represent a significant cost to the new Stadium. These costs have been modelled on the basis of average ticket prices for premium seats at

each type of event, which is consistent with the practice at other venues. No ticket rebate is assumed for RWC on the basis that the ground membership and corporate suite leases would exclude rights to these matches, in line with the event's clean stadium requirements.

The ticket revenue rebates per match are summarised in Table 4.7 below.

Table 4.7: Ticket Revenue Rebate Per Match ($000s)

	With Roof		Without Roof	
	2011	2025	2011	2025
Tests – Premier Category B	176	232	172	227
Tests – Other Category B	141	186	137	181
RWC	-	-	-	-
Junior All Blacks	62	81	60	79
Lions Provincial Match	175	231	171	226
Super 14	48	64	47	62
Super 14 Finals	56	74	55	72
Air NZ Cup	31	41	30	40
Air NZ Cup Finals	34	45	33	44
Club Rugby Finals	8	10	8	10

Note: these rebates are payable per event. Not all of the above events occur each year and some events occur multiple times (eg: Super 14)
(Source: HHTL)

4.3 OVERHEAD COST ASSUMPTIONS

Overhead costs have been modelled using existing Carisbrook overhead costs as a base and referencing to available information in relation to other New Zealand venues. A provision has been made for incremental costs, such as irrigation, ground maintenance, and air reticulation systems attributable to a permanent roof structure but as the roof option is unique there is significant uncertainty as to the potential cost level.

Table 4.8: Overhead Cost Estimates ($000s)

	With Roof		Without Roof	
	2011	2025	2011	2025
Salaries & Wages	555	747	555	747
Administration	162	229	162	229
Sales & Marketing	70	99	70	99
Cleaning	78	112	78	112
Energy	77	162	60	126
Security	11	20	11	20
Building Maintenance	100	427	80	342
Ground Maintenance	150	405	85	230
Governance	100	141	100	141
Rates	110	218	100	198
Insurance	150	297	135	267
Total	1,563	2,858	1,436	2,512

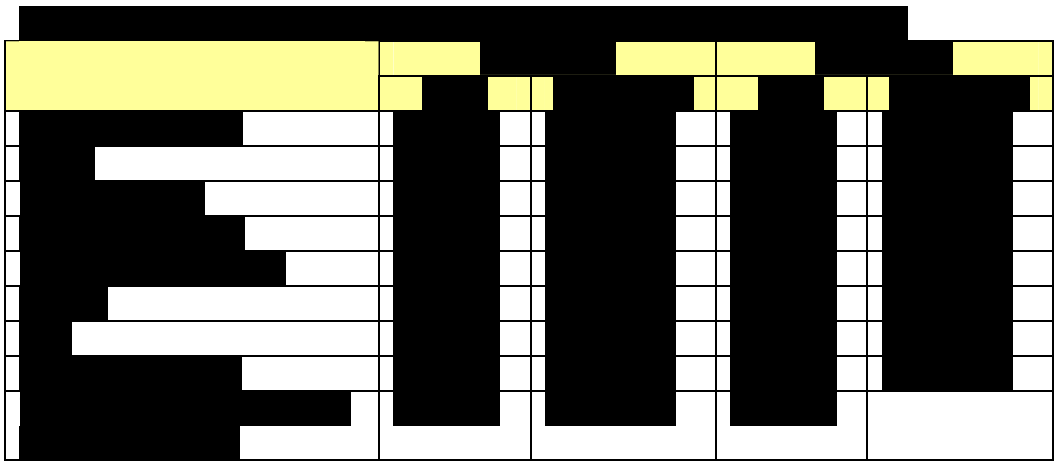
(Source: HHTL)

The salaries and wage estimates assume the following staffing:

- Chief Executive
- Event Manager
- Sales & Marketing Manager
- Accounts Clerk
- PA
- Ground Staff (x3).

4.4 [redacted]

[redacted]



5. ECONOMIC IMPACT ESTIMATE

It is important for decision makers to understand the flow on effects of decisions on capital expenditure. In particular, large capital projects that are likely to have extensive and wide ranging effects on the local and regional economies.

The key purpose of this section is to provide summaries of the economic impact of various capital expenditure options currently before Dunedin and Otago decision makers on the development of a new stadium at the Awatea Street site.

This analysis focuses on the direct and total impacts in NPV terms, net of a base case scenario where nothing is done. The base case assumes far fewer games of rugby in particular occur within Dunedin so the city benefits to a far lesser degree from any flow on effects of increased tourist expenditure.

It is also important to note that a wide range of other factors need to be taken into consideration in making a fully informed decision that are not covered in this report. These cover the impacts on the environment, in the social sphere and on culture. University of Otago has undertaken a separate social impact assessment.

The economic impact assessment has been undertaken in relation to both the Dunedin City and the Otago Region economies.

