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City of Joondalup

Joondalup Performing Arts and Cultural Facility

Review of JPACF Business Case

18 November 2016

Deloitte.

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18 November 2016

Garry Hunt
Chief Executive Officer
City of Joondalup
90 Boas Avenue
Joondalup WA 6027

Dear Garry

Re: Review of the Joondalup Performing Arts and Cultural Facility Business Case

Pursuant to our CUA 23706 Audit Services and Financial Advice Order Form dated 15 September 2016, this report sets out our key observations following our review of the Joondalup Performing Arts and Cultural Facility (JPACF) Business Case September 2016 (the Business Case).

We understand that the purpose of the Business Case is to inform the Elected Members on the merits of the JPACF project, prior to embarking on a public consultation process.

Deloitte has been engaged by the City of Joondalup (the City) to review and comment on the Business Case, in particular:

- The financial projections and the basis of the key financial assumptions and supporting information
- The sources of funding (in particular progress with assets sales, National Stronger Regions Fund (NSRF) grant and WATC debt funding) and the proposed financing strategy for JPACF
- Risks, sensitivity analysis and potential variability of cash flows, returns and impact on the City
- The Social and Economic Impact Analysis
- The Cost Benefit Analysis.

If you have any questions or would like clarification about any aspects of the attached report, please do not hesitate to contact me on 08 9365 7287.

Yours sincerely

Andrew Annand
Partner
Deloitte Touche Tohmatsu

Contents

1 Scope of work

This report sets out the observations that have come to our attention in relation to our review of the Joondalup Performing Arts and Cultural Facility (JPACF) Business Case September 2016 ('the Business Case').

The City of Joondalup (the City) requested that we review and comment on the Business Case, in particular:

- The financial projections and the basis of the key financial assumptions and supporting information
- The sources of funding (in particular progress with assets sales, National Stronger Regions Fund (NSRF) grant and Western Australian Treasury Corporation (WATC) debt funding) and the proposed financing strategy for JPACF
- Risks, sensitivity analysis and potential variability of cash flows, returns and impact on the City
- The Social and Economic Impact Analysis
- The Cost Benefit Analysis.

We understand that the purpose of the Business Case is to inform the Elected Members on the merits of the JPACF project, prior to embarking on a public consultation process.

Our review of the Business Case and supporting documents and appendices provided by Management has included:

- Review of the JPACF Business Case (September 2016 version) and supporting documents and appendices provided by Management
- Discussions with Management including Garry Hunt (CEO), Blignault Olivier (Manager City Projects) and Alan Ellingham (Senior Financial Analyst)
- Discussions with Michael Chappell (Managing Director) from Pracsys in relation to the Market Analysis and Feasibility Study (2012), the Financial Evaluation and Review Final Briefing Note (September 2016) and JPACF Analysis – Economic and Social Impacts (completed 2016).

2 Background to the current JPACF Art Box Design

The City first defined a need for a performing arts facility in 1992 as part of a cultural plan for the City. The City undertook initial feasibility studies during the 1990's and early 2000's. Council approved the purchase of a lot of land for the JPACF development in 2004 and the City finalised the purchase in 2006.

In 2010 the City established a steering committee for the JPACF development. The project philosophy and parameters as adopted by Council in 2011 are summarised below:

- Partnerships
- World Class, state of the art facility
- Imagination and Creativity
- Inclusive Environment
- Viability and Attraction
- Financial Sustainability.

Between 2012 and 2016, the City engaged economic, architectural and engineering consultants to establish the design, financial projections and economic benefits and cost estimates for the JPACF.

In 2012, economic consultants, Pracsys, recommended that the scope and facilities of the JPACF be extended from the traditional performing arts centre to an Art Box Design to better connect with market requirements in the Joondalup area.

The Art Box Design of the JPACF was approved by Council in 2013. The City commenced an international architectural design competition in April 2013, receiving 21 submissions. In April 2014, Council endorsed ARM Architecture as the winner of the architectural design competition for their Art Box concept. A People's Choice vote was also undertaken and was awarded to ARM Architecture.

The current estimated capital cost of the JPACF is currently $99.7 million. Key approval, development and capital expenditure estimate milestones for the JPACF development have been summarised in Appendix 1.

3 The Business Case Development Process

As noted above, the Business Case has been developed for consideration by Council before a public consultation process is undertaken.

The City has undertaken an extensive process in developing the Business Case for its current purpose. The City has consulted widely and engaged a number of relevant independent consultants to assist with the development. The City also developed a detailed financial model for JPACF (the Financial Model) and we understand from Management that the financial implications have been included in the City's 20 Year Strategic Financial Plan. The process followed by the City to develop the assumptions underlying the financial forecasts appears robust.

In 2012 a comprehensive Market Analysis and Feasibility Study (MAFS) was prepared by Pracsys. The MAFS highlighted that there is currently a significant under provision of performing arts and cultural facilities within the northern corridor of Perth. The MAFS was updated in 2016 and based on Australian Bureau of Statistics data estimated that the demand for performing arts and cultural facilities in the catchment area (incorporating Joondalup, Wanneroo, Gin Gin and part of Stirling) there were approximately 800,000 attendances (this includes all attendances – theatres, studios, conference, general attendance etc.) of which approximately 200,000 were already being consumed (the latter figure was established by a survey). This left a latent or unmet demand of c.600,000 attendances. Management prepared a bottom up estimate of attendance based on the projected utilisation of the Primary and Secondary Theatres as part of the financial modelling process - this came to c100,000 attendances (this did not include general attendances at conferences, studios etc.). Therefore there may be some upside in the assumed attendances at the Primary and Secondary Theatres.

Table 1 below outlines the key financial and economic drivers and the primary sources of input into the development of the Business Case.

Table 1: JPACF assumption development

Key financial and economic assumptions	Primary Source	Secondary Source
Need/Demand analysis for the JPACF	Pracsys Consultants (Pracsys) Feasibility Study 2012. Update in September 2016	N/A
Design and Capital Cost	ARM Architecture and quantity surveyors subcontracted by ARM Architecture	N/A
WATC debt funding	Management and preliminary engagement with Western Australia Treasury Corporation (WATC)	N/A
Tamala Park asset sales	Management with reference to Tamala Park Council projections	N/A
Potential NSRF grant funding applications	Management and Pracsys	N/A
Revenue and Costs		
Theatre	Pracsys and reports by the Australian Performing Arts Centres Association (APACA)	Paxon with review by the General Manager of the Mandurah Performing Centre and Ex-General Manager of the Perth Theatre Trust
Conference	Pracsys and public reports by the Australian Performing Arts Centres Association (APACA)	Paxon
Studios	Pracsys and public reports by the APACA	Paxon
Parking	City of Joondalup	N/A
Restaurant leases	City of Joondalup and Paxon Group Pty Ltd (Paxon)	N/A
Sponsorship	City of Joondalup	N/A
Staff costs	Pracsys	Paxon with review by the General Manager of the Mandurah Performing Centre and Ex-General Manager of the Perth Theatre Trust
Building maintenance and utilities	City of Joondalup building and maintenance division	Paxon and Donald Cant Watts Corke
Ticketing income	Ex-General Manager of the Perth Theatre Trust	N/A
Sustaining capital	City of Joondalup and Randall Arts Management Consultancy	Paxon and Donald Cant Watts Corke
Economic and Social benefit analysis	Pracsys	N/A

Although the Business Case broadly includes aspects typically found in a business case, there is limited analysis and commentary on the financial and economic assessment of the alternative options to the Art Box Design. Options analysis is a key component of the Western Australian Government Strategic Asset Management Framework (SAMF). While the City is not required to follow this framework, it does provide useful guidance in the development of Draft Business Cases and ensuring options are assessed objectively. However, Management has advised that the current design has evolved through extensive engagement with stakeholders and Elected Members (which has resulted in additional features/capacity and cost being added to the JPACF concept) and the options assessment is set out separately in the Financial and Option Evaluation prepared in 2015 which has previously been considered by Elected Members.

The Business Case should document in greater detail the rationale as to why the other options are not effective in meeting the project objectives drawing on the analysis contained in the 2015 Financial and Option Evaluation.

4 The development of the financial projections

The JPACF is the largest capital project the City has considered to date and if it proceeds, it will consume significant financial resources of the City, which may be to the exclusion of other future projects. The key drivers of the financial performance and outcomes of the JPACF project are listed below.

Table 2: JPACF key financial considerations

Item	Assumption	Commentary
Capital expenditure	• $99.7m	• Based on value engineered estimates provided by ARM Architecture following engagement of quantity surveyors • There is a risk that capital costs are higher than the assumed $99.7m which will need to be funded and will ultimately have an impact on the total cost to rate payers. See Section 4.2 for further detail • c.$100m is a significant capital and financial commitment for the City and will have a significant impact on the development and funding of future projects by the City. The implications of allocating scarce capital to one project should be considered.
Sources of funding (nominal)	• $37.5m (includes Tamala Park and other land sale proceeds) • NSRF grants - $10m • WATC - $57.8m	• The current Financial Model assumes that the City ratepayers will be funding c.90% of the capital costs (ie excluding the NSRF grant) and all ongoing annual operating deficits of the JPACF even though the benefit will be obtained by rate payers in other catchment areas. The City should therefore consider obtaining State or Federal funding to contribute towards the cost of the project • Tamala Park and other land / asset sales are also forecast to provide an additional c.$46m during the JPACF operating stage, which will be used to repay some of the debt. The City has already revised downwards its estimate of Tamala Park sale proceeds and in the current economic climate, there is a risk that further downward revisions are possible. There is a risk that the timing and quantum of Tamala Park and other land sale proceeds are lower than forecast, particularly given the current economic environment and, as a 16.5% shareholder in the Tamala Park Council, the City does not have control over the land sale programme. The impact of delays on the funding profile and funding requirements needs to be considered • The $10m NSRF grant application was unsuccessful. Management has advised that it will seek to replace this shortfall with either WATC borrowing or funding from other sources (including State and Federal grants)

Item	Assumption	Commentary
		• Current discussions between WATC and the City indicate that WATC loans of c.$57m are achievable with a 4% to 5% annual increase in rates. The rate increase last year was approximately 2.5% • There is a financial risk to the City of servicing the proposed WATC loans if the Elected Members do not approve rate increases of 4% to 5% in the next few years in accordance with the 20 Year Strategic Financial Plan (SFP). The City completed a "Shadow Credit Risk Assessment" with WATC earlier this year, based on the Draft 20 year SFP. Management advised that WATC evaluated the proposed borrowings for the JPACF using the same criteria that they normally would as part of any loan arrangement. This involved an overall assessment of the City based on overall income, existing debt, expenditure, etc. Based on this preliminary assessment, WATC advised the City it would qualify for the borrowings. Management advised that WATC also performed a sensitivity analysis assuming that the increase in general rates would result in $1m less income in 2017/18 (1%) and a further $1m reduction in 2018/19. On the basis of this analysis, WATC confirmed that the City would still qualify for the proposed borrowings. The City has an annual process to review the proposed borrowings with WATC; this is carried out as part of the annual update of the 20 Year SFP. The next review with WATC will be carried out in early 2017 as part of the 2017 SFP • There is a risk that debt repayments and interest expenses are higher than forecast, which will impact the total cost of the JPACF on Joondalup ratepayers. The total cost to ratepayers is discussed in Section 4.2 • In September 2016 Management prepared an alternative financing strategy to the City's traditional fixed rate/fixed repayment term financing (as set out in the Financing Review September 2016). Management has recommended a move towards a financing strategy where there is a more structured approach in matching the term and repayment profiles of the debt facilities to the underlying forecast cashflows of the City, thereby reducing total interest costs. Although this is a move away from the City's traditional fixed repayment profile, it is a strategy which if managed effectively can reduce the total borrowing costs. However there is always a trade-off between risk, certainty and cost, and Management will to need to provide a risk management framework to manage the underlying risk.

Item	Assumption	Commentary
Operating deficit of the JPACF (excluding financing and capital maintenance costs)	• Average annual operating deficit of $863,000 • Funding and sustaining capex is not included	• The projected operating deficit of the JPACF is being subsided fully by the City ratepayers although there will be a benefit to other non-Joondalup ratepayers • The operating deficit excludes the impact of significant debt repayments and sustaining capital expenditure (impact on cashflow) and interest costs and depreciation (the impact income statement). The total cost impact should be made clear in the Business Case (see Section 4.2 below) • Based on our analysis to date, there is potential for further downside to the operating performance of the JPACF (refer to Section 4.1) • Management has assumed a four year ramp up of JPACF until it gets to a steady state financial performance in year five.
Sustaining capital expenditure	• Assumes $79.4m over the life of the project based on Management assumptions	• Management has consulted with the City's asset management team to develop the sustaining capital expenditure profile • Management assumptions are significantly different to the sustaining capital expenditure assumptions determined by Paxon (c$200m) and Donald Cant Watts Corke • Management has advised that the estimated life assumptions by Paxon and Donald Cant Watts Corke are not fully based on actual data but based on project estimates from other projects and experience. A separate arts management consultant, Randall Arts Management Consultancy, was engaged and has indicated that the higher estimates are on the high side and inconsistent with actual experience of Performing Arts Centres in Australia • Management has advised that it will undertake further reviews in this area by seeking actual data from other facilities in Australia.

Source:_Excel file - Project Fin Eval Model (JPACF Sept2016)__v6__(29.09.16).xls

Management prepared an initial risk register and action plan as set out in the JAPCF Project Plan. There is a significant risk that the funding and operation of the JPACF may place significant financial strain on the City, in particular if potential risks such as capital cost increases, operating deficits, debt levels and sources of funding are not properly managed. The City should ensure that the risk management plan is regularly updated to identify, quantify and mitigate key risks.

4.1 Financial analysis

Management has set out the financial projections for the operating deficit of JPACF in the Business Case. Certain assumptions are subject to significant variability and risk, particularly given JPACF will be a greenfield development with no track record of financial performance.

On this basis, further downside scenarios should be considered to address the potential operating and financial risks associated with the JPACF should be developed and included in the Business Case.

Although the Business Case sets out debt repayments, interest costs and sustaining capital expenditure over the life of the JPACF, we suggest that the full cost impact of the facility on a per ratepayer basis is also shown (refer to Section 4.2 for discussion on the total impact on ratepayers).

4.1.1 Operating deficit – downside analysis

Financial projections by their very nature are subject to change. Having regard to the comments by Paxon and Pracsys with respect to potential revenue and costs for the JPACF, we believe a further downside scenario should be considered.

Management has developed worst (Scenario 1), Idealistic (Scenario 2) and Realistic (Scenario 3) scenarios. Table 3 shows the potential operating deficits outlined in the Business Case (Scenarios 1 to 3). For illustrative and discussion purposes only, we have presented an additional potential downside scenario (Scenario 4), which reflects the following additional adjustments to the Business Case's downside scenario (Scenario 1):

- Reduction in secondary theatre operating days to 142 days from 163 days (Deloitte adjustment)
- 5% reduction in primary and secondary theatre ticket prices (Deloitte adjustment)
- 5% reduction in the commercial hire rate for the Primary theatre (Deloitte adjustment)
- A reduction in the number of conferences and functions held to 45 per annum from 90, with a corresponding adjustment to variable costs. Paxon and Pracsys have commented on the existence of other conference / function facilities in the region (which are underutilised), the significant new hotel capacity being built in Perth and the lack of accommodation in Joondalup as being a risk to the utilisation of the conference / function rooms. The 90 conferences / functions were based on the attendance at the Joondalup Resort. Assuming an additional 90 conferences at the JPACF means the market size would need to double, which is unlikely given current economic conditions and the development of new facilities in the CBD
- 10% reduction in studio and exhibition revenues (Deloitte adjustment)
- 10% increase in staff costs (Deloitte adjustment)
- A reduction in the gross food and beverage margin from 33% to 15%. Paxon has noted that food and beverage may operate at a breakeven point
- A reduction in Restaurant turnover to $3,500 sqm, which has a marginal impact on restaurant lease revenue (based on Paxon report)
- An increase in cleaning and security costs to reflect a recent comparison of other facilities prepared by Donald Cant Watts Corke
- Sponsorship income reduced from $150,000 to $100,000. The $150,000 is a general assumption and Paxon have noted there may be limited opportunities to secure sponsorship. Management has provided additional information in relation to sponsorship it receives for other events and noted that the average sponsorship across all facilities assessed in the APACA report was $97,000.

Table 3: Operating deficit (excluding loan repayments and sustaining capex) in year 5 (assumed steady state)

	JPACF Business Case			Deloitte
($'000, 2016)	Scenario 1 Worse Case	Scenario 2 Idealistic	Scenario 3 Realistic	Scenario 4 Potential further downside adjustments
Primary Theatre	$311	$391	$351	$297
Secondary Theatre	$125	$129	$127	$109
Conferences, Exhibitions and Studios	$392	$392	$392	$325
Parking	$181	$181	$181	$181
Food & Beverage	$42	$42	$42	$18
Leases: Restaurant	$63	$90	$77	$63
Sponsorship	$150	$150	$150	$100
Staffing, Marketing, Admin	($1,464)	($1,243)	($1,342)	($1,558)
Building Costs & Utilities	($1,078)	($791)	($969)	($1,093)
Ticketing income	$128	$128	$128	$128
Annual Subsidy (excluding interest and depreciation)	**($1,150)**	**($529)**	**($863)**	**($1,431)**
Subsidy as % of Expenses	**27%**	**14%**	**21%**	**33%**

Source:_Excel file - Project Fin Eval Model (JPACF Sept2016)__v6__(29.09.16).xls

The City should consider the impact of an increased operating deficit on:

a. The benefits of the JPACF project

b. The City's ability to fund operating deficits and potential sources of funds

c. The City's debt / borrowing capacity and its ability to service Western Australian Treasury Corporation loans.

There is however potential upside through additional utilisation and attendances driving higher revenues, improved profit margins on presented events and lower costs in general. Achieving better financial performance will be driven by engaged and entrepreneurial JPACF management and the ability to activate the assumed latent demand by attracting the right shows which appeal to the demographic. Given available information and the early stage of the project, it is not possible to determine with certainty the potential operating deficit. It is therefore prudent to consider an operating deficit range and conduct stress testing on the City's ability to fund the deficit and the impact on borrowing capacity. Based on current assumptions, the projected annual operating deficit of the JPACF could be between the range of $500,000 and $1,400,000 (excluding debt and sustaining capex).

4.2 Impact on ratepayers (total cash cost)

The Business Case highlights the average annual operating deficit of $899k (or $13.66 per rate payer in years 6 to 10 – see table 4(b) below) but does not clearly show the average annual cost to ratepayers of including debt repayments, interest costs and sustaining capital expenditure.

Outlined below is the average annual cash cost on ratepayers of the JPACF under the current "Realistic" scenario (Scenario 3 in the Business Case).

Table 4(a): Average annual cost per ratepayer (Scenario 3)

Average annual total cash cost to the ratepayer ($, nominal)	Years 1 - 5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	Years 26-30
Operating subsidy	12.59	13.66	15.68	16.54	20.10	24.42
Sustaining capital expenditure	0.00	0.00	0.00	25.56	18.44	0.00
Debt repayment	52.03	61.00	50.22	0.00	0.00	0.00
Interest	33.35	19.99	5.26	0.00	0.00	0.00
Total cash cost to ratepayers	**97.97**	**94.64**	**71.16**	**42.10**	**38.54**	**24.42**

Table 4(b): Average annual deficit (Scenario 3)

Average annual total cash cost ($, nominal)	Years 1 - 5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	Years 26-30
Operating subsidy	804,443	898,517	1,052,107	1,119,797	1,360,352	1,653,121
Sustaining capital expenditure	-	-	-	1,729,918	1,248,037	-
Debt repayment	3,324,731	4,012,702	3,368,590	-	-	-
Interest	2,130,971	1,314,691	352,682	0	0	0
Total cash cost	**6,260,146**	**6,225,910**	**4,773,379**	**2,849,715**	**2,608,389**	**1,653,121**

Notes: 1) We have excluded Tamala Park land sale proceeds received during the operating period as these funds could be used for alternative purposes / project and use on the JPACF presents an opportunity cost

Source:_Excel file - Project Fin Eval Model (JPACF Sept2016)__v6__(29.09.16).xls

The inclusion of sustaining capital expenditure, debt repayment and interest highlights the significant total cost to ratepayers, increasing the average annual operating deficit to $6.2m (see table 4(b)) or $94.64 per rate payer (see Table 4(a)) in years 6 to 10.

As noted above, there is significant risk to the sources of funding and potential for increased costs. Outlined below is a sensitivity analysis on the total cost to ratepayers assuming the following:

- The revised worst case scenario as set out in section 4.1.1 (Scenario 4)
- A 30% increase in sustaining capital expenditure. This increase is, however, still significantly below the nominal life cycle maintenance costs assumed by Paxon and Donald Cant Watt Corke, which have both assumed life cycle maintenance costs of $200m and $176m (respectively) compared to Management's assumption of $79.4m (in conjunction with advice from Randall Arts Management Consultancy). The table below shows sustaining capital expenditure over a 30 year period. It is important to note that sustaining capital expenditure increases significantly in later years (ie >30 years)
- The $10m NSRF grant is replaced with WATC loans
- Construction costs increase to $113.2m from $99.7m, with the increase funded by WATC loans
- There is a 15% reduction in Tamala Park proceeds that contribute to the JPACF reserve fund, the difference being funded by WATC loans.

Table 5(a): Average annual cost per ratepayer (Scenario 4)

Average annual total cash cost to the ratepayer ($, nominal)	Years 1 - 5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	Years 26-30
Operating subsidy	22.34	25.80	29.88	33.31	40.08	48.24
Sustaining capital expenditure	0.00	0.00	0.00	33.23	23.97	0.00
Debt repayment	76.04	89.14	73.34	0.00	0.00	0.00
Interest	48.72	29.19	7.68	0.00	0.00	0.00
Total cash cost to ratepayers	**147.10**	**144.14**	**110.89**	**66.54**	**64.05**	**48.24**

Table 5(b): Average annual deficit (Scenario 4)

Average annual total cash cost ($, nominal)	Years 1 - 5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	Years 26-30
Operating subsidy	1,427,470	1,697,454	2,004,134	2,254,450	2,712,556	3,264,776
Sustaining capital expenditure	-	-	-	2,248,893	1,622,449	-
Debt repayment	4,858,691	5,863,906	4,920,051	-	-	-
Interest	3,113,022	1,920,340	514,895	-	-	-
Total cash cost	**9,399,182**	**9,481,700**	**7,439,080**	**4,503,343**	**4,335,005**	**3,264,776**

Source:_Excel file - Project Fin Eval Model (JPACF Sept2016)__v6__(29.09.16).xls

The inclusion of these additional downside scenario assumptions increases the average annual operating deficit to $9.5m (see Table 5(b)) or $144.14 per rate payer (see Table 5(a)) in years 6 to 10.

5 Cost benefit analysis (CBA) and Social Return on Investment (SROI) assessment

The CBA completed by Pracsys calculated a benefit cost ratio (BCR) for the project of 2.01, and a social impact ratio of 2.73. These are important considerations in the investment decision to proceed with the JPACF. As noted above, under Scenario 3 (the "Realistic" scenario) there is a financial cost to ratepayers and a net project cost (as opposed to benefit).

Accordingly, the decision to invest in the JPACF is more likely to be based on the economic and social benefits the project provides to ratepayers. Investing in projects that do not provide commercial financial returns but provide economic and social benefits to the community is a key role that local government can and should fulfil.

However, the calculation of economic and social benefits should be based on sound and transparent assumptions and methodologies. To this extent, we have identified a number of key issues that are outlined in full in Appendix 2.

Our key observations are as follows:

- The significant effort undertaken as part of the MAFS work in calculating the potential demand for attendances within the catchment (c.810,000, with c.600,000 estimated to be latent) is currently not sufficiently discussed in the business case. We appreciate that the MAFS document forms an appendix to the business case. However, given the importance of these estimates to the CBA, the City should consider including greater detail in the business case itself regarding the process employed in calculating the demand quantum
- The economic benefits currently expressed in the CBA as transport-related benefits are in fact utility-related benefits, with transport costs used as a proxy for the utility gained by latent consumers who choose to consume arts and culture due to the JPACF. The City should consider renaming the transport benefits as utility benefits. Utility is the majority of the benefit component, and therefore has a significant impact on the BCR
- Given that avoided transport costs are not a conventional proxy for utility, the City should consider detailing the limitations of and rationale for using this approach in the business case
- A number of capture rates drive the value of the utility benefit, however, it is not clear if these capture rates have been modelled, or are pure assumptions. If they are pure assumptions, the City should consider acknowledging this in the business case and presenting in the business case the results of a number of sensitivity tests with higher and lower capture rates to demonstrate how the CBA outcome may change
- The quantum of demand used as the basis to calculate the utility benefit (i.e. c.600,000 attendances) varies from the quantum of demand used to calculate the revenue benefits and the secondary spending benefits (i.e. c.100,000 attendances). A consistent demand scenario should ideally be used to calculate all benefits in a CBA, however, we understand that there may be a viable rationale in the case of the JPAC for utilising different bases of demand. The City should consider making this rationale clear in the business case
- The quantum of demand used as the basis to calculate benefits in the CBA includes attendees from a broad catchment beyond the City of Joondalup. While noting there might be a benefit to persons attending the new facility from councils outside of Joondalup (including regional areas), it will be Joondalup ratepayers bearing the financial cost and risks of the investment. The City should consider undertaking an assessment of the economic and social benefits from a Joondalup ratepayer perspective, or consider strengthening the rationale for Joondalup rate payers to tolerate this risk.

In addition to the observations above and those contained in Appendix 2, we note that Pracsys have already agreed to action a number of other issues during our engagement with them as part of our review of the business case. These include:

- The calculation of the value of travel time savings as part of the utility benefit will be amended such that:
    - A resource value of $18.90 per hour will be used in place of the $11.49 per hour previously used. This reflects Austroads (2008) guidance as well as the application of inflation effects to escalate the resource value to 2016 dollar terms. This will have the effect of increasing the BCR
    - The existing estimate of hours saved will be multiplied by a factor of 1.6, which reflects the average vehicle occupancy benchmark from Austroads (2008). This corrects the current calculation, which uses an estimate of 'car hours' rather than 'commuter hours' to estimate this benefit. This will have the effect of increasing the BCR
- The calculation of present value in the SROI model will be adjusted to include the 'Additional Intrinsic Benefits', which is currently excluded from the calculation. This will have the effect of increasing the social impact ratio.

6 Summary and next steps

The City has undertaken an extensive process in developing the Business Case for its current purpose. The City has consulted widely and engaged a number of relevant independent consultants to assist with its development. Significant further work will be required prior to the City making a Final Investment Decision.

In summary we would like to draw your attention to our key observations:

- Financial considerations
    - c.$100m investment is a significant commitment for a council the size of Joondalup. At this stage the City is assuming that it will fund a 90% of the upfront capital costs (balance being $10m in grants) and all the ongoing operating deficits and risks, however other non-Joondalup ratepayers will also benefit from the JPACF
    - Given the size of the investment, it is likely that this will have a significant impact on the allocation of capital and the ability to fund future City projects. The City should also consider the impact of the JPACF on its future funding capacity and headroom
    - Although it appears that the City can fully fund the project by a combination of existing cash reserves, WATC debt and land sales there is significant funding risk as a result of:
        - WATC – the repayment of the $67m loan (including an additional $10m due to the unsuccessful NSRF grant application) assumes that rates will increase at 4% to 5% per annum which may not be sustainable. The City is currently debt free, so adding $67m of debt significantly increases the financial risk
        - Tamala Park proceeds - Tamala Park and other land / asset sales are estimated to provide funding prior to JPACF construction commencing. Proceeds from Tamala Park are also forecast to provide an additional c.$46m during the JPACF operating stage, which will be used to repay some of the debt. There is significant risk in relation to the timing and quantum of sale proceeds given the City does not control Tamala Park Council
    - Financial impact on ratepayers is significant. Based on financial modelling and current assumptions the total cashflow deficit that will need to be funded by ratepayers is projected to be between approximately $4.8m and $10.5m per annum in years 1 to 15 (or $70 to $163 per rate payer per annum)
    - The JPACF has the potential to place significant financial risks on the City, particularly given it is a greenfield development with no track record of financial performance. If the JPACF proceeds to the next stage of the decision making process, the preparation of a detailed risk, procurement and funding management plan will be essential to ensure that all key risk are identified, quantified and mitigated
- Economic considerations
    - The CBA completed by Pracsys calculated a benefit cost ratio (BCR) for the project of 2.01, and a social impact ratio of 2.73. These are important considerations in the investment decision to proceed with the JPACF. As noted above, there is a financial cost to ratepayers and a net project cost (as opposed to benefit). Accordingly, the decision to invest in the JPACF is more likely to be based on the economic and social benefits the project provides to ratepayers

  - The existing BCR is predicated on the assumption that 600,000 attendances will be activated as a result of JPACF. Although this is a significant assumption, the effort undertaken as part of the MAFS work in building the basis for this assumption to calculate the potential demand for attendances within the catchment (c.810,000, with c.600,000 estimated to be latent) is currently not sufficiently discussed in the business case
  - The economic benefits currently expressed in the CBA as transport-related benefits are in fact utility-related benefits. Given that avoided transport costs are not a conventional proxy for utility, the City should consider detailing the limitations of and rationale for using this approach in the business case. Utility is the largest benefit component, and therefore has a significant impact on the BCR
  - The quantum of demand used as the basis to calculate the utility benefit (i.e. c.600,000 attendances) varies from the quantum of demand used to calculate the revenue benefits and the secondary spending benefits (i.e. c.100,000 attendances). A consistent demand scenario should ideally be used to calculate all benefits in a CBA, however, we understand that there may be a viable rationale in the case of the JPAC for utilising different bases of demand. The City should consider making this rationale clear in the business case
  - The quantum of demand used as the basis to calculate benefits in the CBA includes attendees from a broad catchment beyond the City of Joondalup. While noting there might be a benefit to persons attending the new facility from councils outside of Joondalup (including regional areas), it will be Joondalup ratepayers bearing the financial cost and risks of the investment. The City should consider undertaking an assessment of the economic and social benefits from a Joondalup ratepayer perspective, or consider strengthening the rationale for Joondalup rate payers to tolerate this risk

- The City should investigate alternative sources of funding (e.g. State and Federal government grants) to reduce the financial commitment of the City. This would also reflect the benefits that are attributable to non-Joondalup rate payers in the broader catchment area. It is unusual for councils to fully fund facilities the size of JPACF. The City may also need to consider a scaled down facility to reduce the financial commitment of the City
- We understand Management will be continuing discussions with WATC in relation to the debt capacity of the City and the support for the proposed level of borrowings for the JPACF. The City will need to support increasing rates by 4% to 5% each year
- The City will need to develop a clear link between cost to Joondalup rate payers and the specific benefits that are likely to accrue to Joondalup rate payers (as opposed to the benefits to the broader catchment area or non-Joondalup rate payers)
- The Business Case should be updated accordingly.

7 Disclaimer and Limitations

This paper is prepared solely for the internal use of the City of Joondalup. The advice is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The advice has been prepared for the purpose set out in our CUA 23706 Audit Services and Financial Advice Order Form dated 15 September 2016. You should not refer to or use our name or the advice for any other purpose.

In preparing these comments, we have relied on, and presumed accurate, the information provided by the City of Joondalup. Except as otherwise expressly stated, we have not attempted to verify the accuracy or completeness of such information. Given that the Business Case has not yet been made 'final', we note that these comments reflect the Business Case at a point in time and that further changes to the Business Case may be made on the basis of the comments in this letter.

Please note that our analysis is subject to the following limitations and caveats:

- We have focused on the Business Case, including the economic and social assessments of the JPACF
- We have not reviewed the technical or costing aspects of the projects
- We have not reviewed the mathematical integrity and logic of the JPACF financial model or undertaken a review of the Joondalup SDP model
- We have not engaged with WATC nor assessed the City's ability to obtain and service WATC loans, and
- We have focussed on the issues and assumptions most material to the project's financial performance and economics.

Appendix 1 – Key approval, development and capital estimate milestones

Design	CAPEX Estimate ($ million)	Year	Milestones	Progression
None	Not Established	1992	Cultural Plan	Defined a need for a performing arts facility
		1996	**Hames Sharley**, architectural brief	Supported need for a performing arts facility
		2000	**Australian Pacific Projects**, report	First feasibility study supported a need for a performing arts facility
		2003	**Walne & Alexander**, report	First resource study and supported the need for a performing arts facility
		2004	Authorisation to acquire land	Commissioners provide the City with approval
		2005	Land purchase negotiations	The City undertakes negotiations with the Government of Western Australia, Department of Education and Training to purchase Lot 1001 Kendrew Crescent
		2006	Land purchase negotiations complete	The City completes the purchase of land for $584,000
	$35 million	2009	20 Year Strategic Financial Plan ("SFP")	Notional amount of $35 million allocated to JPACF
		2010	Strategic Financial Management Committee, meeting	Defines objectives and parameters of the JPACF and establishment of steering committee
Traditional Performing Arts Centre	$50.6 million	2012	20 Year SFP	The City establishes initial cost estimate
Art Box	$79.5 million	2013	**Pracsys**, Market Analysis and Feasibility Study	Pracsys recommend an extended design (the "Art box" model) to better connect JPACF with market requirements, primarily to include a performing arts centre and conference facilities.
			Council resolution	Council approves Art Box Design for JPACF
	$90.7 million	2014	**ARM Architecture**, concept design	New design for JPACF established
	$94.2 million		20 Year SFP	CAPEX estimate increased to include additional facilities for JPACF
	$97.6 million	2015	**Donald, Cant, Watts Corke,** Engineers report	CAPEX estimate revised based on architectural concept design
			20 Year SFP	The City highlights JPACF as an integral part of its strategic development
	$99.7 million	2016	**ARM Architecture**, schematic design report	Updated architectural design for JPACF
			Paxon Group, assumptions report	Review of assumptions used in the JPACF financial model
			Pracsys, economic briefing note • Economic benefit analysis • Social return on investment analysis • Cost benefit analysis	Updated brief from economic consultant

Appendix 2 – Additional economics related commentary

Need for the facility

- A clear value proposition is currently not observable for Joondalup rate payers, who are being requested to pay for a facility for which there is regional need. It is recommended that broader discussion be included to strengthen this value proposition (e.g. reference to potential benefits to Joondalup from hosting such a facility, strategic role fulfilled by Joondalup in the region etc.)

