



COST BENEFIT ANALYSIS

Report for the
Shire of Wyndham East Kimberley
Kununurra Aquatic & Leisure Centre Redevelopment

November 2019



Prepared by NAJA Business Consulting Services



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1. INTRODUCTION

This Cost Benefit Analysis (CBA) has been prepared to support the Shire of Wyndham East Kimberley's Business Case, which it is utilising in its endeavours to seek funding for redevelopment of the Kununurra Aquatic and Leisure Centre. This project will see the redevelopment of facilities on the existing site, which for the purposes of this CBA are costed at \$22,326,541 excluding GST.

Investment in community infrastructure of this type is fundamental to community health, well-being and economic prosperity. The facilities and services associated with community uses, and the networks they foster, bring people together, strengthen community capacity, build community resilience and enhance community cohesion. When developed appropriately, community infrastructure can cater for intergenerational needs and provide a great legacy for all to enjoy.

In the context of this report, Community infrastructure can be described generally as “the community facilities, services and networks which help individuals, families, groups and communities meet their social needs, maximise their potential for development, and enhance community wellbeing”. They can include:

- Universal facilities and services such as education, training, health, open space, recreation and sport, safety and emergency services, religious, arts and cultural facilities, and community meeting places
- Lifecycle-targeted facilities and services, such as those for children, young people and older people
- Targeted facilities and services for groups with special needs, such as families, people with a disability and Indigenous and culturally diverse people.

Delivery of community infrastructure in Australia is the responsibility of a broad range of stakeholders. It is generally shared between local government, state agencies and federal agencies, as well as the private and the community sectors.

Scarce public resources are spurring innovation and over the last decade or so, new models of delivery have emerged. Often the form of the collaboration between players has been innovative and the bringing together of the Shire of Wyndham East Kimberley with potential other partners for delivery of programs and activities in this redevelopment should bring about improved results.

A comprehensive business case in relation to this project has been prepared and should be read in conjunction with this Cost Benefit Analysis Report.

This cost benefit analysis and the accompanying business case verifies through analysis, research and enquiry that the proposed development will achieve short-term viability and long-term sustainability and outcomes. On this basis the project should be a desirable funding target for Federal Government, State Government, the Shire of Wyndham East Kimberley and community/commercial partners.

2. PROPOSAL BACKGROUND

The redevelopment of the Kununurra Aquatic and Leisure Centre is a project that the Shire of Wyndham East Kimberley has been investigating over the last ten years and due to the current state of the facilities, it has now become a priority.

A redeveloped and new aquatic and leisure centre is required in Kununurra to replace existing facilities that have reached the end of their useful life. The current aquatic facilities cannot be cost effectively maintained due to issues associated with the water table, and the existing facilities will not meet the needs of the population in the medium term.





The Kununurra Aquatic and Leisure Centre was built in 1983 with assistance from RioTinto. The age of the infrastructure and the changing requirements for accessibility and sports activities, as well as moving ground conditions, have meant the pool, indoor courts and gym have had to undergo significant works to keep the centre running, but these have not contributed to a more functional and contemporary range of services to meet increasing community demand.

The following provides a brief background to the history of the project over the last ten years.

In 2011, the Shire of Wyndham East Kimberley engaged Creating Communities to draft a master plan that investigated a range of community facilities and provided recommendations for potential upgrades to these facilities in a sporting precinct including the Kununurra Aquatic and Leisure Centre.

In 2012, a brick fell through the pavement and caused structural damage to the pool. Further investigation resulted in the discovery of extensive problems caused by ground water. The pool was closed for 6 months while they pumped concrete under the existing pool.

In 2013, the Shire then engaged @leisure, to investigate and provide a business case for a new leisure centre facility. The business case recommended a 10 lane, 25 metre competition pool with a 4 lane 50-metre deep-water extension. This would coexist with a gym, 3 indoor courts and 4 squash courts, among other amenity facilities. The proposed site for this new facility as a result of the investigation was proposed in the East Lily Creek area neighbouring the Transient Workers Accommodation site, which had been decommissioned. The capital cost for this two staged approach was between \$36.5 and \$58 million. The Shire did not proceed with this option at the time as the cost of relocating and building a new facility proved to be too costly.

In 2015, the Shire then engaged GHD, to develop a preliminary business case for a new aquatic and leisure facility for the Kununurra community and surrounding areas. This preliminary business case considered a range of locations (existing and new) for the replacement of the aquatic and leisure facility within the town of Kununurra, as well as the social and economic impacts of the options. This report focused on identifying preferred options and location for the long-term provision of an aquatic and leisure facility for the Kununurra and surrounding communities, which has been taken into consideration in preparing this business case.

In developing the preliminary business case the Shire sought to create a redeveloped facility that:

- Provided a range of sporting, fitness and recreation activities to meet the existing and future needs of the population;
- Created an environment where residents and visitors are encouraged to engage in more healthy, physical and social activity at times that suit;
- Promoted social interaction, inclusivity and positive lifestyle choices;
- Responded to demographic and employment trends in Kununurra, and the constraints on participation associated with remoteness and climate.

As in the 2013 @leisure business case the GHD preliminary business case recommended the facility be moved to the East Lily Creek site in three staged approach, with a capital cost estimated at \$48-\$67 million. Once again, the Shire did not proceed with this option at the time as the cost of relocating and building a new facility proved to be too costly.

After incurring ongoing significant capital repair and maintenance costs on the existing pool, in July 2017, the Shire engaged Donovan and Payne Architects to reinvestigate and develop a design concept and masterplan for the redeveloped Aquatic and Leisure Centre on the existing site. This concept was costed at \$40 million to deliver.



Following feedback from the Shire, the community and key stakeholders, in October 2018, the Shire then asked Donovan and Payne Architects, to modify the initial concept design, which has now resulted in a proposed four stage development which encompasses replacing the existing aquatic facilities for new including an 8 lane 50m pool; a zero depth water splash pad with free public access; upgraded and reconfigured sports/leisure centre facilities; new community hall; commercial kitchen; fully shaded playground; and gymnasium extension.

This new design concept is estimated to have a capital cost of \$22,326,541 (excluding GST) and is now the preferred option of the Shire.

In 2019, the Shire then engaged, NAJA Business Consulting Services to develop a detailed business case, cost benefit analysis and funding strategy for the new design on the existing site as the preferred option of the Shire. This is the resultant business case for the preferred option to redevelop the Kununurra Aquatic and Leisure Centre on the existing site.

The current proposed redeveloped Kununurra Aquatic and Leisure Centre on the existing site will be modest, affordable from a capital outlay and an ongoing cost perspective, while remaining regionally significant serving many communities and towns other than Kununurra, including Wyndham, Warmun, Halls Creek and Timber Creek.