The broad approach to the assessment is based on work undertaken by BERL in 2003 for Dunedin City Council, which appraised Carisbrook Stadium upgrade options at that time. The key similarity in approach is that the assessment looks at potential economic costs and benefits of the redevelopment options. As with the earlier BERL analysis, this analysis adopts a relatively narrow view of costs and benefits and does not consider all social costs and benefits. This analysis does, however, differ from the BERL analysis in a number of important ways:

1. it considers all incremental activity at the stadium, not just test match rugby and Super 14 rugby
2. it includes expenditure of visiting media and event organisers as well as visiting spectators
3. it allows for the retention of local resident expenditure in the local economy as a result of not having to travel elsewhere to attend events
4. it allows for the loss of local resident expenditure from the local economy as a result of spending on event tickets sold by non-local event organisers (eg: NZRU)
5. impacts are considered over the assumed 50 year life of the asset (rather than the first 15 years in the BERL analysis) and all impacts are discounted to provide a present value as at 2011. Future impacts have been discounted at 7.5% per annum
6. economic impacts are considered in terms of total value added, rather than total expenditure as it is the total valued added (or total contribution to GDP) that is retained within the local economy and represents the “benefit” to the local economy. By contrast total expenditure includes expenditure that occurs outside the local economy.

In order to assess the incremental activity attributable to the new stadium options, it is necessary to develop a scenario of future activity at the existing Carisbrook Stadium if no upgrade or redevelopment work is undertaken. Key assumptions within this scenario are that:

1. Dunedin will continue not to host test match rugby
2. Dunedin will not host Rugby World Cup matches in 2011
3. Dunedin will cease to be a base for a Super 14 franchise from 2011
4. Dunedin will not host a Lions provincial match in 2017.

The activity assumptions for the two new stadium options are summarised in Section 4.

There are 4 key components to this analysis:

1. Estimating the total direct expenditure arising from the events, from the Dunedin Council, event organisers, teams, media, spectators and others.
2. Estimating the net additional expenditure into Dunedin City and the Otago Region economies by only including visitors from outside of the region which are visiting the area with the key purpose of attending the event (expenditure in these areas that would have occurred in any case has been excluded).
3. Identify Maintenance, Capital and Operating loss associated with the stadium, assess the opportunity cost of these expenditures and then net these costs from the capital works expenditure effects.
4. Analysing the net additional direct expenditure by each spending group through an Input-Output model of Dunedin City and the Otago Region economies, to assess the economic impacts in terms of direct and total output, value added and employment.

5.1 VISITOR EXPENDITURE - DUNEDIN CITY

At the Dunedin City level, visitor expenditure attributable to the new stadium arises as a result of an increase in non-Dunedin visitors that visit primarily because of events at the stadium. The percentage of non-Dunedin visitors attending events will depend upon the event's status and its ability to draw people from further a field. The assumed percentage of non-Dunedin visitors is based on our extrapolation of previous research undertaken by Dunedin City Council and utilised by BERL.

The assumed increase in the average number of annual visitors (over 50 years) to Dunedin as a result of the new stadium is summarised in Table 5.1 below.

Table 5.1: Estimated Average Annual Increase in Visitors

	Option 1a		Option 1b	
	Non Otago	Oth. Otago*	Non Otago	Oth. Otago*
Rugby Tests	6,560	3,300	5,460	2,820
RWC	840	340	790	320
Junior ABs	60	120	30	60
Lions – Prov.	980	260	980	260
Super 14	11,590	14,600	10,300	12,970
Air NZ Cup	1,460	2,900	1,060	2,100
Other Sport	-	70	-	10
Concerts	3,930	4,400	1,210	970
Conferences	260	40	260	40
Functions	70	360	-	-
Total	25,760	26,400	20,090	19,550

*ie: non-Dunedin Otago visitors
(Source: HHTL)

The assumed average expenditure per person is based on our extrapolation of previous research undertaken by Dunedin City Council and utilised by BERL, as well as research undertaken by Covec in relation to the 2005 DHL Lions Tour, as summarised in Table 5.2 below.

Table 5.2: Estimated Average Expenditure per Person

	Non Otago	Oth. Otago*
Rugby Tests	$261	$170
RWC	$392	$255
Junior ABs	$209	$136
Lions – Prov.	$441	$287
Super 14	$209	$136
Air NZ Cup	$209	$136
Other Sport	$209	$136
Concerts	$209	$136
Conferences	$866	$563
Functions	$209	$136

(Source: HHTL, BERL)

Based on the estimated incremental visitors and the average trip expenditure, the present value of incremental expenditure over 50 years is summarised in Table 5.3.

Table 5.3: Present Value of Visitor Expenditure – Dunedin City ($m)

	Option 1a		Option 1b	
	Non Otago	Oth. Otago	Non Otago	Oth. Otago
Accommodation	16.8	6.5	14.0	5.2
Food & Beverage	36.1	24.3	29.6	18.9
Retail	17.7	10.5	14.3	8.1
Transport & Travel	18.5	6.5	15.6	5.0
Recreation & Other	6.8	6.2	5.4	4.7
Total	95.8	54.1	79.1	41.8

(Source: HHTL)

Under Option 1a it is projected that the increased event activity will result in present value incremental visitor expenditure of $149.9 million over 50 years ($95.8 million from non-Otago visitors and $54.1 million from Otago visitors). Under Option 1b, the slightly lower level of increased activity is projected to result in present value incremental visitor expenditure of $120.9 million.