Location, Options and Proposal

- Chapter 5.2 would benefit from greater analytical detail with regard to the options assessment. In particular, it is recommended that more detail is added regarding:
    - Definition of the three options – including scope of the two vanquished options: the cultural campus and the traditional performing arts centre
    - Options assessment – at present, only a brief discussion is provided for why the other two options were dismissed. Greater detail is needed to add rigour and transparency to the process by which the preferred scope was chosen. For example, why does a cultural campus rely on greater land resources? Can a design for a cultural campus with less land requirements not be drafted? And why does the design of the Traditional Performing Arts Centre have major shortcomings when considered against the project objectives?
    - The decision-making process that led to the Art Box Model being favoured.
- Chapter 5.6 states that *"The progra*m model is the most important aspect of operating the facility, and *requires dedicated expertise from the management team to drive the program model"*. However, little detail is provided as to the size of or experience sought for the future JPACF management team. It is recommended that further detail is included here regarding the desired size and experience of the team.

Economic impact assessment

- Consideration should be given to the appropriateness of using Input Output (IO) modelling to assess the impact of a capital investment project. There are several shortcomings to this approach which are documented in publications such as Gretton (2013)[1] and Layman (2000)[2]. A general equilibrium model is generally best when considering economic impacts from capital investment through time. It is recommended that the shortcomings of the IO modelling approach be documented in a footnote to ensure decision-makers are aware of the limitations.

Demand estimation

- We understand that significant effort was undertaken as part of the MAFS work in calculating the potential demand for attendances within the catchment (c.810,000, with c.600,000 estimated to be latent). However, the extent of this effort and analysis is currently not sufficiently discussed in the business case. We appreciate that the MAFS document forms an appendix to the business case. However, given the importance of these estimates to the CBA (and the likelihood that many decision-makers will not review material contained in the appendices), it is recommended that some detail is added in the business case itself regarding the process employed in calculating the demand quantum. Adding this detail would provide decision-makers with confidence that the estimate of demand is based on a level of rigour. For example, the relevant description and discussion provided by Pracsys on 30/10/16 on these aspects may be sufficient
- We note that the MAFS document does not appear to contain the 810,000 estimate of demand, as this estimate has evolved since the 2012 MAFS report (a quantum of 1,100,000 is referenced in the MAFS). It

[1] On input-output tables: uses and abuses, Productivity Commission, Staff Research Note, September 2013, Paul Gretton. See: http://www.pc.gov.au/research/supporting/input-output-tables/input-output-tables.pdf
[2] The Use and Abuse of Input-Output Multipliers, Western Australian Economic Summary, WA Treasury, December Quarter 2000, Bruce Layman. See: http://www.treasury.wa.gov.au/uploadedFiles/ecoresearchart2002.pdf.

is recommended that a footnote is provided in the business case explaining the process and rationale by which this estimate has evolved to avoid confusion among decision-makers as to the demand quantum

- The 600,000 estimate of latent demand is a critical assumption, driving outcomes in the CBA. However, this figure is almost 10 times higher than the level of consumption that can be currently verified as occurring outside the catchment (i.e. 66,500), and almost five times greater than the level of consumption currently verified as occurring within the catchment (i.e. the 124,000). In order to give decision-makers a level of comfort that this estimate is appropriate and not overstated relative to current demand, it is recommended that the business case includes some discussion on why this is appropriate. For example, the relevant description and discussion provided by Pracsys on 30/10/16 on these aspects may be sufficient
- There is inconsistency in the CBA with regard to the quantum of demand used as the basis to calculate the utility benefit (i.e. c.600,000 attendances) compared to the quantum of demand used to calculate the revenue benefits and the secondary spending benefits (i.e. c.100,000 attendances). A consistent demand basis is usually adopted to calculate all benefits (i.e. either 100,000 or 600,000) to ensure decision-makers receive a clear picture of outcomes under a consistent demand scenario. However, we understand that there may be a viable rationale in the case of the JPAC for utilising different bases of demand (i.e. service differentiation for paying users versus all users). The City should consider making this rationale clear in the business case.

Cost benefit analysis

- We understand that the economic benefits currently expressed in the business case as transport-related benefits are actually utility-related benefits, with transport costs used as a proxy for the utility gained by latent consumers who choose to consume arts and culture due to the JPACF. We recommend making it clear (i.e. naming it as such) that these benefits are utility benefits, not transport benefits
- In addition, we recognise that avoided transport cost is not a conventional proxy for utility. To ensure that decision-makers fully appreciate the potential shortcomings of this approach, we recommend that the limitations in using this approach are clearly identified in a footnote in the business case, including:
    - Acknowledgement that calculation of this benefit is different to traditional transport economics in that the attendance is latent (i.e. the trip does not occur in the base case)
    - The rationale for choosing to use transport benefits as a proxy, and acknowledgement that a number of other factors are also relevant to the consumption decision (e.g. ticket cost, programming, access to transport etc.) and the rationale for excluding these
    - A brief discussion of how utility would ideally be measured (i.e. the use of preference modelling)
- Given that incremental utility forms the key benefit in the CBA, there is scope for this benefit to be perceived to be overlapping with the benefits claimed in the SROI. As such, we recommend making clear in the business case why these two estimates are distinct (e.g. accrual of consumer surplus versus government surplus)
- A number of capture rates drive the value of the utility benefit. However, it is not clear if these capture rates have been modelled, or are pure assumptions. If they are pure assumptions, it is recommended that this be acknowledged in the business case so that decision-makers can appreciate the risks around the CBA outcome. It is also advisable to sensitivity test these assumptions with higher and lower capture rates to demonstrate to decision-makers how the CBA outcomes change under these scenarios
- There is a possibility that the secondary benefit (being spending outside the JPACF) may be considered a transfer within the catchment. The rationale and assumptions supporting the view that this spending is genuinely incremental needs to be made clear in the business case. The relevant description and discussion provided by Pracsys on 30/10/16 on these aspects may be sufficient
- We understand that the revenue streams included in the CBA are not adjusted for any income re-distribution within the catchment. Rather, it is assumed that any attendances re-distributed from facilities within the catchment are replaced by new attendances, resulting in an overall increase in attendances in the catchment. This assumption needs to be made clear in the business case so that decision-makers are aware

that there is potential for attendances that are re-distributed within the catchment to potentially not be replaced. It is ideal that such a scenario is sensitivity tested

- The quantum of demand used as the basis to calculate benefits in the CBA includes attendees from a broad catchment beyond the City of Joondalup. While noting there might be a benefit to persons attending the new facility from councils outside of Joondalup (including regional areas), it will be Joondalup ratepayers bearing the financial cost and risks of the investment. The City should consider undertaking an assessment of the economic and social benefits from a Joondalup ratepayer perspective, or consider strengthening the rationale for Joondalup rate payers to tolerate this risk.

Creative economy

- We would recommend that Chapter 8 be reviewed for a thorough tightening in logic, explanation and argument. Examples include:
    - Employment Self Sufficiency (ESS) is addressed but not defined, and an explanation of why it's important in the context of JPACF is not provided
    - Data source and timeframe is required for many of the Figures. In particular, if data is from Census 2011, this should be caveated so decision-makers are aware of the age of the data
    - A distinction is made in this chapter between 'strategic jobs' and 'population-based' jobs but a clear explanation of how / why this links to ESS is not provided
    - No academic / empirical underpinning is provided for the 'three-phase system' outlined in the chapter (which is critical to the analysis contained in the chapter). Without any underpinning, this model of growth appears an assertion rather than evidence-based.

SROI

- There appears to be a typographical error in Figure 15. SROI benefits seem to have been charted as intrinsic benefits. These may need to be swapped
- The SROI outcomes shown in this chapter also differ slightly from the SROI Excel model. The business case may need to be updated accordingly.

ATTACHMENT 2

City of Joondalup Response to Deloitte Review

Deloitte Comment	Management Response	Reference
Downside analysis has been prepared which indicates that if a number of factors were to change the operating deficit could be $1,431k instead of $863k (Page 10).	It is acknowledged that there is high level of uncertainty with the operating subsidy, and it is reasonable to suggest that the subsidy could be anywhere between $500k and $1,400k. A couple of issues to note • Downside scenario of $1,431 contains a series of assumptions for 8 out of the 11 operating lines all of which are on the downside. In probability terms it is highly unlikely that all cost lines would be worse case, it is more likely that some items may be better and some items may be worse. • Opportunities – there are other opportunities that the City could consider to mitigate the overall impact to the City if it chooses to do so. For example there are a range of other Cultural events each year which could be migrated into the JPACF, and reduce overall costs. • The 20 Year SFP has been modelled with the Operating Subsidy of $1,431k instead of $863k. The results of this are as follows: - 85 Key Ratios out of 100 are projected to be achieved with an operating deficit of $1,4131k. This is the same number of key ratios with an operating deficit of $863k. - Borrowings Capacity. The SFP model uses a tool from WATC to evaluate borrowings capacity and whether any years are estimated to fail the WATC Criteria. The revised scenario indicates that one year within the SFP would fail the criteria. However this failure is small and 7 years from now, the Debt Service Coverage Ratio is projected to be 2.95 with the WATC minimum threshold being 3.00.	• JPACF Business Case Appendix 4 – JPACF Briefing Paper – Financial and Scenario Evaluation: City of Joondalup (September, 2016). • JPACF Business Case Appendix 12 – Financing Review: City of Joondalup (September 2016).

pracsys.

ATTACHMENT 3

COMMENTS IN RESPONSE TO DELOITTE (NOV, 2016) *JOONDALUP PERFORMING ARTS AND CULTURAL FACILITY REVIEW*

22 Nov 2016

Deloitte Comment	Pracsys Response	Other references
"the City should consider including greater detail in the business case itself regarding the process employed in calculating the demand quantum." (Section5, Pg 12 and 14) and (Appendix 2, Pg 17)	The process employed in calculating the quantum of demand involved the consideration of: • demand met locally at existing facilities in the catchment • demand met outside of the catchment area (leakage) • demand unmet due to lack of a facility (latent demand) **Current Attendance Estimate** Findings from consultation undertaken by the City of Joondalup and from further consultation with local cultural organisations and professional arts organisations undertaken by Pracsys, informed estimates of attendances occurring within and outside of the catchment. Of 95 arts organisations in the City of Joondalup contacted, 16 were interviewed covering dance, theatre, singing, crafts and drama. One third of these organisations indicated that they frequently travel outside of the NW Corridor to venues such as Swan Park Theatre, Midvale, Penrhos College Como, Mandurah Performing Arts Centre, St Mary's Anglican Girl's School etc. for activities such as rehearsals, recitals and performances **Latent Demand Estimate** Latent (potential) demand cannot be measured as the activity is not currently occurring. To estimate latent demand, Pracsys employed two methods: 1. Examining the demographic profile of the catchment, and 2. Estimating cultural attendance and participation based on a revealed preference model State averages for cultural attendance were applied to the catchment population to determine the number of attendances that could reasonably be expected to be occurring in the catchment given the size and characteristics of the population. The MAFS used the following ABS sources which are based on results from the 2009-10 Multipurpose Household Survey and contain details on the frequency of visits and characteristics of adults and children who attend a range of cultural venues and events: • ABS, Attendance at Selected Cultural Venues and Events, Australia, 2009-10 • ABS, Children's Participation in Cultural and Leisure Activities 2009-10 Revealed preference analysis based on average rates of attendance represent the most reliable means of estimating latent demand outside of extensive consultation within the catchment. Such consultation would involve mapping the preference functions of individuals, identifying the point at which the cost of attendance (a function of distance required to travel and time expended) falls below the marginal benefit of attending.	Pracsys, 2016, *Joondalup Performing Art Centre, Market Analysis and Feasibility Study (MAFS)* ABS, *Attendance at Selected Cultural Venues and Events, Australia*, 2009-10 ABS, *Children's Participation in Cultural and Leisure Activities* 2009-10

Deloitte Comment	Pracsys Response	Other references
	Revealed preference analysis together with the findings of consultation demonstrates a significant deficit of cultural attendance in the catchment. There are significant documented social and cultural benefits of arts and cultural attendance and participation. The deficit in cultural attendance caused by a lack of enabling infrastructure represents a source disadvantage for the catchment population. This provides a strong justification for the development of JPACF. The study assumes that these attendances are not occurring due to the lack of a suitable facility. This is supported by the findings from consultation. Many local cultural organisations (especially dance schools) reported a lack of suitable facilities in the primary catchment, and some are travelling to Midvale, Como and even Mandurah to perform. Many professional arts producers stated that they do not produce in the north-west corridor because of the lack of a suitable facility.	
"Given that avoided transport costs are not a conventional proxy for utility, the City should consider detailing the limitations of and rationale for using this approach in the business case". (Section 5, Pg 12 and 14) and (Appendix 2, Pg 18)	**Rationale for the use of Transport Costs as a Proxy for Utility** If cost of attending/participating > marginal utility the individual does not undertake the activity. However, the forgone attendance/participation imposes a cost on these individuals which must be captured. It is impossible to calculate the true value of the utility forgone as the benefits are intangible. A series of experiments with individuals to determine the equilibrium point where the marginal cost of attendance equates to the marginal benefit of attendance is one means of estimating the value however, such extensive consultation was outside of the scope of the study. We know that for those individuals currently not undertaking the activity, the value of the utility foregone lies somewhere between zero dollars and the current prohibitive cost of attending/participating. The cost of attending/participating is used as a proxy value for utility foregone. While this represents the upper bound of the value, in the absence of an alternative method it is an acceptable proxy. If JPACF were to be established the cost of attending/participating would fall, triggering attendance and the accrual of benefits associated with that attendance. These benefits must be included in the cost benefit analysis. As explained above, transport cost can be used as a proxy for the value of the utility that can be derived from attendance, thus the rationale for inclusion of this value in the cost benefit analysis. This does overstate the benefit to an extent as it represents the upper bound of the value. Beyond the direct benefits of attendance, there are instrumental social benefits that accrue to individuals – improved physical health and wellbeing, education outcomes etc. These benefits are explored in the SROI analysis.	

Deloitte Comment	Pracsys Response	Other references
	There are institutional benefits which accrue to those that do not attend but value the fact that a regionally significant performing arts and cultural facility is located in their catchment. This is commonly referred to as non-use value and while these benefits haven't been included in the analysis they are supported by cultural literature.	
"A number of capture rates drive the value of the utility benefit, however, it is not clear if these capture rates have been modelled, or are pure assumptions." (Section 5, Pg 12) and and (Appendix 2, Pg 18)	The capture rate is an estimate of the percentage of total potential attendances within that LGA that may be captured by JPACF. A higher rate has been applied to City of Joondalup (50%) given the facility is located here and a smaller rate across the other affected LGAs of Wanneroo, Chittering and Gingin (40% respectively). These capture rates effectively distribute the 600,000 potential attendances across affected LGAs. These are assumptions used for the purpose of modelling the utility benefit and there is potential to run a range of scenarios.	
"There may be some upside in the assumed attendances at the Primary and Secondary Theatres." (Section 3, Pg 5) "The quantum of demand used as the basis to calculate the utility benefit (i.e. c.600,000 attendances) varies from the quantum of demand used to calculate the revenue benefits and the secondary spending benefits (i.e. c.100,000 attendances). A consistent demand scenario should ideally be used to calculate all benefits in a CBA" (Section 5, Pg 12 and 14) and (Appendix 2, Pg 18)	The estimate of approximately 100,000 was quoted in an early version of the JPACF Business Case prepared by the City of Joondalup. It included attendance estimates for Film, Comedy, Theatre, Dance and Music at the primary and secondary spaces only based on the model program prepared under the MAFS. It does not include: • attendance figures for participation in arts and craft, music and dance learning programs • attendance at conferences and events held within the conference venues • attendance at events within the art gallery and exhibition/reception area • general attendance at exhibitions in the art gallery and exhibition/reception area • attendance at other community events held within the Plaza At 100% capacity and utilisation the facility can accommodate over 2 million attendances per annum. A more realistic scenario, where a program of activation is undertaken and spaces in JPACF are well utilised could easily see the 600,000 latent demand attendances per annum captured by JPACF. The secondary spending benefit has conservatively only been attributed to 100,000 attendances for events within the primary and secondary spaces however, it is likely that attendees to other events and activities will undertake some expenditure in the local area. Note: a review of the financial and operating assumption for the Primary and Secondary Spaces was outside of the scope of the *Financial Options and Evaluation Review*.	Pracsys, 2016, *Joondalup Performing Art Centre, MAFS* (Pages 109-112) Pracsys, 2016, *Financial Options and Evaluation Review*.

Deloitte Comment	Pracsys Response	Other references
"Consideration should be given to the appropriateness of using Input Output (IO) modelling to assess the impact of a capital investment project. There are several shortcomings to this approach which are documented in publications such as Gretton (2013)1 and Layman (2000)2. A general equilibrium model is generally best when considering economic impacts from capital investment through time. It is recommended that the shortcomings of the IO modelling approach be documented in a footnote to ensure decision-makers are aware of the limitation." (Appendix 2, Pg 17)	The I-O approach does have limitations including a lack of supply side constraints and price/demand adjustment. Nevertheless, this approach is commonly used for smaller scale projects such as this. It should be noted that some government agencies advise the use of computable general equilibrium modelling in conjunction with cost benefit analysis, only for significantly large projects that are likely to have economy-wide impacts (Victorian Department of Treasury and Finance, *Economic Evaluation for Business Cases Technical Guidelines*, August 2013). Regardless, the I-O analysis contained in the analysis does not factor into the overall BCR and is largely a secondary or supporting piece of analysis and thus will not impact the overall BCR.	Victorian Department of Treasury and Finance, *Economic Evaluation for Business Cases Technical Guidelines*, August 2013
"We note that the MAFS document does not appear to contain the 810,000 estimate of demand, as this estimate has evolved since the 2012 MAFS report (a quantum of 1,100,000 is referenced in the MAFS)." (Appendix 2, Pg 18)	The estimate of approximately 1,100,000 is referenced in the MAFS (Figure 10) refers to adult participation and includes attendance to film which was purposefully excluded in the modelled demand estimate. In addition, this does not include children's attendances.	Pracsys, 2016, *Joondalup Performing Art Centre, MAFS* (Page 16)
"The 600,000 estimate of latent demand is a critical assumption, driving outcomes in the CBA. However, this figure is almost 10 times higher than the level of consumption that can be currently verified as occurring outside the catchment (i.e. 66,500), and almost five times greater than the level of consumption currently verified as occurring within the catchment (i.e. the 124,000). In order to give decision-makers a level of comfort that this estimate is appropriate and not overstated relative to current demand, it is recommended that the business case includes some discussion on why this is appropriate." (Appendix 2, Pg 18)	Latent demand of 620,000 attendances is derived from revealed preference analysis, applying observed average attendance rates at a State level to the catchment population based on ABS data. The rates applied represent averages across the State with some locations likely to have significantly higher rates of cultural attendance and others are likely to have lower rates. Revealed preference analysis based on average rates of attendance represent the most reliable means of estimating latent demand outside of extensive consultation within the catchment. Such consultation would involve mapping the preference functions of individuals, identifying the point at which the cost of attendance (a function of distance required to travel and time expended) falls below the marginal benefit of attending.	

Deloitte Comment	Pracsys Response	Other references
"There is a possibility that the secondary benefit (being spending outside the JPACF) may be considered a transfer within the catchment. The rationale and assumptions supporting the view that this spending is genuinely incremental needs to be made clear in the business case." (Appendix 2, Pg 18)	The additional expenditure represents spending that would otherwise not be undertaken had those attendees chosen to stay home instead of visiting JPACF. It results in a marginal increase in the frequency and concentration of transactions in the area. Determining and adjusting for additionality (determining the expenditure that would have occurred regardless of the activity) requires primary data collection on what attendees would have done had they not attended. We have not applied an additionality adjustment, however considering the conservative application of visitation expenditure to only 100,000 attendances we believe this does not overstate the benefits. We would be open to running scenarios where various additionality adjustments are applied.	
"We understand that the revenue streams included in the CBA are not adjusted for any income re-distribution within the catchment. Rather, it is assumed that any attendances re-distributed from facilities within the catchment are replaced by new attendances, resulting in an overall increase in attendances in the catchment …" (Appendix 2, Pg 18)	Given the significant latent demand within the catchment, it can be assumed that any attendances redistributed form other facilities within the catchment to JPACF will be replaced by new attendances. The result is an overall increase in the number of attendances occurring in the catchment. The CBA therefore does not consider the redistribution of income from other facilities in the catchment. Attendances lost from facilities outside of the catchment is not considered within the scope of the study.	
"Employment Self Sufficiency (ESS) is addressed but not defined, and an explanation of why it's important in the context of JPACF is not provided" (Appendix 2, Pg 19)	Strategic employment accounts for almost half of employment in the creative clusters. The development of JPACF will have an impact on the development of creative clusters and therefore has the potential to enhance strategic employment. This is a broader economic impact of the project.	
"Data source and timeframe is required for many of the Figures. In particular, if data is from Census 2011, this should be caveated so decision-makers are aware of the age of the data." (Appendix 2, Pg 19)	Unfortunately, given the timing of work completed ABS 2011 Census data represents the only currently available source.	
"A distinction is made in this chapter between 'strategic jobs' and 'population-based' jobs but a clear explanation of how / why this links to ESS is not provided." (Appendix 2, Pg 19)	As noted in the BC, only jobs supported through means outside of local consumption ('strategic jobs') can improve the ratio of jobs to population in order to support a higher ESS. With growth in population-driven employment only, the job to population ratio will remain constant (25%) into the future and ESS targets will not be met.	
"No academic / empirical underpinning is provided for the 'three-phase system' outlined in the chapter (which is critical to the analysis contained in the chapter). Without any	This model was created based on extensive creative economy literature, in particular work by Nesta including but not limited to: • *Creating Innovation: Do the creative industries support innovation in the wider economy?* (2009) • *Creative Clusters and innovation: Putting creativity on the map* (2010)	

Deloitte Comment	Pracsys Response	Other references
underpinning, this model of growth appears an assertion rather than evidence-based" (Appendix 2, Pg 19).	• *A manifesto for the creative economy* (2013) • *Creativity, cities and innovation: Evidence from UK SMEs* (22013) • *Estimating Gross Value Added of the Creative Economy* (2013) • *Capital of culture? An econometric analysis of the relationship between arts and cultural clusters, wages and the creative economy in English cities* (2014) and others including but not limited to: • Shakuntala Banaji, Andrew Burnwith and David Buckingham (2010) The rhetoric's of creativity: a literature review, 2nd edition, • SGS Economics and Planning (2013) Valuing Australia's Creative Industries	
Notes: Pracsys has agreed to make adjustments on resource value and car occupancies used to calculate the value of utility, as well as typographical errors noted.		

ATTACHMENT 4

City of Joondalup

Joondalup Performing Arts and Cultural Facility

Business Case

October 2016

A Global City: Bold | Creative | Prosperous

Contents

Executive Summary

Background

The need for a performing arts and cultural facility for the Joondalup region was first identified and defined in the 1992 Joondalup Cultural Plan. Throughout the period 1996 – 2006 significant progress was made towards achieving this ambition including the purchase of a site for the facility. During this time a number of studies and reports clearly identified the need for a cultural facility in Joondalup and indicated strong support from community and other stakeholders for the concept of a centrally-located performing arts centre containing a range of venues and facilities.

The Project Philosophy and Parameters as adopted by Council in 2011 are summarised below:

- Partnerships
- World Class, state of the art facility
- Imagination and Creativity
- Inclusive Environment
- Viability and Attraction
- Financial Sustainability

A vast amount of research has been commissioned by the City of Joondalup (the City) for this project with three separate feasibility studies being undertaken since 2001. The most recent feasibility study from 2012 has further supported the development of a performing arts and cultural facility in Joondalup.

The City commenced an international architectural design competition in April 2013, receiving 21 submissions. In April 2014 Council endorsed ARM Architecture as the winner of the architectural design competition for their Art Box concept. A People's Choice vote was also undertaken and was awarded to ARM Architecture

The numerous studies and reports have laid the foundations for this business case.

Context – City of Joondalup

The City of Joondalup is the thriving centre of the Perth North West Sub Region, with significant economic growth forecast in the next 20 years, including an additional 20,000 jobs.

Perth's North West Sub Region is experiencing rapid population growth which makes the catchment area of the proposed Joondalup Performing Arts and Cultural Facility (JPACF) one of the largest of its type in Australia.

The City:

- Aspires to be a global City, the Strategic Community Plan (Joondalup 2022) sets out the path to achieve this
- is projected to continue to enjoy large economic development
- is on track to becoming formally recognised as a Strategic Metropolitan Centre.

Needs Analysis

In 2012 the City undertook a comprehensive market analysis and feasibility study for the development of a performing arts and cultural facility in the City. This study reinforced the notion that there is currently a significant under provision of performing arts and cultural facilities within the northern corridor of Perth.

The need is confirmed by the following:

- The catchment area has a population of over 300,000 people and will grow to over 500,000 within 20 years.
- The catchment area is already much larger than that of most other comparable facilities in Australia.
- Australian Bureau of Statistics (ABS) data indicates a high level of demand for cultural participation.
- The JPACF will address the lack of existing facilities in the region.

Location, Options and Features

The location for the facility was evaluated and selected several years ago, and is in an ideal location, adjacent to the Joondalup Learning Precinct with excellent access by public transport and roads.

Facility model options have been thoroughly evaluated. The preferred option is an Art Box Model which will provide multiple community and commercial spaces ensuring continuous activation of the facility.

The design is iconic and will contribute significantly to the urban and cultural fabric of the City and broader region.

The program model for events has been researched and will be developed to deliver a diverse range of events that will appeal to all sectors of the community.

The project plan will ensure the facility is constructed and ready for operation by July 2019 (subject to funding approvals). The Facility will feature:

- An 850 seat main auditorium of international standard, including a fly tower, with lighting and acoustic specifications of a high standard
- A 200 seat black box theatre to accommodate a variety of non-traditional theatre stagings and performances
- A range of rehearsal spaces that could also serve as places for small performances and general community activities
- Theatre support spaces such as a box office, green room, make up and change areas, backstage workshops and storage
- A dedicated art gallery
- Jinan Chinese Cultural Garden
- Conferencing and exhibition spaces
- Spaces for the practice of fine arts and crafts
- Curatorial space
- Bar and catering facilities
- Office and managerial spaces
- Multi-storey car parking to cater for staff and patrons of the facility and day-time public parking.

Financial Projections

- The project is estimated to cost $99.7 million to plan, design and construct.
- The City has implemented strategies to fund the costs, and is projected to have $37 million in dedicated reserves to help fund the project. The remaining costs will be funded by a $10 million grant and by borrowings of $58 million.
- The JPACF will require an ongoing annual contribution by the City, estimated to be

$863,000 per year. The estimated annual subsidy is 21% of income, which compares favourably to other similar facilities in Australia.

- Cost per Ratepayer for the annual subsidy is $13.64 per year
- Depreciation expense of $1.5m per year is estimated
- Total costs up to 2058-59 is estimated to be $217 million, with a net present cost of $94 million.
- All whole-of-life impacts are included in the City's Draft 20 Year Strategic Financial Plan.
- Detailed analysis has been prepared and reviewed on several occasions during the past few years.
- There is opportunity for improvement to financial assumptions and projections as the project progresses.

Project Benefits

Delivering positive economic and social value

An estimated 609 jobs will be supported (directly and indirectly) due to the construction of JPACF. The operation of JPACF is expected to create 47 jobs (directly and indirectly) through the operations of the facility and supplies purchased. In addition, 91 jobs are expected to be created across the retail, food and beverage and tourism industries as a result of increased visitation and tourism in the region.

The analysis calculates a Present Value for the project benefits of $328.5 million, a Net Present Value of $182.4 million and BCR of 2.34. This indicates that the project delivers significant social and economic return on investment.

The arts foster a culture of inclusion and civic participation, facilitate the development of cognitive skills and self-confidence and support mental and physical health and wellbeing – all of which have direct and indirect impacts on disadvantaged sectors of the community. Increased access to art and cultural experiences and provision of enabling infrastructure to support art and cultural production is therefore likely to provide improvements in relative disadvantage.

Supporting the growth of the creative economy

JPACF will catalyze creative industry growth in the North-West sub region which will increase economic diversity and support the knowledge-driven, strategic employment crucial to driving economic resilience.

JPACF will provide a facility to connect audiences and artists so as to increase creative output in the region and the pool of creative individuals. This translates into growth of related creative industries such as advertising, software programming, publishing and architecture.

It will in doing this, expand the pool of ideas and creativity accelerating the overall rate of innovation and economic success in the North-West.

Summary

- Construct the JPACF at a cost of $99.7 million, which will become an iconic part of the Joondalup City Centre.
- Utilise the facility for more than half of the year equating to 186 days per year for the primary theatre, engaging the community and building local cohesion and identity.
- Ongoing annual operating subsidy estimated to be $863,000 (excluding Interest and depreciation).
- Develop a diverse program that caters for the needs of the community.

1 Introduction and Background

1.1 Background

The City of Joondalup (the City) is the northern regional centre of Perth, located 30 kilometres north of the CBD, abutting the Indian Ocean to the west, City of Wanneroo to the north and east, and City of Stirling to the south.

The City provides many of the key services for the region (health, education, retail) with a catchment area that extends as far north as Geraldton. Its location, relative to Perth Central area, and access to high-order public transport infrastructure has positioned the City as an ideal location for investment in regional-level infrastructure including the Joondalup Health Campus, the Arena, Council Chambers and Library and Edith Cowan University.

The City is a key activity centre and employment node for the northern corridor and rapid population increases across the region will place added pressure on the City to provide additional employment, health, entertainment and educational opportunities to support the needs of a growing region.

The maturity of the City into a resilient, adaptable, and diverse strategic centre is essential in order to ensure the significant populations of the northern corridor are not disadvantaged, forced to travel to other centres to access amenity and employment, adding to existing congestion, limiting productivity and impacting on quality of life.

The Joondalup Performing Arts and Cultural Facility (JPACF) will be a catalyst project which acts as a key piece of enabling infrastructure as the City grows into a principle centre of activity within Perth's urban network. It will play a significant role in the development of an adaptable and robust regional economy and a population of resilient individuals and communities.

The purpose of this report is to set out the current challenges facing the catchment and the opportunities that this project will provide to the region. The business case will also provide a holistic analysis of the benefits of investment in the JPACF.

1.2 History of Project

The need for a performing arts and cultural facility for the Joondalup region was first identified and defined in the 1992 Joondalup Cultural Plan. Throughout the period 1996 – 2006 significant progress was made towards achieving this ambition including the purchase of a site for the facility. During this time, a number of studies and reports clearly identified the need for a cultural facility in Joondalup and indicated strong support from community and other stakeholders for the concept of a centrally-located performing arts centre containing a range of venues and facilities.

In 2010 the Joondalup Performing Arts and Cultural Facility Steering Committee was formed and the Project Philosophy and Parameters were adopted. The Steering Committee included City of Joondalup Elected Members, specialist members, representatives from community arts groups and representatives from the Joondalup Learning Precinct (Edith Cowan University, West Coast Institute and Western Australian Police Academy). The Steering Committee was disbanded in 2015 and the City of Joondalup Major Projects Committee of Council now oversees the progress of the project.

A vast amount of research has been commissioned by the City for this project with three separate feasibility studies being undertaken since 2001. In 2012 a Market Analysis and Feasibility Study (MAFS) was prepared by Pracsys and is a comprehensive report that will be referred to throughout the document. The MAFS incorporates demand and supply analysis, accommodation schedule and concept design description, operations management, business

framework and financial analysis. This study reinforced the notion that there is currently a significant under provision of performing arts and cultural facilities within the northern corridor of Perth.

The need is confirmed by:

- The catchment area is over 300,000 people and will grow to over 500,000 within 20 years
- The catchment area is already much larger than that of most other equivalent facilities in Australia
- ABS Data indicates a high level of demand for cultural participation
- A lack of facilities of the type and size of the proposed JPACF within the greater metropolitan area.

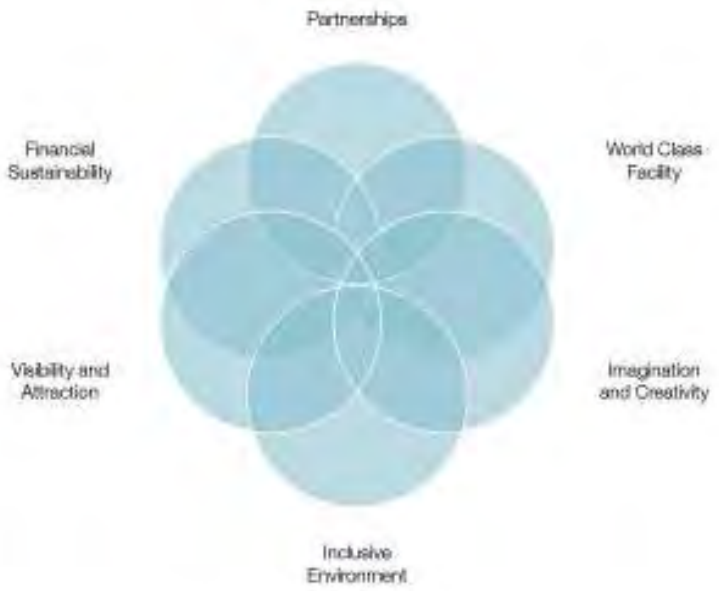
The City commenced an architectural design competition in April 2013 receiving 21 submissions from local and international architects. In April 2014 Council endorsed ARM Architecture as the winner of the architectural design competition for their Art Box concept. As part of the design competition, a community survey was also completed, which indicated large community support for the project.

During 2014 and 2015 the financial projections have been reviewed in detail, ensuring that the business case provides a thorough assessment of the implications. Additionally, several aspects of the concept design have been reviewed.

The numerous studies and reports have laid the foundations for this report.

1.3 Project Objectives

The project objectives are reflected in the Project Philosophy and Parameters, which were adopted by Council in 2010. Additionally, the City's Strategic Community Plan also includes objectives that apply to the project. The objectives are summarised as follows:



Joondalup Performing Arts and Cultural Facility project objectives

Table 1*: Joondalup Performing Arts and Cultural Facility project objectives*

No.	Objective	Details
1	Partnerships	Create synergies with the existing educational institutions and reinforce the Joondalup City Centre as the creative and educational centre of the northern corridor.
2	World Class Facility	Provide a world class, state of the art centre incorporating innovative and sustainable design that is architecturally symbiotic with the existing natural and built environment.
3	Imagination and Creativity	Project an ambience of cultural significance, providing an easily recognised entry statement to the City that creates strong visual and physical linkages to existing and future civic buildings, educational precinct, green areas and transport hub.
4	Inclusive environment	Become a place to celebrate imagination and creativity, inspiring individuals and the community to take part in the arts and raise the aspirations of all users.
5	Viability and Attraction	Create an inclusive environment where people of all ages and levels of cultural awareness can develop and nurture a strong sense of the possibilities that the arts can provide.
6	Financially Sustainability	Provide a facility that can host a mixture of commercial and community activities that supports the viability and attraction of the venue.