3. PROPOSED COSTS

The following assumptions regarding costs have been made for this analysis:

Establishment	<p>Upfront costs of \$22,326,541 (excluding GST and all spent in construction and fit out phase for Stage 1 Aquatic Facilities, Stage 2 Zero Depth Water Splash Pad, Stage 3 – Sports Centre Facilities and Stage 4 – Additional facilities)</p> <p>Total - \$22,326,541 (once off)</p>
Recurrent Costs	<p>The recurrent (ongoing) costs in Year 1 of \$2,002,128 increasing to \$2,828,919 by year 10 in line with the whole of life model and sustainability analysis for the existing and new facilities broken down as follows:</p> <p>Total Annual Operating Costs - \$1,442,852 indexed at CPI @ 1.5%;</p> <p>Average Annual Maintenance Demand Expenditure - \$557,676 per annum over 20 years; and</p> <p>Capital Replacement for new facilities (Asset Renewal Fund) – starting at \$1,600 in year 1 due to it being a new facility, increasing to \$621,500 in Year 10, which represents cash backed depreciation to a building and infrastructure asset renewal reserve fund (Refer to Whole of Life Asset Sustainability Section of the Business Case).</p>

It is assumed that the new facility will be sustainable, with all ongoing and maintenance costs funded by the Shire of Wyndham East Kimberley. (refer to Section 4 Operational Funding section).



4. PROPOSED FUNDING AND OPERATIONAL BUDGET

Project funding

The project is intended to be funded through a combination of State and Federal grant funds, other sporting grants, and the Shire of Wyndham East Kimberley contributions. The only confirmed funding towards the redevelopment at this stage is from the State Government through the Community Sport Recreation Facility Funding Grant towards the splashpad.

Separate to this cost benefit analysis and the business case being prepared for the full redevelopment of the Kununurra Aquatic and Leisure Centre project, a Funding Strategy has also been prepared with proposed funding contributions and status based on the QS cost estimate including a 30% District loading on construction and a 60% District Loading on construction cost estimate to build the new facility are:

Source of Funds exc GST	QS including 30% District Loading \$	QS including 60% District Loading \$	Funding confirmed	Funding Details
State Government	\$590,000	\$590,000	Yes	CSRFF funding towards the splash pad
Federal Government			No	Potential BBRF Grant and Sport Australia – Community Sport Infrastructure Grant
State Government	\$17,873,085	\$21,736,541	No	Potential Royalties for Regions, Lotterywest or further CSRFF
SWEK			No	Shire Contribution or Self-Supporting Loan
Total Funds Available if completely secured				
Total Quoted Cost to build	\$18,463,085	\$22,326,541		
Surplus/(Shortfall)	-	-		

Current Indicative and Forward Operating Budget for Kununurra Aquatic and Leisure Centre

In order to estimate the likely future operating budget of the facility, the 2018/19 Kununurra Aquatic and Leisure Centre operating budget was considered and then projected over ten years to develop the scenario for the increased activity.

Key assumptions and considerations around growth in income and expenditure have been applied, namely:

- An overall increase in Aquatic Centre revenue of 1.5 times, even though Olympic pool will be twice the size, it is best to conservative.
- New revenue as a result of the new splash and dash pool.
- Future gym membership numbers increase due to increasing size of facility.
- Leisure Centre revenue increases of 2 times due to overall increasing size.
- Operating costs for the new facilities are estimated to be on par with the existing facilities e.g. estimated to start at \$1,442,852 per annum in 2020/21 indexed at CPI of 1.5% per annum. However, these may be higher than predicted given the increased scale of facilities.
- Maintenance Demand for the new facilities is expected to be on average over the life of the facility \$557,676 per annum.



- As part of the Whole of Life Sustainability of the facility, an Asset Renewal Fund would be set up to enable the replacement of the facility at the end of its useful life. This is expected to start at \$1,600 in year 1 due to it being a new facility, increasing to \$621,500 in Year 10, which represents cash backed depreciation to a building and infrastructure asset renewal reserve fund (Refer to Whole of Life Asset Sustainability Section of the Business Case).
- For the nine months January 2019 to September 2019, there has been a total attendance at the facility of 34,015 people. This has been extrapolated for the 12 months with an expected number of attendances at the facility to be at least 51991 uses per annum.
- It should be noted the revenue is significantly less than what the Shire spends on the premises and this will continue with the new facilities. Effectively the Shire subsidises users to utilise the facilities as a community service.
- The Shire's subsidy per participant use of the facilities per annum is expected to be approximately \$22.65 (Projected Operating Net Loss for 2020/21 \$1.18m/ 52,000 participation uses during the year).

Historical Operational Revenue with Predicted Increase

Shire of Wyndham East Kimberley Kununurra Leisure Centre and Swimming Pool - Operating Revenue 2018/19 and Predicted Revenue after Redevelopment			
	Actuals	Predicted	Assumptions
Description	2018/19	2020/21	
Operating Revenue			
Kununurra Swimming Complex			
Pool Admissions - Kununurra Swimming Complex	\$78,675.44	\$118,013.16	Revenue increase of 1.5 times
Pool Courses - Kununurra Swimming Complex	\$800.91	\$1,201.37	Revenue increase of 1.5 times
Swim School Income - Kununurra Swimming Complex	\$8,854.50	\$13,281.75	Revenue increase of 1.5 times
Pool Hire (Functions) - Kununurra Swimming Complex	\$9,742.35	\$14,613.53	Revenue increase of 1.5 times
Pool Admissions – Splash and Dash	\$0.00	\$78,675.44	Revenue increase of 1.5 times
Grants - Kununurra Swimming Complex	\$0.00	\$0.00	
Sub-total Kununurra Swimming Complex	\$98,073.20	\$225,785.25	
Kununurra Leisure Centre			
Recreation Hall Hire - Kununurra Leisure Centre	\$47,461.96	\$94,923.92	Revenue increase of 2 times
Memberships - Kununurra Leisure Centre	\$159,666.27	\$319,332.54	Revenue increase of 2 times
Classes and Programming - Kununurra Leisure Centre	\$8,402.15	\$16,804.30	Revenue increase of 2 times
Casual Use - Kununurra Leisure Centre	\$21,143.04	\$21,143.04	
Squash Court and Equipment - Kununurra Leisure Centre	\$13,794.81	\$13,794.81	
Equipment Hire - Kununurra Leisure Centre	\$1,174.54	\$1,174.54	
Sale of Consumables - Kununurra Leisure Centre	\$30,359.34	\$60,718.68	Revenue increase of 2 times
Group Fitness - Kununurra Leisure Centre	\$334.09	\$334.09	
Personal Training/Gym Assessment - Kununurra Leisure Centre	\$0.00	\$60,718.68	Figure due to increase in gym
SWEK Staff Memberships - Kununurra Leisure Centre	\$7,885.74	\$7,885.74	
Sub-total Kununurra Leisure Centre	\$290,221.94	\$596,830.34	
Total Operating Revenue	\$388,295.14	\$822,615.59	



Current Indicative Forward Operating Budget for Kununurra Aquatic and Leisure Centre

Note: That the Forward Operating Budget below excludes an Annual Figure that should be applied to an Asset Renewal Reserve Fund (refer to Section 16 - Whole of Life Sustainability in the detailed business case) for replacement of the facilities when they reach their useful life.