5.2 VISITOR EXPENDITURE – OTAGO REGION

At the Otago Regional level, visitor expenditure attributable to the new stadium arises as a result of an increase in non-Otago visitors that visit primarily because of events at the stadium.

The assumed increase in the average number of annual visitors (over 50 years) to Otago as a result of the new stadium is summarised in Table 5.4 below.

Table 5.4: Estimated Average Increase in Annual Visitors to Otago

	Option 1a	Option 1b
Rugby Tests	6,560	5,460
RWC	840	790
Junior ABs	60	30
Lions – Prov.	980	980
Super 14	11,590	10,300
Air NZ Cup	1,460	1,060
Other Sport	-	-
Concerts	3,930	1,210
Conferences	260	260
Functions	70	-
Total	25,760	20,090

(Source: HHTL)

The assumed average expenditure per person is based on our extrapolation of previous research undertaken by Dunedin City Council and utilised by BERL, as well as research undertaken by Covec in relation to the 2005 DHL Lions Tour, as summarised in Table 5.5 below. The higher average spend, compared to that for Dunedin City, reflects the fact that these visitors incur expenditure in other locations within Otago than just Dunedin City during their visit.

Table 5.5: Estimated Average Expenditure per Person

	Non Otago
Rugby Tests	$311
RWC	$467
Junior ABs	$249
Lions – Prov.	$526
Super 14	$249
Air NZ Cup	$249
Other Sport	$249
Concerts	$249
Conferences	$1,032
Functions	$249

(Source: HHTL)

Based on the estimated incremental visitors and the average trip expenditure, the present value of incremental expenditure over 50 years is summarised in Table 5.6 below.

Table 5.6: Present Value of Incremental Expenditure ($m)

	Option 1a	Option 1b
Accommodation	21.8	18.1
Food & Beverage	42.6	35.0
Retail	18.8	15.3
Transport & Travel	21.2	18.0
Recreation & Other	9.7	7.9
Total	114.1	94.2

(Source: HHTL)

Under Option 1a it is projected that the increased event activity will result in present value incremental visitor expenditure of $114.1 million over 50 years. Under Option 1b, the slightly lower level of increased activity is projected to result in present value incremental visitor expenditure of $94.2 million.

5.3 LOCAL RESIDENT EXPENDITURE FLOWS – DUNEDIN CITY

The increased event activity will also result in changes in local resident expenditure flows. Positive changes will occur as a result of local residents not having to travel outside Dunedin to attend events that will be available at the new stadium. This positive change will be off-set to some extent by the expenditure of local residents on tickets to events organised by non-Dunedin event organisers (eg: NZRU). This expenditure leaves the City and then a proportion re-enters as the event organiser incurs expenses in Dunedin (event organiser expenditure is accounted for in Section 5.1.5).

The projected average annual reduction in residents travelling outside Dunedin to attend events is summarised in Table 5.7 below.

Table 5.7: Projected Reduction in Residents Travelling Outside Dunedin

	Option 1a	Option 1b
Rugby Tests	1,260	1,020
RWC	380	360
Junior ABs	30	10
Lions – Prov.	190	190
Concerts	3,050	820
Conferences	280	280
Exhibitions	230	-
Total	5,420	2,680

(Source: HHTL)

For the purpose of the analysis it is assumed that the expenditure these residents would have incurred had they travelled would be the same as the expenditure level of visitors coming to Dunedin for comparable events. Therefore, the present value of resident expenditure retained in Dunedin over the 50 year period is as summarised in Table 5.8 below.

Table 5.8: Present Value of Resident Expenditure Retained in Dunedin ($m)

	Option 1a	Option 1b
Accommodation	4.0	2.3
Food & Beverage	13.9	8.3
Retail	5.7	3.5
Transport & Retail	3.6	2.1
Recreation & Other	3.2	2.0
Total	30.3	18.3

(Source: HHTL)

The increase in the projected average annual number of local residents attending events organised by non-Dunedin organisations is summarised in Table 5.9 below.

Table 5.9: Projected Local Attendance to Non-Dunedin Organised Events

	Option 1a	Option 1b
Rugby Tests	10,130	8,850
RWC	950	890
Junior ABs	560	260
Lions – Prov.	750	750
Concerts	20,350	5,490
Conferences	380	380
Exhibitions	4,500	-
Total	37,610	16,620

(Source: HHTL)

Based on the average ticket prices summarised in Section 4, the present value of expenditure lost from the Dunedin economy over the 50 year period due to the increased number of events organised by non-Dunedin entities, is as summarised in Table 5.10 below.