1.4 Location, Options and Features

The location for the facility was evaluated and selected several years ago, and is in an ideal location, adjacent to the Joondalup Learning Precinct with excellent access by public transport and roads.

Facility model options have been thoroughly evaluated. The preferred option is an Art Box Model which will provide multiple community and commercial spaces ensuring continuous activation of the facility.

The design is iconic and will contribute significantly to the urban and cultural fabric of the City and broader region.

The program model for events has been researched and will be developed and deliver a diverse range of events that will appeal to all sectors of the community.

The project plan will ensure the facility is constructed and ready for operation by July 2019(subject to funding approvals). The Facility will feature:

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- Theatre support spaces such as a box office, green room, make up and change areas, backstage workshops and storage
- A dedicated art gallery
- Jinan Chinese Cultural Garden
- Conferencing and exhibition spaces

- Spaces for the practice of fine arts and crafts
- Curatorial space
- Bar and catering facilities
- Office and managerial spaces
- Multi-storey car parking to cater for staff and patrons of the facility and day-time public parking.

1.5 Jinan Garden

The Jinan Chinese Cultural Garden is an important component of the overall development of the Joondalup Performing Arts and Cultural Facility. The City of Joondalup is engaged in an ongoing Sister City Relationship with Jinan Municipal People's Parliament in China. The Sister City Relationship began in 2000 with the signing of a Memorandum of Understanding and in 2006 the two Cities agreed to a long term Relationship Plan to assist in guiding the growth and continuity of the Jinan-Joondalup Sister City Relationship.

In 2009 the Jinan Municipal People's Parliament constructed a 'Joondalup Garden' in Jinan at the 7th China International Garden and Flower Expo and the City agreed to incorporate the Jinan Chinese Garden into the design of the JPACF.

Occupying approximately 1100m^2 the Jinan Garden will be reminiscent of the Baotou Spring located in the City of Jinan in China. The garden will feature ponds, water fountains, a small water fall, a bridge, a rock garden, trees and flowers and an assortment of open and covered walkways that meander through the garden. The focal point in the garden will be the traditional lotus pavilion.

It is intended that the Jinan Garden is constructed at the same time as the JPACF adjacent to the facility in Central Park. The cost of the Jinan Garden has been incorporated into the financial modelling for the JPACF.

Image: Jinan Garden Concept Plan

2 Context

2.1 City of Joondalup – Current

The City of Joondalup is located 30 kilometres north of the Perth CBD, abutting the Indian Ocean to the west, City of Wanneroo to the north and east, and City of Stirling to the south.

Image: Joondalup context

After experiencing significant residential growth throughout the 1980s and 1990s, the City's population has since stabilised as areas have become developed. Table 3 summarises some of the key statistics for the City:

Table 2: Key statistics – City of Joondalup

Joondalup Headline Statistics:	
Population – 2016 (Estimated Resident Population)	164,942[1]
Distance between Perth and the Joondalup City Centre	30 kilometres
Number of businesses – Business Register 2014	13,061
Headline Gross Regional Product (NEIR 2014)	$5.88 billion
Public Open Spaces	369

Current services located in the City include Joondalup Health Campus, Edith Cowan University, Joondalup Arena and North Metropolitan TAFE. Additionally, the City hosts the largest shopping/retail centre in Western Australia, the Lakeside Shopping Centre. Despite the diversity of facilities already provided in the area, there is a growing demand for improved services including a performing arts facility.

The City of Joondalup provides an extensive range of services to the community, including but not limited to:

- Community development, education and youth services
- Library, festivals, concerts and other cultural events
- Infrastructure including roads, footpaths and street lighting
- Leisure and recreation services and facilities
- Building, planning and health regulatory services
- Waste Management
- Building and planning approvals
- Environmental health services
- Rangers and community safety
- Parking facilities
- Parks and natural areas and management of the environment
- Economic development.

2.2 City of Joondalup – Future

The City has embarked on a bold and ambitious plan for the improvement of the City, the Strategic Community Plan Joondalup 2022 which was adopted by the City of Joondalup in 2012, and sets out a series of bold and creative strategies to develop the city as a global city. The development of the JPACF is one of the core initiatives identified in the Strategic Community Plan.

[1] Forecast id. provides a 2016 estimated resident population for the City of Joondalup of 164,942 (See: http://forecast.id.com.au/joondalup).

The City has an exciting future with extensive opportunities for economic development:

- Population Growth: An increase of approximately 9% over the next 20 years.
- Housing Growth: 5,326 additional dwellings in the next 20 years, comprising of 1,626 new dwellings and 3,700 'in-fill' higher density dwellings, where existing lots are subdivided. The higher density will be achieved as a result of Housing Opportunity Areas; these areas are concentrated within high quality public transport and will have the zoning restrictions relaxed to encourage higher density development.
- Economic Development: The City adopted an Economic Development Strategy in 2014, which aims to improve the self-sufficiency of employment within the City. It is estimated that the number of jobs in the City will need to increase by 20,000 (from 50,000 to 70,000) by 2031.
- Digital Strategy: The City has also adopted a Digital Strategy encouraging economic development in this area. The City set up free wifi throughout the City Centre in 2012.

Joondalup Learning Precinct is the only known educational precinct in the world incorporating a university, police academy and technical and further education college. The Precinct is made up of the three co-located education campuses of Edith Cowan University, North Metropolitan TAFE and the Western Australia Police Academy. As these education and training facilities develop, the precinct provides enormous potential for social, cultural and economic growth over the next 20 years.

2.3 Perth North West Sub Region

Joondalup currently provides many of the key services for the region (health, education, shopping). Regional population increases will place added pressure on the City to provide additional employment, health, entertainment and educational opportunities to support the needs of a growing region.

Whilst the City itself will have moderate increases in population, the wider region is enjoying large growth, in particular the neighbouring City of Wanneroo. The City of Wanneroo has over 8,000 additional residents each year, and over the next 20 years will have an estimated 89% increase in population.

2.4 Joondalup – Strategic Metropolitan Centre for Perth North West Sub Region

The Western Australia State Government has identified the need for Strategic Metropolitan Centres in Western Australia, and Joondalup is identified as the centre for the North West Sub Region. This need was first identified in the North West Corridor Structure Plan (1992) and updated more recently in the 2010 report, "Activity Centres for Perth and Peel". The State Government is in the process of updating the reviews with the draft release of "Perth and Peel @ 3.5 million".

Joondalup is identified as a Strategic Centre due to its central location, relative to Perth Central area, and access to high-order public transport infrastructure. The planning framework further states that a Strategic Centre, "must build on their existing assets and invest in the attributes that influence the location decision of these businesses, including accessibility, land availability, local amenity, communications and technology and the availability of skilled labour".

Joondalup is on track to becoming a Strategic Centre. In a very short period Joondalup has developed from being undeveloped bush (1970s), to the thriving centre of the North West Sub Region. Joondalup Strategic Metropolitan Centre is the only current centre in the North West Sub region.

2.5 Context in Summary

- The City of Joondalup is the thriving centre of the Perth North West Sub Region, with significant economic growth forecast in the next 20 years, including an additional 20,000 jobs.
- Perth's North West Sub Region is experiencing rapid population growth which makes the catchment area of the proposed JPACF once of the largest of its type in Australia.
- Joondalup's neighbouring City of Wanneroo grows by over 8,000 additional residents each year, and over the next 20 years will have an 89% increase in population.

The City of Joondalup:

- Aspires to be a global City, the Strategic Community Plan (Joondalup '2022') sets out the path to achieve this
- Will continue to enjoy large economic development
- Is on track to becoming formally recognised as the Strategic Metropolitan Centre, as per State Planning Policy.

3 Strategic Context

3.1 State Policy Alignment

A Culturally Ambitious Nation – Strategic Plan 2014-2019[2]

A Culturally Ambitious Nation is the strategic plan of the Australian Council for the Arts – the Australian Government's arts funding and advisory body. The Plan sets out a vision for the arts in Australia and defines the following four key goals:

Australian arts are without boarders

- Enable Australian Art to travel across the globe and access new markets
- Maximise impact of National Regional Touring Programs to increase access across regional communities
- Australia is known for its great art and artists
- Support a more diverse range of artists, ensuring that all artists are able to express their art no matter from where they come

Build the capacity of artists to make excellent work

- The arts enrich daily life for all
- Ensure more Australians have greater access to and engage with arts regardless of where they live, what language they speak or how much they earn
- Partner with governments (State, Territory and Local) on targeted arts development in regional and urban areas

Increase public and private investment in the arts

- Australians cherish Aboriginal and Torres Strait Islander arts and cultures
- Support young Aboriginal and Torres Strait Islander people to practice and experience their culture by supporting an intergenerational transfer of Indigenous arts and culture knowledge

The JPACF will increase access to art and cultural experiences and provide key enabling infrastructure for artists to practice and develop their skills. The JPACF will support in the achievement of a wide range of the abovementioned national goals for art in Australia and is therefore supportive of the Plan.

Towards a Strategic Directions Framework 2015 – 2030[3]

This document is a discussion paper produced by the Western Australian Arts Leadership Group for the Department of Arts and Culture WA which sets a strategic direction for the culture and arts sector for 2015–2030. Themes outlined in the document include: valuing and sustaining Aboriginal arts and cultures, increasing community access and participation, technological innovation, enhancing access to collections, greater internationalisation, infrastructure, education, and arts funding and philanthropy.

The framework identifies a broad range of opportunities under each of these themes, with many exhibiting direct linkages with the JPACF including:

- Strengthen local government capacity to foster participation in culture and arts at the local community level and promote the value of community arts programs and strategies

[2] Australia Council for the Arts (2014). *A culturally ambitious nation: Strategic Plan 2014 to 2019*
[3] Arts Leadership Group (2015). *Towards a strategic directions framework 2015 – 2030*

- Promote volunteering in support of cultural and arts organisations and activities
- Engage with the ageing population and loyal customers, don't alienate them
- Utilise new technologies to create new forms of work and to engage new audiences
- Promote participation between artists, cultural organisations and audiences to increase interest and participation in new works and practices.
- Touring exhibitions and loans from WA State Collections
- Promote national and international collaborations to develop new markets and raise standards
- Promote the success of social responsibility initiatives such as those undertaken in the Pilbara to increase the engagement of vulnerable people in the arts
- Replicate the success of the disability arts sector model to engage other marginalised groups in arts practice and participation.

Under the theme of cultural infrastructure, the plan specifically references the proposed JPACF as a key opportunity. The JPACF provides a vehicle for harnessing a great range of these opportunities in particular, supporting the City of Joondalup to foster participation in culture and arts not only in their local government area but also in the broader north-west corridor. The JPACF will reach out to a significant catchment, connecting artists and cultural organisations with audiences and volunteers. There are also opportunities for JPACF to directly engage with marginalised and disadvantaged groups.

3.2 Regional Significance

Perth & Peel@3.5million[4]

Perth and Peel @3.5Million is the strategic planning document by the Department of Planning, envisioning the Perth metropolitan and Peel Region with a population of 3.5 million in 2050. The document builds on previous spatial planning documents, principally *Directions 2031 and beyond,* to develop a robust strategic direction for region.

Perth and Peel@3.5Million establishes seven key objectives to be achieved by 2050, three of which exhibit direct linkages to JPACF, namely:

- **Economy and Employment** – Promoting employment opportunities and increasing the number of people that live and work in the sub – regions (self sufficiency).
- **Community and Social Infrastructure** – Provide a wide range of community and social infrastructure to enhance health and wellbeing in the community while promoting the use of existing facilities and infrastructure to reduce traffic movement and establish a sense of social cohesion.
- **Environment and Landscape** – Preserve and enhance exciting environmental and landscape values for the current and future generations to enjoy

The document supports the preferred future growth pattern established in *Directions 2031 and beyond* for a 'connected city' which provides a balance between urban infill and fringe development. The high level spatial framework identifies three integrated networks, the most important of which is the activity centre network. This is an integrated system of activity centres that deliver employment, entertainment and higher-density lifestyle choices. Joondalup is identified in the framework as a Strategic Metropolitan Centre, that is, a centre that provides the main regional activity, servicing populations of up to 300,000.

The JPACF will support the ongoing development of Joondalup as a Strategic Metropolitan

[4] Department of Planning (2015). *Draft Perth and Peel@3.5million*

Centre and be a piece of key enabling infrastructure as the City matures into a principle centre of activity within Perth's urban network. It will therefore support the connected city growth pattern and aligns with *Perth and Peel @3.5million.*

Draft North West Sub-Regional Planning Framework[5]

The *Draft North West Sub Regional Planning Framework* builds on the framework in *Perth and Peel @3.5Million* focusing on the North-West Sub-Region which comprises the City of Joondalup and City of Wanneroo. The framework acknowledges that as a Strategic Metropolitan Centre, Joondalup contains a number of regional-level services and facilities including Joondalup Hospital, Edith Cowan University, a major sporting and events arena, a basketball stadium and a district court.

The sub-regional framework encourages a focus on:

- employment opportunities that can complement and support existing regional-level facilities to support an agglomeration of uses;
- making the most efficient use of transport networks, service infrastructure, employment and key community/social infrastructure facilities; and
- opportunities that build on existing and proposed infrastructure within these centres can provide a catalyst for a mix of land uses, employment opportunities and housing choice.

The JPACF will complement and exhibit synergies with existing regional-level education, health and recreation facilities to support the development of a regional hub with the capability to service the rapidly growing population of the Northwest corridor. The JPACF therefore aligns with the draft framework.

Public Transport for Perth in 2031[6]

The Plan seeks to address congestion and accessibility issues Perth faces as the population rises to an expected 2.7 million by 2031. The Plan identifies principles to support integration of public transport and land use planning including:

1. Concentrate development in particularly designated strategic centres within an acceptable walking distance (400 – 1,000 metres) from major public transport nodes.
2. Align centres with major public transport corridors.

The City of Joondalup has been identified as a Strategic Metropolitan Centre and is well serviced with easy access to transport infrastructure. The JPACF will support the objective to concentrate development in designated strategic centres in close proximity to transport nodes with the Joondalup Train/Bus terminal just a few hundred metres from the site. The project thus aligns with this strategy.

State Planning Policy Urban Growth and Settlements (SPP 3.0)[7]

This policy sets out the principles and considerations which apply to planning for urban growth and settlements in Western Australia. The objectives of this policy include promoting the development of sustainable communities for which the key requirements include:

- directing urban expansion into designated growth areas which are, or will be, well serviced by employment and public transport
- clustering retail, employment, recreational and other activities which attract large numbers of people in existing and proposed activity centres at major public transport nodes so as to reduce the need to travel, encourage non-car modes and create attractive, high amenity mixed use urban centres;
- access for all to employment, health, education, shops, leisure and community facilities

[5] Department of Planning (2015). *Draft North-Wesr Sub-regional Planning Framework*
[6] Department of Transport (2011). *Public Transport for Perth in 2031*
[7] WAPC (2006). *Statement of Planning Policy No. 3 Urban Growth and Settlement*

by locating new development so as to be accessible by foot, bicycle or public transport rather than having to depend on access by car (whilst recognising the convenience of car travel for some trips and the limited potential to provide alternatives in rural and remote locations);

- good urban design which creates and enhances community identity, sense of place, liveability and social interaction in new and existing neighbourhoods;

The City of Joondalup has been identified as a designated growth centre. The JPACF will support a cluster of regional level services with a range of health, education and retail services already located within the City of Joondalup in close proximity the JPACF site and the Joondalup Train/Bus terminal. This will support easy access to a range of services and amenities in one location. The JPACF will be a feature in the City that enhances pride and identity. The project thus aligns with this strategy.

Examining Perth's Performing Arts Infrastructure[8]

"The Committee for Perth is a member funded think tank focused on maintaining and improving the liveability of the Perth metropolitan region by ensuring its vibrancy, economic prosperity, cultural diversity and sustainability". In 2013 the Committee issued a report, *Examining Perth's Performing Arts Infrastructure*, which summarised research of infrastructure in the Perth and Peel region in comparison to other capital cities. The research evaluated facilities in the wider region, including the catchment area of the JPACF, and the following observations are worth noting:

- Perth will need adequate performing arts infrastructure to meet the demand of an estimated population of four million people, indicating that Perth will need infrastructure that is of comparable size and quality to that of metropolitan Melbourne today. This means that the number of performing arts venues in Perth will need to approximately double.
- There is a need for more theatres with a capacity of 800 to 1000 seats.
- There is a shortage of affordable, appropriately sized rehearsal space in the region.
- There is significant evidence that Perth's people not only have a growing appetite for arts and culture but that there remains untapped potential for audience growth.

3.3 Local Objectives

Joondalup 2022: Strategic Community Plan 2012-2022[9]

Joondalup 2022 is the City of Joondalup's long-term strategic planning document that sets out a number of key objectives for the City. Objectives in the area of 'Economic prosperity, vibrancy and growth' include those on activity centre development and the growth of Joondalup into a Destination City, capable of attracting and providing a high level amenity for residents. Objectives in the area of 'Community wellbeing' include those focused on cultural development, namely:

- Establish a significant cultural facility with the capacity to attract world-class visual and performing arts events.
- Invest in publicly accessible visual art that will present a culturally-enriched environment.
- Promote local opportunities for arts development.

The development of the JPACF is one of the core initiatives identified in the Strategic Community Plan, described in the Plan as a transformational project critical to achieving the

[8] Committee for Perth (2013). *Examining Perth's Performing Arts Infrastructure*
[9] City of Joondalup (2012). *Joondalup 2022: Strategic Community plan 2012-2022*

City's aspirations of establishing a thriving cultural scene within the City.

Joondalup: Digital City[10]

This strategy identifies various digital technology strategies which could support the City to take advantage of the opportunities of digital technologies and broadband services. It identifies various strengths and challenges of Joondalup, one challenge being the lack of a strong cultural centre or unique identity. It also notes that Joondalup needs to build economic and employment diversity.

Actions recommended by the strategy include promoting digital arts activity in the City, in conjunction with the JPACF.

The support to be considered should include:

- Competitions
- Festivals
- Seed funding
- Shared facilities
- "smart art" installations throughout the City

The JPACF therefore aligns withthe City's strategy for a 'Digital City'.

Expanding Horizons: An Economic Development Strategy for a Global City[11]

Expanding Horizons is the City's Economic Development Strategy. The document builds on the 'Destination City' objective within the Strategic Community Plan taking a perspective that recognises the 'visitor economy' to include retail and arts and recreation services identifying that a wide range of people visit Joondalup for a variety of reasons.

The strategy states that development of major strategic projects including the JPACF will enhance Joondalup as a major destination location and provide greater recognition of the City as meeting the requirements of a Primary Centre as defined by State Government.

The strategy also highlights the City's current dependence on population driven employment and the imperative to support the growth of strategic employment in order to ensure long term economic prosperity, competitiveness and resilience. The strategy includes a goal to support and encourage the growth of more sustainable, innovative and productive businesses to enhance local strategic employment.

The JPACF will not only support the City's aspiration to become a 'Destination City' but will also be a key driver of strategic employment creation and is therefore supportive of the City's Economic Development Strategy.

[10] City of Joondalup (2013) *Digital City*
[11] City of Joondalup (2014). *Expanding Horizons*

4 Need for the Facility

4.1 2012 Market Analysis and Feasibility Study

Pracsys Consulting Firm was employed by the City to prepare a Market Analysis and Feasibility Study (MAFS) commencing in 2011. This resulted in a comprehensive analysis that has been used by the City as a guiding platform for the project. The key outcomes from the study were:

Table 3: JPACF Market Analysis and Feasibility Study Key findings

Demand and Supply	Operational Analysis	Financials
• Demand and Market for facility was clearly established, using ABS data • Availability of existing facilities and opportunities for groups to supply market are inadequate	• Program model developed • Design initial scope • Operational analysis	• Initial Financial projections • Benchmark to other Performing Arts Centres

4.2 Catchment Area

The catchment area of the proposed JPACF is one of the largest of its type in Australia. The MAFS identified the primary catchment area as the City of Joondalup and the City of Wanneroo, which comprises of a population of over 360,000 and is forecast to grow to over 500,000 in 20 years. A secondary catchment takes in most of the northern metropolitan area, stretching south to the City of Stirling and east to the City of Swan. A further area of influence stretches out north into the Wheatbelt, including towns on the way north from Perth, such as Cervantes, Jurien, Dongara, and as far as Geraldton.

People living in towns in the northern Wheatbelt already travel to Joondalup for major shopping trips and popular shows that do not tour north of Perth. It is expected that the JPACF is likely to draw some audience members from these areas. This has been facilitated by the completion of the Indian Ocean Drive, allowing easy access to Joondalup for communities to the north of the metro area, who would previously have had to use Brand Highway and then cut across to Wanneroo Road. See the below image for an illustration of the proposed catchment area.

Joondalup is more accessible to the majority of residents in the City of Wanneroo than the Perth CBD. The primary growth areas of the City of Wanneroo (largely in the north) are approximately a 15 – 30 minute journey by car from the City of Joondalup but 50 minutes from Perth CBD. It is therefore reasonable to assume that the vast majority of City of Wanneroo residents can be considered as part of the primary catchment area.

The 2016 estimated resident population of the Primary Catchment area is 363,631 comprising of:

- 164,942 within the City of Joondalup[12]
- 198,689 within the City of Wanneroo[13]

[12] Forecast.id (2016) Available at: http://forecast.id.com.au/joondalup
[13] Forecast.id (2016) Available at: http://forecast.id.com.au/wanneroo

Image: Joondalup Performing Arts and Cultural Facility catchment areas. Source: Pracsys Market Analysis and Feasibility Study 2012

4.3 Population Growth

Whilst the City of Joondalup is forecast to have moderate increases in population, the catchment overall is enjoying large growth driven predominantly by the City of Wanneroo, which is forecast to grow by 81.2% between 2016 and 2036.

The City of Wanneroo stretches from Girrawheen and Koondoola in the south to Yanchep and Two Rocks in the north and the majority of population growth expected to occur in the Northern Coastal Growth Corridor (Alkimos, Eglinton, Yanchep and Two Rocks) and East Wanneroo (Gnangara, Jandalbup and Mariginiup). The North West Sub Region is expected to grow by over 180,000 people during the next 20 years to 534,854 people. See Table 5 and Figure 1 for headline statistics on the primary catchment's expected population growth.

Table 4: Primary Catchment Population Growth

Measure	City of Joondalup	City of Wanneroo	Primary Catchment
Estimated Resident Population – 2016[14]	164, 942	195,369	360,311
Population 2036	180, 812	354, 042	534, 854
Population change 2016 – 36	9.62%	81.22%	48.4%

Source: Forecast id. (2014)

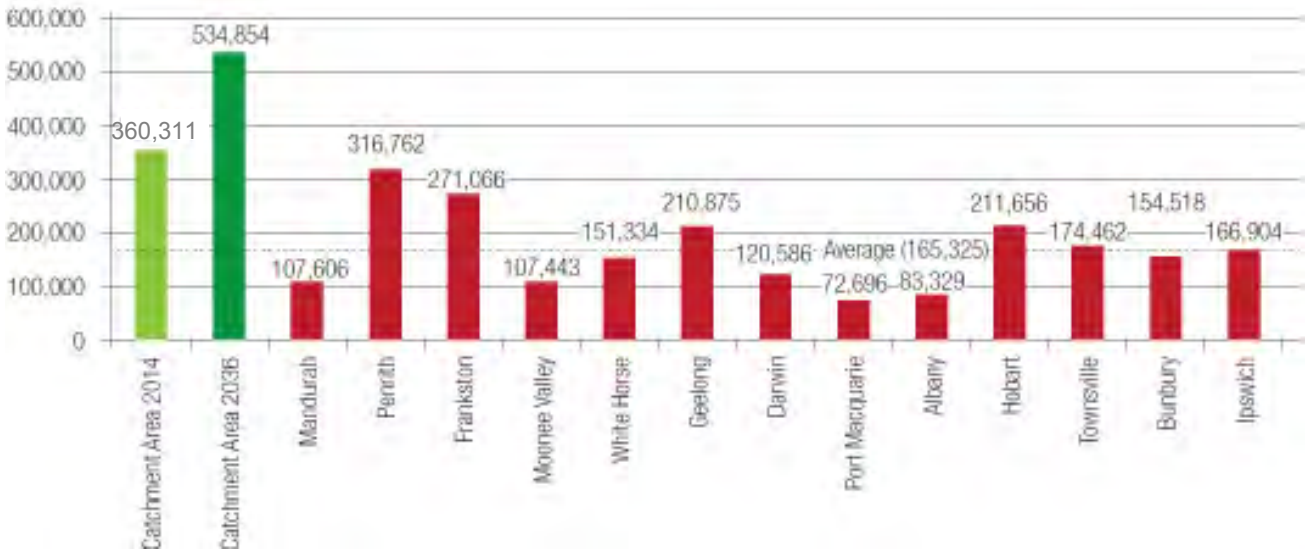
4.4 Comparison of Catchment Population

The chart below compares the catchment population of the JPACF to other comparable areas. The other areas selected were those identified in the 2012 Feasibility Study. This chart shows that the JPACF catchment is larger than any of the other regions and twice the size of the average of the other 13 areas, and by 2036 would be more than three times the size of the average.

This comparison is vital for two key reasons:

- The need for the facility in the North West Sub Region
- Confidence that the JPACF will be highly utilised

Figure 1: Joondalup Performing Arts and Cultural Facility – Comparison catchment area populations



4.5 ABS Data – Participation in Cultural Activities

The Australian Bureau of Statistics (ABS) collects data on attendance at cultural venues and events as well as participation in selected arts and cultural activities[15]. The ABS data analyses participation and attendance for a range of event/activity types with children analysed separately to adults. Data is available at both a state and national level and also looks at the frequency and of engagement.

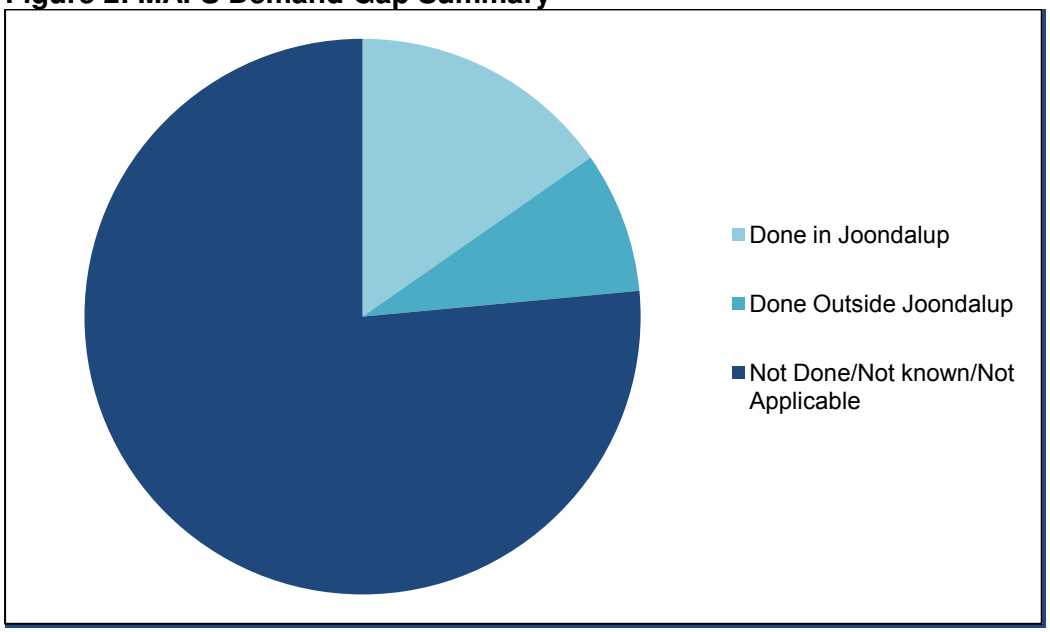
[14] These population estimates were obtained from Forecast.id in 2016. Forecast id. provided the same numbers in 2014 (See: http://forecast.id.com.au/joondalup).
[15] ABS (2009) Cat No. 4114.0 *Attendance at Selected Cultural Venues and Events, Australia, 2009-10*

Demand modelling was completed within the MAFS and was used to develop an estimate of the level of cultural activity that could be expected of a Western Australian population of the size and demographic profile of the primary catchment area.

Data from the 2009-10 *Attendance at Selected Cultural Venues and Events* Survey was used comprehensively in the preparation of the MAFS. This survey showed that 86% of the Australian population aged 15 years and over attended at least one of the selected cultural venues or events in the year prior to the survey, with the rate for Western Australia equal to the national rate. Earlier releases (1999 and 2005-06) and the latest release (2013-14) indicate similar national attendance rates with results ranging between 85% and 86%. For this reason, results from demand modelling based on the 2009 data are still deemed to be relevant.

Modelling indicated that approximately 15% of attendances were being met locally and a further 10% were being met outside of Joondalup. This means that 85% of potential attendances are either occurring outside of Joondalup or not occurring at all.

Figure 2: MAFS Demand Gap Summary



Source: Pracsys (2012) JPACF Market Analysis and Feasibility Study

4.6 Industry Consultation

The City has also consulted with various parts of the Arts and Culture Industry, including:

- Australian Performing Arts Centres Association (APACA). APACA represents organisations throughout Australia and prepare reports of operating activities:
- Economic Activity Report (2013) included data from 88 respondents
- Venues Charges and Salaries Report (2013) had 66 respondents.
- WA Department of Culture and Arts
- General Managers of other facilities in Western Australia have been consulted on a regular basis.
- AEG Ogden, are commercial operator of Arts Centres.

The consultation has allowed the City to test the need for the facility and refine the operating assumptions.

4.7 Need for the Facility in Summary

A vast amount of research and industry consultation has occurred to date. In 2012 the City engaged consultants Pracsys to undertake a comprehensive market analysis and feasibility study for the development of a performing arts and cultural facility in the City. This study reinforced the notion that there is currently a significant under provision of performing arts and cultural facilities within the northern corridor of Perth.

The need is confirmed by:

- The catchment area is over 300,000 people and will grow to over 500,000 within 20 years
- The catchment area is already much larger than that of most other equivalent facilities in Australia
- ABS Data indicates a high level of demand for cultural attendance currently not being met within the local catchment
- A lack of facilities of the type and size of the proposed JPACF within the greater metropolitan area

Image: Joondalup Performing Arts and Cultural Facility: ARM Architecture

5 Location, Options and Proposal

5.1 Location – Lot 1001, Kendrew Crescent, Joondalup

In 2004, the City purchased Lot 1001 from the Department of Education and Training (now the Department of Training and Workforce Development), for the sole purpose of developing the arts facility. The contract of sale for the land included special conditions limiting the use of the land to the provision of a cultural facility and associated activities. If the City proposes development on the site, that is inconsistent with this use, then the Department of Training and Workforce Development reserves the right to repurchase the land. Additionally, the City is required to advise the Department of any proposed development on the site prior to seeking development approval outlining the connection between the proposed development and the cultural facility.

In deciding to purchase the land for the construction of the JPACF the City considered the following factors:

Table 5*: Site identification matrix*

Location	✔	Prominent location within the City Centre
Entry Statement	✔	JPACF will provide an easily recognisable entry statement to the City
Existing Civic Buildings	✔	Creates strong and physical linkages to existing buildings
Public Transport	✔	Accessible to public transport with the Joondalup Train/Bus terminal just a few hundred metres from the site
Roads	✔	Accessible to road users, just 2 kilometres from the freeway
Education Precinct	✔	Adjacent to Education Precinct, providing synergies and opportunities for the growing precinct

5.2 Traditional Performing Arts Centre versus Art Box Model

The 2012 Market Analysis and Feasibility Study considered three options for the detailed design description being:

- A cultural campus, spread over a larger area.
- A traditional performing arts centre.
- An “Art Box” design, reflecting a contemporary architectural engagement with the environment, and that includes facilities for both visual and performing arts.

The cultural campus was immediately excluded as it relies on far greater land resources than is available. The Traditional Performing Arts Centre would include a primary theatre, secondary theatre and rehearsal space however this design has major shortcomings when considered against the project objectives.

Therefore, the study focused on the ‘Art Box Model’ as a representation of a complete cultural community arts centre. The Art Box Model has the same spaces as the traditional performing

arts centre but also has additional multi-purpose spaces so that the facility becomes more activated (during the day, not just in the evening) and is therefore a more inclusive environment for the community.

5.3 Art Box Model Proposal

The proposal for the Community Art Box Model will include:

Figure 3: ***Joondalup Performing Arts and Cultural Facility features.***

5.4 Design Options

The City has evaluated a wide number of alternative options in the design and operation of the facility, including:

- 1,000 seats within the primary theatre
- Condensed model
- Two Stage Construction
- Traditional performing arts centre.

These options were assessed in detail during the concept design stage of the project and discussed in previous versions of the Business Case. This Business Case focuses on the Art Box Model as described above.

5.5 JPACF Design Solution

The City conducted an architectural design competition in April 2013 receiving 21 submissions from local and international architects. In April 2014 Council endorsed ARM Architecture as the winner of the architectural design competition for their Art Box concept.

The submission by ARM Architecture is an exciting design that will capture the imagination of the users/patrons and reflects the aspirations of the City. The design delivers a built form of significant aesthetic merit that will greatly enhance the streetscape and fits seamlessly with both Central Park and Jinan Gardens.

The design concept is highly functional with scope for flexible use of spaces. The design demonstrates a good balance between innovation, contextual variation and the efficient use of space.