Shire of Wyndham East Kimberley												
Kununurra Leisure Centre and Swimming Pool - Operating Budget 2018/19 and forward projections												
Description	Actuals		Estimated									
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Operating Revenue												
Kununurra Swimming Complex	\$98,073	\$99,544	\$225,785	\$229,172	\$232,610	\$236,099	\$239,640	\$243,235	\$246,883	\$250,587	\$254,345	\$258,161
Kununurra Leisure Centre	\$290,222	\$294,575	\$596,830	\$605,783	\$614,870	\$624,093	\$633,454	\$642,956	\$652,600	\$662,389	\$672,325	\$682,410
Total Operating Revenue	\$388,295	\$394,120	\$822,616	\$834,955	\$847,479	\$860,191	\$873,094	\$886,191	\$899,483	\$912,976	\$926,670	\$940,570
Operating Expenditure												
Kununurra Swimming Complex	\$967,797	\$982,314	\$997,048	\$1,012,004	\$1,027,184	\$1,042,592	\$1,058,231	\$1,074,104	\$1,090,216	\$1,106,569	\$1,123,168	\$1,140,015
Kununurra Leisure Centre	\$432,725	\$439,216	\$445,804	\$452,491	\$459,278	\$466,167	\$473,160	\$480,257	\$487,461	\$494,773	\$502,195	\$509,728
Total Operating Expenditure	\$1,400,521	\$1,421,529	\$1,442,852	\$1,464,495	\$1,486,462	\$1,508,759	\$1,531,391	\$1,554,362	\$1,577,677	\$1,601,342	\$1,625,362	\$1,649,743
Maintenance Demand Expenditure	\$123,066	\$124,912	\$557,676	\$557,676	\$557,676	\$557,676	\$557,676	\$557,676	\$557,676	\$557,676	\$557,676	\$557,676
Net Operating Profit/Loss	-\$1,135,293	-\$1,152,322	-\$1,177,913	-\$1,187,216	-\$1,196,659	-\$1,206,244	-\$1,215,972	-\$1,225,847	-\$1,235,870	-\$1,246,042	-\$1,256,368	-\$1,266,848





5. BENEFITS AND MODEL ASSUMPTIONS

The key benefit categories identified in relation to this project encompass:

Economic	Social
Employment	Community
Gross Regional Product	Social Connectedness
Health plus Productivity	Volunteering

The following cost benefit analysis seeks to map the expected benefits of the project in comparison to the costs, however it is noted that cost benefit analysis findings often overstate the actual benefits, along with the difficulties in the Western Australian context of applying outdated data and multipliers which may not be directly transferrable to the state's regional economic conditions¹. As such, a very conservative approach has been taken to the development as the Shire of Wyndham East Kimberley do not want to imply the potential of creating an unrealistic impact. This project has been undertaken in a considered manner and it is recommended that this cost benefit analysis be read in conjunction with the business case prepared for the project.

5.1. Economic Benefits – Employment and Gross Regional Product

5.1.1. Economic Impact Model

To calculate the employment benefits and gross regional product for this cost benefit analysis, we have used the Flinders University – Australian Urban Research Infrastructure Network - Economic Impact Analysis Tool (EIAT)². The EIAT is developed based on the location quotient adaptation of the 2009/10 national input-output (I-O) table of 19 industry sectors (consistent with the 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC) 1-digit level) using the 2016 Census industry employment data for local government areas in all the states and territories of Australia.

The EIAT allows us to conduct a preliminary I-O analysis for estimation of local regional economic impacts for regional infrastructure investment projects.

I-O models provide a standard approach for the estimation of the economic impact of a particular activity (e.g. construction of a new infrastructure project). Regional economic impact statements regarding the impact of major projects and policies has become a critical part of regional development analysis and is an extensive component of the applied economic literature. The linkages between employment opportunities and residents – and business to business linkages – affect urban design, infrastructure demand and provision, regional taxes etc.

The EIAT draws on 2016 Census industry of employment data and the 2009/10 national I-O table to calculate industry multipliers which in turn provide estimates of economic impacts of regional infrastructure investment projects.

There are a number of important assumptions that underpin the use of an I-O model, these must be considered in interpreting the predicted impacts. They include:

¹ Department of Treasury and Finance (WA). (March 2002). Economic Research Articles. Retrieved from <https://www.treasury.wa.gov.au/uploadedFiles/ecoresearchchart2002.pdf>

² <https://aurin.org.au/archived-pages/input-output-tables/>





- a) increases in demand in the region are serviced by industries with constant proportions, there are no significant price adjustments that occur
- b) industries have a linear production function, which implies constant returns to scale and fixed input proportions
- c) firms within a sector are homogeneous, which implies they produce a fixed set of products that are not produced by any other sector and that the input structure of the firms are the same, and
- d) the model is a static model that does not take account of the dynamic processes involved in the adjustment to an external change.

5.1.2. Method of Analysis

Location Quotient Method

The Australian Bureau of Statistics produces I-O tables, consistent with the 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC) 4-digit industry codes (114 sectors), at the national level only with the latest for 2009/10 year.

At the regional level, the easily accessible data generally available is industry of employment data by Place of Usual Residence and Place of Work – this data is available from the 2016 Census and reflects the responses with respect to industry and location of residency and employment. It is somewhat limited in that it depends on the Census respondents own “identification” of the industry, is influenced by the July timing of the Census and involves some degree of non-response (particularly with respect to detail of industry). It is however the only data collected consistently across all economic sectors at once.

Given that the key regional data is employment based, WISeR developed regional I-O tables based on the location quotient adaptation of the 2009/10 national I-O table of 19 industry sectors using the 2016 Census employment in the region. Under the location quotient method, the basis of the mathematical distribution is to assume that if the industry is “as significant” in the region as in the nation it has the capacity to supply to local industries at the same proportion as in the nation as a whole. Otherwise it supplies proportionally less. The location quotient ratio for each industry was calculated based on the industry’s regional employment significance to its national employment.

Input-Output (I-O) Multipliers

Regional I-O models are used to calculate industry multipliers which in turn can be applied to estimate regional economic impacts of various developments or change scenarios (see ‘Impact Factor Analysis’ section below).

Detailed explanations on calculating I-O multipliers, including the underlying assumptions, are provided in any regional economics or I-O analysis textbook (see, for example, Miller R. E., Blair P. D. 2009, Input-Output Analysis: Foundations and Extensions, Second Edition, Cambridge University Press). A multiplier is essentially a measurement of the impact of an economic stimulus. In the case of I-O multipliers the stimulus is normally assumed to be an increase of one dollar in sales to final demand by an industry sector.

Gross regional product and employment multipliers refer to changes in gross regional product per initial change in output and changes in employment per initial change in output. These multipliers are expressed as 'per unit' measurement and described as Type I and Type II multipliers. For example, with respect to gross regional product:

Type I gross regional product multiplier = [initial + production induced]/initial; and

Type II gross regional product multiplier = [initial + production induced + consumption induced]/initial



Impact Factor Analysis

The economic impact in terms of contribution to gross regional product and employment can be identified in terms of direct, flow-on (indirect) and total impacts.

Direct or initial impacts refer to the impact of the assumed dollar increase in sales directly in the sector. The dollar change in final demand is the stimulus or the cause of the impacts. Associated directly with this dollar increase in output is an own sector increase in household income (wages and salaries, drawings by owner operators etc.) used in the production of that dollar. Household income together with other value added, provide the total GRP from the production of that dollar of output. Also associated is own sector increase in employment, represented by the size of the employment coefficient. The employment coefficient represents an employment/output ratio and is usually calculated as 'employment per million dollars of output'.

Flow-on or indirect impacts are the sum of production-induced impacts and consumption-induced impacts. Production-induced impacts are the sum of first-round impacts and industrial support impacts. The first-round impact refers to the effect of the first round of purchases by the sector providing the additional dollar of output. Industrial-support impacts are the second and subsequent round effects as successive waves of output increases occur in the economy to provide industrial support, as a response to the original dollar increase in sales to final demand, excluding any increases caused by increased household consumption. Consumption-induced impacts are defined as those induced by increased household income associated with the original dollar stimulus in output.