Table 5.10: Present Value of Expenditure Lost From Dunedin Economy ($m)

	Option 1a	Option 1b
Event Tickets	-26.2	-14.7

(Source: HHTL)

5.4 LOCAL RESIDENT EXPENDITURE FLOWS – OTAGO REGION

The increased event activity will also result in changes in Otago resident expenditure flows. Positive changes will occur as a result of residents not having to travel outside Otago to attend events that will be available at the new stadium. This positive change will be off-set to some extent by the expenditure of residents on tickets to events organised by non-Otago event organisers (eg: NZRU). This expenditure leaves the Region and then a proportion re-enters as the event organiser incurs expenses in Otago (event organiser expenditure is accounted for in Section 5.6).

The projected average annual reduction in residents travelling outside Otago to attend events is summarised in Table 5.11 below.

Table 5.11: Projected Reduction in Residents Travelling Outside Otago

	Option 1a	Option 1b
Rugby Tests	1,750	1,410
RWC	530	500
Junior ABs	40	20
Lions – Prov.	260	260
Concerts	3,590	970
Conferences	310	310
Exhibitions	250	-
Total	6,730	3,470

(Source: HHTL)

For the purpose of the analysis it is assumed that the expenditure these residents would have incurred had they travelled would be the same as the expenditure level of visitors coming to Otago for comparable events. Therefore, the present value of resident expenditure retained in Otago over the 50 year period is as summarised in Table 5.12 below.

Table 5.12: Present Value of Resident Expenditure Retained in Otago ($m)

	Option 1a	Option 1b
Accommodation	7.5	5.2
Food & Beverage	14.2	9.6
Retail	6.1	4.1
Transport & Retail	7.8	5.6
Recreation & Other	3.1	2.1
Total	38.7	26.6

(Source: HHTL)

The increase in the projected average annual number of Otago residents attending events organised by non-Otago organisations is summarised in Table 5.13 below.

Table 5.13: Projected Local Attendance to Non-Otago Organised Events

	Option 1a	Option 1b
Rugby Tests	13,940	12,110
RWC	1,330	1,2500
Junior ABs	700	330
Lions – Prov.	1,050	1,050
Concerts	23,940	6,460
Conferences	420	420
Exhibitions	5,000	-
Total	46,370	21,610

(Source: HHTL)

Based on the average ticket prices summarised in Section 4, the present value of expenditure lost from the Otago economy over the 50 year period due to the increased number of events organised by non-Otago entities, is as summarised in Table 5.14 below.

Table 5.14: Present Value of Expenditure Lost From Otago Economy ($m)

	Option 1a	Option 1b
Event Tickets	-41.9	-22.7

(Source: HHTL)

5.5 VISITING MEDIA EXPENDITURE

Account has also been taken of incremental expenditure in Otago by visiting media as a result of increased sport activity. For the purpose of this analysis it has been assumed that all media expenditure occurs within Dunedin City and therefore the impact is the same for Dunedin City as for the Otago Region.

The assumed average number of media per sport event is summarised in Table 5.15 below. These assumptions are based on benchmarking against similar economic impact studies.

Table 5.15: Estimated Average Media per Sport Event

	Media
Cat B Rugby Tests - Premier	80
Cat B Rugby Tests - Other	48
RWC	100
Junior ABs	24
Lions – Prov.	200
Super 14	20
Air NZ Cup	20

(Source: HHTL)

Based on the projected increase in the level of activity the increase in the average annual number of non-Otago media over the 50 year period is as summarised in Table 5.16 below.

Table 5.16: Estimated Average Number of Non-Otago Media

	Option 1a	Option 1b
Rugby Tests	52	45
RWC	10	10
Junior ABs	-	-
Lions – Prov.	14	14
Super 14	93	93
Air NZ Cup	-	-
Total	170	162

(Source: HHTL)

The present value of the future incremental expenditure by visiting media over the 50 year period is as summarised in Table 5.17 below.

Table 5.17: Present Value of the Future Incremental Expenditure by Visiting Media ($m)

	Option 1a	Option 1b
Accommodation	0.6	0.6
Food & Beverage	0.4	0.4
Retail	-	-
Transport & Retail	0.9	0.9
Recreation & Other	0.4	0.4
Total	2.3	2.2

(Source: HHTL)

5.6 VISITING ORGANISER EXPENDITURE

The final component of event-related expenditure is the additional expenditure that occurs in the Otago economy from non-Otago event organisers choosing to bring additional events to Dunedin because of the new stadium. For the purpose of this analysis it is assumed that all event organiser expenditure occurs in Dunedin City resulting in the same impacts for Dunedin as for Otago.

The projected present value of expenditure by event organisers over the 50 year period is as summarised in Table 5.18 below.