The key design features are:

- The building form springs from the natural traits of the Joondalup region i.e. Large eroded block: the building is rendered as an abstracted block. Using a process of erosion, the outer perimeter is opened up, perforated with gaps and caverns throughout the building. It appears as both natural and manmade, with rough stone formations, contrasting with the smooth water-like theatre space. From the outside, the erosion generates window openings, cloisters, garden balconies and entry spaces.
- Context / Presence: the JPACF sits within the central activity zone of Joondalup, adjacent to the major shopping centre, to the rail station and the Joondalup Learning Precinct. It is adjacent to the Central Park land and green spine that links through to the lake. The design is of a scale that can generate a civic identity.
- Activated edges: a primary rule of new public buildings is that they are not built like fortresses, contemporary buildings need to operate at least 12 hours a day, 7 days a week and be open/ integrated to surroundings. The JPACF design locates active uses (such as foyers, studios and food & beverage) to the edges of the site overlooking Central Park.
- Human scale: the large eroded mass creates a presence along Grand Boulevard, but is also broken down into smaller elements.
- Landscape Master Plan and Jinan Gardens: design accommodates a building forecourt with secondary ‘spill-over’ and event spaces in addition to external dining and cafe zones. Leafy green planting zones are used to separate areas. Nearby existing parklands are retained for visual and contextual reasons.
- Functionality: three zones which have discrete entries, allowing the truly multifunctional uses of the facility to function independently from each other, whilst still belonging together in a simple building.
- Theatre Design: a place that everyone wants to return to: Artists, because it supports their art well; and the community, because it gives them a sense of belonging as audience members and active participants.
- Acoustic Design: caters for all genres (music, dance, theatre, comedy, spoken word).
- Environmentally sustainable design.
- Building management considerations – e.g. air conditioning levels adjusts to ticket sales.

5.6 Program Model

The program model is the most important aspect of operating the facility, and requires dedicated expertise from the management team to drive the program model. The program

model has to consider the demographics, diversity of program, activation of the facility during the day and evening, long-term bookings, and commercial imperatives.

A potential program model was initially prepared as part of the 2012 Feasibility Study, and has since been reviewed with reference to more recent Australian Performing Arts Centres Association (APACA) data and consultation with performing arts management consultants.

Table 7 provides an outline of the potential program model for the primary theatre and secondary theatre by Year 5 (2023-24). This indicates that the primary theatre should be utilised for 186 days per year, and the secondary theatre used for 163 days a year.

Table 6: ***Joondalup Performing Arts and Cultural Facility potential program***

Potential Program Model – Year 5	Primary	Secondary	Total	% of Total
Comedy	12	10	22	6%
Theatre	38	39	77	22%
Dance and Ballet	24	11	35	10%
Music	39	23	62	18%
Festivals	16	15	31	9%
Schools	16	11	27	8%
Film	6	19	25	7%
Joondalup Eisteddfod	12	11	23	7%
Special Events	23	24	47	13%
Total	186	163	349	100%

The JPACF management team is planned to be recruited at least one year before construction is completed: so that the program model can be developed in advance of the opening (the financial projections have included provision for this).

It will take some years before the program model is fully developed, perhaps as many as five years.

There are a range of opportunities that the management team can consider to develop the program model, particularly in the early years:

- In-house theatre/Dance Company: Develop a relationship with a client company who use the facility for creative development/rehearsal and to premiere their works. This option would see the City of Joondalup offering complimentary venue hire and other services for one or two years to support both activation of the JPACF and the company. This could provide long-term benefits by improving the status, activation and commercial viability of the JPACF
- City of Joondalup Cultural Program: The City should develop a community festival development strategy that supports and integrates the JPACF program plan. This doesn't necessarily mean that the cultural program should be completely focused on the JPACF, nor should the cultural program be expanded just so it uses the JPACF (which may be to the detriment of other potential users).
- Music Workshop Plan: Host music workshops, encourage musical development and long term utilisation.

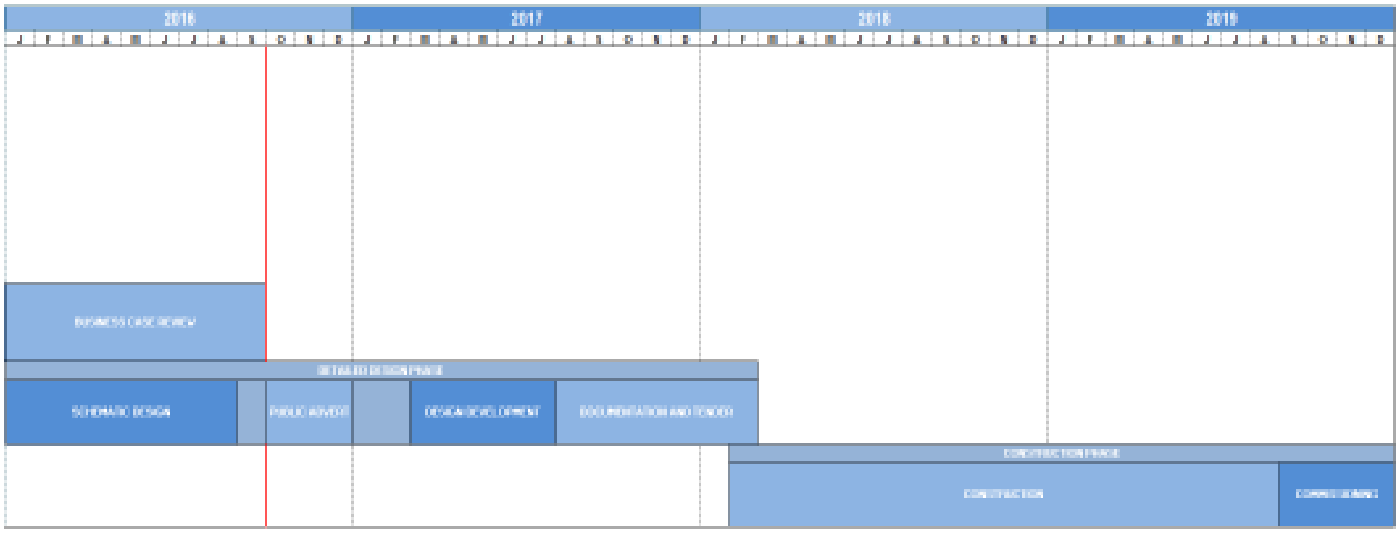
5.7 Project Plan and Key Milestones

Two scenarios outlining the proposed key milestones to deliver the JPACF development are shown in Figure 4.

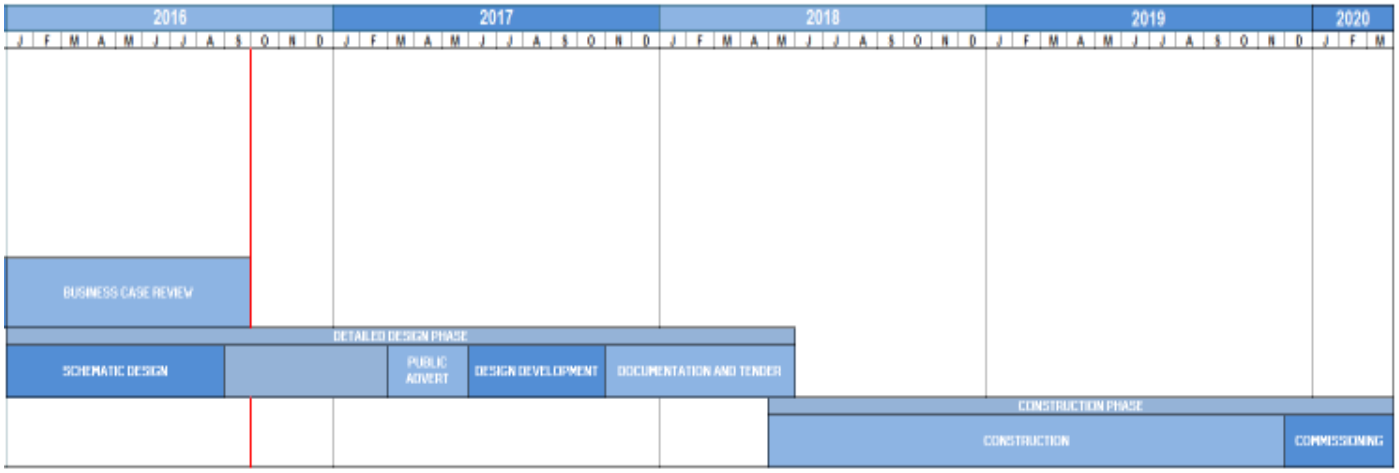
Figure 4: Proposed Timelines

N.B. The project timeline scenarios as outlined below are indicative only.

Scenario Two – Public advertising commences after October Council meeting with results to be presented to February 2017 Council meeting.



Scenario One – Public advertising commences after February 2017 Council meeting. It should be noted that this scenario pushes back completion of project to 2020.



5.8 Location, Options and Proposal in Summary

- The Location for the Facility was evaluated and arranged several years ago, and is in an ideal location, adjacent to the Joondalup Learning Precinct with excellent access to public transport and with linkages to main roads.
- Options have been continually evaluated; the preferred option is an Art Box Model which will provide multiple spaces with activation throughout the day and evening.
- Design has several key features, which will make it an iconic part of the City.
- Program Model for events has been researched with a diverse program that will appeal to all sectors of the Community.
- Project plan will ensure the facility is constructed and ready for operation in 2019.

Image:Joondalup Performing Arts and Cultural Facility : ARM Architecture.

6 Financial Projections

6.1 Establishment Phase

It is estimated that the project will cost $99.7 million and includes the following:

- $96.5 million Design and Construction
- $ 2.1 million Jinan Gardens
- $ 1.1 million Project Management

The above values are current as at 2016. The project is subject to detailed design, and therefore the costs will vary. A contingency of $5.25 million is included in the costs. An indicative phasing of the $99.7 million is as follows:

Phasing of Project Costs	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Estimated Cost ($m)	$0.2	$1.7	$11.3	$53.6	$32.9	$99.7
% of Total	0%	2%	11%	54%	34%	100%

Table 7: Indicative costs phasing. *(N.B. The phasing of costs as outlined above is indicative only and is subject to project program and funding approvals. The phasing represents an idealistic scenario where the project continues to proceed without delay. It should be noted that the project program and associated phasing of costs is continually being reviewed and amended accordingly. The abovementioned figure of $11.3 million for the 2016-17 financial year represents the current budget amount for the JPACF project. At the time the budget was approved it was anticipated that construction would commence in the latter part of the 2016-17 financial year however this scenario is now highly unlikely).*

The City has planned for the project for a number of years and implemented strategies (e.g. sale of vacant surplus land) to contribute to the cost of the JPACF. At present there is $21 million in reserves specifically for the project, and It is estimated that there will be $37 million in total available at the point of construction, this has reduced by $8m since the previous update due to revised forecast of proceeds from Tamala Park Regional Council. The financial projections currently assume a $10 million grant being received from the National Stronger Regions Fund, subject to a successful grant application.

The remainder of the funding would derive from borrowings from Western Australia Treasury Corporation. It is estimated that $58 million borrowings would be required during the construction period, repaid over a 15 year term at fixed interest rate of approximately 3.81%. The total repayments, including principal and interest, are estimated at $80 million. It is estimated that approximately 60% of the repayments will be repaid using future proceeds from the sale of surplus land, with the remaining 40% being funded from general municipal funds. If the City's application for a $10 million Federal Grant is unsuccessful this would result in additional borrowings and total repayments of $14 million resulting in overall borrowings of $94 million.

The City has begun a detailed evaluation of alternative forms of financing, including variable rate loans and interest only loans. A separate report is available which indicates that an alternative interest-only arrangement rather than traditional fixed interest fixed term arrangements may be beneficial. The financing review is subject to validation and until the review is complete the JPACF business case will continue to assume the traditional method of financing, which is a Fixed Rate Fixed Term (15 years).

6.2 Operating Phase

The operating assumptions have been reviewed on several occasions during the past four years, and will continue to be reviewed on an ongoing basis. Comparisons to other facilities and information available from APACA have been used to inform the reviews. It is assumed that it will take five years to build up the program. The financial projections have therefore assumed that year 5 becomes the 'steady state' and from years 6 to 40 the same operating assumptions are used in the financial model. The key assumptions that are assumed from Year 5 in the operating model are:

- Utilisation: 186 days usage of the Primary Theatre and 163 days in the Secondary Theatre
- 50% Average Occupancy (% of seats filled): With the large catchment area of the JPACF it would be hoped that the occupancy could be higher than the APACA average, but this is deemed a prudent assumption at this stage
- Community User Groups: Reduced fees may be provided to Community user groups for hire of spaces
- Parking: 50% occupancy during the day and 85% during the 186 days of events at the Primary Theatre
- Marketing Expenses: 8% of Expenses
- Staff: 20 Full Time Equivalent Staff employed. This would include management, administrative, technicians, ushers, box office staff, cleaners and parking attendant.
- No assumption is made within the financial projections regarding the management model, irrespective of the type of model used the City would be responsible for the subsidy.

It is acknowledged that a facility of this nature will require an ongoing subsidy, the average subsidy of facilities within the APACA analysis is 37% of income. The projections for the JPACF from Year 5 onwards are a subsidy of 21% of income ($863,000); this is lower than the industry average predominantly due to the surpluses generated from the facility's 374 parking bays. The estimated annual subsidy from Year 5 (in today's dollars) of $863,000 is summarised in the graph below.

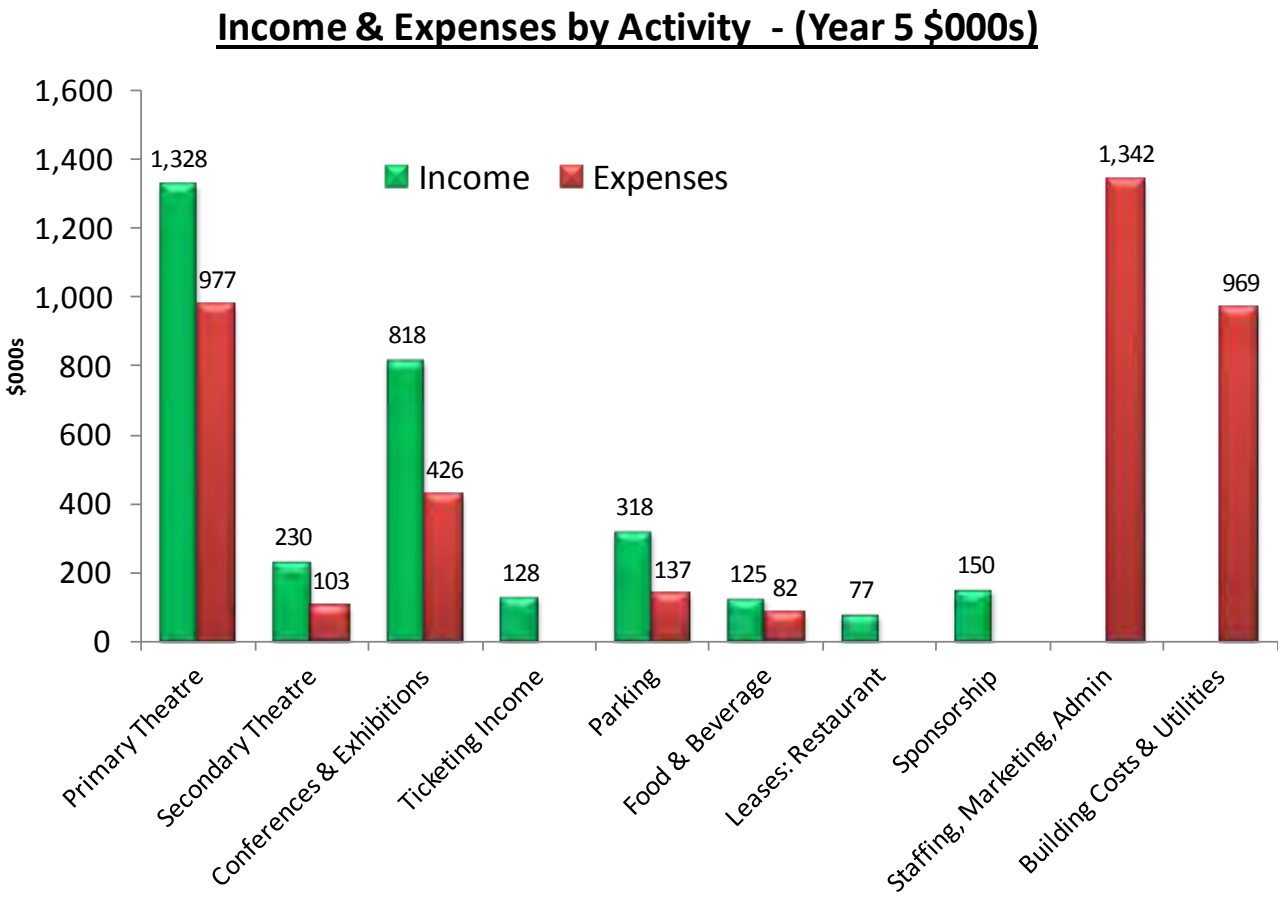


Table 8: Income and Expense by Activity - Year 5 $000s. *(N.B. The expenses exclude the interest expense on the borrowings of approx $1.45 million per year, payable for 15 years).*

The operating subsidy of $0.9 million has been compared to other regional facilities in Australia, as summarised in the graph below. This shows that the average subsidy is $1.1 million and therefore the JPACF projections can be considered to be optimistic by comparison.

The annual subsidy of $863,000 per year equates to $13.64 per Ratepayer per year.

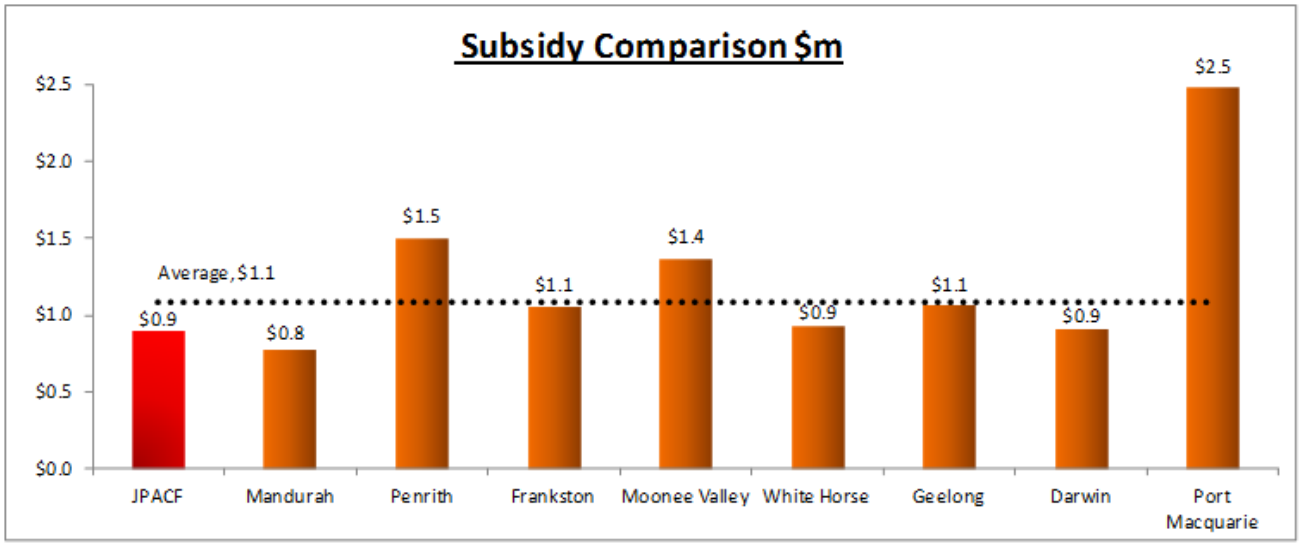


Table 9: The operating subsidy of comparable facility in Australia.

6.3 Operating Expenditure

In addition to the $863,000 operating subsidy, there would be additional operating expenditure:

- Interest expense on the borrowings of approx $1,506,000.
- Depreciation $1,527,000.

The total operating losses per year whilst the borrowings are being repaid is estimated at $3,896,000. This has the impact of depressing the Operating Surplus Ratio for the overall City by 2.8%.

6.4 Summary Cash Flows

The financials have been projected up to 2058-59, including inflation. This covers the period of construction and 40 years of operation. By evaluating over such a long period ensures that the long-term impacts including capital renewals can be evaluated. The graphs below summarises the overall cash flow impacts and net present cost. This includes all costs and income for the facility, establishment costs, funding costs, capital renewals, operating costs, and escalation. The projections indicate that the total cost to the City is estimated to be $217 million by 2058-59, with a net present cost of $94 million.

The reductions in the first 15 years are steeper than the remaining years, due to the repayment of the borrowings. The spikes in (2034-35, 2042-43, 2050- 51 and 2058-59) relate to estimated capital renewals.

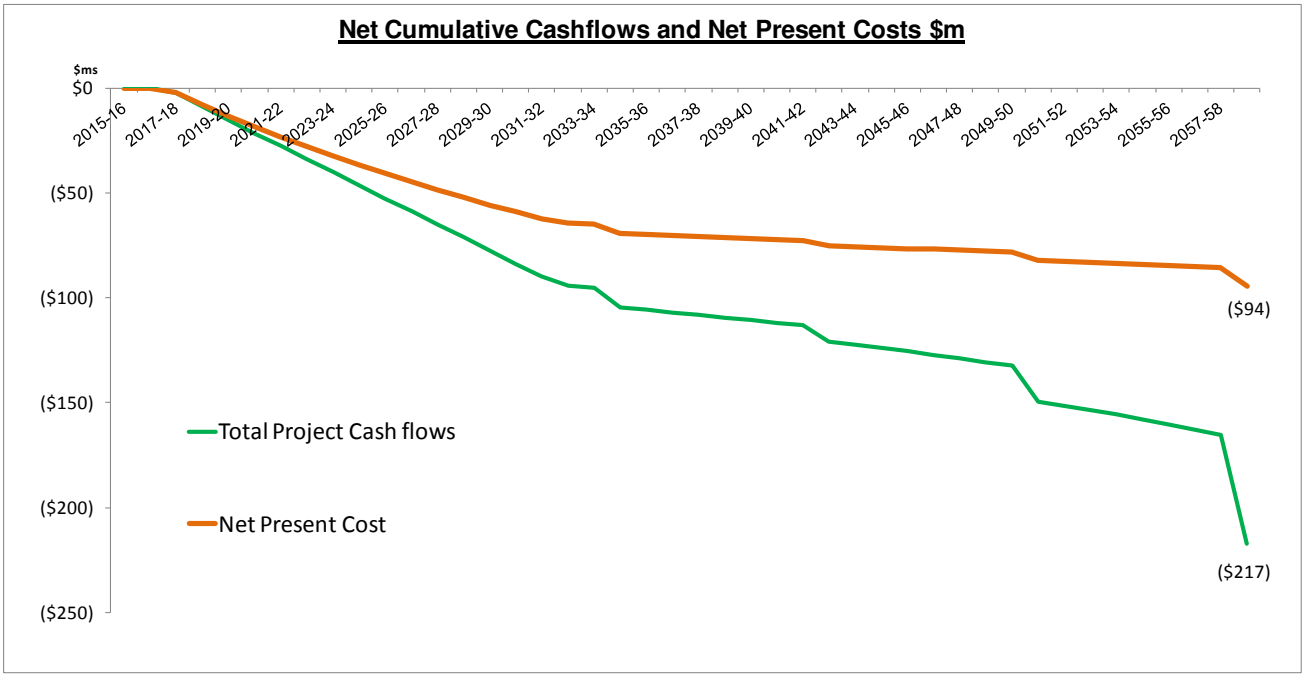


Table 10: Net Cumulative Cash flows and Net Present Cost ($m)

6.5 Risk & Sensitivity

It should be noted that while the projected cash flows indicate a potential overall cost by 2058-59 of $217 million, it is vital to emphasise that there a large number of risks with the financial estimates, both in terms of the initial establishment and the ongoing operation. In reality the total cash flows could be a lot worse than the $217 million, while there is also a lesser possibility that the cash flows could be better. The likelihood of worse cash flows is considered to be greater than the likelihood of better cash flows as there are several key risks in the establishment phase whilst the Operating Subsidy projection is optimistic when compared to other facilities.

The table below summarises the sensitivity of the overall cash flows i.e. how much higher or lower than the $217 million the outcome may be by 2058-59. The parameters used for the analysis are:

- Establishment Costs being higher or lower than the $99.7m currently estimated. It is more likely that the establishment costs could be higher than the $99.7m than lower, and therefore the analysis evaluates the impacts of a 30% increase to capital costs but only considers a reduction of 10%.
- Operating Subsidy being $400,000 less than the $863,000 estimated or $400,000 more.

The results of the sensitivity analysis indicate that the overall cost by 2058-59:

- Best case could be $165 million which would arise if the capital costs were 10% lower and the Operating Subsidy was $400,000 less
- Worst Case could be $318 million which would arise if capital costs were 30% higher and the Operating Subsidy was $400,000 more.

Operating Subsidy per year	Cost of Facility Different to $99.7m								
	-10%	-5%	0%	5%	10%	15%	20%	25%	30%
($463)	($165)	($173)	($180)	($188)	($195)	($203)	($211)	($218)	($244)
($563)	($174)	($182)	($190)	($197)	($205)	($212)	($220)	($227)	($253)
($663)	($184)	($191)	($199)	($206)	($214)	($222)	($229)	($237)	($262)
($763)	($193)	($201)	($208)	($216)	($223)	($231)	($238)	($246)	($272)
($863)	($202)	($210)	**($217)**	($225)	($233)	($240)	($248)	($255)	($281)
($963)	($212)	($219)	($227)	($234)	($242)	($249)	($257)	($265)	($290)
($1,063)	($221)	($228)	($236)	($244)	($251)	($259)	($266)	($274)	($299)
($1,163)	($230)	($238)	($245)	($253)	($260)	($268)	($276)	($283)	($309)
($1,263)	($239)	($247)	($255)	($262)	($270)	($277)	($285)	($292)	($318)

Table 11: Sensitivity analysis

Some of the major risks are as follows:

- One-off capital costs higher than projected – unforeseen costs with construction (e.g. ground work), changes to specification, final costs per square metre could be higher than estimated. Indeed the project is still subject to detailed design and tender and there are a wide number of issues that can arise during these phases.
- Funding risks – NSRF grant not approved, proceeds from land sales (e.g. Tamala Park) do not materialise, interest costs increase.
- Operating assumptions – failing to meet the program envisaged in the evaluation, adverse variation to the occupancy levels and number of attendees, parking surpluses do not materialise. The project cash flows of $217 million assume that the escalation of fees each year is broadly in line with the increase in expenditure but it is possible that expenses (e.g. employment expenses) increase by more than income as patrons become less able/willing

to accept fee increases.

The previous Business Case (December 2015) indicated an overall cost to establish the project of $97.6m. The $97.6m estimate was used to update the recently adopted 20 Year Strategic Financial Plan. The revised estimates for the favoured Option are $2.1m higher, with a total revised cost of $99.7m. However the $99.7m includes a contingency for Design and Construction of $5.2m. It may be worth capping the costs to $97.6m, by reducing the contingency to $3.1m.

The contingency costs of $5.2m are prepared by ARM and supporting sub-contractors based on Industry Standard practice. If the City reduced the contingency to $3.1m this would present additional risks to the project.

6.6 Option Evaluation

The City has undertaken detailed financial evaluation of other options that were considered by the Steering Committee during the past few years. The results of the evaluation are summarised in the table below. The key issues to note are:

- First column of figures shows the December 2015 Business Case
- Scenario 1 – Worse Case. This includes some of the worse-case estimates for staff costs, utilities and repair/maintenance as provided by Consultants.
- Scenario 2 – Idealistic. The other end of the range of possibilities with best-case estimates for staff costs, utilities and repair/maintenance.
- Scenario 3 – Realistic. Amended set of assumptions, which represent a balance between Scenario 1 and Scenario 2.

Scenario 3 is used as the basis of the projections in the Business Case. The difference between the scenarios indicates the uncertainty with some of the assumptions and that there is further improvements that should continue to be made to the projections.

Option Summary Total Cash Flows up to 2058-59 including escalation			Concept Design Business Case (Dec 2015)	Scenario1 Worse Case	Scenario2 Idealistic	Scenario3 Realistic
Establishment Costs						
Capital & Other One-Off Costs		*$ms*	($103.0)	($105.3)	($105.3)	($105.3)
Grants and Reserves		*$ms*	$55.2	$47.5	$47.5	$47.5
Borrowings		*$ms*	$47.8	$57.8	$57.8	$57.8
Repayments		*$ms*	($47.8)	($57.8)	($57.8)	($57.8)
Establishment Costs		*$ms*	**($47.8)**	**($57.8)**	**($57.8)**	**($57.8)**
Operating Impacts						
Operating Expenses incl. Interest		*$ms*	($333.3)	($426.7)	($368.8)	($400.5)
Operating Income		*$ms*	$260.4	$319.0	$321.5	$320.2
Operating Deficit incl. Interest		***$ms***	**($72.9)**	**($107.7)**	**($47.3)**	**($80.3)**
Asset Replacement		*$ms*	($79.4)	($79.4)	($79.4)	($79.4)
Total Project Cash flows		*$ms*	**($200.2)**	**($244.9)**	**($184.6)**	**($217.5)**
Ranking		*Rank*		3	1	2
Diff to Concept Design	$000s	*$ms*		($44.8)	$15.6	($17.3)
	%	*%*		22.4%	-7.8%	8.6%
Net Present Cost		*$ms*	($84.3)	($104.0)	($83.0)	($94.4)

Table 15: Cash flow summary of various options

A separate report (Financial Options and Evaluation) provides more details on the assumptions for the cash flows above.

6.7 Comments / Affordability

The project cost is a significant outlay for the City and it is vital that the City understands the overall project costs (including ongoing operating subsidy) and plans accordingly. The City uses a variety of tools to ensure it is financially sustainable, including the 20 Year Strategic Financial Plan. At the heart of the City's 20 Year Strategic Financial Plan is a set of guiding principles, which includes five key ratios (e.g. avoiding rate increases above 5%), that the City uses to evaluate the long term plans. The impacts of the JPACF on the key ratios have been evaluated and the targets are still projected to be achieved by the City after construction of the JPACF.

The City has undertaken informal discussions with West Australia Treasury Corporation regarding the capacity of the City to borrow funds for the JPACF in 2017-18 and 2018-19, especially as the proposed borrowings would be much higher than any previous borrowings by the City – WATC evaluated the City's proposed borrowings and confirmed that the City would have capacity. However it should be emphasised that the evaluation was based on the projections within the Adopted 20 Year Strategic Financial Plan which includes high assumptions for Rates Increases in the next few years (between 4% to 5%). The City has recently (2016-17) implemented a 2.5% rate increase and if the increases for one or more of the next few years were less than 4% this would present a material risk of the City's capacity to borrow for the JPACF.

6.8 Financial Projections in Summary

- The project is estimated to cost $99.7 million to plan, design and construct.
- The City has implemented strategies to fund the costs, and is projected to have $37 million in dedicated reserves to help fund the project. The remaining costs will be funded by a $10 million grant and by borrowings of $58 million.
- The JPACF will require an ongoing annual contribution by the City, estimated to be $863,000 per year. The estimated annual subsidy is 21% of income, which compares favourably to other similar facilities in Australia.
- Cost per Ratepayer for the annual subsidy is $13.64 per year
- Depreciation expense of $1.5m per year is estimated
- Total costs up to 2058-59 is estimated to be $217 million, with a net present cost of $94 million.
- All whole-of-life impacts are included in the City's Draft 20 Year Strategic Financial Plan.
- Detailed analysis has been prepared and reviewed on several occasions during the past few years.
- There are numerous financial risks within the projections

Image: Joondalup Performing Arts and Cultural Facility – Gallery Entrance, corner of Grand Boulevard and Teakle Court: ARM Architecture.

7 Economic Impact Assessment

There are local and regional economic benefits associated with the development of a facility such as the JPACF. Not only will the construction and operation of the JPACF generate direct and indirect employment opportunities but the cultural activities/events will attract consumers from throughout the catchment who spend money on a ticket, eating out, parking, accommodation and other activities. This supports local businesses and provides jobs in retail and consumer service businesses.

7.1 One-off Investment

The project is estimated to cost $99.73 million (as at 2016). Considerable construction employment will be generated during the two-year construction period. Initial estimates of employment have been prepared using a regionalised input-output table.

The modelling was undertaken by by Pracsys using the latest cost figures. This has estimated that:

- Direct - Construction employment associated with the $99.73 million development is estimated at 117 jobs over the lifetime of the project. As the project is spread mostly over two years, this can be equated to 59 full time employees (FTE) per year.
- Indirect - An estimated 492 jobs would be further supported indirectly in the wider economy through the multiplier effect.

In total an estimated 609 jobs will be supported through the direct and indirect construction activities associated with the JPACF construction over the lifetime of the project, which equates to 305 FTE per annum on average over the two years of the construction phase.

The total economic benefit of the one-off investment is $274 million. A detailed review of the economic benefits of the one-off investment is provided in Table 16.

Table 16: Joondalup Performing Arts and Cultural Facility construction economic impacts

Modelling the effect of adding $99.73m in Construction ($ 2016)				
Summary	**Output ($m)**	**Value-added ($m)**	**Wages and salaries ($m)**	**Local jobs**
Direct Impact	99.73	28.26	13.57	117
Total Input Effects	110.06	44.31	24.47	232
Consumption Effects	63.84	36.78	14.92	260
Total Impact on Australian economy	273.63	109.36	52.96	609

Source: Pracsys 2016, ABS National Accounts 2012/2013 (Catalogue 5206)

7.2 Direct and Indirect effect of Operating Expenses

The economic impact of the annual operations has been assessed by the City using the *National Institute of Economic and Industry Research (NIEIR)© 2015 Model.* This estimates that a total of 37 FTE jobs are created on a permanent ongoing basis including 20 direct FTE jobs and 17 indirect FTE jobs.

In addition, 10 jobs are created in relation to the operation, maintenance and servicing of the

facility's bar/restaurant, art gallery and other additional functions of the facility. This includes six FTE jobs generated directly and four FTE jobs generated indirectly.

7.3 Potential Expenditure on Arts and Culture in the Catchment

Revealed preference modelling conducted in production of the MAFS identified total potential demand for attendances within the catchment of approximately 810,000[16] attendances. Based on an average expenditure of $40 per visit, this represents potential total expenditure on arts and culture in the order of $32.4 million.

Stakeholder consultation indicated that approximately 124,000 attendances (15%) currently occur in Joondalup and a further 66,500 (8%) occur outside of Joondalup, representing a capture of approximately $5 million and leakage of approximately $2.6 million respectively[17].

An estimated 620,000 (76%) potential attendances do not occur at all and the value of this attendance could be in the order of $24.8 million.

The ability to capture a portion of this expenditure is likely to be an attractive driver of investment in the JPACF. This expenditure pool will drive growth within industries related to a variety of different content sources. An example of these content sources are shown in Figure 5.

