



Yarrow Stadium

Future 8 options : Value to Taranaki

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Making sense of the numbers

The TRC in 2018 retained BERL to complete a retrospective study of the last 15 years of *Yarrow Stadium value to the Taranaki community*, in a report of October 2018. The TRC, in collaboration with NPDC has now requested BERL to complete comparisons of the potential future values of the 8 Options proposed. These have been studied and planned by architects and engineers locally: by Elliott Architects, TSE Taranaki, Calibre Consulting and BCD Group. BERL assessed the options using the same approach as used in the 2018 retrospective study of the previous shape of Yarrow Stadium.

Our approach here is to project forward the similar types of values for the coming 15 years for each Option. There has been some expansion and changes in uses in recent years, so we have projected forward for fifteen years for each Option, the patterns of use over the last five years, making adjustments for changes in spending opportunities. There has been recent expansion of non-sporting uses of Yarrow Stadium, which we described, but were unable to value in the retrospective report. We can now provide order-of-magnitude values to the community, derived mainly from NPDC's reported revenue streams from the Stadium.

The Options are described in some detail in this report, but are generally characterised by the working titles we have given them. These titles and their capital costs are:

	<u>Capital Cost</u>
• Option One: Back to terraces	\$6 million
• Option Two: Putting Yarrow back right	\$55 million
• Option Three: Putting it right plus more stand seats	\$57 million
• Option Four: More opportunities to spend at Yarrow	\$69 million
• Option Five: Two Bigger main stands, one new	\$121 million
• Options Six: Option Five with more uncovered seats	\$133 million
• Options Seven and Eight: Via Westpac to Forsyth Barr	\$167 or \$271 million.

We think that the logic in terms of the potential scale of utilisation, and the potential investment which the Region's and City's communities are willing to make indicate that the main comparison shall be between the Option 2 (or 3) and the Option 4. We have analysed potential benefits from non-sporting functions and sporting events for main Options and related these to the capital costs of each Option. The summary of this information is in the table.

Option	15 years 2003 - 2017	Last 5 years	Option 1	Option 2	Option 3	Option 4	Option 5	Option 8
Capital costs and Benefits, Value to Taranaki (\$ million)								
Capital costs with enhancements			\$6	\$55	\$57	\$69	\$121	\$271
				<i>Taranaki value over next 15 years</i>				
Total value to Taranaki	\$180.2	\$70.0	\$1	\$210	\$214	\$275	\$319	\$381
Taranaki Value less Capital Cost			-\$6	\$155	\$157	\$206	\$198	\$110
Ratio of Benefit to Capital Cost			0.1	3.8	3.8	4.0	2.6	1.4

The general conclusion from these investigations is that Options 2, 3 or 4 are all tenable, and the selection can be made on the amount of investment funds available, and the level of hospitality and venue size required especially for non-sporting functions. Option 4 creates a value to Taranaki \$65 million more than Option 2, mostly from Stadium revenues due to the extra \$14 million investment.

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1 Yarrow stadium's future 8 Options and the past 15 years

The bodies with main responsibility for the ownership and operation of Yarrow Stadium, the Taranaki Stadium Trust, Taranaki Regional Council (TRC) and the New Plymouth District Council (NPDC) have defined 8 possible options for its restoration into an asset capable of becoming again an operating entity of benefit to the Taranaki communities and New Plymouth. The locally-based architects and engineers, Elliott Architects NP Ltd, TSE Taranaki, Calibre Consulting and BCD Group have planned, drawn up descriptions, and completed the costing of the *Base Cost* of implementing each of these 8 options and a list of costed enhancements.

The TRC in 2018 retained BERL to complete a retrospective study of the last 15 years of *Yarrow Stadium value to the Taranaki community*, in a report of October 2018. The TRC, in collaboration with NPDC has now requested BERL to complete comparisons of the potential future values of the 8 Options studied and described by the architects and engineers, using the same approach as used in the 2018 retrospective study of the previous configuration of Yarrow Stadium. This current *Future 8 Options: Value to Taranaki*, takes a high level approach, comparing values created by the 8 Options.

1.1 Approach to Option comparison

The retrospective October 2018 report took the timescale from when information is available for the new-configuration Yarrow Stadium in 2003, through fifteen years to 2017.