Table 5.18: Present Value of Expenditure by Event Organisers ($m)

	Option 1a	Option 1b
Venue Hire	6.9	3.6
Accommodation	0.9	0.6
Food & Beverage	0.6	0.4
Retail	-	-
Transport & Retail	0.7	0.4
Recreation & Other	14.3	7.7
Total	23.3	12.6

(Source: HHTL)

5.7 ADDITIONAL STUDENT EXPENDITURE

The University of Otago believes that the co-location of the Stadium with University facilities has the potential to improve the attractiveness of the University amongst potential students. The University would be unique amongst New Zealand universities in being able to offer a "campus stadium" environment and it is believed that such a facility would hold strong student appeal, particularly amongst students studying sports-related degrees (eg: physical education, physiotherapy, etc).

The University has estimated that a covered stadium could assist it in attracting approximately 500 more students than it otherwise might. This estimate does not necessarily mean the University's roll will increase by 500 students in the short term, however, as it does anticipate a softening in student numbers due to demographic trends. The University does believe though that the stadium would assist in ensuring student numbers do not reduce by as much as they otherwise might.

If the stadium does not have a roof over the pitch, the University has estimated that the additional number of students may reduce to 300.

The University of Otago's 2004 Economic Impact Report demonstrated that the University's total annual expenditure equated to $35,000 per student. However, much of this expenditure is fixed in nature and would not be directly influenced by an increase of 300 - 500 students. Student expenditure will be the component that is most directly influenced by an increased student roll. For this reason, the economic impact analysis in relation to the University-related expenditure focuses on student expenditure.

The University has provided student expenditure information. The estimated Dunedin City portion of this expenditure is summarised in Table 5.19 below.

Table 5.19: Estimated Dunedin City Portion of Student Expenditure

	Expenditure Per Annum
University Fees	3,842
Rent	4,094
Food & Beverage	2,233
Retail	5,277
Transport	1,832
Total	17,278

(Source: HHTL)

The present value of incremental expenditure by university students over the 50 year period is summarised in Table 5.20 below.

Table 5.20: Present Value of Incremental Expenditure by University Students ($m)

	Option 1a	Option 1b
University Fees	26.2	15.7
Rent	28.0	16.8
Food & Beverage	15.2	9.1
Retail	36.0	21.6
Transport	12.5	7.5
Total	118.0	70.8

(Source: HHTL)

The estimated Otago Region portion of the University student expenditure is slightly higher than that for Dunedin City due to transport expenditure that is assumed to occur outside Dunedin. This is summarised in Table 5.21 below.

Table 5.21: Estimated Otago Region Portion of Student Expenditure

	Expenditure Per Annum
University Fees	3,842
Rent	4,094
Food & Beverage	2,233
Retail	5,277
Transport	2,290
Total	17,736

(Source: HHTL)

The present value of incremental expenditure by university students in Otago over the 50 year period is summarised in Table 5.22 below.

Table 5.22: Present Value of Incremental Expenditure by University Students ($m)

	Option 1a	Option 1b
University Fees	26.2	15.7
Rent	28.0	16.8
Food & Beverage	15.2	9.1
Retail	36.0	21.6
Transport	15.6	9.4
Total	121.1	72.7

(Source: HHTL)

5.8 TOTAL VISITOR EXPENDITURE

The overall present value of the net increase in visitor expenditure in Dunedin City over the 50 year period is summarised in Table 5.23 below.

Table 5.23: Overall Net Increase in Visitor Expenditure – Dunedin ($m)

	Option 1a	Option 1b
Non-Otago Visitors	95.8	79.1
Otago Visitors	54.1	41.8
Retained Resident Expenditure	30.3	18.3
Resident Ticket Expenditure Outflows	-26.2	-14.7
Visiting Media Expenditure	2.3	2.2
Visiting Organiser Expenditure	23.3	12.6
Additional Student Expenditure	118.0	70.8
Net Incremental Expenditure	297.7	210.2

(Source: HHTL)

The overall present value of the net increase in visitor expenditure in the Otago Region over the 50 year period is summarised in Table 5.24 below.

Table 5.24: Overall Net Increase in Visitor Expenditure – Otago ($m)

	Option 1a	Option 1b
Non-Otago Visitors	114.1	94.2
Retained Resident Expenditure	38.7	26.6
Resident Ticket Expenditure Outflows	-41.9	-22.7
Visiting Media Expenditure	2.3	2.2
Visiting Organiser Expenditure	23.3	12.6
Additional Student Expenditure	121.1	72.7
Net Incremental Expenditure	257.7	185.6

(Source: HHTL)

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

5.10 NET ECONOMIC IMPACT

Direct and 'flow on' economic impacts of events are frequently measured using regional input-output models. The key impacts considered are gross output, value-added (payments to all factors of production and including profits, depreciation, and wages and salaries) –measured in $m terms.

Value Added is the most important measure as it represents the amount of impact generated within or felt within the economy. It is synonymous with Gross Domestic Product (GDP) the standard measure of economic performance for regions and nations.

To estimate the economic impacts of the new Stadium on Dunedin City and Otago Region economies, Input-Output models for Dunedin City and Otago Region were used. These models identify the total output, value added and employment effects of additional expenditure generated by the Stadium which is directed to each sector (spend by all groups on food, drink, transport, construction, entertainment, and accommodation etc), and calculate the flow-on effects of this expenditure.