Total impacts are the sum of direct and flow-on impacts.

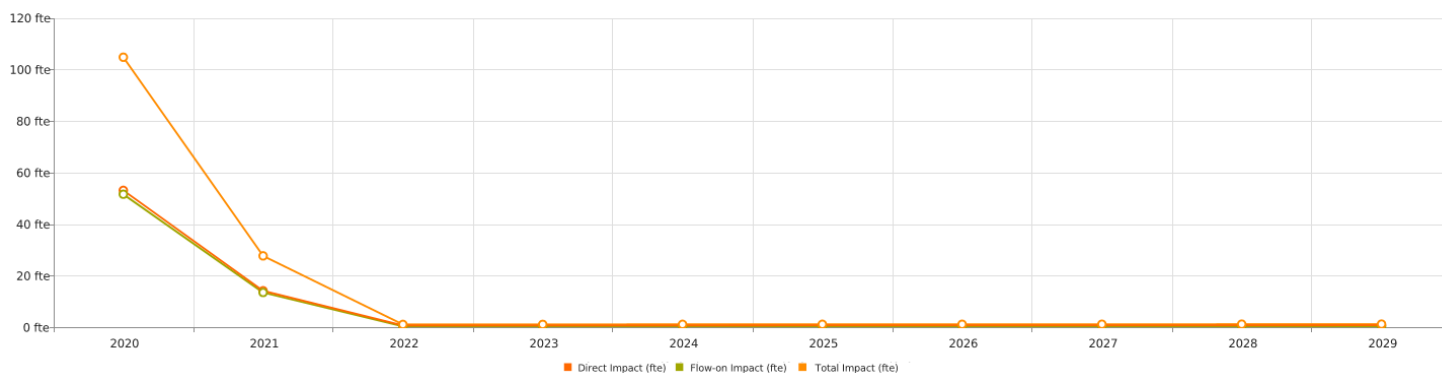
5.1.3. Economic Impact Analysis Tool Results for Employment Benefits and Gross Regional Product

Employment Benefits

The results from the EIAT for the full redevelopment of the Kununurra Aquatic and Leisure Centre built over a two-year period showed that it would result in an additional 105 Full time equivalents (FTEs) being employed during the construction of Stage 1 and 2 of the project in 2020/21 and 28 FTE during the construction of Stage 3 and 4 of the project in 2021/22. Of the 105 FTE in 2020/21, 53 FTE would be employed directly on the build and 52 FTE as flow on within related industry sectors used by the EIAT model. Of the 28 FTE in 2021/22, 14 FTE would be employed directly on the build and 14 FTE as flow on within related industry sectors used by the EIAT model. Post 2021/22 capital expenditure for refurbishment and repairs is expected to employ 1 FTE ongoing annually (see graphs and tables below).

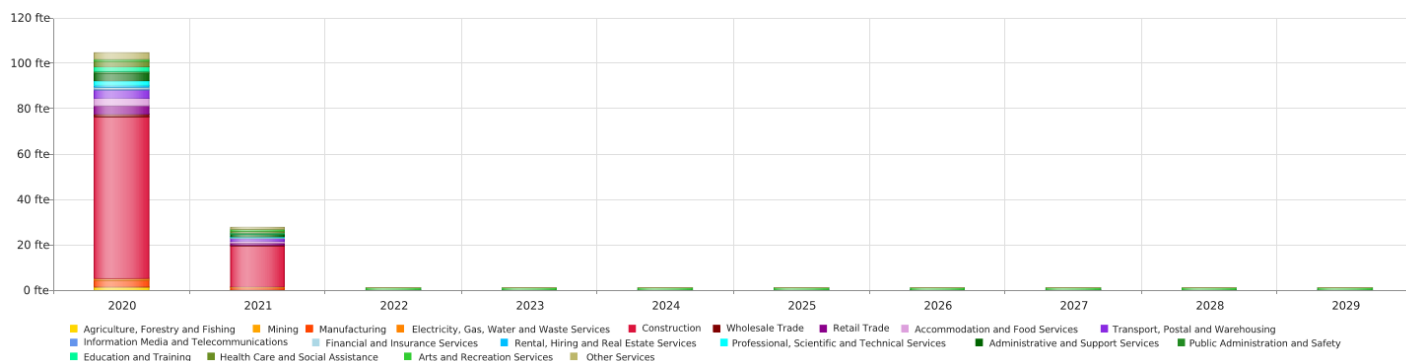
The assumption here is that the facility will be constructed by a local regional builder and that during the construction phase this will mean this money will be spent and retained within the local economy.

Employment Impact (fte) in Wyndham-East Kimberley (S)





Employment-Total Impact (fte) by Industry in Wyndham-East Kimberley (S)



Employment Impact (fte) in SWEK (S)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Direct	53.150	14.196	0.757	0.768	0.779	0.790	0.800	0.806	0.827	0.838
Flow-on	51.654	13.544	0.393	0.398	0.404	0.409	0.415	0.418	0.429	0.434
Total	104.804	27.740	1.150	1.166	1.183	1.199	1.215	1.223	1.256	1.272

Employment Impact (fte) by Industry Sector SWEK (S)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Agriculture, Forestry and Fishing	1.254	0.339	0.023	0.023	0.023	0.024	0.024	0.024	0.025	0.025
Mining	0.303	0.079	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Manufacturing	2.993	0.778	0.013	0.014	0.014	0.014	0.014	0.014	0.015	0.015
Electricity, Gas, Water and Waste Services	0.942	0.249	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.011
Construction	71.048	18.241	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015
Wholesale Trade	1.009	0.266	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.011
Retail Trade	3.781	1.005	0.047	0.048	0.049	0.049	0.050	0.051	0.052	0.053
Accommodation and Food Services	3.396	0.905	0.046	0.046	0.047	0.048	0.048	0.049	0.050	0.051
Transport, Postal and Warehousing	3.529	0.929	0.031	0.032	0.032	0.033	0.033	0.033	0.034	0.035
Information Media and Telecommunications	0.599	0.162	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012
Financial and Insurance Services	0.769	0.201	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005
Rental, Hiring and Real Estate Services	0.895	0.236	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.010
Professional, Scientific and Technical Services	1.849	0.486	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.017
Administrative and Support Services	3.317	0.885	0.046	0.047	0.047	0.048	0.049	0.049	0.050	0.051
Public Administration and Safety	0.906	0.239	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010
Education and Training	2.037	0.544	0.029	0.030	0.030	0.031	0.031	0.031	0.032	0.032
Health Care and Social Assistance	2.333	0.619	0.028	0.028	0.028	0.029	0.029	0.029	0.030	0.030
Arts and Recreation Services	1.004	0.829	0.776	0.787	0.798	0.809	0.820	0.826	0.848	0.859
Other Services	2.840	0.748	0.026	0.027	0.027	0.028	0.028	0.028	0.029	0.029
Total	104.804	27.740	1.150	1.166	1.183	1.199	1.215	1.223	1.256	1.272



Once operational it is expected that ongoing annual direct employment for the Kununurra Aquatic and Leisure Centre will remain at current levels of 5 FTE contained within the Shire of Wyndham East Kimberley. These 5 FTE will contain portions of administration, maintenance and operational staff costs at the Shire. It is also expected that 1FTE will be employed directly external to the Shire to continue annual refurbishment and maintenance through annual capital upgrades. Indirectly it is expected that up to a further 5 jobs could be created to support the ongoing operations of the buildings leased as a café and/or party room/creche, business meeting facilities at the Centre.