Our approach here is to project forward the similar types of values for the coming 15 years for each Option. There has been some expansion and changes in uses in recent years, so we have projected forward for fifteen years for each Option, the patterns of use over the last five years. We have allowed for increased opportunities to spend, on better seating opportunities, more food and beverage options, and the opportunity to enjoy conferences and other functions in more accommodating places. Particularly relevant is the fact that there has been recent expansion of non-sporting uses of Yarrow Stadium, which we described, but were unable to value in the 2018 retrospective report. We can now provide order-of-magnitude values to the community, derived mainly from NPDC's published revenue streams from their management of the Stadium, their catering information and cross-referring these to parameters from other industry sources.

Where an Option allows increased or reduced activity and increased or reduced uses compared with the last five years, the value is estimated accordingly. For comparison we have shown the values for the retrospective fifteen years 2003 to 2017.

In terms of the Optimistic-Pessimistic scale we aim to occupy the Realistic centre. We did this in projecting benefits for Westpac Stadium, and were accused by some commentators of being 'Hopelessly optimistic'. The actual benefits have been significantly higher than our projections. The performance of the previous configuration of Yarrow Stadium is a much better base for projecting the Option values for Yarrow than Athletic Park was for projecting the Westpac Stadium performance.

1.2 Potential enhancements to the Options

The architects' and engineers' information has defined and costed a range of important enhancements and refurbishments. Each of these enhancements are either an additional cost for some of the Options with a lower *Base Cost*, or they are Included in the *Base Cost* for the more comprehensive, more expensive Options. Many of the enhancements are deferred maintenance and minor upgrades or improved location of equipment like lights, generators, sewage etc. Others will improve operations, potential value earnings, and the customer experience.

2 Main characteristics of 8 Options

This section describes the main characteristics of each of the eight options and provides the *Base Cost* and the cost *With Enhancements*. For each Option it also describes the main assumptions made in estimating the values to Taranaki over the next fifteen years.

2.1 Shape and Capital costs

2.1.1 Option One: Back to terraces

Option One: Demolishes and removes both stands and develops grassed areas at East and West. There is no covered seating, minimal permanent seating and reduced toilet facilities. Mention is made of lights, but no Enhancements shown.

Option 1 Capital:	Base Cost:	\$6 million
	With enhancements:	\$6 million

For value estimation we assume value-generating non-sporting functions are lost, and the only main sporting fixtures to be the NPC rugby matches with reduced Taranaki spectators.

2.1.2 Option Two: Putting Yarrow back right

Option Two: Repairs stands to previous configurations only. Adds gym facilities and community toilets, and makes good some existing faults and East stand interior layout. There is the base Option 2 and two variations, Option 2A which fixes the East stand and demolishes the West stand. Option 2B fixes East and West stands but removes the West stand roof, making it uncovered seating.

Option 2 Capital:	Base Cost:	\$36 million
	With enhancements:	\$55 million

Option 2A Capital:	Base Cost:	\$32 million
	With enhancements:	\$51 million

Option 2B Capital:	Base Cost:	\$38 million
	With enhancements:	\$57 million

Options 2A and 2B cost nearly as much as the straight Option 2, but each result in significantly fewer total seats in Option 2A, with West stand demolished this loses over 4,900 seats. In Option 2B there is the same total number of seats as in Option 2, but over 4,900 in the West stand are now uncovered.

In perspective, Option 2A saves about \$4 million or about 7% of the cost but delivers about 20% fewer total seats, and 60% fewer covered seats than Option 2.

Option 2B costs \$2 million or 4% more than Option 2 and delivers the same total number of seats but over 4,900 are now uncovered, and so the number of covered seats is reduced by 60%.

This indicates that both Option 2A and Option 2B deliver a solution of significantly lesser value than Option 2. As we found that the value of benefits from Option 2 are over \$200 million, we do not assess that the saving of \$2 million on Option 2A will be justified. And Option 2B provides less covered seating than Option 2 and costs more, so we assess that Option 2B needs no further analysis

For value estimation we assumed that there would be a similar pattern of use to the past, but that with the increase in uncovered seating in Option 2B, there would be less attraction of visitors to

Taranaki. The upgrade to the entry gates (Essential Enhancement 13) will allow quicker access and more time for customers to spend and socialise.