The additional expenditure has been allocated to relevant industry sectors to take into account different types of spending by each group and the flow on effects as directly impacted industries increase their purchases of intermediate inputs to meet the increased demand. The model estimates the direct value added and employment effects, and then applies the appropriate sector multipliers to take account of the indirect and induced impacts, and estimate the total impacts. These multipliers were estimated using Market Economics Ltd Input-Output Models for national, regional and territorial local authority level economies. These models are based on the Statistics New Zealand Inter Industry Transaction Tables (published in 2001) and have been used extensively for other comparable economic impact studies.

Economic impacts can be assessed in a number of ways. Each broad category of impact (Gross Output, Value Added, Household Income and Employment) can be assessed in terms of the direct, indirect and induced effects. These are defined as follows:

- **Direct Effects** – these are also termed the first round effects. They cover the direct spending that occurs for an event such as the RWC (direct ticket sales, direct organiser spend, direct spend associated with the event such as at restaurants, cafes, accommodation and retail outlets). This direct spending sustains a certain amount of direct employment to meet these direct needs, and generates a certain amount of direct value added ($).

- **Indirect Effects** – these are the effects that occur when suppliers to the directly impacted businesses have to increase their production to meet the increase in demand for goods and services. This requires the further purchase of other goods and services from their suppliers. Indirect effects are calculated in terms of indirect gross output ($), and value added ($).

- **Induced Effects** – the final category of economic impact covers the induced effect of additional wages and salaries paid into the regional economy inducing additional expenditure. When businesses either directly or indirectly impacted are assumed to be operating at maximum capacity, additional demand causes them to either hire additional workers or pay overtime. This means more money is available to households in the economy. The induced effect covers how this money then flows through the system as people spend more.

For the purposes of this Report, estimates of the direct and total effects are presented for value added. These total effects include all direct, indirect and induced impacts.

Net Expenditure and Transfers

Net effects rather than total effects of the event are the focus of this report, since the economic impact of the Stadium arises from the net additional expenditure flows, rather than the gross expenditure. Care must be taken to include only additional spending in the relevant geographic area, and to exclude "transfer" expenditure – money which would have been spent in the area in any case, but is spent on the event rather than alternative activity.

It is assumed that households and individuals operate with some sort of budget constraint, and that spending that occurs at the Stadium is spending that would have been directed elsewhere and is not newly created money. This means that spending by Otago residents is usually considered a transfer since it is presumed that the residents' money spent at the event would otherwise have been spent in the Regional economy (though this overstates the true level of transfer to some degree because a proportion of residents' expenditure is normally spent on 'out-of-region' goods and services). The exception to this is the proportion of local resident spend that would otherwise have been spent attending an event at an alternative venue outside of the region (e.g. a rugby test in Christchurch).

However, expenditure by event organisers and media is almost all a net addition to the local economy, because it would not have been spent in the regional economy if the tournament were not held.

Similarly, visitor spending will generally be an addition to Otago's economy if the visitors came to Otago because of the event. As determined in other economic impact studies most spectators spend the major proportion of their time attending the event itself, and only a very minor share would have visited the area in the absence of the event.

Assumptions

In order to model the likely outcomes from any investment in the stadium a number of assumptions have had to be made. It is important to note that the results reported in this paper are tied directly to these assumptions. In addition, the assumptions made are not necessarily the only valid set of assumptions that could be made (potentially producing quite different results).

Assumptions can be split between those that are inherent in Input-Output modelling and those that are particular to the assessment of the 6 options discussed here.

Input-Output Modelling Assumptions

- The regional and City economies in the future have the same structure as the current economy – the IO model contains a transaction table that defines how sectors interact with each other. This is a static relationship meaning that technological change is assumed to be nil and proportion of imports to local production is held constant.
- The model aggregates the economy into 123 sectors each producing a single commodity – this leads to a degree of aggregation bias where variation within a sector is ignored.
- Households and businesses spend any (potential) reduction in rates in a similar way to that revealed in the Input-Output model. This is important in assessing the opportunity costs of the development
- The economy is operating at full capacity, such that a unit increase in final demand requires businesses to require more inputs from suppliers and requires workers to work more hours. This implies that firms do not have surplus stock that could be utilised to meet increases in demand, rather they must increase production. This is a long run view of the impacts, given that at some point firms would need to produce goods to meet the additional demands brought about by any stadium investment.

Carisbrook Redevelopment Modelling Assumptions

- Councils borrow to fund the majority of the capital cost of development
- Interest on any loans, 7%
- Discounting was conducted using the same formulation and discount rate as described by Horwath HTL
- Share of capital expenditure to develop the stadium options on works vs professional fees 90% and 10%
- Level of spend on capital expenditure within the Region equates to 75% of total capital costs - therefore 25% flows out to external contractors
- Distribution of maintenance costs are 100% within Otago Region but only 90% within Dunedin City.