Estimation Method for Dollar Value of Employment Benefits

The expected direct and indirect dollar value of employment benefits for the project during construction and operations over ten years is \$18,004,048, which has been included in the Cost Benefit Analysis calculated as follows:

During Construction

During a two-year construction phase: 67 FTE are estimated to be directly employed for this size of facility. The estimated dollar value benefit of these 67 FTE salaries over the two-year period for the build phase is \$5,640,663 based on the average annual construction/builder's wage in Western Australia is \$84,189³ e.g. $\$84,189 \times 67 \text{ FTE} = \$5,640,663$ benefit during construction over 2020/21 to 2021/22.

During the same timeframe a flow on benefit of a further 66 FTE are expected to be employed across related industry sectors that support the building and construction sector. The estimated dollar value benefit of these 66 FTE salaries is \$2,965,248 based on the average mean employee income in the Shire of Wyndham East Kimberley being \$44,928⁴ and the construction timeframe for the project taking 12 months – e.g. $\$44,928 \times 66 \text{ FTE} = \$2,965,248$ benefit during construction over 2020/21 to 2021/22.

During Operations

During operations: 5 FTE are estimated to be directly employed annually by the Shire of Wyndham East Kimberley to maintain and operate this size of facility. The estimated annual dollar value benefit of these 5 FTE salaries based on the current direct salaries including superannuation and benefits paid by the Shire in 2018/19 of \$599,934. This figure was then indexed at the rate of CPI over the 10-year period equating to \$6,615,007.

It is also expected during the operations that the capital expenditure requirement of ongoing refurbishment and maintenance for the facility will employ 1 FTE externally of the Shire annually. The annual dollar value benefit of this 1 FTE salary based on average mean employee income in the Shire of Wyndham East Kimberley being \$44,928 e.g. $\$44,928 \times 1 \text{ FTE} = \$44,928$ per annum. This figure was then indexed at the rate of CPI over the 10-year period equating to \$378,871

Also, a further 5 FTE are expected to be indirectly employed across related industry sectors to support the Shire of Wyndham East Kimberley in the operations and maintenance of the additional leased facilities for the proposed café/creche/party room and or business meeting facilities. The estimated annual dollar value benefit of these 5 FTE indirect salaries is also based on the average mean employee income in the Shire of Wyndham East Kimberley being \$44,928 e.g. $\$44,928 \times 5 \text{ FTE} = \$224,640$ per annum. This figure was then indexed at the rate of CPI over the 10-year period equating to \$2,404,259.

³ <https://au.neuwoo.com/salary/Construction-salary-in-Western-Australia>

⁴ https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA51680?opendocument

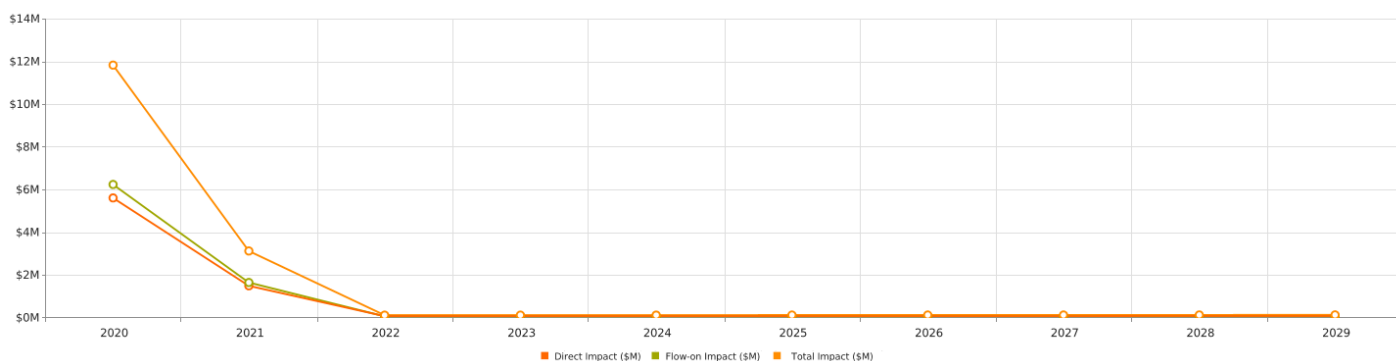




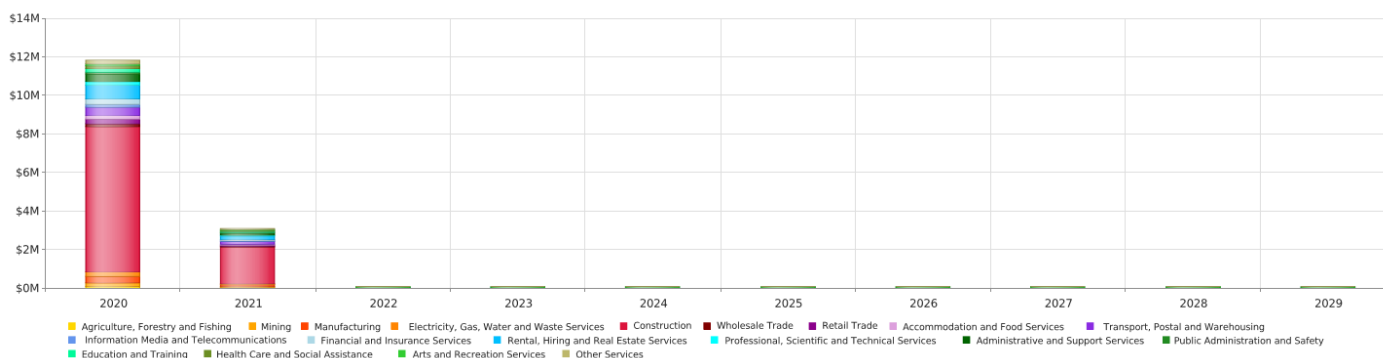
Gross Regional Product (GRP) Benefits

The results from the EIAT for the full redevelopment of the Kununurra Aquatic and Leisure Centre showed that the construction over 2020/21 and 2021/22 would result in a total GRP Benefit of \$14.923m (\$7.07m in direct benefits and \$7.854m in flow on benefits). The ongoing capital upgrade expenditure post 2021/22 will deliver a further \$856,000 in GRP benefits through to 2029/30 totaling a 10-year GRP Benefit of \$15.779m (see graphs and tables below).