Figure 5: Arts Content Sources

Source: Pracsys (2016)

A growth in expenditure will also open up opportunities for other neighboring institutions and companies that will further drive growth and promote synergies. These partnerships could include:

- Intrastate programs
- Interstate programs
- Fringe festival
- Commercial presenters
- Fledgling industry

[16] This excludes film, which it is understood is predominantly being met through existing commercial facilities.
[17] Assuming expenditure of $40 per visit.

- Perth International Art Festival (PIAF)

Linking with these institutions is likely to capture more expenditure through diversification of activity with the potential to attract a larger number of users into the future.

7.4 Secondary Visitation and Tourism Expenditure

Much like a major retailer such as Myer or David Jones acts as an anchor tenant for a shopping centre, the JPACF can act as a major destination for the Joondalup activity centre. In this way it supports the growth of the Joondalup Strategic Metropolitan Centre into a more liveable, attractive, vibrant, multi-purpose centre. The JPACF will therefore have significant flow on benefits to the local economy. It is anticipated that the JPACF will attract over 100,000 attendances per year, by visitors from both within and outside of Joondalup, with significant flow on benefits for the local economy.

If these visitors were to spend anywhere between $20 and $80 on retail and cafes in the surrounding activity centre per visit, this could result in increased expenditure of between $2 and $11 million per annum directly supporting jobs in these industries. The expenditure in the retail and food and beverage industries is expected to generate anywhere between 18 and 103 FTE jobs annually (see 17 and 18).

If the anticipated 100,000 attendances for JPACF supported a spend of $40 per visit, this could represent the creation of 37 direct FTE jobs a further 49 indirect FTE jobs.

Applying a conservative assumption, if 1% of visitors were to stay overnight as part of their trip (1,000 per annum) and spend on average a further $300 on tourism activities, this could result in an injection into the tourism industry of $300,000 per annum. Based on National Accounts and Input-Output data this could directly support 2 FTE jobs in tourism and a further 3 indirect FTE jobs.

Table 17: Potential Secondary Expenditure – Retail, Food and Beverage

	Potential Spend			
Visitors	$20	$40	$60	$80
100,000	2,000,000	4,000,000	6,000,000	8,000,000
120,000	2,400,000	4,800,000	7,200,000	9,600,000
140,000	2,800,000	5,600,000	8,400,000	11,200,000

Source: Pracsys (2016).

Table 18: Potential Jobs Created

	Potential Spend			
Visitors	$20	$40	$60	$80
100,000	18	37	55	74
120,000	22	44	66	89
140,000	26	52	78	103

Source: Pracsys (2016) calculated using ABS (2014). 5204.0 - Australian System of National Accounts, 2013-14

7.5 Total Employment Generated by JPACF

It is a priority for the region to create more local jobs given the current unsustainable level of out commuting for employment. Employment opportunities generated by the construction and operation of the JPACF will support the creation of self-contained and vibrant communities with diverse employment and lifestyle choices.

Total ongoing employment generated by JPACF is estimated in the order of 138 FTE jobs based on those jobs directly supported by the facility and those supported by secondary expenditure associated with increased visitation and tourism (see Table 19).

Table 19: Total ongoing employment generated by the JPACF

	Direct Jobs	Indirect Jobs	Total Jobs
Directly supported by facility [A]			
JPACF	20	17	37
Suppliers	6	4	10
Secondary Expenditure [B]			
Visitation	37	49	86
Tourism	2	3	5
TOTAL	**65**	**73**	**138**

Sources:

[A] National Institute of Economic and Industry Research (NIEIR) © 2015. Compiled and presented in economy.id.

[B] Pracsys (2016) calculated using ABS (2014). 5204.0 - Australian System of National Accounts, 2013-14

7.6 Sponsorship

The JPACF would encourage sponsorship which would be expected to lead to improved activity for sponsors. A modest estimate of $150,000 per year has been assumed for sponsorship.

Whilst it may be plausible to consider additional economic benefits arising from sponsorship (as attendees are influenced to use sponsor's products), no impact has been calculated as the benefits are already included in the Economic Impact Assessment Model.

7.7 Travel Time and Vehicle Operating Cost Savings

As established in the MAFS, there is a lack of arts and culture infrastructure in North West sub-region. This creates a situation in which constituents must drive further to access culture and arts infrastructure.

The distance required to travel to a facility represents a premium over and above other costs involved in attending and participating in arts and culture i.e. ticket costs and parking. For members of the community already disadvantaged by lower incomes this represents a cost barrier to participation and attendance.

If JPACF were to be built it would provide significant cost savings in terms of reduced travel time and vehicle operating costs for residents, through the provision of a facility in closer proximity. Doing so not only represents savings to residents currently travelling far distances but also encourage increased participation and attendance.

Figure 6 demonstrates the cultural and arts infrastructure currently being used by cultural groups within the JPACF catchment area as identified through consultation, despite being far away. Table 20 demonstrates the extent of the potential savings in vehicle travel time and operating costs that could be accrued by residents through the development of the JPACF. The

figures show that there are potential savings of $12 million per annum in terms of vehicle operating costs and a further $4 million per annum in vehicle travel time savings.

Figure 6: Performing Arts Facilities Servicing the Primary Catchment

Source: Pracsys (2012). JPACF Market Analysis and Feasibility Study

Table 20: Vehicle Cost Savings

Local Government Area	Capture Rate	Trips	Total Km's Saved	Vehicle Operating Costs Saved (pa)	Vehicle Travel Time Saved (pa)
Joondalup	50%	330,000	29km	$7,410,000	$2,289,000
Wanneroo	40%	263,000	20km	$3,978,000	$1,229,000
Chittering	40%	8,000	29km	$173,000	$53,000
Gingin	40%	8,000	29km	$184,000	$57,000
Total			N/A	$11,745,000	$3,627,000

Source: Pracsys (2016) based on vehicle operating costs in RAC (2015).

Vehicle Running Costs Guide **[https://rac.com.au/car-motoring/info/buying-a-car/running-costs]**

Notes: Assumes average occupancy of 1.6 persons per car and average speed of 60 km/hr. Vehicle operating costs assumed to be 62c/km based on RAC (2015), *Vehicle Running Costs Guide* [https://rac.com.au/car-motoring/info/buying-a-car/running-costs], vehicle travel time costs assumed to be $11.49/person-hr based on Austroads (2008) *Guide to Project Evaluation Part 4: Project Evaluation Data.*

7.8 Economic Benefit Cost Ratio (BCR)

What is cost-benefit analysis?

The Federal Government's handbook on cost benefit analysis[18] provides the following description of cost-benefit analysis:

> *Cost-benefit analysis is a method for organising information to aid decisions about the allocation of resources. Its power as an analytical tool rests in two main features:*
>
> - *costs and benefits are expressed as far as possible in money terms and hence are directly comparable with one another; and*
> - *costs and benefits are valued in terms of the claims they make on and the gains they provide to the community as a whole, so the perspective is a 'global' one rather than that of any particular individual or interest group*

Cost-benefit analysis should be viewed as closely related to, yet distinct from financial evaluation. Whilst financial evaluation looks at the net benefit to the individual organisation (in this case the City of Joondalup) cost-benefit analysis considers the community as a whole. It provides a more holistic representation of the costs and benefits associated with a project. Whilst financial evaluation takes into account cash flows in and out of the organisation only, cost-benefit analysis considers benefits such as travel time savings and 'externalities' or other unmarketed spillover effects.

Costs and benefits occurring at different points in time have different values and future costs and benefits are discounted in order to determine their net present value (NPV).

The handbook states that:

"Subject to budget and other constraints and equity considerations, a project or policy is acceptable where net social benefit (total benefit less total cost), valued according to the opportunity cost and willingness to pay principles, is positive rather than negative".

What is a benefit-cost ratio (BCR)?

The BCR is calculated by dividing the present value of all benefits by the present value of all costs.

$$BCR = PV\ Benefits\ /\ PV\ Costs$$

For a project to be viable, the BCR must have a value greater than 1[19]. If the BCR is greater than 1, the net present value (NPV) is positive and vice versa. BCR's are used when choices have to be made between mutually exclusive viable projects.

The JPACF Benefit-Cost Ratio

Pracsys Economics have calculated a BCR and NPV for the JPACF taking into account vehicle travel time, vehicle operating cost and secondary expenditure within the region generated through visitation and tourism. The results of this analysis are shown in Table 21.

Considering economic benefits and costs only, the analysis calculates a NPV for the project of $126.9 million and BCR of 1.902. This indicates that taking into account all economic benefits, the project is viable and delivers significant positive value to the community overall, taking into account all costs.

[18] Commonwealth of Australia (2006), Handbook of Cost Benefit Analysis, January 2006 <https://www.finance.gov.au/sites/default/files/Handbook_of_CB_analysis.pdf.>
[19] Ibid.

Table 21: NPV and BCR

Category	Annual Income/Expense	$ Total (2016 to 2059)
Income		
Primary Theatre	$1,328,000*	$52,766,739
Secondary Theatre	$230,000*	$9,163,000
Studios, Conferences and Exhibitions	$818,000*	$32,497,672
Ticket Income	$128,000*	$5,248,000
Parking (escalated real/above inf)	$551,542*#	$24,813,248
Food and Beverage	$125,000*	$4,965,812
Leases: Bar/restaurant	$77,000	$3,157,000
Sponsorship	$150,000	$6,150,000
Secondary Expenditure to the Region	$4,000,000	$164,000,000
Tourism Spend	$300,000	$12,300,000
Vehicle Travel Time Savings	$3,627,417	$148,724,089
Vehicle Operating Cost Savings	$11,744,117	$481,508,799
Expenses		
Primary Theatre	$977,000*	$38,820,548
Secondary Theatre	$103,000*	$4,092,206
Studios, Conferences and Exhibitions	$426,000*	$16,926,844
Parking	$137,000	$5,617,000
Food and Beverages	$82,000*	$3,257,636
Staff Costs	$897,000*#	$36,652,932
Marketing	$323,000*	$12,923,589
Admin and General	$119,000*	$4,726,573
Building Maintenance and Repair	$676,000*	$26,278,925
Utilities	$313,000*#	$14,371,806
Asset Renewal	$792,000	$23,760,000
Estimated Capital Cost Cost		$99,700,000
Borrowings	-	$50,255,000[A]
Primary Theatre	- $977,000*	$38,820,548
Revenue PV		**$267,489,603**
Cost PV		**$140,622,276**
Economic NPV		**$126,867,327**
Economic Benefit Cost Ratio (BCR)		**1.902**

Source: (Pracsys 2016)

***These annual figures represent the steady state, assumed to be achieved in 2023/24. Income and expenses in the first years of operations as per the Financial and Options Evaluation have been used in the NPV analysis.**

 # Includes real cost escalation (over inflation)

[A] 15-year payback period assumed

[B] 7% discount rate has been used to calculate the Net Present Value. This is based on Treasury guidelines.

7.9 Economic Impact Assessment in Summary

The JPACF will provide major economic benefits for the region.

- One-off Investment creates 117 Direct Jobs and 469 Indirect Jobs
- Operating Activities create 37 FTE per year (20 Direct and 17 Indirect)
- Supplier Employment create 10 FTE (6 Direct FTE and 4 Indirect)
- Visitation and tourism could support the creation of an additional 39 direct jobs and 52 indirect jobs
- An economic benefit cost ratio of 1.902 indicates that taking into account economic benefits to the region the project provides positive value net of all costs.

Image: Joondalup Performing Arts and Cultural Facility – Main Entrance: ARM Architecture.

8 Creative Economy Growth

Supporting artistic and cultural attendance and participation drives economic growth in local and regional economies. Growth is supported through a three-phase system whereby:

1. The meeting of communities of interest and practice is facilitated so as to support the production and dissemination of cultural and artistic products and experiences
2. Creators and consumers of these experiences and products translate individual creativity into social and commercial outcomes through creative industries such as publishing, architecture, advertising and software IT etc.
3. Ideas and creativity are amplified, creative networks are established and a cluster of creative industries emerges. The creative industry cluster connects with the broader economy to accelerate the overall rate of innovation and commercialisation of ideas and creativity, driving economic success

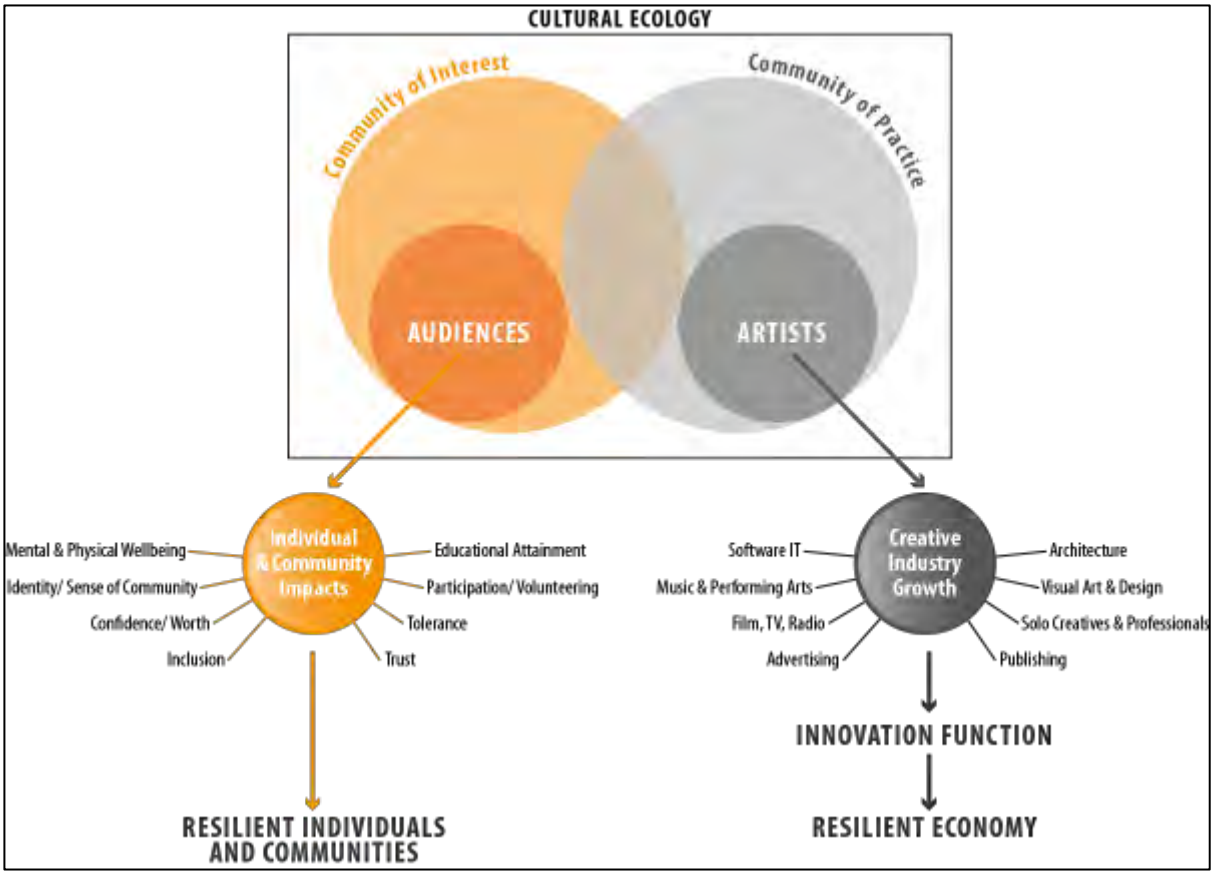
The JPACF will be the catalyst that galvanizes this process for the North-West sub region, facilitating cultural attendance and production, acting as an anchor cultural institution to facilitate the creation of a creative industry network and link with the broader economy (both public and private sector). It will in doing this, expand the pool of ideas and creativity to drive innovation and economic growth.

Exposure to and participation in such activities/events provide significant individual and community level social benefits. Research shows that they support sense of mental and physical wellbeing, which leads to positive personal attributes such as tolerance, trust, participation and even educational attainment.

Collectively these individual well-being characteristics aggregate to community cohesion, identity and pride, which are essential to well-functioning societies. These impacts are explored in more detail in the Social Impact Assessment (Section 10).

Figure 11 provides a representation of various the components of the process to realise both economic and social outcomes through arts and culture.

Figure 7: Cultural Ecology Model



Source: Pracsys (2016)

8.1 Uniting Communities of Interest and Practice

The JPACF will provide a facility to connect audiences and artists so as to support the production and dissemination of cultural and artistic products and experiences.

The JPACF will serve to enhance the cultural ecology of the North-West sub-region of Perth (the region) and the wider area of influence. The cultural ecology consists of the community of interest (audience and potential audience) and the community of practice (artists and associated service/equipment providers). The JPACF will be a key location where the communities of interest and practice meet for cultural exchange.

Demand modelling conducted in the preparation of the MAFS concluded that the level of formal cultural activity in the primary catchment is significantly less than could be expected of a Western Australian population of the size and demographic profile.

Modelling indicates that local residents are either travelling outside of the primary catchment area for their cultural pursuits (meaning that the cultural life of the City of Joondalup is being subsidised by other councils), or else this activity is not happening at all.

There are many producers of entertainment, culture and arts product who for many reasons, including the lack of suitable facilities, are unable to supply within the primary catchment.

The MAFS also examined barriers to participation in culture and the arts and production of artistic products. The most common barrier to increased participation was a lack of time, followed by expense/cost and lack of opportunities close to home/transport problems.

Developing the JPACF would allow those suppliers currently excluded from the market to enter, and address barriers currently being faced by potential attendees through improved access to opportunities for cultural attendance. The JPACF will therefore unite the existing and potential

communities of interest and practice in order to increase the overall cultural attendance and production in the City of Joondalup.

8.2 Supporting Creative Industry Growth

JPACF will catalyse creative industry growth in the region which will increase economic diversity and support the knowledge-driven, strategic employment crucial to driving economic resilience.

Increasing the pool of creative individuals producing art and cultural not only provides outputs for audiences to consume, but also translates into growth of related creative industries. Creative industries in turn support the growth of innovation-rich economies that are capable of adaptation and evolution to high productivity industries.

This is achieved through a process whereby artists, designers and academics translate their individual creativity into social and commercial outcomes. For example, a local artist may also be engaged within a creative institution such as an advertising agency or a publishing company. Increasing the pool of creative individuals can subsequently result in growth of creative industries which provide significant benefits to local and regional economies.

Analysis of existing creative industries within the North-West and the benefits associated with future growth of these industries has been conducted by Pracsys Economics. For the purpose of the analysis creative clusters we identified; these represent groupings of creative industries (at ANZSIC 4 Level) that share similar characteristics.

Based on 2011 ABS Census data[20] creative industries are underrepresented in the North-West. It is estimated that 1,235 people are employed in creative industries and this accounts for only 1.75% of total employment (see Table 22).

Table 22: North-West Creative Clusters

Cluster	No. Employed	Share of Creative Industries	Share of total Employment in the North West
Advertising and marketing	113	9%	0.16%
Music and performing arts	115	9%	0.16%
Design and visual artists	284	23%	0.40%
Film, television and radio	39	3%	0.06%
Writing, publishing and print media	159	13%	0.23%
Architecture	114	9%	0.16%
Software development and interactive content	411	33%	0.58%
Total	1,235	100%	1.75%

Source: Pracsys (2016), ABS Place of Work (2011)

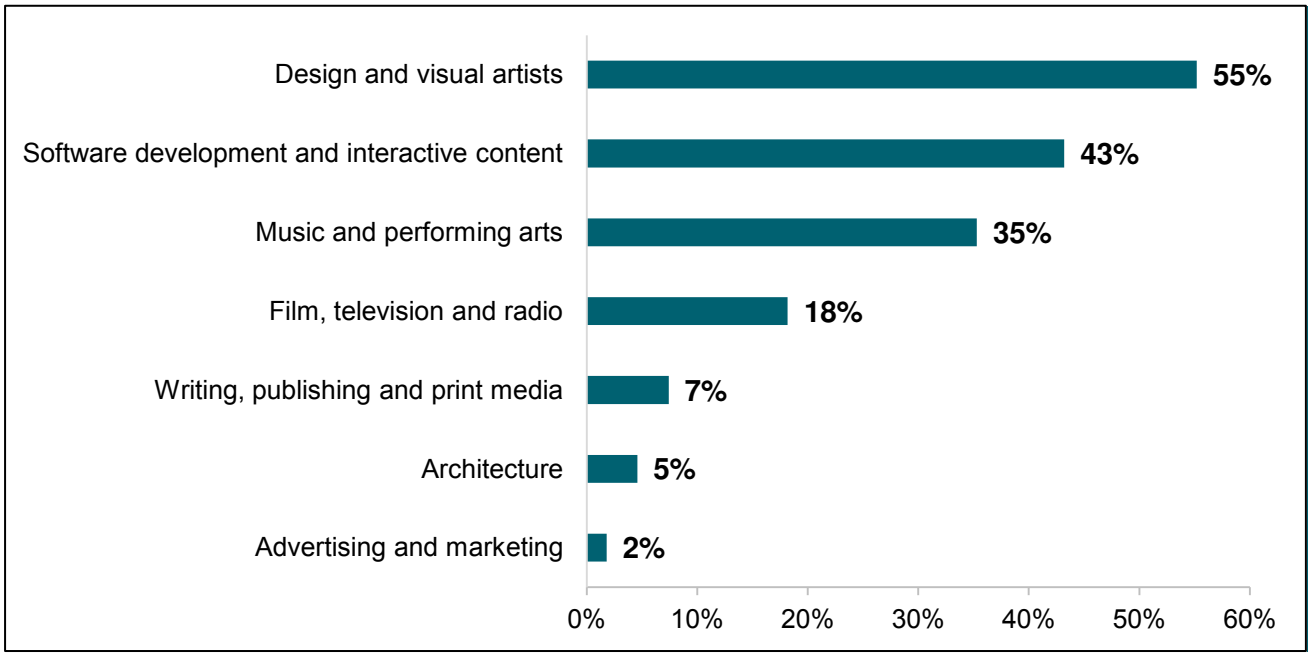
Software development and interactive content and design and visual art are the biggest industries of employment, accounting for 33% and 23% of creative employment respectively. These industries may be associated with the presence of Edith Cowen University (ECU) which caters for a range of creative productions as well as software engineering.

Between the 2006 and 2011 Census, total employment in the North-West grew by 14,099 jobs representing a 25% increase. Creative industries have experienced similar growth in employment (24%) over this period. Design and visual artists and Software development and

[20] As at 2016, the most recent data from ABS available is that of 2011. This analysis we be updatable with new statistics once the 2016 Census is released.

interactive content represented the creative clusters that experienced the most significant growth whilst Architecture and Advertising and marketing have remained relatively stable (see Figure 8).

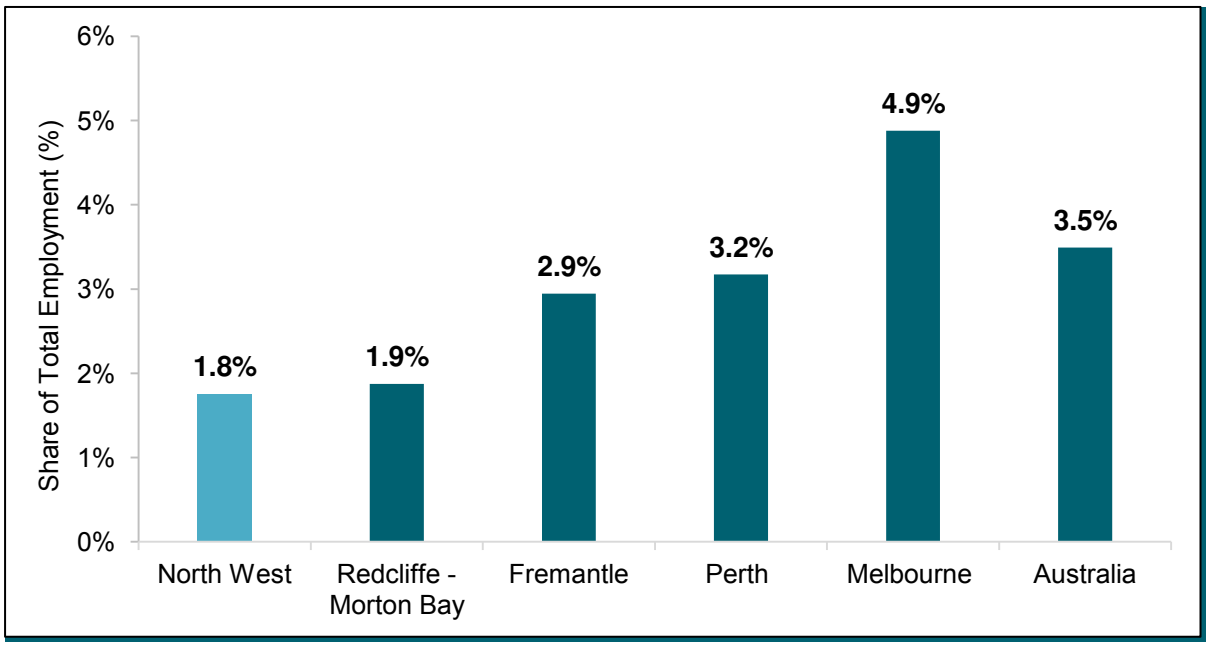
Figure 8. Creative Cluster Employment Growth (North West Sub-Region 2006 to 2011)



Source: Pracsys (2016), ABS Place of Work (2011), ABS Place of Work (2006)

For comparison, analysis of creative industry employment in benchmark locations identified in the MAFS has been conducted. The results highlights that the North-West has a significantly lower share of creative industry employment when compared to Perth, Australia and other creative cities such as Melbourne, Fremantle and Redcliffe-Morton Bay (see Figure 9).

Figure 9. Creative Industry Employment (% of total employment)



Source: Pracsys (2016), ABS Place of Work (2011)

This is indicative of a gap in the three-phase system. Although there is a pool of existing creative individuals, it is not significant enough to facilitate the growth of creative industries in line with the Nation, Greater Perth and other creative cities. This is due to the fact that many potential producers face barriers to producing creative output largely due to the lack of enabling infrastructure. The JPACF will provide the enabling infrastructure to expand the pool of creative individuals producing creative output which will support the growth of creative industries.

If the development of the JPACF facilitated growth in creative industries in line with benchmark locations, it would represent considerable growth in local jobs and associated reductions in unemployment levels.

Table 23 identifies the job creation resulting from creative industry employment in line with benchmark ratios. Employment Self Containment (ESC) was used to calculate the potential employment creation within Joondalup, accounting for the fact that a portion of newly created jobs will be filled by residents from outside of the region.

Some positions will be filled by currently unemployed persons and some will be filled by individuals that shift from employment in other jobs/industries. It is assumed that unemployed people will be able to take vacant jobs.

Analysis indicates that the growth of creative industries in line with benchmarks could reduce unemployment by 20 to 500 jobs in Joondalup (see table 23).

Table 23: Employment Growth in North-West and Joondalup to Meet Creative Industry Benchmarks

Location	Output of Creative Industries	Additional Jobs Required in the North West to meet Benchmark Ratio	Additional Job creation in Joondalup
Moreton Bay	$404 million	86	22
Fremantle	$668 million	863	222
Perth	$984 million	1,032	265
Australia	$1.6 billion	1,266	325
Melbourne	$2.1 billion	2,312	594

Source: Pracsys (2016) based on ABS National Accounts

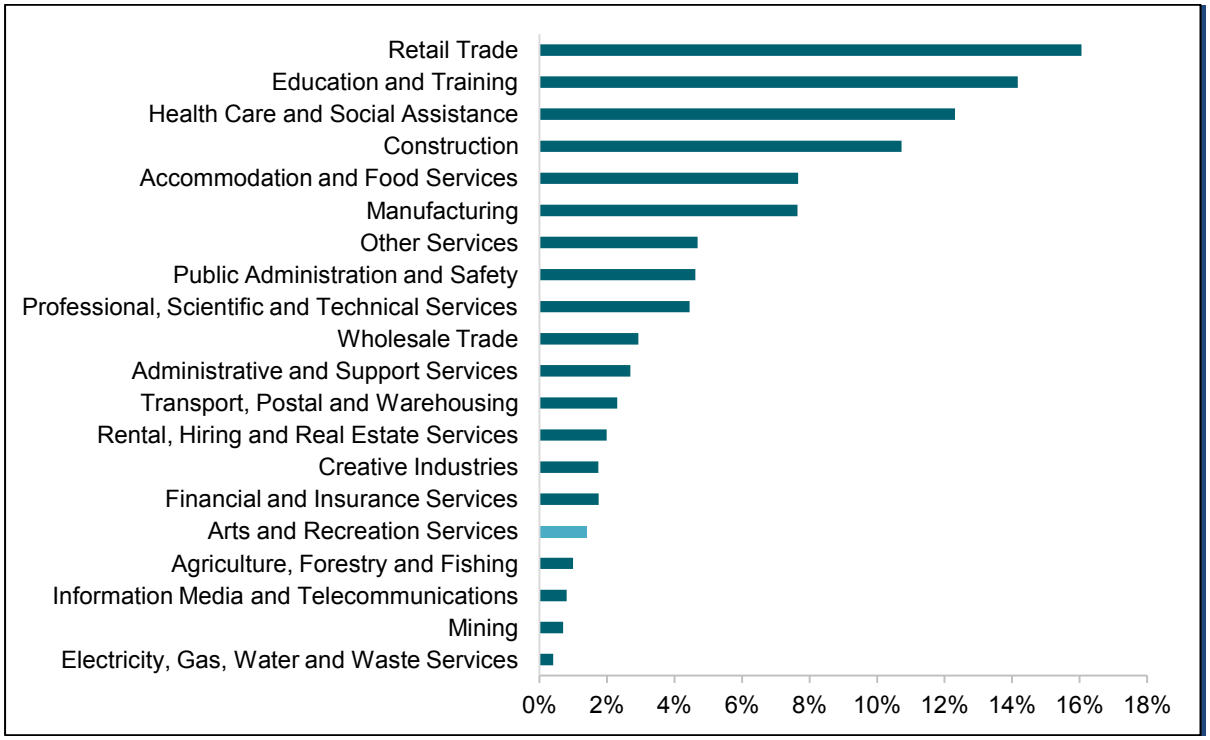
Strategic Employment and Employment Self Sufficiency[21]

Jobs can be broadly broken down into strategic and population driven in nature. Population driven jobs are largely consumption based and are built from population growth. Strategic jobs are export and knowledge-based, autonomous of population growth and thus act as natural catalysts for economic activity.

Perth currently sits at approximately 20% strategic employment while the North-West sits at approximately 18%. The low level of strategic employment in the North-West is not particularly surprising considering the major industries of employment are retail trade, education and training and healthcare and social assistance which are largely population driven (see Figure).

[21] Employment can be broadly broken down into 5 categories: export oriented, consumer services, producer services, knowledge intensive consumer services (KICS) and knowledge intensive producer services (KIPS). Of these, export oriented and KIPS are classified as strategic employment.

Figure 10. North West Industries of Employment

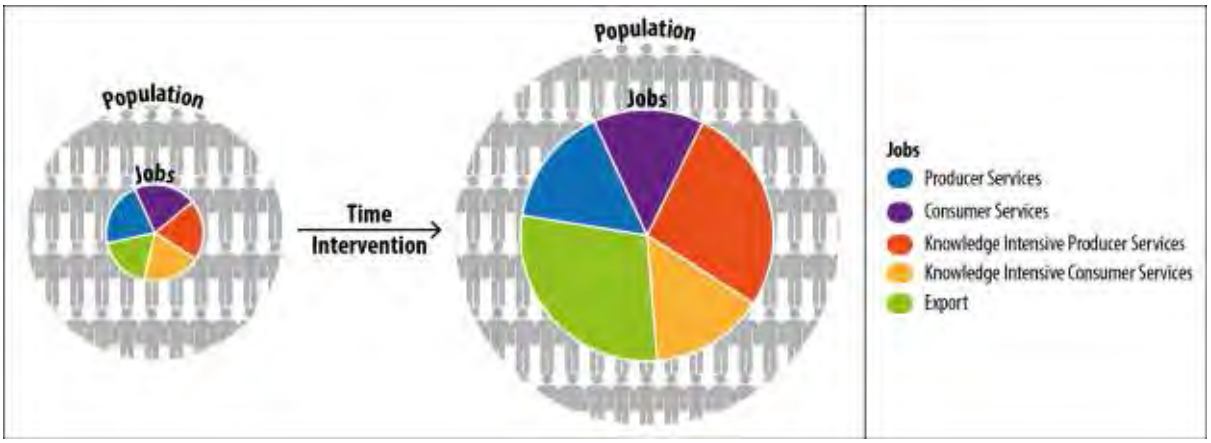


Source: Pracsys (2016)

According to data derived from national accounts and input-output data, creative industries are 49% export based. The growth in these creative industries will thus facilitate a transition into a more knowledge-based, strategic economy.

Strategic employment is also needed to maintain a region's Employment Self-Sufficiency (ESS) in line with sustained population growth. Only jobs supported through means outside of local consumption can improve the ratio of jobs to population in order to support a higher ESS (see Figure 11).

Figure 10: Intervention Effects



Source: Pracsys (2016)

Identifying strategic industry, supporting them and building additional human, productive and natural capacity around them to facilitate the development of local supply chains is one way to increase the quantum of jobs offered and increase the share of strategic jobs. The construction of the JPACF fits these criteria by building the human and productive capacity necessary to support this growth.

Table 24 provides the ESS targets established by the Department of Planning in *Perth and Peel@3.5million.* In order to achieve the increased job to population ratios required to support ESS targets, strategic jobs are required. With growth in population-driven employment only, the

job to population ratio will remain constant (25%) into the future and ESS targets will not be met. Specifically, for the 2021 target to be met 18,600 new strategic jobs will need to be created in the North-West.

Table 24: Perth and Peel@3.5million North West Employment Goals

	Current	Targets			Total Change	Total % Change
	2011	2021	2031	2050		
Population	322,486	429,954	546,423	740,319	417,833	129.6%
Labour Force	163,636	211,087	268,331	376,386	212,750	130.0%
Jobs	80,566	126,014	174,201	229,089	148,523	184.3%
Jobs to Population	25%	29%	32%	31%	6%	
Employment Self Sufficiency (ESS)	49.2%	59.7%	64.9%	60.9%	11.6%	

Source: Pracsys (2016), DoP (2015)

Considering that strategic employment accounts for almost half of employment in the creative clusters, if through the influence of JPACF, employment in creative industries increased to the same level as benchmark locations between 11 and 291 strategic jobs could be created in Joondalup alone. This is an important contribution to efforts made by other industry initiatives to boost the representation of strategic employment in the region and meet the established ESS goals.