5.10.1 OPTION 1A

For this scenario Market Economics has taken the direct additional spend ($279.6m), capital expenditure ($178.0m) and capital maintenance ($6.4m) derived by HHTL as an input for the calculation of the following results. The results in the table below show that the additional total spend associated with New Stadium with Roof scenario amounts to $627.7m for Dunedin City and $529.0m for the Otago Region. The actual impact on the regional economy is $223.3m and the impact on the Dunedin City is $268.0m (value added). The economic impact equates to 4,100 additional FTEs in the Region.

In order for Council to gain an insight into the relative merits of each scenario, from an economic perspective, we have developed a ratio between the total value added generated within the local economy as a result of stadium development and the opportunity cost in terms of the value added associated with the principal alternative. It is important to note that this is not a cost benefit comparison, rather a way of understanding differences between the alternative scenarios.

The ratio between the opportunity costs ($134.5m) and economic impacts shows that for every dollar of opportunity cost associated with the scenario there are $2.6 of net economic impact for the Region ($3.0 for Dunedin City)[5].

Table 5.27: Net Economic Impacts Option 1a

	Dunedin City	Otago Region
Direct Expenditure ($m)	$ 270.2	$ 223.1
Direct Value Added ($m)	$ 103.3	$ 83.4
Direct Employment (FTE)	2,797	2,317
Direct Household Income ($m)	$ 70.7	$ 59.7
Total Expenditure ($m)	$ 627.7	$ 529.0
Total Value Added ($m)	$ 268.0	$ 223.3
Total Employment (FTE)	4,910	4,133
Total Household Income ($m)	$ 139.2	$ 118.5

(Source: MEL)

5.10.2 OPTION 1B

For this scenario Market Economics has taken the direct additional spend ($307.3m), capital expenditure ($178.0m) and capital maintenance ($6.4m) derived by HHTL as an input for the calculation of the following results. The results in the table below show that the additional total spend associated with New Stadium with Roof scenario amounts to $717.1m for Dunedin city and $594.0m for the Otago Region. The actual impact on the regional economy is $254.0m and the impact on the Dunedin City is $309.5m (value added). The economic impact equates to 4,700 additional FTEs in the Region.

The ratio between the opportunity costs ($130.0m) and economic impacts shows that for every dollar of opportunity cost associated with the scenario there are $2.8 of net economic impact for the Region ($3.4 for Dunedin City).

[5] The calculation of the ratio is simply the sum of total value added impacts divided by the sum of opportunity costs in total value added.
For example Dunedin City Scenario 1a;

- Expenditure total value added impact $282.7m
- Maintenance total value added impact $3.1m
- Capital total value added impact $116.8m
  - Total value added impact =$282.7m+$3.1m+$116.8m ≈$402.5m
- Household Opportunity Cost in total value added=$74.7m
- Business Opportunity Cost in total value added=$59.8m
  - Total value added Opportunity cost=$74.7m+$59.8m ≈$134.5m

Ratio =$402.5m/$134.5m=3.0

Table 5.27: Net Economic Impacts Option 1b

	Dunedin City	Otago Region
Direct Expenditure ($m)	$ 313.7	$ 255.3
Direct Value Added ($m)	$ 123.0	$ 98.5
Direct Employment (FTE)	3,304	2,709
Direct Household Income ($m)	$ 82.3	$ 68.6
	$ -	$ -
Total Expenditure ($m)	$ 717.1	$ 594.0
Total Value Added ($m)	$ 309.5	$ 254.0
Total Employment (FTE)	5,672	4,703
Total Household Income ($m)	$ 159.0	$ 133.2

(Source: MEL)

6. SCENARIO ANALYSIS

This scenario analysis considers the financial and economic impact implications if the Trust is able to achieve a more optimistic level of activity at a new stadium.

This scenario analysis is based on the Option 1a development (new covered stadium at Awatea Street).

The following modifications to the baseline Option 1a activity levels (refer Sections 3.9 and 3.10) have been assumed:

1. All category B tests are "premier" matches attracting average attendances of 30,000
2. the number of community events increases to two per annum
3. the number of commercial concerts / events increases to three per annum
4. the number of exhibitions increases to two per annum
5. the number of small conferences increases to four per annum
6. the number of large conferences increases to four per annum
7. the average attendance at Super 14 matches is assumed to increase by 2,000 people.

This higher level of activity is assumed to result in signage revenue increasing by $75,000 per annum to $350,000 and the venue is assumed to be able to command $0.5 million more in naming rights sponsorship.

6.1 FINANCIAL PERFORMANCE

Summary optimistic scenario projections for the new Carisbrook Stadium are summarised in Table 6.1 for Years 1 and 15. The baseline projections for Option 1a are provided alongside for comparative purposes.