Gross Regional Product Impact (\$M) in Wyndham-East Kimberley (S)



Gross Regional Product-Total Impact (\$M) by Industry in Wyndham-East Kimberley (S)



Gross Regional Product Impact (\$M) in SWEK (S)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Direct	5.593	1.476	0.056	0.057	0.057	0.058	0.059	0.059	0.061	0.062
Flow-on	6.223	1.631	0.046	0.047	0.047	0.048	0.049	0.049	0.050	0.051
Total	11.816	3.107	0.102	0.103	0.105	0.106	0.108	0.108	0.111	0.113





GRP Impact (\$M) by Industry Sector in SWEK (\$)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Agriculture, Forestry and Fishing	0.114	0.031	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Mining	0.171	0.044	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Manufacturing	0.356	0.093	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Electricity, Gas, Water and Waste Services	0.224	0.059	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003
Construction	7.508	1.928	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Wholesale Trade	0.148	0.039	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002
Retail Trade	0.246	0.065	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Accommodation and Food Services	0.204	0.054	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Transport, Postal and Warehousing	0.442	0.116	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Information Media and Telecommunications	0.129	0.035	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003
Financial and Insurance Services	0.266	0.069	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Rental, Hiring and Real Estate Services	0.738	0.195	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008
Professional, Scientific and Technical Services	0.190	0.050	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Administrative and Support Services	0.388	0.104	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006
Public Administration and Safety	0.085	0.022	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Education and Training	0.172	0.046	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Health Care and Social Assistance	0.183	0.049	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Arts and Recreation Services	0.074	0.061	0.057	0.058	0.059	0.060	0.060	0.061	0.062	0.063
Other Services	0.180	0.047	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Total	11.816	3.107	0.102	0.103	0.105	0.106	0.108	0.108	0.111	0.113

5.2. Health plus Productivity Benefits

Community connectiveness is extremely important in combating positive health and productivity outcomes and also addresses issues of isolation. Loneliness and social isolation are on the rise in Australia, with more than eighty percent of Australians believing that our society is becoming a lonelier place, and of these, sixty percent reported that they 'often felt lonely'. Evidence demonstrates direct correlations between loneliness, isolation and mental and physical health issues of individuals (including issues related to lack of exercise, obesity or smoking), and the subsequent impact on overall community wellbeing. For this reason, the Kununurra Aquatic and Leisure Centre is a very important part of the Shire of Wyndham East Kimberley community as it provides a place and avenue for participants to connect.

The evidence is mounting that links community connectedness and well-being to mental health. It is important for the individual community members' mental health that isolated communities can connect through clubs, events, social and sporting activities. Without the redevelopment of the Kununurra Aquatic and Leisure Centre, the local community would not have the enhanced capacity for sporting activities, community events, meetings and other functions.





A review of current literature indicates that people who participate in sports clubs and organised recreational activity enjoy better mental health, are more alert, and more resilient against the stresses of modern living. Participation in recreational groups and socially supported physical activity is shown to reduce stress, anxiety and depression, and reduce symptoms of Alzheimer's disease. Violent crime also decreases significantly when participation in community activities increases⁵. Being physically active: protects against mental health problems, decreases depression in older adults, reduces the symptoms of post-natal depression, is as effective as medication for mild to moderate anxiety and depression, improves self-esteem and cognitive function in young people, playing sport reduces psychological distress by 34% 1-3 times a week and 46% 4+ times a week, people who participate in sports clubs and organised recreational activity enjoy better mental health⁶.



The Department of Sport and Recreations (DSR) 2017 Community Perceptions Survey also found in relation to physical activity and mental health within community sport and recreation, that:

- Around 8 in 10 Western Australians believe it's important for sport and active recreation to help us feel good about ourselves and build our confidence and self-esteem.
- More than 8 in 10 Western Australians feel it's important and agree that sport and active recreation creates close friendships.
- More than 8 in 10 Western Australians feel it's important that sport and active recreation involve people like coaches who can have a positive impact on children's lives⁷.

Physical inactivity is second only to tobacco as a contributing factor to the burden of disease and injury in Australia⁸. Regular physical activity is widely recognized as protective against the overall burden of disease⁹. In 2002, more than a third (37.6%) of adult Australians reported no participation in sports and physical recreation¹⁰. Approximately half of the remainder (31.5%) participated in organized sports and physical recreation, with a further 30.9% reporting that they undertook some form of physical activity¹⁰. For both males and females, walking was the most popular form of recreational physical activity¹⁰. Approximately 40% of children do not participate in organised sporting activity outside of school¹⁰.

All of this research emphasizes why it is so important for people in the Shire of Wyndham East Kimberley to have access to quality sporting and community infrastructure to ensure that community members have the best opportunity to participate in physical activity and events, in turn reducing their chances of disease, mental health, depression and obesity.

⁵ Carcach C, Huntley C. Community Participation and Regional Crime. Canberra: Australian Institute of Criminology; 2002.

⁶ <https://www.dsr.wa.gov.au/support-and-advice/research-and-policies/organised-recreational-activity-and-mental-health>

⁷ <https://www.dsr.wa.gov.au/support-and-advice/research-and-policies/organised-recreational-activity-and-mental-health>

⁸ Mathers C, Vos T, Stevenson C. The burden of disease and injury in Australia. Canberra: Australian Institute of Health and Welfare; 1999.

⁹ Roberts CK, Barnard RJ. Effects of exercise and diet on chronic disease 10.1152/jappphysiol.00852.2004. J Appl Physiol 2005;98(1):3-30

¹⁰ Australian Bureau of Statistics. Sport and Recreation: A Statistical Overview. In. Canberra: Australian Bureau of Statistics; 2006.





The World Health Organisation¹¹ identifies physical inactivity as a leading risk factors of death worldwide, and health professionals urging the adopting of less sedentary lifestyles to combat this growing health problem. With an increased opportunity for people to be more active from this proposal comes an improved likelihood of better health outcomes – both in terms of physical fitness as well as the improved mental wellbeing typically associated with increased opportunities to be engaged in social interactions.

The flow-on benefits to the local economy point to improved worker productivity when the workforce is engaged in more physical activity, there is a lower burden on the local health system due to conditions associated with inactivity and an improvement to the liveability of the local area strengthening the ability to attract and retain a robust local workforce.

Additionally, a report looking at the economic benefits of Australia's Public Aquatic Facilities undertaken by the Royal Life Saving Society – Australia in 2017¹², was used to estimate the economic benefits of an individual aquatic facility visit by measuring the links between an increase in physical activity from an average pool visit and reduced risk of mortality, morbidity and health care expenditure, as well as reduced absenteeism.

The report concluded that physical inactivity imposes massive costs on Australian society, leading to higher rates of stroke, heart disease, diabetes and cancer. Almost every Australian could benefit from engaging in additional exercise. Our public aquatic facilities enable Australians to engage in more than 130 million hours of vigorous exercise each year. This activity generates direct economic value, particularly in the form of patrons' improved future health and reductions in health care expenditure, which was estimated to be \$26.39 per visit, or \$2.8 billion each year.

The study also quoted the following:

“These benefits from public aquatic facilities are additional to the revenue they generate and to their many intangible benefits including a sense of community, social capital, access to water safety education and patron enjoyment. When considering whether to provide new aquatic infrastructure and whether to maintain existing facilities, governments should take into account the measurable health benefits these facilities deliver when conducting cost benefit analysis.”

Estimation Method

- The annual health benefit of being physically active is assumed to be \$675¹³. This was multiplied by the current number of Kununurra Aquatic and Leisure Centre members utilizing the Leisure Centre facilities (279) equating to \$188,325.
- Assumption that this benefit is experienced each year.
- Note across the ten years we have not increased the membership numbers, even though it is expected to increase with the new redeveloped Kununurra Aquatic and Leisure Centre facilities. This allows for a very conservative value of benefit.
- The annual health benefit of using the Kununurra Aquatic Facilities was calculated by multiplying the number of pool visits annually (15,465) by the Royal Life Saving Australia economic benefit figure of \$26.39 per visit, which equates to an annual benefit of \$408,121.
- Therefore, total predicted annual health and productivity benefit from activity at the Kununurra Aquatic and Leisure Centre facilities is \$596,446 per year.