Higher provision of strategic jobs will have other positive benefits for the economy and wider community. At present a significant proportion of high quality jobs are held in the central sub-region (including most of Perth's cultural infrastructure). Given this, those that wish to have jobs in these industries yet live outside the central region are forced to commute in to satisfy this requirement.

By developing infrastructure that allows these industries to grow there is potential for employment opportunities to be created closer to a person's place of residence. This can have significant flow on effects in reducing the burden on transportation networks (a significant portion of government spending) as well as other far reaching productivity and social benefits through travel time and road traffic accident savings.

8.3 Innovation and Economic Success

JPACF will become a powerful router and amplifier of ideas and creativity, accelerating the overall rate of innovation and economic success in the North-West.

An examination of the relative productivity of creative industries provides an indicator of the potential economic benefit derived from creative industry growth.

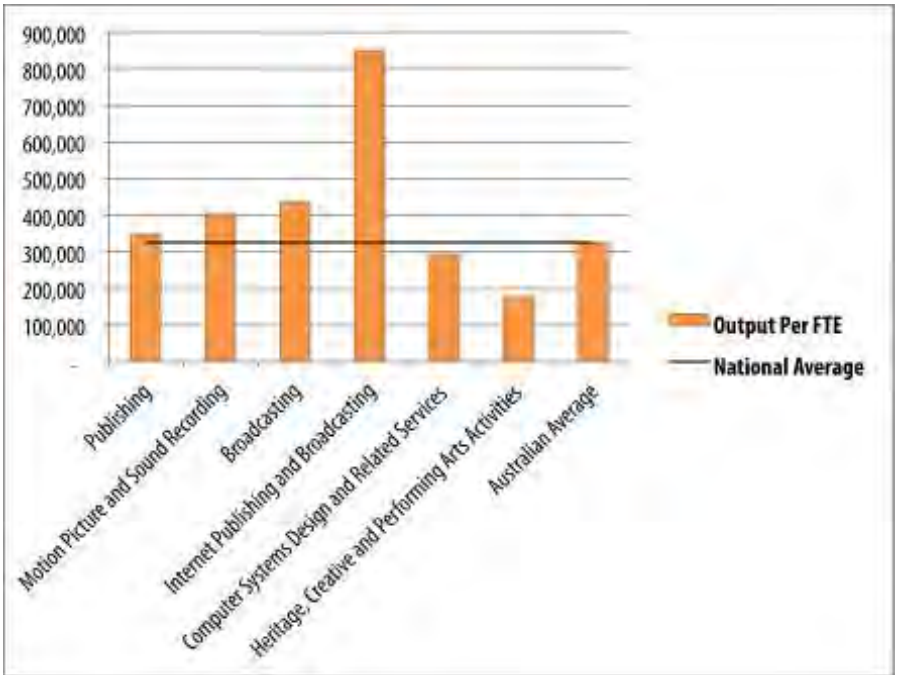
The creative industry boasts relatively high productivity levels per FTE in comparison to the rest of the economy. This is particularly apparent in those sectors of the economy that have a more developed and mature industry associated with them, such as:

- Broadcasting
- Publishing
- Motion Picture and Sound Recording
- Internet Publishing and Broadcasting

These industries have output per FTE that is well above the national average. Creative industry output per FTE as derived from national Input Output tables is shown in Figure 12. Growth in these high productivity creative industries will drive higher incomes and higher employment

levels beneficial to both national and local economies.

Figure 11: Output per FTE – Creative Industries



Source: Pracsys (2016)

In addition to the direct economic benefit of increased high productivity employment, the creative industries are built on core skills that act as a broad stimulant to innovation, which in turn drives growth, sustainability and prosperity. A defining feature of creative industries is the generation of creative ideas that have the potential to be commercialised and which once commercialised, underpin innovation and have a positive flow on impacts on the national economy.

Knowledge capital and ideas are the only infinitely reproducible economic resource with the potential to support exponential growth of worker productivity. Creative ideas work to facilitate the adoption and adaptation of new technologies – through design and advertising, for example – along with the embedding of new technologies raising the output per worker.

The collaborative partnerships, flexible business models, and digital technologies evident in creative industries feed innovation and offer new opportunities across all sectors leading to the development of new markets and products that create jobs. The arts overall are therefore not only for entertainment but are an essential service in the process of economic growth, development and evolution.

It is in this way that growth of the creative industry can support improved rates of employment self-sufficiency (ESS) in the North-West. The JPACF will be an amplifier of ideas and creativity, supporting the growth of creative talent and creative industries in order to bolster the pipeline of ideas for commercialisation. In addition, the JPACF will be an anchor institution that encourages the partnerships required to facilitate downstream commercialise ideas into private sector growth and public service innovation for the North-West. The JPACF will be a catalyst for the growth of this industry that would otherwise not have a chance to grow.

8.4 Building on Joondalup's Arts and Cultural Strengths

The City is well placed to build on existing strengths of being a cultural and artistic hub for the greater region. The JPACF will significantly increase the City's capacity to provide larger, higher profile art and cultural activities in addition to a more diverse and inclusive program. The potential for the JPACF to facilitate this growth is demonstrated by the following:

- **Joondalup Eisteddfod**: young people showcase their talents and gain recognition, with a financial incentive of $6,000 in awards and prizes and a low entry cost of $21 to $35. With currently 900 young people registered the JPACF will provide capacity for more to participate and attend across the region.
- **Sunday Serenades**: Music concerts currently oversubscribed with 50% more interest than capacity. Popular with seniors at a low cost of $12. The JPACF would allow the City to meet the current and future demand.
- **Visual arts community groups**: Currently several community groups do not have access to a venue. The JPACF would provide a cost effective option with the opportunity to exhibit artworks and encourage financial sustainability through increased exposure and artwork sales.
- **Joondalup Festival**: For two days each year, the Joondalup City Centre is transformed to host free activities and showcase world-class artistic and cultural performances. The 2015 Festival was a major cultural experience aimed at fostering community spirit and encouraging a sense of belonging. The Festival assists the City to provide members of the community with access to cultural, artistic and inclusive community events. The Festival achieves this by encouraging active community participation. The Community Choral project and the Twilight Lantern parade encouraged individuals, community groups, schools and emerging and established artists to come together to perform and celebrate their achievements with the wider community. A program feature in 2013 was Urban Couture, an important opportunity for emerging artists to gain recognition and entry into the fashion industry and showcases their talents to the wider community. Urban Couture featured artists, designers, illustrators and photographers participating in fashion pop-up shows. No entry fee provided further encouragement.

The City will develop a suite of arts and cultural strategies that intersect with the JPACF, such as a community festival development strategy and a visual art development strategy that support and integrate with the JPACF Program Plan.

While the City of Joondalup is intended to be a significant user of the Facility, this does not imply that the entire Cultural Program of the City will be focused on the JPACF, nor will the Cultural program be expanded just so it uses the JPACF (which may be to the detriment of the other potential users).

8.5 Local Identify and Place Making

The JPACF will add an exciting new dimension to the City Centre and is a key component in the development of the region's cultural identity.

Arts-based engagement can promote cooperation, awareness of local issues and the reduction of social isolation, all of which contributes to a shared sense of community pride and identity.[22]

Arts initiatives and spaces can be transformative. The JPACF will be located within the

[22] *Promoting Mental Health and Wellbeing Through Community and Cultural Development: A Review of Literature Focusing on Community Festivals and Celebrations,* McQueen-Thomson D, James P & Ziaguras C, VicHealth & RMIT University, 2004.

Strategic Regional Centre of Joondalup. It will be close to public transport networks and will link with existing regional education and health services as well as restaurant and retail opportunities within the City Centre.

The JPACF will be the most significant piece of arts and cultural infrastructure to be built outside of the Perth CBD in the last decade. On completion the JPACF will sit alongside the State Theatre Centre of WA, Mandurah Performing Arts Centre, Bunbury Regional Entertainment Centre and the Albany Entertainment Centre as like-sized and equipped performing arts centres able to tour top quality performance work from WA, Australia and the world.

It will reinforce the Joondalup City Centre as the creative and educational centre of the northern corridor and be an easily recognisable entry statement to the City.

The facility will become a vibrant hub of activity through the day through interactive installations, community classes, public interest talks, trade shows and conferences, seminars, displays, functions and café and restaurant trade. Similarly evening performances and exhibitions will draw patrons and heighten the sense of 'liveability' of the region.

As the JPACF is activated during the night and day and is increasing used and frequented by communities of the Perth North West Sub Region, it will become the iconic heart for the City. Similarly, it will draw visitors to the destination of Joondalup to experience its unique sense of place.

Image:Joondalup Performing Arts and Cultural Facility – 850 seat Theatre: ARM Architecture.

9 Social Impact Assessment

The economic value of the arts and cultural sector is only one part of its net worth to the community. The need to experience, understand and represent the world symbolically is in all of us. The intrinsic value of the arts is perhaps immeasurable.

The arts can transcend barriers of language, culture, ability, and socio-economic status and are therefore increasingly being used to connect and inspire communities, promote health and wellbeing and manifest a collective sense of place and identity.

Our ability to reflect, record, recall, express and exchange meaning through different art forms is what differentiates us as human beings. The arts have been critical to people understanding themselves and their place in the environment since the earliest known civilizations. Today, they are still fundamental to bond, enrich, inspire, enliven and create communities. It is no surprise then, that Western Australians highly value the role arts and culture play in their lives both at a personal and community level. [23]

While the question of how personally experienced values can be translated to a broader social meaning is difficult, and finding empirically convincing evidence for this transfer is complex. Since the 1990s there has been a growing body of evidence[24] demonstrating the links between arts and culture and other socially desirable outcomes.

There is now a well-established empirical evidence base supporting the view that the arts can make a vital contribution to our wellbeing. This can occur across a range of dimensions at an individual, community and broader society level. The arts have the potential to bridge our worlds, harness the wisdom of our different views, engage our imagination to explore new ways of thinking, and create experiences that can be shared by all people in our community.[25]

In 2015, a team of European sociologists and scholars exploring the "return on investment" of public funding in arts and culture concluded that "overall, the results of empirical research into the value of culture support the hypothesis that the experience of art, culture and heritage contributes to realising socially sought after effects such as cognitive development, health, social cohesion, technological and economic development".[26]

The justification of public funding lies in the concept of market failure, that is, that the market fails to account for the broader societal benefits of arts and culture - referred to as 'externalities' - thus resulting in underinvestment (from a societal point of view) in the industry. Evidence from national and international sources demonstrates that even a modest investment in the arts at a local level can deliver significant returns on investment when the value of all benefits are taken into account.

Pracsys Economics has identified how JPACF could address disadvantage within communities of interest and in addition, conducted social return on investment (SROI) analysis in order to quantify the value of social benefits that could be realised by JPACF. The following sections of the Business Case provide the results of this analysis and culminate in the calculation of a BCR that in addition to economic variables of time travel savings, vehicle operating cost savings and visitation expenditure takes into account the broader value of social benefits.

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[23] Western Australian Department of Culture and the Arts Culture monitor 2015 fact sheet. Available at *http://www.dca.wa.gov.au/Documents/New%20Research%20Hub/Research%20Documents/Arts%20Monitor%20Fact%20Sheets/Arts_Monitor_2015_fact_sheet.pdf*

[24] *See Social Impacts of Participation in the Arts and Cultural Activities, Cultural Ministers Council, Statistics Working Group and Cultural Activities, Sydney 2004. Available at http://culturaldata.arts.gov.au/sites/www.culturaldata.gov.au/files/Social_Impacts_of_Participation_in_the_Arts_and_Cultural_Activities.pdf*

[25] *The Arts Ripple Effect: Valuing the Arts in Communities, Castanet with the support of Arts Victoria and the Australia Council for the Arts. Available at http://creative.vic.gov.au/Research_Resources/Resources/The_Arts_Ripple_Effect*

[26] *Culture: The Substructure for a European Common*, A research Report, Flanders Arts Institute, Brussels, February 2015, Pg. 63

9.1 Addressing Disadvantage

The 2015 study *Dropping off the Edge*[27] explores the geographic distribution of disadvantage across Australian states and territories, communicating the current imperative to address persistent and entrenched locational disadvantage across the country. The study looks at a range of indicators of socio-economic problems that impact on people's life opportunities and which create demand upon societal resources. This study highlights the need to when targeting services to communities, explore particular characteristics and factors that contribute to an disadvantage the type of disadvantage being experienced.

With respect to the JPACF, relative disadvantage has been identified in alignment with the SEIFA Index of Relative Socio-economic Disadvantage (IRSD). The SEIFA IRSD comprises a range of component variables, including:

- Income variables
- Education variables
- Employment variables
- Occupation variables
- Transport variables
- Other indicators of relative advantage or disadvantage

The SEIFA Index of Disadvantage measures the relative level of socio-economic disadvantage based on a range of Census characteristics. SEIFA provides a general view of the relative level of disadvantage in one area compared to others and is used to advocate for an area based on its level of disadvantage.

The index is derived from attributes that reflect disadvantage such as low income, low educational attainment and high unemployment. The findings of the SEIFA analysis show that the JPACF will directly and indirectly address current and future problems arising in the primary catchment area, that is, the rapidly growing North-West Sub Region.

SEIFA Analysis

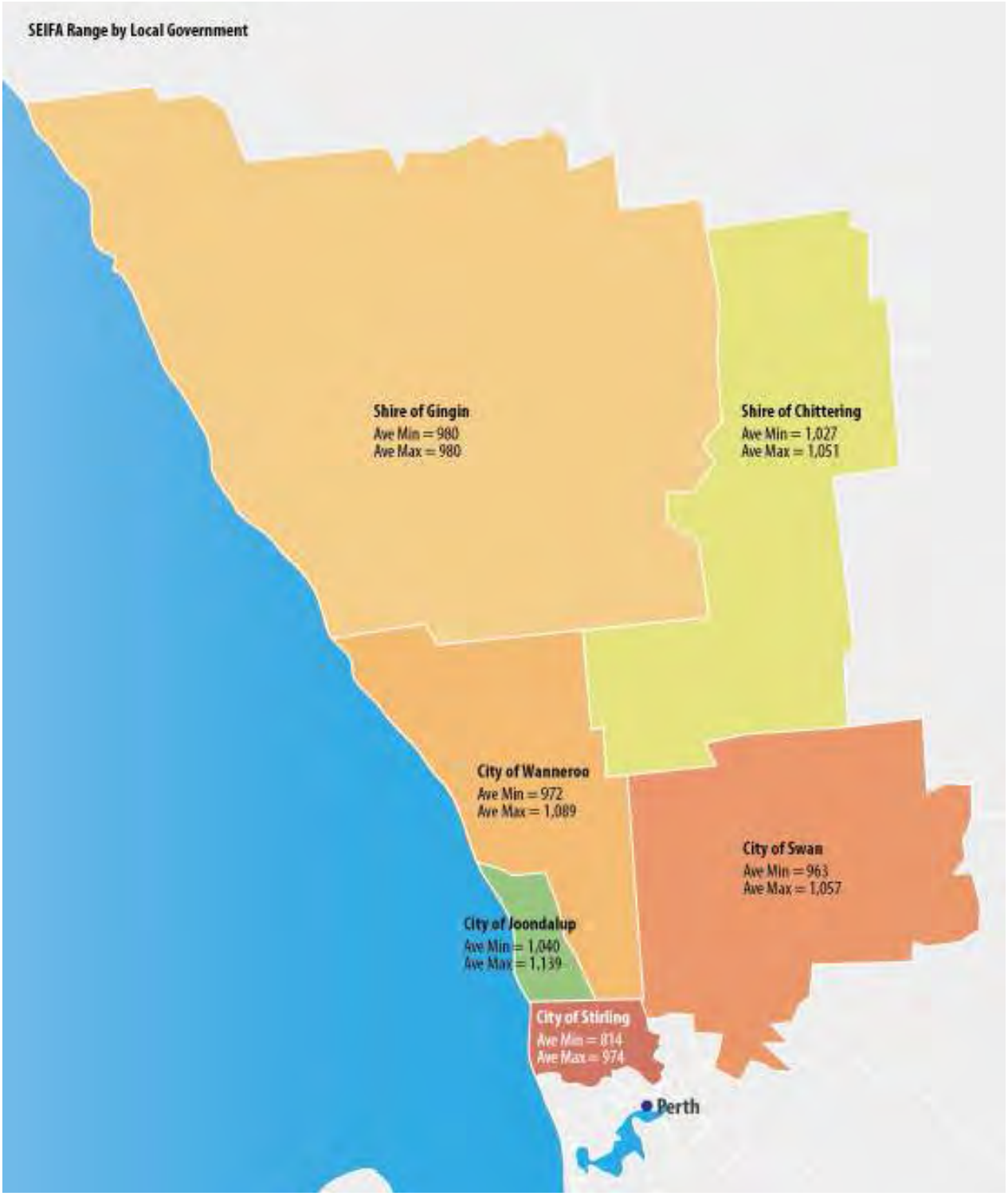
The analysis was undertaken at Local Government Area level as well as at Statistical Level 1 (SA1), in order to more precisely identify areas with low SEIFA scores within suburbs. Areas which include average minimum scores lower than 1,000 provide evidence of relative disadvantage.

Key Areas of Disadvantage

Whilst the City of Joondalup itself is relatively advantaged the catchment area that applies to the project and the broader area of influence extends to include areas with evidence of disadvantage. The City of Wanneroo (within the Primary Catchment) as well as the Cities of Stirling, Swan, Gingin and Chittering (within the area of influence) all have suburbs with average scores below 1,000 (See Figure 13).

[27] T. Vinson and M. Rawsthorne (2015). *Dropping off the Edge 2015: Persistent communal disadvantage in Australia (pages 100 – 105)*

Figure 12: SEIFA Range by Local Government Area



Source: Pracsys (2016) using (ABS, 2011). Socio-Economic Indexes for Areas (SEIFA), Statistical Area Level 1

Table 25 identifies suburbs within the primary catchment and their relative scores. Social indicators have been sourced to explain the type of disadvantage with indicators selected in alignment with those utilised in the 2015 study *Dropping off the Edge.*

Table 25: Suburbs with Disadvantage

Suburb	Average SEIFA Score [A]	Type of disadvantage (LGA Level Data)

Suburb	Average SEIFA Score [A]	Type of disadvantage (LGA Level Data)
Primary Catchment: Wanneroo (LGA)		
Koondoola	869	**Individual Income** Higher proportion of people earning low income (33.1% compared to 32.5%) and lower proportion of people earning high income (14.2% compared to 17.1%) **Unemployment** Similar proportion in employment, as well as a similar proportion unemployed. Overall, 95.1% of the labour force was employed (63.8% of the population aged 15+), and 4.9% unemployed (3.3% of the population aged 15+), compared with 95.3% and 4.7% respectively for Western Australia. **Volunteering** Lower proportion of population performing voluntary work (11.9% compared with 16.9%) **Occupation** Larger percentage of persons employed as Technicians and Trade Workers (19.9%) or Labourers (10.9%) compared to WA (16.7% and 9.7% respectively) **Post-School Qualifications** Lower proportion of persons with bachelor degree or higher (15.2% compared to 23.4%). Higher percentage of persons with no qualification (46.4% compared to 38.7%). **Self Assessed Health** Higher proportion of the people with fair or poor self-assessed health (14.0% compared to 13.7%). **Rent Assist** Higher percentage of households receiving rent assist (17.2% compared to 13.6%) **Cultural Acceptance** Higher percentage of population who disagree/strongly disagree with acceptance of other cultures (7.6% compared to 6.6%)
Merriwa	928	
Wanneroo	981	
Girrawheen	897	
Ashby	994	
Two Rocks	973	
Clarkson	995	
Woodvale	994	
Secondary Catchment: Swan (LGA)		
Cullacabardee	695	**Individual Income** Lower proportion of people earning a high income (13.0% compared to 17.1%) **Volunteering** Lower proportion of people who performed voluntary work (12.9% compared to 16.9%) **Occupation** Larger percentage of persons employed as Machinery Operators And Drivers (9.6%) and Clerical and Administrative Workers (16.3%) compared to WA (7.6% and 14.4% respectively) **Post-School Qualifications** Lower proportion of persons with bachelor degree or higher (10.8% compared to 17.5%). Higher percentage of persons with no qualification (49.0% compared to 43.%). **Self Assessed Health** Higher proportion of the people with fair or poor self-assessed health (14.9% compared to 13.7%). **Rent Assist** Higher percentage of households receiving rent assist (14.3% compared to 13.6%)
Midvale	813	
Swan View	942	
Midland	868	
Lockridge	879	
Bullsbrook	983	
Stratton	927	
Koongamia	909	
Hazelmere	975	
Middle Swan	980	
Beechboro	995	

Suburb	Average SEIFA Score [A]	Type of disadvantage (LGA Level Data)
Herne Hill	996	
Secondary Catchment: Stirling (LGA)		
Balga	913	**Unemployment** At LGA level there is a lower level of unemployment (4.5% compared to 4.7%) however there is a higher rate of unemployment in certain localities compared to the state Balga (11.0%), Mirrabooka (8.3%), Westminster (13.5%) and Girrawheen (8.2%). **Volunteering** Lower proportion of people who performed voluntary work (15.9% compared to 16.9%) **Occupation** At LGA level there is a higher proportion of Professionals (25.6% compared to 19.9%) however in certain localities there is a significantly higher proportion of labourers Mirrabooka (19.8%), Balga (17.2%), Girrawheen (16.9%) and Westminister (13.5%) compared to 9.7% across the state). **Cultural Acceptance** Higher percentage of population who disagree/strongly disagree with acceptance of other cultures (7.6% compared to 6.6%) **Psychological Distress** Higher percentage of the population with high or very high psychological distress (10.6% compared to 10.5%)
Westminster	901	
Mirrabooka	900	
Glendalough	945	
Balcatta	960	
Nollamara	964	
Osborne Park	994	

Source: Pracsys (2016) utilising:

- **PHIDU (2015)** ***Social Atlas of Australia –Cultural Acceptance, Psychological Distress, Rent Assist, Self-Assessed Health***
- **Population id (2016).** ***City of Swan, Wanneroo and Joondalup***
- **ABS (2011).** ***Census of Population and Housing***

[A] Average of all SA1 level scores within the SSC

The Link Between the Arts and Disadvantage

There is a body of evidence to support arguments that many of the intangible social impacts of the arts are connected to tangible impacts such as education, employment and income that contribute to disadvantage.

Whilst some of the social or intangible impacts such as mental health and wellbeing are intuitively directly connected to a desirable social outcome there are other connections that rely on achieving an intermediate outcome. For example, people may learn new skills and feel more confident as the result of participating in community arts activity, and this in turn may increase their employability[28].

Increased access to art and cultural experiences and provision of enabling infrastructure to support art and cultural production is therefore likely to provide improvements in relative disadvantage, as measured by the SEIFA Index.

Social Inclusion and Civic Participation

The arts foster a culture of inclusion within communities, which has direct and indirect impacts on disadvantage. Being socially included means that people have the resources, opportunities

[28] Jermyn, Helen (2001). *Arts and Social Exclusion: a Review Prepared for the Arts Council of England (Page 14)*

and capabilities they need to[29]:

- Learn (participate in education and training);
- Work (participate in employment, unpaid or voluntary work including family and carer responsibilities);
- Engage (connect with people, use local services and participate in local, cultural, civic and recreational activities); and
- Have a voice (influence decisions that affect them)

Those that are socially excluded can be prevented from participating in education or training, and gaining access to services and citizenship activities therefore the outcomes of social inclusion include highly tangible indicators such as increased employment rates and improved educational performance[30].

Whilst the causes of social exclusion are diverse and complex it has been shown that the arts can be a significant part of the solution because they transcend barriers of language, culture, ability, and socio-economic status[31]. Acceptance of cultural diversity is important for building inclusive local communities and various studies point to the impacts of participation in arts and cultural activity including: building cultural bridges, building better understanding of different cultures, fostering tolerance and understanding and directly decreasing social isolation and fostering social inclusion[32].

There is evidence of the significant contribution of nonprofit art and culture organisations as a result of volunteerism with many art businesses operating within a model of social enterprise, providing opportunities for volunteering. An example includes the Wangaratta Performing Art Centre in Victoria, which was construction in 2009 to replace the Wangaratta Memorial Town Hall which had very limited facilities for presenting professional performing arts. An economic impact assessment revealed a significant increase in volunteer levels (in comparison with the old venue) with volunteer hours increasing over tenfold[33].

The City of Joondalup's Community Development Plan identifies geographical and socio-economic factors as limiting civic and cultural participation. The JPACF will provide access to art and cultural experiences that reflect and celebrate diversity fostering social inclusion.

It will also provide numerous opportunities for increased engagement through volunteering. The Joondalup Volunteer Resource Centre (JVRC) in 2013-14, linked 1,904 volunteers to opportunities and the JPACF will provide the JVRC with a new range of volunteering opportunities where volunteers will enhance their sense of belonging providing them with the tools to learn, work, engage and have a voice.

Importantly, the JPACF will also help develop the community and provide increased access to arts and cultural facilities for residents within the broader North-West Metropolitan region. This will be achieved through:

- **Joondalup's existing arts and cultural program:** The City has one of the region's largest cultural programs with festivals, active visual arts programs and exhibitions, concerts, children's events, cultural celebrations, grants and funding schemes. The City currently supports residents to participate in art and cultural activities at low or no cost. The JPACF will greatly enhance the City's ability to deliver a more diverse and larger scale program of arts and cultural projects, events and activities.
- **Diverse programming**: The JPACF will provide a multitude of accessible opportunities for residents and patrons in the broader catchment area. The program will provide a balance of popular arts and cultural events and work targeted towards audience

[29] Department of Premier and Cabinet, Australian Social Inclusion Board (2010). *Social Inclusion in Australia: How Australia is faring*
[30] Castanet (2003). *The Arts Ripple Effect: Valuing the Arts in Communities* (Page 11)
[31] Ibid.
[32] Cultural Ministers Council Statistics Working Group (2004). *Social Impacts of Participation in the Arts and Cultural Activities: Stage Two Report Evidence, Issues and Recommendations (Pages 21 and 25)*
[33] Castanet (2003). *The Arts Ripple Effect: Valuing the Arts in Communities* (Page 14)

development and meeting community engagement needs. The program will be outlined through the Program Policy and annual Program Plan;

- **Strategic long term partnerships**: The JPACF will seek long term partnerships with a range of local, WA and national artists and arts organisations. Programming will take place over a one to three year time frame with an aim to develop ongoing relationships between local patrons and artists and arts organisations.

Cognitive Skills and Self-Confidence

Additional individual impacts of arts participations such as increased self-confidence and the development of creative as well as non-creative skills, such as communication or organisational skills have been shown to present progress towards the harder social inclusion outcomes such as employment or education[34].

Involvement in arts-based activities has been shown to create pathways for personal and social development which increase prospects for employability, particularly for young people and those from culturally diverse or disadvantaged backgrounds.

In addition, there is an understanding that the skills associated with artistic practices– creative thinking, self-discipline, collaboration, risk taking, and innovation – are skills that are in great demand in our contemporary knowledge economy[35] and that the skills taught by the arts will contribute to success. Arts education teaches children creativity, special thinking and abstract reasoning, all critical skill sets for tomorrow's software designers, scientists entrepreneurs and engineers[36].

The site for the proposed JPACF is in close proximity to the Joondalup Learning Precinct which comprises of the three co-located education campuses of Edith Cowan University, West Coast Institute of Training and the Western Australia Police Academy. The JPACF would provide opportunities for partnerships with these institutions, with opportunities to implement best-practice art education programs as a means of developing a workforce capable of great success in the knowledge-based economy.

Mental and Physical Health and Wellbeing

There is a growing body of evidence that participation in arts-based activity – such as visual art, music-making or writing – can have a measurable impact on physical health and wellbeing. As a result, the practice of applying arts initiatives to health problems and health promoting settings is becoming increasingly common.

In 2013, the Standing Council on Health and the Meeting of Cultural Ministers endorsed the National Arts and Health Framework[37], which recognises and promotes greater integration of arts and health practice. The framework acknowledges the value and benefits of arts and health practice and outcomes and endorses collaborative relationships between arts and health sectors at all levels of government and with the non-government sector.

In addition to the benefits of active participation, epidemiological research suggests that promoting general cultural attendance – such as attending a cultural institution such as an art centre - also makes a difference to mental and physical wellbeing. This can be through a variety of channels, for example through improvements the social relationships and networks[38] and reductions in stress levels[39] which, in turn, increase the likelihood of good mental and physical health and wellbeing. There is now considerable evidence that the stronger a sense of

[34] Jermyn, Helen (2001). *Arts and Social Exclusion: a Review Prepared for the Arts Council of England (Page 20)*
[35] Castanet (2003). *The Arts Ripple Effect: Valuing the Arts in Communities (Page 14)*
[36] Robert L. Lynch (2006) *Creating a Brighter Workforce with the Arts (Page 1)*
[37] Meeting of Cultural Ministers and the Standing Council on Health (2014). *National Arts and Health Framework*
[38] Castanet (2003). *The Arts Ripple Effect: Valuing the Arts in Communities (Page 14)*
[39] Mark O'Niell (2010). *Cultural attendance and public mental health – from research to practice*

belonging that people feel, the healthier they are[40].

Mark O'Neill's article in the Journal of Public Mental Health *Cultural attendance and public mental health – from research to practice*[41] explores the implications of this research. The article argues that if general cultural attendance, as evidence suggests, contributes to healthier lives, the issue of democratic access is critical and that cultural organisations need not only meet the demand of existing audiences but address the inequalities in cultural capital and engage non-users. The article suggests that increasing general, non-intensive attendance at cultural organisations among vulnerable communities may be able to achieve a health impact at a population level.

Currently, people living in Perth's North-West have no easy access to a local performing arts and cultural facility, creating a barrier to general cultural attendance and the benefits to mental health and wellbeing that exposure to the arts provides.

The JPACF will provide an important venue to reach out to audiences and creatives with existing demand for a venue and those non-users that have, without access to a facility, been discouraged from engaging with arts and culture. In addition, the close proximity of the JPACF to the Joondalup Health Campus, the largest healthcare facility in the northern suburbs, offers exciting synergies and opportunities for enhancing the arts and health connection.

9.2 Social Return on Investment (SROI)

A number of tools have been developed in order to articulate and measure the economic impact of arts and cultural institutions. The most commonly used method, economic impact assessment (EIA), examines the monetary flows through the economy and looks at the direct, indirect and induced effects of spending associated with arts and culture. This approach relies on estimates of employment and visitation as well as industrial economic data on the relationships between arts and culture and other sectors of the economy in order to determine flow on impacts. This analysis for JPACF was conducted by Pracsys Economics and included in Section 8 of this Business Case.

Whilst this approach communicates the economic impact of an institution to a defined economy, the approach focuses on traditionally 'measureable' economic impacts without considering the value of social or intrinsic benefits. SROI provides an alternative valuation approach for projects. The City of Joondalup commissioned Pracsys Economics to undertake an analysis of the Social Return on Investment (SROI) of the proposed JPACF.

Over the last decade, SROI has attracted a growing level of interest and support due to an intensified focus on impact and value for money by governments and the not for profit sector. SROI is recognised as an appropriate method to prove value by government and not-for profit organisations such as:

- Australian Government Department of the Prime Minister and Cabinet
- Australian Sports Commission (ASC)
- UK Department for Culture, Media and Arts
- Salamanca Art Centre (Hobart, Tasmania)
- Auckland Museum
- Community Arts Network WA

About SROI

SROI can be defined as: "*a framework for understanding, measuring and accounting for the*

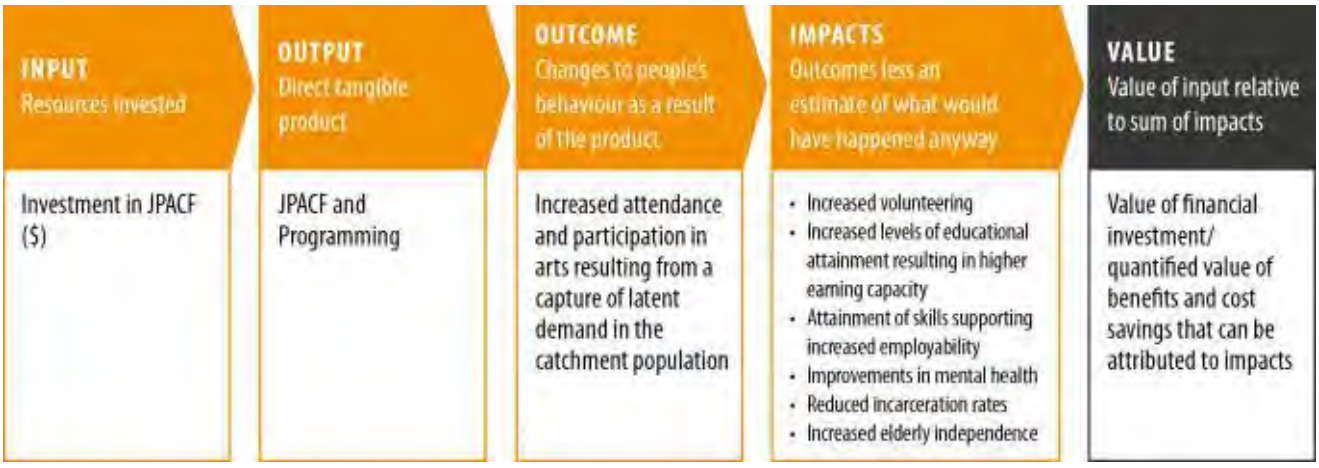
[40] Castanet (2003). *The Arts Ripple Effect: Valuing the Arts in Communities (Page 17)*
[41] Mark O'Niell (2010). *Cultural attendance and public mental health – from research to practice*

social value of projects, programs, organisations, businesses and policies" [42]. SROI analysis places a monetary value on the social impact (the benefit) of an activity and compares this with the cost incurred in creating that benefit. Specifically, SROI:

- Identifies the various cost savings, reductions in spending and related benefits that accrue
- Monetises those cost savings and related benefits through use of financial proxies
- Projects those savings over an investment timeframe and discounts those back in order to determine a net present value in the same way as cost-benefit analysis (described in Section 8.8)

SROI is based on 'theory of change' which distinguishes between outcomes achieved and impact. Figure 18 provides an overview of the way in which the theory of change model has been applied by Pracsys to the JPACF project.

Figure 13: Theory of Change



Source: Pracsys (2016)

Methodology

Pracsys has applied a commonly used SROI valuation methodology in order to provide a measure of the financial value of social benefits that may be accrued as a result of JPACF.