Table 6.1: Summary Financial Projections ($000s)

	Optimistic		Baseline		Variance	
	2011	2025	2011	2025	2011	2025
Revenue	3,044	4,830	2,731	4,386	313	444
Variable Costs	736	1,475	715	1,397	-21	-78
Overhead Costs	1,563	2,858	1,563	2,858	-	-
EBITDA	746	497	453	131	293	366

(Source: HHTL)

As is illustrated in Table 6.1, under the optimistic operating scenario, the Stadium could lift its revenue earning capability by approximately 10%. The increased activity would only have a marginal impact on variable costs and no impact on overhead costs, with 80 – 90% of the additional revenue flowing to the bottom line.

This additional EBITDA could assist the venue in servicing a small level of debt.

6.2 VISITOR EXPENDITURE – DUNEDIN CITY

The primary driver of increased visitor expenditure is the additional non-Dunedin visitors that will be attracted to the increased events under the optimistic scenario.

Table 6.2 summarises the projected level of non-Dunedin visitors under the optimistic scenario compared to the baseline.

Table 6.2: Estimated Increase in Average Annual Visitors

	Optimistic		Baseline	
	Non Otago	Oth. Otago*	Non Otago	Oth. Otago*
Rugby Tests	7,730	3,640	6,560	3,300
RWC	840	340	840	340
Junior ABs	60	120	60	120
Lions – Prov.	980	260	980	260
Super 14	13,350	16,680	11,590	14,600
Air NZ Cup	1,460	2,900	1,460	2,900
Other Sport	-	70	-	70
Concerts	6,230	7,520	3,930	4,400
Conferences	500	70	260	40
Functions	70	360	70	360
Total	31,240	31,970	25,760	26,400

*ie: non-Dunedin Otago visitors
(Source: HHTL)

As shown in Table 6.2, under the optimistic scenario 21% more visitors will be attracted to Dunedin than under the baseline scenario.

The overall present value of the net increase in visitor expenditure over the 50 year period for the optimistic scenario is summarised in Table 6.3 below.

Table 6.3: Overall Present Value of the Net Increase in Visitor Expenditure ($m)

	Optimistic	Baseline
Non-Otago Visitors	114.5	95.8
Otago Visitors	65.0	54.1
Retained Resident Expenditure	41.2	30.3
Resident Ticket Expenditure Outflows	-36.0	-26.2
Visiting Media Expenditure	2.5	2.3
Visiting Organiser Expenditure	31.9	23.3
Additional Student Expenditure	118.0	118.0
Total	337.0	297.7

(Source: HHTL)

The optimistic scenario is projected to result in a 13% increase in the present value of visitor expenditure over the 50 year life of the stadium.

6.3 VISITOR EXPENDITURE – OTAGO REGION

The primary driver of increased visitor expenditure is the additional non-Otago visitors that will be attracted to the increased events under the optimistic scenario.

Table 6.4 summarises the projected level of non-Otago visitors under the optimistic scenario compared to the baseline.

Table 6.4: Estimated Increase in Average Annual Visitors

	Optimistic	Baseline
	Non Otago	Non Otago
Rugby Tests	7,730	6,560
RWC	840	840
Junior ABs	60	60
Lions – Prov.	980	980
Super 14	13,350	11,590
Air NZ Cup	1,460	1,460
Other Sport	-	-
Concerts	6,230	3,930
Conferences	500	260
Functions	70	70
Total	31,240	25,760

*ie: non-Dunedin Otago visitors
(Source: HHTL)

As shown in Table 6.4, under the optimistic scenario 21% more visitors will be attracted to Otago than under the baseline scenario.

The overall present value of the net increase in visitor expenditure over the 50 year period for the optimistic scenario is summarised in Table 6.5 below.

Table 6.5: Overall Present Value of the Net Increase in Visitor Expenditure ($m)

	Optimistic	Baseline
Non-Otago Visitors	136.4	114.1
Retained Resident Expenditure	51.6	38.7
Resident Ticket Expenditure Outflows	-58.1	-41.9
Visiting Media Expenditure	2.5	2.3
Visiting Organiser Expenditure	31.9	23.3
Additional Student Expenditure	121.1	121.1
Total	285.4	257.7

(Source: HHTL)

The optimistic scenario is projected to result in an 11% increase in the present value of visitor expenditure over the 50 year life of the stadium.

6.4 ECONOMIC IMPACT

The economic impact is improved under the optimistic scenario because of the increased activity levels and these increases in activity also result in changes to opportunity costs due to increased naming rights and ground membership revenues.

A summary of the economic impact differences between the baseline and the optimistic scenario are summarised in Table 6.6 below.

Table 6.6: Projected Total Value Added ($m)

	Optimistic		Baseline	
	Dunedin	**Otago**	**Dunedin**	**Otago**
Positive Expenditure[6]	439.6	391.6	402.6	365.5
Opportunity Costs	130.0	137.6	134.5	142.1
Net Economic Impact (Total Value Added)	309.6	254.0	268.1	223.4

The optimistic scenario is projected to deliver a total value added outcome that is 15.5% higher at the Dunedin City level and 13.7% higher at the Otago Region level.

[6] This includes expenditure related to visitors, on-going capital maintenance, and the initial capital expenditure.