¹¹ WHO. (February 2017) Physical Activity: Fact Sheet. Retrieved from <http://www.who.int/mediacentre/factsheets/fs385/en/>

¹² Barnsley, P. Peden, A. Scarr, J. (2017) Economic Benefits of Australia's Public Aquatic Facilities, Royal Life Saving Society – Australia, Sydney.

¹³ Frontier Economics (2009), “The economic contribution of sport to Australia, prepared for The Australian Sports Commission”, November.





5.3. Community and Social Connectiveness Benefits

The need for sport and recreation in regional communities is well recognised and documented. The then Department of Sport and Recreation commissioned a study into the benefits of sport for regional communities in 2006 titled Sport and Community Cohesion in the 21st Century.

This report reveals direct links between participation in sport and the development of cohesive social communities. The report provides evidence of sport being linked to social benefits to both the individual and the community, such as community integration, cohesion, cooperation, and community identity and pride. Local sporting clubs have played a key role in regional communities across Australia providing better physical and mental health outcomes for people of all ages. They also help teach values, volunteerism, cooperation, leadership, teamwork, and help in overcoming adversity. It is now highly recognised by all levels of government that sport and recreation in regional communities are integral to bringing people together and improving community cohesion, social capital and resilience.

Redevelopment of the Kununurra Aquatic and Leisure Centre for Kununurra and its surrounding areas will have the benefit of making these facilities a central point in town for the community to gather and socialize. This is likely to encourage more people to get involved in sports and activities that can use the new facilities and to become more physically active. Exposing children to these sports on a regular basis will hopefully create a desire to be involved.

In addition to the physical health benefits from the various sport related activities offered by the existing facilities, the redeveloped facilities will also offer acknowledged benefits in terms of connectedness and wellbeing.

A recent Australian based sporting study conducted by the La Trobe University, Centre for Sport and Social Impact titled, 'Value of a Community Football Club'¹⁴, highlights the potential value of investment in community sporting facilities, and showed that for every dollar invested in a community sporting facility will return \$4.40 in social value in terms of increased social connectedness, wellbeing and mental health status; employment outcomes; personal development; physical health; civic pride and support of other community groups.

A technical report for Aquatics and Recreation Victoria undertaken by the Victoria University in April 2014¹⁵ also looked at the community benefits of Victorian Aquatic and Recreation Centres (ARCs). The purpose of this research was to identify the scope and scale of the community benefits that come from the operations of ARCs. For the purposes of that study, community benefits were confined to cover both economic significance and social benefits. Economic significance related to the size and nature of financial activities of an ARC. Social benefits related to the capacity of the ARCs to address the needs of their local community and the social connection that the users gained from their participation in the ARC programs and services.

The findings from this research provided some insights about ARC operations and benefits provided to their communities that have not been previously identified. The main conclusions and implications from the research were:

- The centre users participate in a variety of moderate and vigorous physical activity that exceeds the normal physical activity patterns of most Australians. This makes an important contribution to participants' health.

¹⁴ La Trobe University, Centre for Sport and Social Impact. (2015). Value of a Community Football Club. Retrieved from <http://www.aflvic.com.au/wpcontent/uploads/2015/02/Latrobe-Value-of-a-Community-Football-Club-Final-PDF.pdf>

¹⁵ Victoria University, Institute of Sport, Exercise and Active Learning (2014), Community Benefits of Victorian Aquatic and Recreation Centres – A Technical Report for Aquatics and Recreation Victoria





- Most centre users may be among the truly dedicated physical activity participants so there would be value for ARCs to attract a wider range of users, especially from disadvantage sectors of the community.
- The ARC goals/vision expresses a desire to address the social and community development activities in their operations but there may be economic impediments and limited resources to pursue these goals. ARCs need to review these goals and their operations to determine how they can make the social aspects of their operations a larger part of their main activities.
- ARCs contribute to local social capital, but it tends to not be particularly strong. ARC management may need to review how they interact with their customers to facilitate the development of community connections.
- ARCs are important economic entities in their local communities. They provide:
 - Facilities, programs and services for their local residents
 - Employment for local residents
 - Employment for local contractors
- ARC activities are important contributors to the local community. Users value their visit to the centre at almost \$48 per visit and the centres provide an average \$38 million of benefits. The centres generate a return of \$7.60 value for every dollar of expenditure, excluding capital expenditure. The value of their operations needs to be better recognised by the wider community and political decision makers.

Overall, the research identified that ARCs are making important community and economic contributions to their local communities.

As a comparison to the above benefits and in calculating the estimated community and economic benefits of the Kununurra Aquatic and Leisure Centre facilities we have also referred to the Royal Life Saving Society – Australia report mentioned in Section 5.2 above that looked at the economic benefits of Australia's Public Aquatic Facilities in 2017¹⁶, which estimated that the average aquatic facility creates \$2.72 million a year in value to the community.

Estimation Method

In order to establish an indicative measure of the potential community and social connectiveness benefits, the following approach has been applied:

- Calculate the social value in terms of increased social connectedness, wellbeing and mental health status; employment outcomes; personal development; physical health; civic pride and support of other community groups based on a \$4.4 multiplier from the LaTrobe University research by the \$22,326,541 invested in this redevelopment, which equals \$98,236,780 in value. Assumption that this benefit is experienced once-off.

¹⁶ Barnsley, P. Peden, A. Scarr, J. (2017) Economic Benefits of Australia's Public Aquatic Facilities, Royal Life Saving Society – Australia, Sydney.





- Based on the research by Victoria University that indicates users value their visit to the centres at almost \$48 per visit multiply this figure by the projected annual attendance numbers for the Kununurra Aquatic Centre for 2019, 51,991 – giving a community benefit of \$2,495,568 annually. This estimate is very similar to the Royal Life Saving Society - Australia estimate that the average aquatic facility creates \$2.72 million a year in value to the community. To be conservative we have taken the lessor of these two figures for use in this cost benefit calculation.

5.4. Volunteering Benefits

In 2015, Volunteering WA commissioned the Institute of Project Management to undertake a research study to quantify and present a comprehensive analysis of the economic, social and cultural value of volunteering to Western Australia.

The study applied a model of value creation to locate the discrete values of volunteering activity in Western Australia and, for the first time, illustrate the dynamic ways in which they interact. The findings depicted how individuals, businesses and all levels of government use their time, resources and money to enable volunteering across the State and how this alters individual and community states of physical, human, social and symbolic capital.

The research findings¹⁷ place volunteering front and centre as one of Western Australia's largest industries, annually contributing \$39 billion in benefits to the community. It also showed that volunteering offers a significant return on investment, with \$4.50 returned for every dollar invested, with each hour of volunteering costing the community \$6.15. It noted that volunteering is both essential to the wellbeing of Western Australians, impacting positively upon the welfare of society and also a key driver of economic growth influencing fiscal growth across a range of other sectors.

The Shire of Wyndham East Kimberley currently estimates that the clubs currently using the facilities involve volunteer operations, with volunteers estimated to provide up to 2,940 volunteer hours a year in their own time. These volunteers deliver not only an essential service to the Shire, the town of Kununurra and surrounding community, but also provide a significant contribution to the local and State economy based on the research undertaken by Volunteering WA.