The methodology involved an extensive literature review to link exposure to, and participation in arts and culture with tangible and intangible social benefits at the individual and community level. Financial proxies have been calculated and applied to the catchment population in order to provide an estimate of the monetary value of social benefits. The proxy attempts to quantify outcomes or consequences that could arise if there is no change in current behavior. The financial proxies have calculated based on desktop research and a comprehensive literature review (See *SROI Technical Appendices* for more information on the calculation of financial proxies).

The SROI valuation methodology applied by Pracsys included the following stages of work:

- A literature review in order to define links between arts and culture, social impact and the produce theory of change logic model
- Selection of six tangible impacts to form the focus of the SROI analysis
- Identification of appropriate financial proxies for tangible impacts
- Estimation of the scale of impact that JPACF could have on new participants

[42] Social Ventures Australia (2012) *Social Return on Investment: Lessons learned in Australia* <http://socialventures.com.au/assets/SROI-Lessons-learned-in-Australia.pdf>

- Application of financial proxies to affected individuals in order to monetise the value of the social impacts
- Application of an additional attribution to take into account intangible impacts

It is assumed that catchment residents currently engaging in arts and culture within and outside of the catchment already enjoy the benefits of their engagement and financial proxies are therefore only applied to the people that are newly involved in arts and culture as a result of JPACF. These individuals are assumed to be those that represent latent demand, as established in the MAFS.

Revealed preference modelling conducted in production of the MAFS identified total potential demand for attendances within the catchment of approximately 810,000[43]. Stakeholder consultation indicated that approximately 620,000 of these attendances (76%) do not occur at all. Based on an average frequency of attendance of six artistic or cultural events per year[44], total latent demand is estimated in the order of 98,300 persons. The latent demand is not specific to JPACF, rather it is pool of demand for any art or cultural event available in the catchment.

The annual social benefit is then derived from the following formula:

Financial Benefit Per Annum ($) =

Affected Population (no.) x Estimated effect of JPACF (%) x Financial Proxy ($)

An annual value of potential benefits has been estimated and projected over an investment timeframe (2016 to 2059). This has been discounted back to provide a net present value (NPV).

Limitations

There are limitations to SROI which should be acknowledged and care should be taken in interpreting the findings. Assumptions made about the size of the population exposed to the benefit and the impact JPCAF could have on these individuals' behaviour should be taken into account (see *SROI Technical Appendices* for more information).

In addition, significant dimensions of a creator or audience's experience are therefore not captured in an SROI valuation and accounting for the pure cultural values of the arts distinct from economic contributions remains critical[45]. For this reason, the analysis conducted by Pracsys has included an additional 10% (of the total SROI value calculated) to capture these benefits.

Social Benefits Considered in the Analysis

Table 26 provides an overview of the measures and impacts considered in the SROI analysis conducted by Pracsys (See *SROI Technical Appendices* for more information).

Table 26: Social Benefits Considered

Impact and (Measure)	Financial Proxy	Party to which benefit accrues	Rate of Incidence (%)	Population Exposed to Benefit	Description

[43] This excludes film, which it is understood is predominantly being met through existing commercial facilities.
[44] Australian Council of the Arts, 2015, Artfacts: Visual Arts
[45] Nesta (2010) *Culture of Innovation: An economic analysis of innovation in arts and culture organisations*

Impact and (Measure)	Financial Proxy	Party to which benefit accrues	Rate of Incidence (%)	Population Exposed to Benefit	Description
Increased employment (reduced welfare expenditure)	$13,718	Federal Gov.	4.4%	2,310	Unemployed people who engage in arts as an audience member were 12% more likely to look for a job in the last four weeks when compared to unemployed people who had not engaged in the arts[46]. The Federal Government spends at least $13,718 per annum in unemployment benefits for eligible individuals aged 22-60. Based on 2011 ABS Place of Residence, the catchment has an unemployment rate of 4.4%.
Increased educational attainment (greater taxable income)	$3,219	Federal Gov.	67.3%	12,716	Within a sub-sample of 16-18 year olds, participants in the arts were 1% more likely on average to go onto further education in later years[47]. Based on the Smart Australians – Education and Innovation in Australia report by AMP it is estimated that individuals with Year 12 or equivalent will contribute at least $3,219 per annum in tax than less educated residents. Based on 2011 Census data, 67.3% of catchment residents aged 20-34 have attained a year 12 or equivalent education.
Increased social participation (increased volunteering)	$3,957	Local Gov.	14.3%	10,920	People who engage in arts as an audience member are 6% more likely to have volunteered frequently (once a fortnight or more)[48]. Based on the 2011 ABS data it is estimated that 14.3% of residents within the catchment volunteer. Applying an average hourly wage to the average hours per Australian volunteer it is estimated that each individual contributes $3,957 per annum in output.
Reduced mental health (reduced health expenditure)	$891	State Gov.	13.3%	7,198	Participants in the arts were 1.37% less likely to frequently visit GPs and 0.45% to have used psychotherapy services[49] The Public Health Information Development Unit (PHIDU) estimates that 10.0% of the catchment population experience mental health issues. Approximately $891 is spent per affected individual per annum.

[46] UK Department of Culture, Media and Sport (2014) Quantifying the Social Impacts of Culture and Sport https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304896/Quantifying_the_Social_Impacts_of_Culture_and_Sport.pdf
[47] Ibid.
[48] Ibid.
[49] Ibid.

Impact and (Measure)	Financial Proxy	Party to which benefit accrues	Rate of Incidence (%)	Population Exposed to Benefit	Description
Reduced incarceration (reduced incarceration expenditure)	$134,601	State Gov.	0.2%	108	Specific programs have been successful at both diverting and rehabilitating people from criminal conduct[50]. The ABS estimates that 0.2% of Australian's are incarcerated. On average, the Federal and State Governments spend $134,601 per incarcerated individual per annum.
Increased elderly independence (reduced aged care expenditure)	$43,351	Federal and State Gov.	19.8%	2,011	People aged 65 and older who participated in community- based cultural programs used less medication and visited the doctor less often than those who did not, and that they also had better physical health[51]. Approximately 19.8% of individuals aged 85+ across the State live in aged care homes. Aged cared subsidisations and other benefits cost the Federal Government $43,351 per person in an aged care home per annum.

Source: Pracsys (2016) utilising various sources. See *SROI Technical Appendices* for more information.

Calculating SROI

A value was assigned to reflect the scale of impact that JPACF could have on the population exposed to benefit. There are a range of factors that influence social measures considered and for this reason conservative estimates of impact have been attributed ranging from 0.01% to 6%. These have been estimated with reference to literature provided in the above table (See *SROI Technical Appendices* for more information). Using the estimated effect of JPACF, and financial proxies the financial benefit per annum was calculated.

The analysis estimates that over 900 people could experience social benefits as a result of JPACF, and that, with an additional 10% included to account for intrinsic impacts, there is potential for up to $5.2 million worth of social benefits to be accrued per annum. The present value of social benefits (SROI and intrinsic), when discounted to 2050, is over $60 million (See Figure 19).

Table 27 Financial Benefit Per Annum

Measure	Estimated effect of JPACF	Benefiting Individuals	Financial Proxy ($)	Financial Benefit (per annum)
Reduced welfare expenditure	5%	116	$13,718	$1,584,388
Greater taxable income	1%	127	$3,219	$409,375
Increased volunteering	6%	655	$3,957	$2,592,466

[50] Paul Muller, Neil Cameron, Lauren Jameson, Kristel Robertson, Robert Grafton (2012) The Economic, Social and Cultural Value of the Salamanca Arts Centre 2011-2012 http://www.parliament.act.gov.au/__data/assets/pdf_file/0018/622701/Exhibit-No.3-Belconnen-Arts-Centre.pdf

[51] UK Department of Culture, Media and Sport, (2015) Further analysis to value the health and educational benefits of sport and culture www.sportsthinktank.com/uploads/dcms-and-case-further-analysis-to-value-the-health-and-educational-benefits-of-sport-and-culture-(march-2015).pdf

Measure	Estimated effect of JPACF	Benefiting Individuals	Financial Proxy ($)	Financial Benefit (per annum)
Reduced health expenditure	1%	72	$891	$64,129
Reduced incarceration expenditure	0.01%	0.01	$134,601	$1,453
Reduced aged care expenditure	1%	2	$43,351	$91,646
Additional Intrinsic benefit (10%)				$474,345
Total		972		$5,217,803

Source: Pracsys (2016)

Social and Economic Benefit Cost Ratio

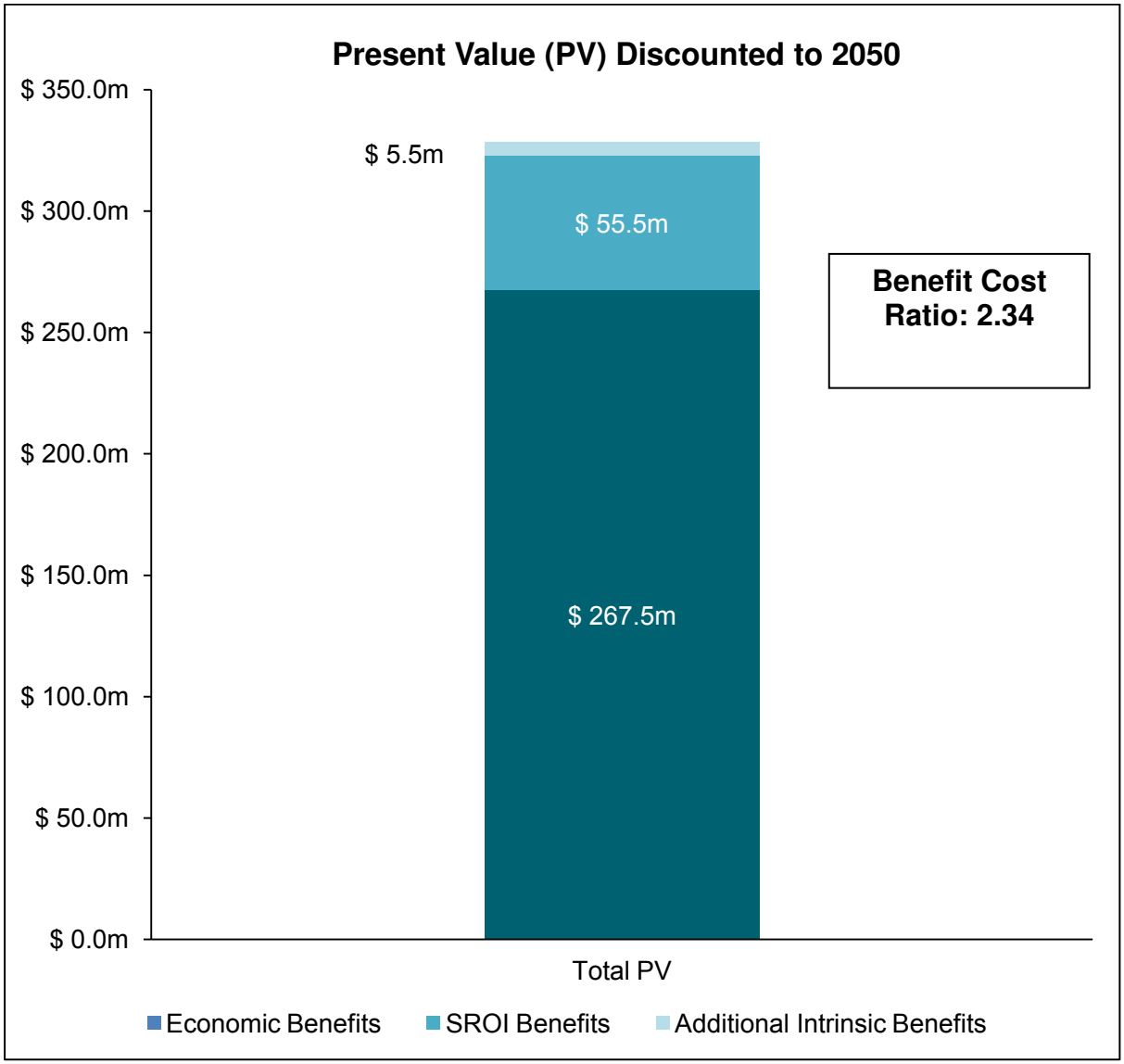
Based on the SROI analysis a BCR has been calculated to reflect the economic, social and intrinsic value of the JPACF. This BCR builds on that provided in Section 8.8 of the Business Case, that is, it includes all economic benefits as well as social benefits identified through the SROI analysis.

The results of this analysis indicate a BCR of 2.34 (see Figure 1).

A BCR between 2 and 3 positions projects favourably when they compete for funding within a limited pool. Given the JPACF represents a project whereby the vast majority of benefits are social in nature with many potential benefits difficult to quantify, the BCR of 2.34 positions the project well. It demonstrates that the project will deliver significant social and economic return on investment.

Image:Joondalup Performing Arts and Cultural Facility –Plaza Theatre: ARM Architecture.

Figure 15: JPACF Net Present Value (Economic, Social and Intrinsic)



Source: Pracsys (2016)

9.3 Social Impacts in Summary

It is estimated the JPACF will have the following social impact:

- strengthen local communities through the provision of accessible and inclusive arts and cultural experiences
- build on the City of Joondalup's strong arts and cultural program to address unmet community needs and demands for arts and cultural experiences
- address regional disadvantage
- provide social benefits to up to 900 people with the value of benefits estimated to be in the order of $5.2 million per annum. When projected over the life of the project (to 2050) and discounted to present value, social benefits are estimated to be in excess of $60 million.

10 Summary

10.1 Project Benefits

- Provide enabling infrastructure, which addresses the current barriers facing audiences and artists so as to increase cultural attendance and output.
- Catalyse creative industry growth in the region which will increase economic diversity and support the knowledge-driven, strategic employment crucial to driving economic resilience.
- Support the generation of ideas and creativity, accelerating the overall rate of innovation and economic success in the North-West.
- Foster a culture of inclusion and civic participation, facilitate the development of cognitive skills and self-confidence and support mental and physical health and wellbeing – all of which have direct and indirect impacts on disadvantage.
- Add an exciting new dimension to the City Centre and is a key component in the development of the region's cultural identity.
- Deliver instrumental social benefits to up to 900 people with the value of benefits estimated to be in the order of $5.2 million per annum. When projected over the life of the project (to 2050), the present value social benefits is estimated to be in excess of $60 million.
- Establish an anchor institution that mobilises and connects creative industries into a network and links with the broader economy to deliver economic benefits through innovation.
- Create 609 jobs through the construction of JPACF, 47 jobs through the operations of the facility and 91 jobs through increased visitation and tourism.
- Deliver economic and social benefits with a Present Value (PV) of $328.5 million, Net Present Value (NPV) of $182.4 million and a Benefit Cost Ratio (BCR) of 2.34.

10.2 Proposal Details

- Construct the JPACF at a cost of $99.7 million.
- Primary theatre utilisation of more than half of the year (186 days per year for the primary theatre).
- Operating subsidy estimated to be $863,000 per year.
- Develop a diverse program that caters for the majority of the community.

ATTACHMENT 5

City of Joondalup

Joondalup Performing Arts and Cultural Facility

Business Case

Part Two - Appendices

October 2016

A Global City: Bold | Creative | Prosperous

Contents

Appendix 1 - Project Philosophy and Parameters Report: City of Joondalup (2010)

Appendix 1 refers

To access this attachment on electronic document, click here:

Attach1sfmc270410.pdf

ITEM 2 JOONDALUP REGIONAL CULTURAL FACILITY - PROJECT PHILOSOPHY AND PARAMETERS

WARD: All

RESPONSIBLE DIRECTOR: Mr Garry Hunt
Office of the CEO

FILE NUMBER: 07019

ATTACHMENTS: Attachment 1 Map of Lot 1001 Kendrew Crescent, Joondalup

PURPOSE/EXECUTIVE SUMMARY

To enable Council and the Strategic Financial Management Committee to affirm the philosophies and parameters on which the project will be based to assist in clarifying and confirming its future direction.

BACKGROUND

The need for a performing arts facility for the Joondalup region was defined in the 1992 Joondalup Cultural Plan (Item G91127 refers) which was commissioned by the former City of Wanneroo and LandCorp. The plan indicated that the facilities should be located adjacent to the Administration Centre; with the provision of the Regional Library and the Civic buildings being Stage 1 of the project.

There have been a number of subsequent studies and reports produced identifying the need for a cultural facility in Joondalup including:

- 1996: Hames Sharley – Planning and Architectural Brief
- 2000: Australian Pacific Projects – Feasibility Study for the Establishment of Performing Arts Facilities in the City of Joondalup (Stages 1 – 3)
- 2003: Walne & Alexander – Joondalup Performing Arts Centre: Resourcing Study.

Each of these and other reports indicate strong support on the part of the community and other stakeholders for the concept of a centrally-located performing arts centre containing a range of venues and facilities.

Throughout the period 1996 – 2004 further significant progress was made on the project including:

- Liaison with key government stakeholders.
- Presentation to the public of a feasibility study.
- Formation of a Joondalup Regional Performing Arts Steering Committee.
- Commissioning of consultants to prepare a concept design and other relevant studies with the outcome being the endorsement of a concept design for the facility (Item C56-0403 refers).

- Identification of West Coast Institute of Training (formerly TAFE) land adjacent to Central Park and facing Grand Boulevard as the preferred site (Item CJ310-02/12 refers).
- Decision by Council to refer to the proposed facility as a "cultural facility" in lieu of Joondalup Regional Performing Arts Centre (Item CJ174-08/04 refers).
- Discussions with the Department of Education and Training and West Coast Institute of Training regarding the acquisition of land.

In August 2004 (Item CJ248-11/04 refers) the Commissioners authorised the City to commence negotiations for a contract of sale between the City and the Department of Education and Training for the purchase of a portion of Lot 500 Kendrew Crescent, Joondalup - the cultural facility site(refer Attachment 1). These negotiations were completed in 2006 (Item CJ194-10/06 refers). The settlement price for the land was $583,999.65 and the contract of sale contained the following special conditions:

(a) Restricts the use of the site to that of cultural facility and associated activities. Should the City propose development on the site that is not consistent with the use under which it is provided, then the DET reserves the right to repurchase the land at a future date at the market valuation at that date;

(b) Requires the City to advise the DET of any proposed development on the site prior to seeking development approval, outlining the connection between the proposed development and the cultural facility and associated activities use. The DET will have 120 days to respond to the City.

The site is 7999 sq metres in area and is now Lot 1001 Kendrew Crescent and has the street address 3 Teakle Court, Joondalup (site plan attached).

Due to financial considerations, the project was not included in the Strategic Financial Plan 2005/06-2008/09 and was deferred pending further research and investigation as to the requirements of a cultural facility being established in the northern corridor.

In June 2008 briefing meetings on the proposed cultural facility were held with the following:

- Vice Chancellor, Edith Cowan University
- Principal, WA Police Academy
- Managing Director, West Coast Institute of Training

The purpose of the briefing meetings was to:

- Outline the proposal for a cultural facility;
- Invite Joondalup Learning Precinct Members to submit to any options for long term joint facilities to be incorporated in the facility;
- Gain a positive response from all parties.

The project has been recommended in line with the City's Strategic Plan 2008 – 2011 (Key Focus Area: the Built Environment / 4.2.2 Develop a concept for a Cultural Centre at Lot 1001, Kendrew Crescent, Joondalup).

It should also be noted that the City of Joondalup has been identified as a "primary centre" by the State Government (Ref: Directions 2031 - Draft Spatial Framework for Perth and Peel, June 2009) due to its central location, relative to Perth central area, and access to high-order public transport infrastructure. Primary centres are described as "....the preferred location for investment in high order public and employment generating infrastructure..." The Framework further states that "....primary centres must build on their existing assets and invest in the attributes that influence the locational decisions of these businesses, including accessibility, land availability, local amenity, communications and technology, and the availability of skilled labour" (Ref: Directions 2031 - Draft Spatial Framework for Perth and Peel, June 2009).

At a meeting with City officers in March 2010, officers from Edith Cowan University advised of the university's forward plans for the development of a large auditorium, capable of hosting events such as ceremonies and small concerts. The proposed site for this auditorium is close to the Joondalup Regional Cultural Facility site. While the university's proposal is at the very early planning stage, the opportunity exists for discussions on the similarities between the scope of both projects and the potential establishment of partnerships.

DETAILS

The purpose of the project philosophy and parameters is to articulate, for historical purposes, the intent of Council progressing the project and address the objectives of the project and why it is proposed.

1. Philosophy/Project Vision

The City has long recognised the need for a Joondalup Regional Cultural Facility. Located with clearly defined linkages to the educational, commercial/retail, transport and civic precincts, the provision of a Regional Cultural Facility would fill a major gap in the amenities and services provided in the City Centre.

The overarching philosophy for the development of the Joondalup Regional Cultural Facility on Lot 1001 Kendrew Crescent is a place for the pursuit of activities such as performing arts, visual arts and crafts, film and media, writing and cultural events for the community of Perth's northern corridor. The Facility aspires to:

- create synergies with the existing educational institutions and reinforce the Joondalup City Centre as the creative and educational centre of the northern corridor;
- provide a world class, state of the art centre incorporating innovative and sustainable design, that is architecturally symbiotic with the existing natural and built environment;
- project an ambience of cultural significance, providing an easily recognised entry statement to the City that creates strong visual and physical linkages to existing and future civic buildings, educational precinct, green areas and transport hub.
- become a place to celebrate imagination and creativity, inspiring individuals and the community to take part in the arts and raise the aspirations of all users.
- create an inclusive environment where people of all ages and levels of cultural awareness can develop and nurture a strong sense of the possibilities that the arts can provide.
- provide a facility that can host a mixture of commercial and community activities that supports the viability and attraction of the venue.

2. Key Parameters

Governance

Any planning for a development on City owned or managed land, including Lot 1001 Kendrew Crescent, Joondalup, should incorporate high ethical standards; probity, legal and legislative compliance and transparency are of vital importance. To ensure these objectives are achieved the City will be required to undertake:

- Implementation of sound probity to ensure transparency of process and decision making;
- Internal audit review and monitoring;
- Development of comprehensive and robust Business Cases/Plans and financial analyses;
- Risk management assessment and monitoring;
- Legal and statutory compliance.

Through its appointment of suitably qualified consultants and peer review panels in the areas of planning, the environment, financing, engineering and infrastructure the City attempts to ensure that any proposed development meets community, legislative and sustainability expectations.

Adherence to the City's internal mechanisms for new development projects must also be recognised as essential to the success and timely delivery of the project.

Land Use and Built Form

The City understands that any development on Lot 1001 Kendrew Crescent, Joondalup must be in accordance with the special conditions of the land purchase and as such has recognised this site as the preferred site for the development of the Facility .

The site offers a unique opportunity for the City to develop the Facility amid an established educational precinct well known to City residents, workers and visitors. The design principles utilised and resulting built form of the Facility should create clear and defined linkages between these institutions, Central Park, the City Civic precinct and other City Centre locations. The use of comtemporary architecture reflecting innovation in design and materials used will create a civic presence with a strong sense of arrival and add considerable value to the public domain.

To ensure maximum usage for a wide variety of cultural events/activities, facilities provided should be highly adaptable and incorporate the latest relevant design principles.

Previous research has identified the need for a facility in the northern Perth region with the ability to accomodate a seated audience of between 800 to 1500 persons able to cater for a range of cultural genres (Australian Pacific Projects, 2000; Feasibility Study for the Establishment of Performing Arts Facilities in the City of Joondalup (Stages 1 – 3) and Walne, G and Alexander, P, 2002; Joondalup Regional Performing Arts Centre – Resourcing Study). To ensure the validity of this data further research into the needs of the community will be required; however facilities provided should reflect the primary focus of the Facility as a cultural facility that recognises the diversity of users and activities and consideration should be given to the inclusion of the following core components:

- **Theatre** / **auditoriums** / **cinema** with required supporting features such as raked seating, fly tower, loading dock, dressing rooms, greenrooms, storage space for props, costumes, equipment.

- **Rehearsal space**
- **Dance studio**
- **Exhibition space**
- **Art workshop** / **studio space**
- **Recording studio**
- **Multimedia studio** / **editing suite**

The City should also recognise and validate the importance of the inclusion of additional components, complementary to those above, which aim to increase the Facility's capacity to attract users and visitors and maximise operating hours. These additional components may include:

- **Function** / **meeting** / **breakout rooms of various sizes** suitable for arts purposes, conferences, seminars and meeting hire
- **Bar** / **café** / **catering facilities**
- **Courtyard or gardens suitable for functions**
- **Box office** / **customer service desk**
- **Foyer space** for use as an art gallery or function space
- **Office space, storage and a facilities** for centre management or community groups
- **Amphitheatre** linked to Central Park
- **Sculpture garden**

It should be recognised by the City that the opportunity exists for the development of a design for the Facility which is flexible and able to grow with the needs of the community.

The use of digital technology to connect with audiences in new and exciting ways will play an important role in the design and creativity of the Facility.

As part of the overall land use strategy, the provision of adequate car parking (in accordance with the relevant City policies) should be recognised.

Fiscal Responsibility and Commerciality

It is clear that the City does not have the financial or resource capacity to bring the development of a Regional Cultural Facility to fruition without a significant financial contribution from the State and/or Federal Governments. This contribution may be in the form of a joint venture partnership or financial input from other sources such as grants or Lotteries Commission funding.

In recognition of the Facility being commercially focussed, a range of suitable and flexible management options should be considered. The City will be required to prepare a Business Plan which takes into consideration the varied needs of each identified user group whilst recognising that the facility may not always operate in a cost neutral environment. An operating subsidy may be required that identifies the value of the contribution by the City towards the various groups/organisation who utilise it. Whilst attempting to maintain a high degree of commerciality, it should be understood that the provision of facilities of this nature form part of the City's charter to provide community facilities to its ratepayers.

Notwithstanding the above, access to the Facility would be on a "user pays" basis wherever possible however the City should attempt to provide an element of community use that would be subsidised where the City identifies that the social benefits derived take precedence over commercial outcomes.

In an attempt to increase the commercial viability of the Facility, the inclusion of activities not principally recognised as "cultural" would allow the Facility to be more widely utilised by groups/ entities. For example:

- Graduations and other school events,
- General commercial / community room hire,
- Conferences,
- Functions including corporate, community and private, such as weddings.

The use of the Facility as a home base for an established company/group may assist in creating a profile and recognition. However to ensure equitable access by all users, the City should guarantee that no one group or entity has exclusive use to the entire Facility.

Sustainability Considerations

By utilising up-to-date urban design, architectural and construction techniques the Facility can be a showcase for innovation in design that aims to achieve best practice in environmentally sustainable principles, whilst maintaining a contemporary, cultural ambience.

- The City should be committed to the utilisation of up-to-date best practice architectural and construction techniques and innovative environmentally sustainable design which provides the opportunity to show leadership in sustainable developments including: energy reduction, efficiency and supply;
- design efficiency to reduce water consumption and utilising alternative sources (eg rainwater);
- environmental impact.

Innovation in these areas includes benefits such as lower operational costs and the creation of a healthy meeting and working place.

Liaison Protocol

The identification of strategic user groups should be acknowledged by the City as an intrinsic component of the project. A strong understanding of the requirements of the individual user groups should be recognised as important to the overall success of the Facility. Ongoing liaison with the identified user groups throughout the development of the project is required to ensure their needs are recognised and, if aligned to the needs of the City, incorporated into the Facility.

The strategic value and implicit importance of community consultation in the development of the Facility should be recognised. To facilitate this a community consultation plan, in accordance with the City's Public Participation Policy and Strategy, should be prepared and implemented.

3. Summary

It is viewed appropriate and necessary that Council and the Strategic Financial Management Committee considers and affirms a philosophy for the Joondalup Regional Cultural Facility and endorses parameters for the project as outlined above and summarised below:

1. Philosophy/Project Vision

- Provide a world class, state of the art facility; incorporating innovative and sustainable design, symbiotic with the existing natural and built environment that is a place for the pursuit of activities such as performing arts, visual arts and crafts, film and media and cultural events for the community of Perth's northern corridor.
- Provide a facility that can host a mixture of commercial and community activities that creates an inclusive environment that becomes a place to celebrate imagination and creativity, inspiring individuals and the community to take part in the arts and raise the aspirations of all users.
- Reinforce the Joondalup City Centre as the creative and educational centre of the northern corridor.

2. Development Parameters

Governance

- Incorporation of high ethical standards;
- Probity, legal and legislative compliance;
- Appointment of suitably qualified consultants;
- Consistency with existing City strategies and plans;

Land Use and Built Form

- Adherence to the special conditions of the land purchase of Lot 1001 Kendrew Crescent;
- Utilisation of design principles that create clear and defined linkages to the established educational precinct, the City Civic Centre and other City Centre locations;
- Utilisation of contemporary architecture reflecting innovation in design and materials that create a civic presence with a strong sense of arrival that will add considerable value to the public domain;
- Provision of a wide range of highly adaptable and flexible facilities incorporating latest design principles including digital technologies;
- Creation of a facility for a seated audience of between 800 to 1500 persons;
- Inclusion of complementary components which aim to increase the Facility's capacity and usage;
- Provision of adequate car parking (in accordance with the relevant City policies);

Fiscal Responsibility and Commerciality

- Recognition that the development of the Facility will require State and/or Federal Government support in the form of a joint venture partnership or grants;

- Consideration of a range of management options in recognition that the Facility is a commercial operation and the preparation of a Business Plan;
- Recognition that the facility may not always operate in a cost neutral environment and that an operating subsidy may be required that identifies the value of the contribution by the City towards the groups/organisations that utilise it;
- Operation of the facility on a "user pays" basis wherever possible and practical with provision for an element of subsidised community use;

- Utilisation of the facility for activities not principally recognised as "cultural" and consideration of the facility as a home base for a company/group;
- Assurance of equitable access by all users and a guarantee that no one group or entity has exclusive use of the entire facility.

Sustainability Considerations

- Achievement of best practice in environmentally sustainable design principles whilst maintaining a contemporary, cultural ambience;
- Implementation of architectural and construction techniques that show leadership in environmentally sustainable developments;

Liaison Protocol

- Identification of, and ongoing liaison with, strategic user groups and a strong understanding of the requirements of individual user groups;
- Development of a public participation strategy in accordance with the City's Public Participation Policy and Strategy.

Issues and options considered:

Not applicable.

Legislation/Strategic Plan/Policy Implications

Legislation Not applicable.

Strategic Plan

Key Focus Area: The Built Environment

Objective 4.2 To progress a range of innovative and high quality urban development project within the City

Strategy 4.2.2 Develop a concept for a Cultural Centre at Lot 1001, Kendrew Crescent, Joondalup.

Policy The Regional Cultural Facility will be developed in accordance with the City's policies and procedures

Risk Management considerations:

A detailed Risk Management Assessment Report outlining the risks apparent to the project will be prepared and updated as the project progresses.

Financial/Budget Implications:

The City has allocated $170,000 in the 2009/10 budget towards the costs of engagement of consultants and other costs to assist with site assessment feasibility plans, design concepts and financial modelling.

For actual construction of the Facility, provisionally $35 million has been allocated in Council's 20 year Strategic Financial Plan with $10 million of these funds to be sourced from Government Grants and the balance from reserves associated with land development.

Regional Significance:

The construction of the Joondalup Regional Cultural Facility will enhance the City Centre as the major commercial, educational, recreational and arts and culture centre for the northern corridor of the Perth metropolitan area.

Sustainability implications:

Consideration of whole of life cycle costings for the development will be included in the Business Case/Plan financial analysis.

Consultation:

All community consultation will be in accordance with the City's Public Participation Policy and Strategy.

COMMENT

Not applicable.

VOTING REQUIREMENTS

Simple majority

OFFICER'S RECOMMENDATION: That the Strategic Financial Management Committee RECOMMENDS that Council ENDORSES the Joondalup Regional Cultural Facility Project Philosophy and Parameters in order to articulate for the record and for historical purposes the intent and purpose of the council in progressing the project:

1 Philosophy/Project Vision

- Provide a world class, state of the art facility; incorporating innovative and sustainable design, symbiotic with the existing natural and built environment that is a place for the pursuit of activities such as performing arts, visual arts and crafts, film and media and cultural events for the community of Perth's northern corridor.

- Provide a facility that can host a mixture of commercial and community activities that creates an inclusive environment that becomes a place to celebrate imagination and creativity, inspiring individuals and the community to take part in the arts and raise the aspirations of all users.
- Reinforce the Joondalup City Centre as the creative and educational centre of the northern corridor.

2 Development Parameters

Governance

- Incorporation of high ethical standards;
- Probity, legal and legislative compliance;
- Appointment of suitably qualified consultants;
- Consistency with existing City strategies and plans;

Land Use and Built Form

- Adherence to the special conditions of the land purchase of Lot 1001 Kendrew Crescent;
- Utilisation of design principles that create clear and defined linkages to the established educational precinct, the City Civic Centre and other City Centre locations;
- Utilisation of contemporary architecture reflecting innovation in design and materials that create a civic presence with a strong sense of arrival that will add considerable value to the public domain;
- Provision of a wide range of highly adaptable and flexible facilities incorporating latest design principles including digital technologies;
- Creation of a facility for a seated audience of between 800 to 1500 persons;
- Inclusion of complementary components which aim to increase the Facility's capacity and usage;
- Provision of adequate car parking (in accordance with the relevant City policies);

Fiscal Responsibility and Commerciality

- Recognition that the development of the Facility will require State and/or Federal Government support in the form of a joint venture partnership or grants;
- Consideration of a range of management options in recognition that the Facility is a commercial operation and the preparation of a Business Plan;
- Recognition that the facility may not always operate in a cost neutral environment and that an operating subsidy may be required that identifies the value of the contribution by the City towards the groups/organisations that utilise it;
- Operation of the facility on a "user pays" basis wherever possible and practical with provision for an element of subsidised community use;
- Utilisation of the facility for activities not principally recognised as "cultural" and consideration of the facility as a home base for a company/group;
- Assurance of equitable access by all users and a guarantee that no one group or entity has exclusive use of the entire facility.

Sustainability Considerations

- Achievement of best practice in environmentally sustainable design principles whilst maintaining a contemporary, cultural ambience;
- Implementation of architectural and construction techniques that show leadership in environmentally sustainable developments;

Liaison Protocol

- Identification of, and ongoing liaison with, strategic user groups and a strong understanding of the requirements of individual user groups;
- Development of a public participation strategy in accordance with the City's Public Participation Policy and Strategy.

Cr Chester left the Room at 1930 hrs and returned at 1939 hrs.