2.1.3 Option Three: Putting it right plus more stand seats

Option Three: Repairs stands and makes good some existing faults and East stand interior layout. This constructs additional permanent seating in front of East and West stands.

Option 3 Capital:	Base Cost:	\$38 million
	With enhancements:	\$57 million

For value estimation we assumed that there would be the same pattern of use in the next fifteen years as in the past five years, for sporting events, and the non-sporting functions. We have not added any concerts under Option 3.

2.1.4 Option Four: More opportunities to spend at Yarrow stadium

Option Four: Makes improvements as in Option 3 and also extends the East stand to create an additional hospitality lounge on Level 3, expands and refurbishes the Legends Lounge and expands all levels of the stand down to ground level. The option also provides additional food and beverage outlets and toilets.

The refurbished, expanded Legends Lounge should permit an increase in the number of higher-yielding season ticket holders, and greater attraction for use for functions, weddings, conferences, trade shows and the like, taking advantage of the view of Mt Taranaki. The creation of the additional hospitality lounge at Level 3 means that, together with using the Legends Lounge, commercial and community functions can take place concurrently, providing a facility available at most times for the community use, while maintaining the NPDC's revenue streams from commercial use.

Option 4 Capital:	Base Cost:	\$53 million
	With enhancements:	\$69 million

For value estimation we assumed that there would be the same pattern of use in the next fifteen years as in the past five years, for sporting events, and the non-sporting functions. We have allowed for the expected increase in the average spend for attendees, given greater food and beverage opportunities. The attractive surroundings may also encourage people to arrive earlier, to socialise and enjoy some of the hospitality. We have also added some concerts under Option 4, as the increased/improved hospitality space should increase Taranaki/ New Plymouth's attraction of visitors to functions and events. The provision of the additional multi-use space and hospitality in the East stand will provide a more complete offering for function- and concert-goers. Possibly sometimes a WOMAD concert could also be moved 'up-market' to become a Stadium concert.

Finally, it could be argued that the increased capacity and quality of surroundings and hospitality in Option 4 can provide a better environment to host officials and supporters of the All Blacks and of their visiting teams. This can provide a better chance of success in securing a future All Blacks test match, similar to the very successful 2013 match All Blacks vs France. At that time Venture Taranaki estimated the total impact of visitor expenditure in the region was \$4.5 million. The amount for a future Test would be higher. In fact a recent test in Nelson was estimated by their Regional Development Agency to have generated \$9.9 million spending in their region.

The level of attraction of more events, functions, people and their spending, as well as stadium revenues like advertising and naming rights are to some extent conjectural, so not all of these revenues are factored into our analyses. This ensures the overall picture and comparison is realistic.

2.1.5 Option Five: Two Bigger main stands, one new

Option Five: Builds a new East stand and hence is able to shift the Pitch 1, and to move the stands closer to the pitch. West stand is enlarged with another bay at either end. The total covered seating in the two stands is thus increased from 8,250 seats to 13,560 seats. The South bank is replaced with terraces and seating for 3,994, which reduces the uncovered seating, but this has been replaced by the increased covered seating in the stands.

Option 4 Capital:	Base Cost:	\$106 million
	With enhancements:	\$121 million

For value estimation we assumed that there would be some increase to attendees in the next fifteen years compared with the past five years. This increase is in the number and attendees at the non-sporting functions, and attendees at sporting events. We have added some concerts also and increased the number of attendees enjoying hospitality together with their covered seating in the larger hospitality suites, and the bars and kitchens to service them. The increased access to toilets improves the customer experience especially for females at such venues.

2.1.6 Options Six: Option Five with more uncovered seats

Option Six: Is basically Option 5 with an open new North stand, with uncovered 3,994 seats. Replacement of the North terraces with an open stand reduces total capacity by about 2,000 people.

Option 6 Capital:	Base Cost:	\$119 million
	With enhancements:	\$133 million

There is little opportunity to add value from this Option because there are few situations when people would pay more for open seating than for the terraces and few when the 23,000 capacity is used.