Estimation Method

To estimate the value of the volunteering benefits for all of the volunteers' time at the Kununurra Aquatic and Leisure Centre, we have utilised the Volunteering WA's Volunteer Benefits Calculator¹⁸.

The volunteer benefits calculator looks at two main factors when coming up with the benefits as follows:

1. What is the 'replacement cost'?

The replacement cost of an individual's time is calculated with reference to the Australian Bureau of Statistics' 2015 data for Western Australia on the average part-time wage earnings of each age cohort, indexed for employer on-costs. This is added to the cost of relevant resources acquired by the individual in pursuit of their volunteering. In other words, it is the amount of money a Western Australian business would have to spend to replace the overall contribution of the individual volunteer.

¹⁷ Institute of Project Management (2015), "The Economic, Social, and Cultural Value of Volunteering to Western Australia, prepared for Volunteering WA"

¹⁸ <https://www.volunteeringwa.org.au/resources/volunteer-benefits-calculator>





2. What is 'value'?

The value a volunteer-involving organisation delivers to the Western Australian community is a different measure to replacement cost. It aggregates the commercial, community and individual benefits created by each act of volunteering, and includes things like:

- The employment and tax revenue created by the direct expenditure of individuals and organisations on volunteering
- The costs avoided by civic institutions such as government departments of health, education, emergency services and the like
- The productivity surplus enjoyed by employers as a result of their employees' volunteering
- The wellbeing benefits returned to individuals and the community

You can use the replacement cost and value calculators interchangeably for individuals and organisations; however, the value calculator is not sensitive to age differences.

To calculate the Kununurra Aquatic and Leisure Centre volunteer benefit we utilized the following collated number of volunteer hours provided by the Shire of Wyndham East Kimberley, that was then input into the calculator to provide these benefits:

Redevelopment Kununurra Aquatic and Leisure Centre - Combined Volunteer Hours & Benefits and Value Delivered to WA Community

Individual Age Group Hours	Hours per week	Hours per year	Individual Benefits per year	
15-24	8	288	\$6,624	
25-34	12	432	\$17,712	
35-44	12	360	\$17,640	
45-54	8	240	\$12,000	
55-64	4	120	\$6,240	
65-74	2	60	\$2,460	
75+	0	0	0	
Total volunteer hours	46	1500	\$62,676	
Organisational Volunteer hours			Organisation Benefits per year	
Club Committees	40	1,440	\$110,256	
Total Organisational hours	40	1440	\$110,256	
Total volunteer hours	86	2,940	Total Individual & Organisational Benefits	\$172,932
			Total Value of Benefits Delivered to WA Community	\$172,932

This calculation results in the Kununurra Aquatic and Leisure Centre providing \$172,932 in value to the Shire of Wyndham East Kimberley community and the Western Australia economy each year through its volunteering hours.



6. RESULTS

The breakdown of costs and benefits, as defined above is provided below, along with a cost-benefit assessment.

Establishment	<p>Upfront costs of \$22,326,541 (excluding GST and all spent in construction and fit out phase for Stage 1 Aquatic Facilities, Stage 2 Zero Depth Water Splash Pad, Stage 3 – Sports Centre Facilities and Stage 4 – Additional facilities)</p> <p>Total - \$22,326,541 (once off)</p>
Recurrent Costs	<p>The recurrent (ongoing) costs in Year 1 of \$2,002,128 increasing to \$2,828,919 by year 10 in line with the whole of life model and sustainability analysis for the existing and new facilities broken down as follows:</p> <p>Total Annual Operating Costs - \$1,442,852 indexed at CPI @ 1.5%;</p> <p>Average Annual Maintenance Demand Expenditure - \$557,676 per annum over 20 years; and</p> <p>Capital Replacement for new facilities (Asset Renewal Fund) – starting at \$1,600 in year 1 due to it being a new facility, increasing to \$621,500 in Year 10, which represents cash backed depreciation to a building and infrastructure asset renewal reserve fund (Refer to Whole of Life Asset Sustainability Section of the Business Case).</p>

Benefit Area	Future Value of Benefits over 10 years
Employment	\$18,004,048
Gross Regional Product	\$15,778,501
Health plus Productivity	\$5,964,460
Community	\$24,955,680
Social Connectedness	\$98,236,780
Volunteering	\$1,729,320

A standard cost-benefit framework was used to develop a 10-year discounted cash flow analysis of the benefits and costs identified in the preceding sections. Assuming a discount rate of 6%, the project is expected to yield a Net Present Value Benefit of \$121.29 million over 10 years. The Benefit Cost Ratio is 3.98 to 1. For reference, calculations at a discount rate of 2% have also been shown in the following tables.



Discount Rate	2%	6%
Present value of costs – project plus ongoing renewal (\$m)	\$44,131,241	\$40,655,533
Present value of benefits (\$m)	\$169,311,258	\$161,946,249
Net Present Value (\$)	\$125,180,018	\$121,290,716
Benefit to Cost Ratio	3.84 : 1	3.98 :1

A breakdown of the present value of benefits, assuming a discount rate of 6% over ten years, yields ratios for economic benefits of 1.05 to 1 and social community benefits of 2.93 to 1.

Economic Benefits

Discount Rate	2%	6%
Present value of costs – project plus ongoing renewal (\$m)	\$44,131,241	\$40,655,533
Present value of benefits (\$m) - Economic	\$46,398,802	\$42,719,151
Net Present Value (\$)	\$2,267,561	\$2,063,618
Benefit to Cost Ratio - Economic	1.05 : 1	1.05 : 1

Social Community Benefits

Discount Rate	2%	6%
Present value of costs – project plus ongoing renewal (\$m)	\$44,131,241	\$40,655,533
Present value of benefits (\$m) - Social	\$122,686,209	\$119,055,596
Net Present Value (\$)	\$78,554,968	\$78,400,063
Benefit to Cost Ratio - Social	2.78 : 1	2.93 : 1

As discussed earlier, a conservative approach was taken in this analysis, however it is possible that the actual economic benefits could be lower than estimated, especially if the operating costs for the new facilities do not remain relative to the current operational costs. Should these increase substantially then it is expected that the economic benefit to cost ratio would become negative. Also impacting the economic benefit is the assumptions made regarding the increase in operational revenue based on the new facilities. Should this increase in revenue also not eventuate from more usage of the new facilities then it is expected that the economic benefit to cost ratio would become negative



However, on current figures as just a stand-alone economic investment proposal, the development at a 6% discount rate provides a fairly cost neutral position with a small net present benefit of \$2,063,618 and benefit cost ratio of \$1.05 returned for every dollar invested over the 10-year period. This fairly balanced outcome is not unexpected as many of these types of facilities are run at a loss and are subsidised by local government revenue based on the community and social benefits that arise.

With the addition of the social and community benefits taken into consideration the project becomes a more attractive proposition, with the project expected to yield a Net Present Value Benefit of \$121.29 million over 10 years and a benefit cost ratio of \$3.98 for every dollar invested.

On the basis of these returns the Shire of Wyndham East Kimberley would be justified in proceeding with this investment given the benefits it will bring to its local community, but noting the proviso that they will need to operate the new facility within a normal current expenditure profile and also increase its incoming revenue.

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