2.1.7 Options Seven and Eight: Via Westpac to Forsyth Barr

Options Seven to Eight: Option 7 builds three new covered stands with total seating capacity of over 16,000 seats. There is a fourth stand to the South which is uncovered with a capacity of 4,424. There is access at three levels around three of the four sides of this New Stadium. In that way it has some similarity to Westpac where there is access right around. The capacity is reduced from 23,000 to 20,500, with 16,000 of those covered. Option 8 is the same New Stadium, with the fourth stand built as covered, and a roof over the whole Stadium as with Forsyth Barr in Dunedin. The total seating is 20,545, all covered.

Options 7, 8 Capital:	Base Cost:	\$162, \$266 million
	With enhancements:	\$167, \$271 million

For value estimation we assumed that there would be the some increase to attendees in the next fifteen years compared with the past five years. This increase is in the number and attendees at the non-sporting functions, and attendees at sporting events. However there appear few opportunities to significantly increase the number and scale of either the non-sporting function or the sporting functions to take advantage of the fully covered pitch and seating.

2.2 The key Option comparisons

There is a large amount of detail in the changes which would be made with each of the 8 Options. However, taking a realistic position as to the scale and value of a Stadium which is relevant and justified for a city like New Plymouth in a Region like Taranaki, we can focus the comparison a little.

We suggest that Option 1, the grassed terraces, losing all of the main amenity and value to Taranaki of the previous multi-purpose Yarrow Stadium is unrealistic, if not an insult. Certainly the striking venue for functions would be lost, and the NPC rugby matches would presumably have to be held elsewhere, or a major share of the long-standing 6,000 to 8,000 loyal Taranaki followers would likely cease attending and lose that enjoyment and socialising. Other nationally important sporting fixtures of various types would also be lost to New Plymouth and probably to Taranaki.

Conversely the expensive luxury of options 7 and 8 would be seldom used or justified.

The increase in cost from Option 4 to Options 5 and 6 gives an increase in covered seating by about 5,000 seats and reduced grass bank capacity by about the same number of people. It would require a strong case for Options 5 or 6 to justify the additional \$50 to \$60 million in their cost to provide cover for those 5,000 seats. We shall however complete the assumptions and analyses for all main options, 1, 2, 3, 4, 5, and 8 so that the comparisons can be made.

We think that the logic in terms of the potential scale of utilisation, and the potential investment which the Region's and City's communities are willing to make indicate that the main comparison shall be between the Option 2 (or 3) and the Option 4.

3 Past and future Options benefits of Yarrow stadium

The following table is based upon the retrospective analysis of the benefits in the last fifteen years from Yarrow Stadium, shown in the first column.

There has been some change in the last five years, and so the coefficients from these years are used as the base for projecting the likely value of Yarrow Stadium to Taranaki for the next fifteen years under the six main options modelled.

These options use coefficients for such things as partially and fully catered functions, at non-sporting and sporting functions and events. The figures from New Plymouth caterers were completely consistent with those from other sources.

Table 3.1: Benefits and Costs of Options for restoring Yarrow Stadium

Option	15 years 2003 - 2017	Last 5 years	Option 1	Option 2	Option 3	Option 4	Option 5	Option 8
Capital costs and Benefits, Value to Taranaki (\$ million)								
Capital costs with enhancements			\$6	\$55	\$57	\$69	\$121	\$271
				<i>Taranaki value over next 15 years</i>				
Non-sporting functions value	\$12	\$7	\$1	\$21	\$21	\$38	\$48	\$57
Sporting functions local value	\$48	\$23	\$0	\$68	\$72	\$78	\$78	\$99
Visitors total value to the Region	\$120	\$40	\$0	\$121	\$121	\$159	\$193	\$225
Total value to Taranaki	\$180	\$70	\$1	\$210	\$214	\$275	\$319	\$381
Taranaki Value less Capital Cost			-\$6	\$155	\$157	\$206	\$198	\$110
Ratio of Benefit to Capital Cost			0.1	3.8	3.8	4.0	2.6	1.4

3.1 Scale of Stadium costs in some New Zealand cities

Considering first the scale of capital costs of Stadia in a number of New Zealand cities may give a guide as to what could be thought reasonable for New Plymouth in Taranaki.

Wellington's Westpac Stadium, constructed in 1999 cost \$130 million, which in 2018 prices, would be approximately \$230 million. The capacity is about 33,000.

Dunedin's Forsyth Barr Stadium was constructed in 2011 at a cost of \$220 million, which in 2018 prices would be about \$260 million. The capacity is about 31,000, fully covered.

The taxpayer-funded upgrade to Eden Park in 2010 cost about \$250 million, which in 2018 prices would be about \$310 million. The capacity is now 60,000.

Early indications for the replacement stadium for Christchurch was a cost of \$470 million which in 2018 prices would be \$490 million.

The most relevant to Taranaki and New Plymouth populations are probably the locally-funded Wellington and Dunedin stadia, although Taranaki populations are significantly lower than the hinterlands of those. Accordingly a cost at a level of \$170 to \$270 million as for Options 7 and 8 would seem definitely out of scale for Yarrow Stadium.

3.2 Benefits and costs of key Options

As discussed in section 2.2 above the main option comparisons are between Option 2, (or equally Option 3) with Option 4, (or possibly Option 5).

3.2.1 Option 2 (or 3) compared with Option 4

Option capital costs

Options 2 or 3 have capital costs of \$55 to \$57 million, and Option 4 has a capital cost of \$69 million. An increase in capital costs of \$12 to \$14 million which extends the East stand to create an additional hospitality lounge on Level 3, expands and refurbishes the Legends Lounge with more facilities and expands all levels of the stand down to ground level. The option also provides additional food and beverage outlets and toilets.

Benefits and Benefit : Cost Ratio

Options 2 and 3 each have a healthy benefit: cost ratio of 3.8 to 1, and the total value to Taranaki over the next 15 years is estimated to be \$210 million and \$214 million respectively. The increase for Option 3 is due to people being able to be on the seats in front of the stands rather than standing on the bank.

Option 4 has an estimated benefit : cost ratio of 4.0 to 1. The estimated total value to Taranaki over the next 15 years is \$275 million. The additional value of \$65 million compared with Option 2 is mostly from increased Stadium revenues from more functions, higher seat yields and hospitality revenue streams to NPDC management. These are due to the additional \$14 million investment in Option 4. The implication is that the additional capital cost of \$14 million over Option 2 is estimated to increase benefits by about \$65 million.

The additional hospitality capacity and additional food and beverage outlets will increase the revenue streams, and also the increased capacity and quality of surroundings and hospitality in Option 4 could arguably provide a better environment to host officials and supporters of the All Blacks and of their visiting teams.

Although always a difficult outcome to achieve, this level of hospitality and ability to generate higher revenues would place New Plymouth and Taranaki in a position to argue strongly to be awarded a future All Blacks test match, similar to the very successful 2013 match All Blacks vs France. At that time Venture Taranaki estimated the total impact of visitor expenditure in the region was \$4.5 million and a recent ABs test in Nelson was estimated to increase spending in their region by \$9.9 million.

Overall the improved hospitality capacity is expected to increase benefits by increasing the scope of non-sporting functions, and increase the opportunity for spectators at some sporting events to enjoy a higher level of hospitality and socialising.

The choice between these three would tend to favour Option 4, but that depends upon the ability to finance the additional capital expenditure.

3.2.2 Option 5 to Option 8 compared with Options 2, 3 and 4

Option capital costs

Option 5 has a capital cost of \$121 million and Option 8 a capital cost of \$271 million. While Option 5 could possibly be considered, Option 8 is out of scale with the expected usage and benefits. The need for over 20,000 seating capacity, all covered is greater than the attendance expected at all but a few events.

Benefits and Benefit : Cost Ratios

While Options 2, 3 and 4 each have a healthy benefit: cost ratio of 3.8 to 1 or 4.0 to 1, Option 5 has a significantly lower ratio of 2.6 : 1, and for Option 8, the ratio is little more than 1 at a level estimated at 1.4 to 1. This level indicates that the investment is very marginal, with benefits likely to only just exceed the cost.

The estimated benefits for Option 5 exceed the costs by about \$200 million, which is similar to that for Option 4, but option 5 has required an additional \$50 million investment to achieve that benefit. The benefits from Option 8, exceed the costs by just \$110 million which is the lowest of all of these Options.

The general conclusion from these investigations is that Options 2, 3 or 4 are all tenable, the selection being made on the amount of investment funds available, and the level of hospitality and venue size required especially for non-sporting functions.