MOVED Mayor Pickard, SECONDED Cr Norman that the Strategic Financial Management Committee RECOMMENDS that Council:

1 ENDORSES the Joondalup Regional Cultural Facility Project Philosophy and Parameters in order to articulate for the record and for historical purposes the intent and purpose of the council in progressing the project:

(a) Philosophy/Project Vision

- **Provide a world class, state of the art facility; incorporating innovative and sustainable design, symbiotic with the existing natural and built environment that is a place for the pursuit of activities such as performing arts, visual arts and crafts, film and media and cultural events for the community of Perth's northern corridor.**

- **Provide a facility that can host a mixture of commercial and community activities that creates an inclusive environment that becomes a place to celebrate imagination and creativity, inspiring individuals and the community to take part in culture and the arts and raise the aspirations of all users.**

- **Reinforce the Joondalup City Centre as the creative and educational centre of the northern corridor.**

(b) Development Parameters

Governance

- **Incorporation of high ethical standards;**
- **Probity, legal and legislative compliance;**
- **Appointment of suitably qualified consultants;**
- **Consistency with adopted Council strategies and plans.**

Land Use and Built Form

- **Adherence to the special conditions of the land purchase of Lot 1001 Kendrew Crescent;**
- **Utilisation of design principles that create clear and defined linkages to the established educational precinct, the City Civic Centre and other City Centre locations;**
- **Utilisation of contemporary architecture reflecting innovation in design and materials that create a civic presence with a strong sense of arrival that will add considerable value to the public domain;**
- **Provision of a wide range of highly adaptable and flexible facilities incorporating latest design principles including digital technologies;**
- **Inclusion of complementary components which aim to increase the Facility's capacity and usage;**
- **Provision of adequate car parking (in accordance with the relevant City policies);**

Fiscal Responsibility and Commerciality

- **Recognition that the development of the Facility will require State and/or Federal Government financial support.**
- **Consideration of a range of management options in recognition that the Facility is a commercial operation and the preparation of a Business Plan;**
- **Recognition that the facility may not always operate in a cost neutral environment and that an operating subsidy may be required that identifies the value of the contribution by the City towards the groups/organisations that utilise it;**
- **Operation of the facility on a "user pays" basis wherever possible and practical with provision for an element of subsidised community use;**
- **Utilisation of the facility for activities not principally recognised as "cultural" and consideration of the facility as a home base for suitable entities;**
- **Assurance of equitable access by all users and a guarantee that no one group or entity has exclusive use of the entire facility.**

Sustainability Considerations

- **Achievement of best practice in environmentally sustainable design principles whilst maintaining a contemporary, cultural ambience;**
- **Implementation of architectural and construction techniques that show leadership in environmentally sustainable developments;**

Liaison Protocol

- **Identification of, and ongoing liaison with, strategic user groups and a strong understanding of the requirements of individual user groups;**
- **Development of a public participation strategy in accordance with the City's Public Participation Policy and Strategy.**

2 REFERS to the proposed facility as the Joondalup Performing Arts and Cultural Facility;

3 ESTABLISHES a Joondalup Performing Arts and Cultural Facility Steering Committee and requests the Chief Executive Officer to prepare appropriate Terms of Reference for consideration by Council.

The Motion was Put and CARRIED (7/0)

In favour of the Motion: Crs Amphlett, Corr, Fishwick, McLean, Norman, Taylor and Mayor Pickard

MOVED Cr Fishwick, SECONDED Cr Norman that the Strategic Financial Management Committee RECOMMENDS to Council the creation of a facility that is capable of catering for the needs of a regional centre.

The Motion was Put and CARRIED (7/0)

In favour of the Motion: Crs Amphlett, Corr, Fishwick, McLean, Norman, Taylor and Mayor Pickard

Appendix 2 refers
To access this attachment on electronic document, click here: Attach2sfmc270410.pdf

Appendix 2 - Joondalup Performing Arts and Cultural Facility Market Analysis and Feasibility Study: Pracsys (2012)

pracsys.

CITY OF JOONDALUP

JOONDALUP PERFORMING ARTS AND CULTURAL FACILITY

MARKET ANALYSIS AND FEASIBILITY STUDY

NOVEMBER 2012

DISCLAIMER

This report has been prepared for **the City of Joondalup**. The information contained in this report has been prepared with care by the authors and includes information from apparently reliable secondary data sources which the authors have relied on for completeness and accuracy. However, the authors do not guarantee the information, nor is it intended to form part of any contract. Accordingly all interested parties should make their own inquiries to verify the information and it is the responsibility of interested parties to satisfy themselves in all respects.

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Document Control				
Document Version	Description	Prepared By	Approved By	Date Approved
v 1.0	JPACF Final Report	Sebastian Davies-Slate	Michael Chappell	21 September 2012
v 2.0	JPACF Final Report	Sebastian Davies-Slate	Michael Chappell	18 October 2012
v 3.0	JPACF Final Report	Sebastian Davies-Slate	Michael Chappell	7 November 2012

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CONTENTS

EXECUTIVE SUMMARY

The City of Joondalup has commissioned Pracsys to conduct a feasibility study for the proposed Joondalup Performing Arts and Cultural Facility (JPACF). While the JPACF will represent a significant ongoing cost to the City if it is built, it will significantly bolster the City's cultural life and urban development. The research undertaken for this study has shown that there is currently a significant under-provision of performing arts and cultural facilities in the northern corridor.

In undertaking this study, Pracsys did extensive demand modelling, based on ABS surveys of culture and arts participation and attendance, and population projections. These analytical tools were used to develop an estimate of the level of cultural activity that could be expected of a Western Australian population of the size and demographic profile of the primary catchment area (defined as the City of Joondalup and City of Wanneroo). This modelled level of formal cultural activity was significantly less than has been found to take place at the moment, meaning that local residents are either travelling outside of the primary catchment area for their cultural pursuits (meaning that the cultural life of the City of Joondalup is being subsidised by other councils), or else this activity is not happening at all.

In addition to the demographic modelling, Pracsys conducted extensive consultation during the course of this study. This included Western Australian cultural organisations and arts producers, local cultural organisations in the City of Joondalup, the three existing school-based performing arts centres in the area and existing conference or function venues (Joondalup Resort, Joondalup Reception Centre and Arena Joondalup), as well as the Perth Convention Bureau.

This consultation reinforced the observation that there is lack of suitable facilities in the City of Joondalup. There was evidence of local dance schools in particular having to travel to the Swan Park Theatre, Midvale, the Rixon Theatre, Penrhos College, in Como, and even down to the Mandurah Performing Arts Centre to stage their performances. Almost all of those consulted (producers, existing facilities, cultural groups) supported the idea of building a purpose-built performing arts centre, with a primary performance space of around 800 seats. The evidence of demand for conference facilities (an option considered by the JPACF Project Philosophy and Parameters) was limited, however, with existing function venues reporting that they still have excess capacity. Despite limited current demand, conference space has been included in the proposed design, as demand can be expected to increase as the primary catchment area grows and the Joondalup economy matures.

Based on the above research, a model program of events was developed to connect the market analysis with a facility design. It should be noted that it is not being suggested that this is "the" program that the JPACF will run. Rather, it is typical of the program of events that are put on by existing facilities similar to what is envisaged the JPACF will be. A detailed design description was also developed, informed by the model program and the market analysis. The design description allows for considerable community cultural activity and activation, rather than following a traditional performing arts centre design. This design has been dubbed the "Art Box".

The capital cost of the "Art Box" design (as estimated by a Quantity Surveyor, Ralph Beattie Bosworth) was $78 million. Obviously, the City cannot be expected to fund a project of this scale without significant assistance, presumably largely from the Western Australian Government.

The study also identified four potential management models for the JPACF once it has been built, with varying levels of autonomy from the City's regular hierarchy. These four models are:

- An independent, arm's length relationship to the City of Joondalup
- Management being contracted out to a third party, such as the State Theatre Trust
- The JPACF run as a division or department of the City of Joondalup
- The City's entire cultural program being run through the JPACF. This is similar to what is done at "The Glasshouse", in Port Macquarie, NSW

For the purposes of the financial feasibility, the third option - JPACF as a division of the City of Joondalup - was used, as this was considered an obvious default option.

In addition to the capital cost, it has been estimated that the JPACF will require an ongoing operating contribution from the City of Joondalup. Cultural and arts facilities simply do not cover their costs and require financial support. It has also been assumed that there would be financing costs associated with the City's contribution to constructing the JPACF. These costs are estimated at $4.5 million per annum (and increasing with CPI).

In considering whether to proceed with the project, it should be borne in mind that, while this is an additional cost to the City, it affords the City the opportunity of providing a comprehensive cultural and artistic program to ratepayers. Currently, the City's cultural life is being subsidised by other local governments – as mentioned above. In addition to this, there is no way to measure the cultural and arts activity that residents of the City are not enjoying, due to the lack of suitable facilities.

1.0

1 INTRODUCTION

1.1 BACKGROUND AND PURPOSE OF THE STUDY

The City of Joondalup has commissioned Pracsys to undertake a feasibility study of the proposed new Joondalup Performing Arts and Cultural Facility. As part of the brief, it was agreed that Pracsys would deliver several interim briefing notes to inform the City of the progress of the study and so that feedback could be provided throughout the process.

These briefing notes covered the following:

Briefing Note 1: Demand and supply analysis with gap analysis (latent and unmet demand for activities and facilities)

Briefing Note 2: Accommodation schedule and detailed development concept description

Briefing Note 3: Operations management and description of the facility

Briefing Note 4: Document business analysis framework and financial analysis

These four briefing notes have been delivered as described, and this report is an amalgamation of them, with an additional social impact assessment.

1.2 APPROACH

The initial stages of the study focus on determining the demand for the facility. There are two sides to demand for a performing arts facility – demand from audiences and community participants for cultural events and demand from producers for the use of facilities (although this is ultimately a function of audience demand).

A range of potential users of the space have already been identified and consulted by the City. Pracsys has validated this consultation, surveying a range of performing arts producers, local cultural organisations, existing performing arts facilities and conference venues and organisers.

Running parallel to this consultation, Pracsys has conducted an analysis of the population and demographic make-up of the primary catchment area of the facility (City of Joondalup and City of Wanneroo). This demographic analysis is based on ABS surveys of attendance and participation in culture and the arts (see Figure 3, in Chapter 3).

Pracsys has estimated demand for a range of arts and cultural activities in the primary catchment area, using the demographic analysis, informed by the consultation done to date.

Pracsys has also consulted with existing performing arts and conference facilities in the area, to gauge their level of utilisation and the limits of the facilities available.

Following this, Pracsys developed a model program for the JPACF and accommodation schedule.

2.0

2 BACKGROUND

The City of Joondalup was named the World's Most Liveable City of 2011 at the UN-endorsed annual International Awards for Liveable Communities. The LivCom Awards is a worldwide competition focusing on International Best Practice regarding the management of the local environment with the further objective of improving the quality of life of individual citizens through the creation of 'liveable communities'.

The City now faces the challenge of living up to this designation. This performing arts and cultural facility is a key component of the Cultural Development Plan to promote the development of cultural identity and social harmony through "contemporary multicultural arts practice".[1]

The cultural development context for the performing arts and cultural facility encompasses a range of considerations,[2] including:

Reach - to enable the north-west metropolitan community to experience a wide cultural experience

Quality - to encourage high standards of creativity, innovation and excellence in cultural activity

Impact – to support a range of cultural experiences that have the potential to entertain and transform the community and the way they view the world through their participation in artistic experience

Capacity - to enhance communities of cultural practice through building stronger creative networks involving artists, educational institutions, museum, galleries with public and private funding and support

Infrastructure - to develop the infrastructure that will sustain and develop these communities of practice over time

The Joondalup Performing Arts and Cultural Facility (JPACF) will represent a special milestone for the City of Joondalup as an indicator of a City that has come of age. Since its inception as the northern regional centre of Perth, Joondalup has witnessed the construction of significant infrastructure including the Joondalup Health Campus, the Arena, Council Chambers and Library and Edith Cowan University. The JPACF will add a new dimension to the City Centre.

The facility will support Joondalup's role as a Strategic Metropolitan Centre[3], and be a piece of key enabling infrastructure, as the City matures into a principle centre of activity within Perth's urban network. It will help to activate the surrounding area, giving people an extra reason to visit and stay in the City Centre.

The need for a performing arts and cultural facility was identified in the Joondalup Cultural Development Plan, developed in 1992. Several studies were undertaken between 1992 and 2010, identifying the need for a performing arts and cultural facility within the City. The development of the JPACF was included in the City's 2008-2011 Strategic Plan.[4]

1 City of Joondalup Cultural Development Plan, Community Development Strategy 2006-11
2 Pracsys Public Value of Cultural Value – Assessment Framework, 2011
3 State Planning Policy 4.2: Activity Centres for Perth and Peel (2010)
4 City of Joondalup, JPACF project brief, 2012.

Understanding the role the JPACF will fulfil, and ensuring that it can cater for the disparate demands particular to the Joondalup region will be the key to creating a sustainable and vibrant cultural environment at the City. The JPACF's activities may need to extend beyond the traditional theatre, music and dance offer, and should be designed to cater for the requirements of conferences, exhibitions and education functions. Capturing as much of this diverse market as possible will ensure that events stay in Joondalup, rather than leaking towards other centres. Furthermore, the JPACF should be of a quality that attracts events to it as a preferred venue.

2.1 POLICY AND STRATEGY REVIEW

2.1.1 Strategic Plan 2008-2011

The City of Joondalup Strategic Plan articulates the highest level of direction for the City for the four years that it covers. It is an overarching framework that aims to achieve better leadership and decision making with greater community participation. The success of the goals set out in the strategic plan are measured through: annual customer satisfaction surveys, the State of the Environment Report, delivery of projects on time and on budget, and statistical data comparisons. The results are presented in the City's Annual Report.

The key focus areas of the Strategic Plan are:

- Leadership and governance
- The natural environment
- Economic prosperity and growth
- The built environment
- Community wellbeing

Each of these focus areas has a number of specific objectives, referring to a range of other City policies and processes. In addition to these, the concept of sustainability in the City "permeates all of the City's decision-making and planning processes." The JPACF comes under the fourth of these focus areas, the built environment. Specifically, Objective 4.2: To progress a range of innovative and high quality urban development projects within the City - Strategy 4.2.2: Develop a concept for a Cultural Centre at Lot 1001 Kendrew Crescent, Joondalup.

While these principles will not be considered explicitly in this study, the JPACF will address each one of them, and it is expected that they will influence how the City plans and delivers the project.

2.1.2 Asset Management Plan

The objective of the City of Joondalup's Asset Management Plan is: "To ensure the organisation undertakes a structured and coordinated approach to asset management that will promote sustainable infrastructure for the City of Joondalup." The City spends more than $15 million annually (at the time the plan was written) on asset management services, and so it is important that the City adopts best practice management skills and practices.

The City's vision in implementing this objective is "To provide the desired level of service in the most cost-effective manner for present and future customers."

The policy was issued in October 2007, and is scheduled to be reviewed every two years.

2.1.3 City of Joondalup Cultural Development Plan, Community Development Strategy 2006-11

The Cultural Development Plan is part of the City's vision for Joondalup as a community that is recognised as innovative, unique and diverse. The first Cultural Plan was adopted in 1992. In 2003, the Council resolved to develop a new Cultural Plan. This plan was developed after extensive community consultation.

The City pursues community cultural development for a range of reasons:[5]

- To promote the development of cultural identity and social harmony through contemporary multicultural arts activities
- To enable the Joondalup community and visitors to Joondalup to experience wide cultural experience
- To encourage the highest standards of creativity and excellence in all aspects of cultural activities
- To foster partnerships with organisations throughout the City which are involved in working within, or supporting, cultural activities, such as higher and further educational establishments, museums and galleries, and the commercial and private sectors
- To develop lively and sustainable cultural industries, among which should be those evolving with the emergence of new technologies
- To develop and support the infrastructure which will sustain and develop Joondalup's cultural industries and activities
- To recognise and promote the importance of culture for children and young people
- To ensure that the cultural diversity within our communities is advocated for and continues to contribute to and inform Australia's national identity.

As the Plan notes, the community of the City of Joondalup have high expectations of the cultural services that will be made available.

The Plan also outlines key performance indicators for the following issues as they relate to the City's cultural development: strategic partnerships, securing sustainability, cultural diversity, cultural heritage and the built environment and leadership.

5 City of Joondalup Cultural Development Plan, Community Development Strategy 2006-11, page 27.

3.0

3 DEMAND AND SUPPLY OF CULTURE AND ARTS ACTIVITY

It is important upfront to distinguish between demand for activities and demand for facilities. The users generate demand for entertainment, cultural and arts activities, and then producers demand facilities.

3.1 ACTIVITY MODELLING

In order to assess the demand for the JPACF, it is necessary to define the potential activities that may be accommodated within the future facility. According to the Joondalup Regional Cultural Facility – Project Philosophy and Parameters[6], the facility aspires to:

Provide a world class, state of the art facility; incorporating innovative and sustainable design, symbiotic with the existing natural and built environment that is a place for the pursuit of activities such as performing arts, visual arts and crafts, film and media and cultural events for the community of Perth's northern corridor.

In the context of this vision, Figure 1 outlines the scope of activities that are analysed in this study.

Figure 1: Activity Types

Category	Production	Consumption
Performing Arts	Singing or playing a musical instrument	Attending a music concert or recital
	Performing in a drama, comedy, opera or musical, including rehearsals	Attending a drama, comedy, opera
	Dancing	Attending a dance performance or recital
Visual Art	Sculpting, painting, drawing or cartooning, including digital pieces	Attending screenings, galleries, exhibitions and installations
	Printmaking, screen printing or etching	
	Photography, film-making or editing,	
Craft	Textile crafts, jewellery making, paper crafts or wood crafts	Attending galleries, exhibitions, installations and fairs
	Glass crafts, pottery, ceramics or mosaics	
Literature	Writing song lyrics, or mixing or composing music, including digital composition	Attending readings, listening to music
	Writing any fiction or non-fiction, such as stories, poetry or scripts	Visiting libraries

Source: Pracsys (2012)

6 Minutes of Strategic Financial Management Committee – 27.04.2010, City of Joondalup, page 15.

3.1.1 Activity Classification

Activity can be further broken down into categories based on artistic quality, reach and impact. The categories are applied within each activity stream and as such do not attempt to make distinctions between the types of activity, or imply that one is a higher cultural art form than another, but rather recognises the differences that exist within each stream. Quality is a measure of the creative process and product and includes the distinctive, innovative and significant elements of the cultural experience. Reach is a measure of the access to and participation in arts and cultural activities. It measures the breadth and depth of engagement, through attendance and participation data alongside audience and public satisfaction with their level of engagement. Impact is a measure of the social, cultural and economic value of arts and cultural activities, and includes the transforming impact through engagement.

Figure 2 outlines an example of how the categories can be applied to dance performance events.

Figure 2: Activity Classification Example

Category	Event (Example)	Description
Premium	The Imperial Russian Ballet Touring Sleeping Beauty	Frequency – Very infrequent Profile – Exclusive event that is recognised globally Quality - World quality standard. Venues – Performed in limited, high level venues in capital cities
Popular	WA Ballet at the Quarry	Frequency – Annually Profile – Part of the PIAF and recognised at a state level Quality - National Quality Standard Venues - Elements tour to other venues
Community	Local Ballet School Recital	Frequency – Semi-annually Profile – Unlikely to be recognised outside of the family and friends of the community of practice Quality - Non-professional and dozens of similar events take place across the Metro area Venues – performed in many lower level venues servicing a localised catchment

Source: Pracsys (2012)

Understanding the different categories of activities is important in assisting to identify gaps in the current supply of activity within the catchment and in turn the gaps in facilities, as different categories will have different requirements in terms of the infrastructure necessary to facilitate their delivery.

3.1.2 Methodology

To estimate the current and future demand for the JPACF, a revealed preference model has been developed to examine the two factors affecting the demand for a facility:

- Demand (by attendees in a community of interest)
- Supply (by participants in a community of practice)

Revealed preference is an economic theory of consumption behaviour, which asserts that the best way to measure consumer preferences is to observe their behaviour. In the case of culture and arts this behaviour includes:

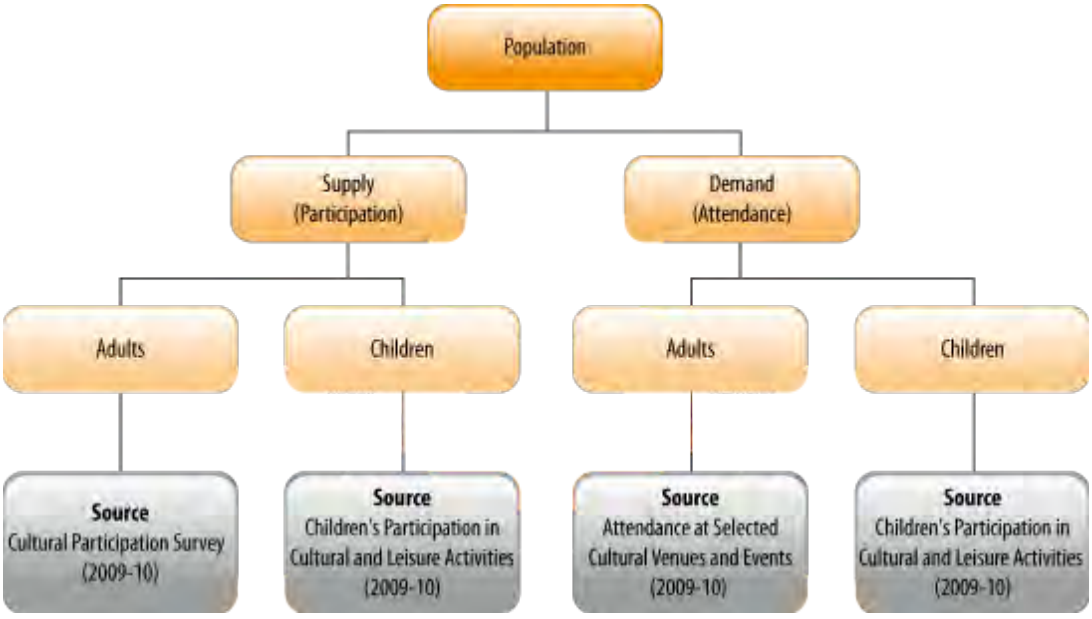
- Activity type and category
- Attendance/participation rate
- Frequency and duration of attendance/ participation

There are a number of reliable data sources on the revealed preferences of the Australian public for the consumption and production of culture and the arts (see Figure 3).

The level of demand and supply within the catchment area can be estimated by applying these attendance and participation rates, together with the frequency of engagement, to the catchment population.

A similar approach is to measure the revealed preferences of the catchment by surveying existing cultural and arts organisations servicing the catchment area. Beyond the surveying challenges that this methodology presents, this approach fails to capture the latent demand.

Figure 3: Method and Data Sources for Revealed Preferences



Source: Pracsys (2012)

Figure 4: Calculating Latent Demand

Source: Pracsys (2012)

Latent demand is the potential demand for a product. It describes the phenomenon whereby, after the supply of a product is increased, more of a product is consumed. There are many producers of entertainment, cultural and arts products who for many reasons, including the lack of suitable facilities, are unable to supply within the primary catchment, or in some cases within the Perth Metropolitan Area.

Developing the JPACF would allow those suppliers currently excluded from the market to enter, addressing the currently unmet needs of catchment residents.

The current level of latent demand for the catchment can be defined as the gap between the demand estimate from the revealed preferences analysis and the activities of existing culture and arts organisations servicing the catchment area (see Figure 4). This assumes that the level of demand for culture and the arts is currently being met at a national level[7].

From here, the future level of demand can be estimated. This is based on a number of assumptions regarding how the catchment will grow and how the preferences of the catchment will evolve over time.

Once the demand for entertainment, cultural and arts activities is estimated, it can be translated into the types and quantities of facilities necessary to accommodate it. In this study, cultural activity is expressed in terms of events, which can be expressed in terms of event days and the number of attendees. Based on benchmarking of similar catchments nationally, the facilities and infrastructure required to accommodate current and future demand can be estimated. This then informs the accommodation schedule for the JPACF.

3.2 CATCHMENT

3.2.1 Catchment Area

For the purposes of this analysis, the primary catchment for the Joondalup Performing Arts and Cultural Facility (where the majority of audience members for community events or touring performances are drawn from) covers the cities of Joondalup and Wanneroo. A secondary catchment takes in most of the northern metropolitan area, stretching south to the City of Stirling and east to the City of Swan.

A further area of influence stretches out north into the Wheatbelt, including towns on the way north from Perth, such as Cervantes, Jurien, Dongara, and as far as Geraldton. People living in towns in the northern Wheatbelt already travel to Joondalup for major shopping trips. Popular shows that do not tour north of Perth could be expected to draw some audience members from these areas. This has been

7 Recent data suggests that the Australian arts sector is grossly 'oversupplied'. This is evidenced by increasing levels of creative arts practice and declining relative incomes of professional artists. As such it is likely that at a national level demand for culture and the arts is being met. See Craik, J (2007) Re-visioning Arts and Cultural Policy: Current Impasses and Future Directions

facilitated by the completion of the Indian Ocean Drive, allowing easy access to Joondalup for communities to the north of the metro area, who would previously have had to use Brand Highway and then cut across to Wanneroo Road.

See Figure 5 for an illustration of the identified catchment area.

The primary catchment area had a population of 304,483 people at the time of the 2011 Census. Rapid population growth is expected to occur in this area, predominantly in the City of Wanneroo. However, a comparison of the results of the 2011 census with the State Government's population projections reveals that the north-west corridor is growing slightly slower than anticipated, falling short of the 308,700 – 349,100 range. This was due to lower than anticipated population growth within the City of Joondalup. The population is forecast to increase to over 400,000 by 2026[8].

3.2.2 Demographics of the Primary Catchment

The north-west corridor of Perth has several demographic characteristics that make it distinct from the rest of Western Australia.

The most notable feature of the City of Joondalup is the very high proportion of migrants living in the area, particularly from the UK and other English-speaking countries. In the City of Joondalup, 15.4% of residents were born in England, as compared with a state average of 8.9%, and a national average of only 4.2%.

The proportion of people born in England decreases with age, and drops off quite sharply below 40 years of age. The primary catchment also has a high proportion of people living in family households, particularly couples with dependent children. This suggests a large number of migrant families, who settled in the area and many of whose children were born in Australia.

As well as the large number of English families in the area, there are also relatively high numbers of people born in other English-speaking countries, primarily New Zealand, South Africa and Scotland. People born in what the ABS defines as the Main English-speaking Countries (MESCs)[9] have the highest level of attendance at cultural activities, including being higher than those born in Australia.

Residents of the City of Joondalup tend to be more highly qualified than the state average, with a higher proportion of people with a bachelor degree or higher. This is reflected in the occupations of the people there, with a slightly higher than average number of professionals than the state average. There are also higher proportions of technicians and trades people, and clerical and administrative workers. Reflecting this higher level of qualification, average incomes in the City of Joondalup are much higher than the state average.

Figure 6 summarises some of the key demographic characteristics of the City of Joondalup, relative to the state average.

8 Based on population projections from WA Tomorrow, Band A (Western Australian Planning Commission, 2012).

9 The United Kingdom, United States, the Republic of Ireland, New Zealand, Canada or South Africa.

Figure 5: Joondalup Performing Arts and Cultural Facility catchment area

Source: Pracsys (2012)

Figure 6: Catchment Area Demographic Profile

	Joondalup	Wanneroo	Western Australia	Australia
Median Age	38	32	36	37
Under 15	19%	24%	20%	19%
15-65	70%	67%	68%	67%
65+	11%	9%	12%	14%
Ethnicity	Many migrants from England and other English-speaking countries, and their families.			
Australian born	58.60%	54.90%	62.90%	69.80%
England	15.40%	14.30%	8.90%	4.20%
New Zealand	3.00%	3.60%	3.20%	2.20%
South Africa	3.40%	2.80%	1.60%	0.70%
Scotland	2.20%	1.90%	1.20%	0.30%
	But, the proportion of Australian-born is higher among the young – pointing to migrants settling in the area and starting families.			
Households	Higher proportion of families, especially couples with dependent children.			
Education	More degrees and diplomas			
Occupation	More likely to be a professional, tradesman or clerical or administrative worker.			
Average Income (weekly)				
Individual	718	656	662	577
Family	2036	1722	1722	1481
Household	1780	1415	1415	1234

Source: ABS Census of Population and Housing (2006 and 2011)

3.3 DEMAND DRIVERS

3.3.1 Demographics

Relative to current demographic patterns, in the future the primary catchment:

- Will likely be older
- Will be less likely to be living with dependent children
- May be more likely to be born in Australia, although still with a relatively high proportion of people born in England or other English-speaking countries
- May be slightly more highly qualified
- Will probably be wealthier.

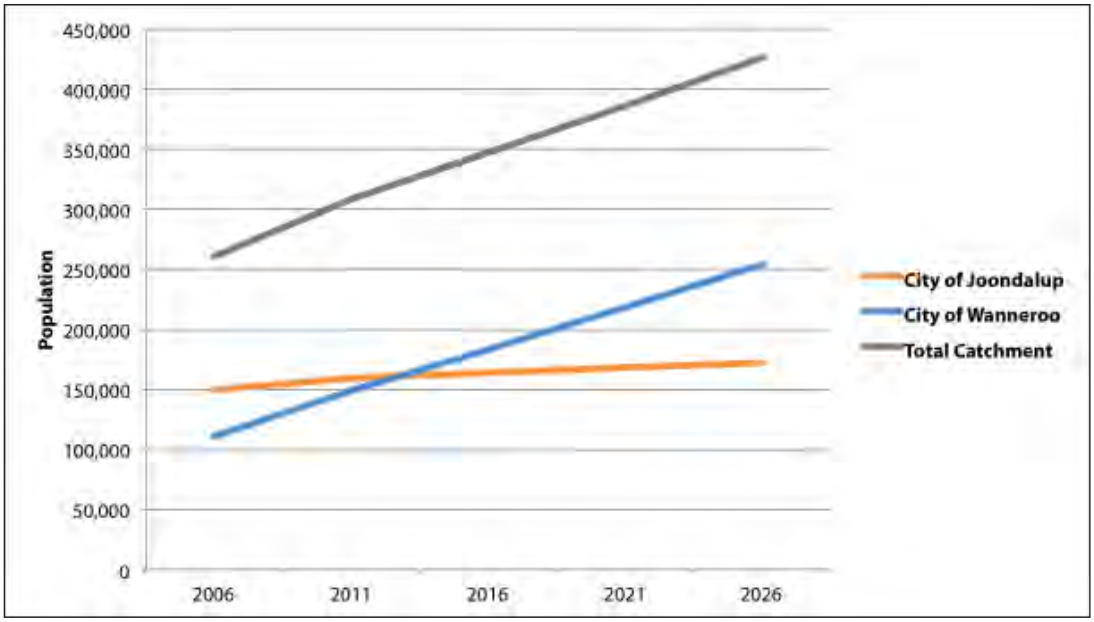
The ageing of the catchment population can be expected to increase demand for classical music concerts, as this is most popular with the oldest age category – 65 years and older. If the average level of educational attainment increases in the catchment, then demand for all art forms will increase, as there is a strong correlation between educational attainment and attendance at cultural events. Increasing wealth also suggests increased attendance rates.

If the relatively high proportion of people born in one of the English-speaking countries is replaced with a more Australian-born population, then this can be expected to moderate demand for musicals and operas and theatre, as people born in the English-speaking countries have a higher rate of attendance at these art forms.

3.3.2 Population Growth

The most significant factor for future demand for cultural activities, however, will be population growth. As mentioned above, the population of the primary catchment area is forecast to grow from 304,483, people in 2011,

Figure 7: Projected Population Growth Primary Catchment



Source: WA Tomorrow, Band A (Western Australian Planning Commission, 2012)

to over 400,000 by 2026 – over 30% growth. This in itself will lead to strong growth in demand. Growth in regional centres north of Perth will also promote increased demand for performing arts in Joondalup, if a facility exists there to attract them.

3.4 ABS-BASED DEMAND AND SUPPLY MODELLING

3.4.1 Demand for Culture and the Arts (Attendance)

Adults

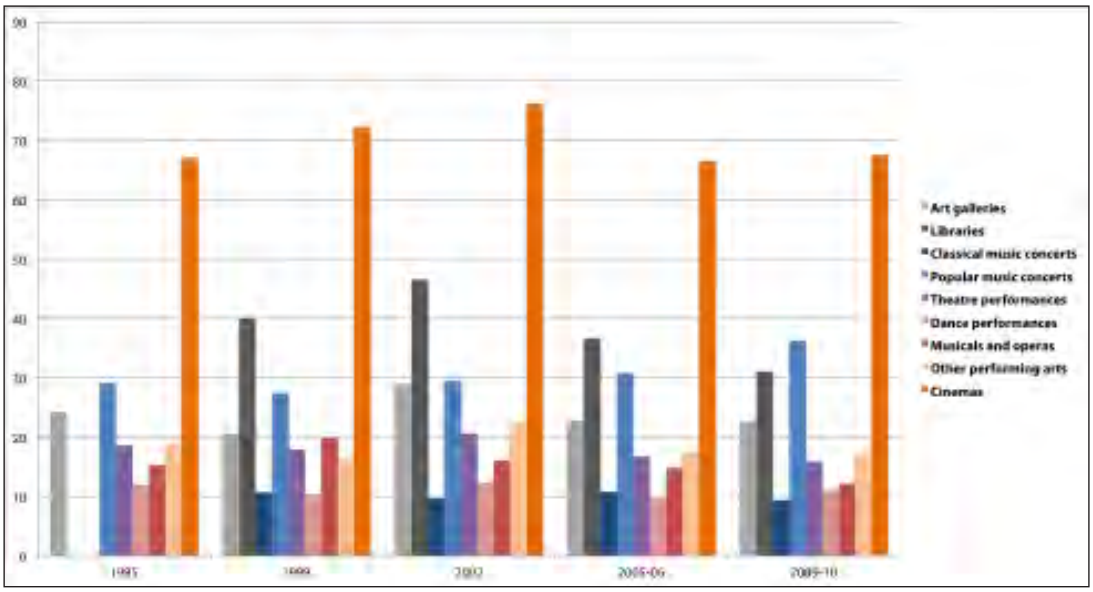
Attendance at Selected Cultural Venues and Events, Australia, 2009-10 is an ABS publication based on results from the 2009-10 Multipurpose Household Survey on the attendance of people aged 15 years and over at selected cultural venues and events. It contains details on the frequency of visits and characteristics of people who attend a range of cultural venues and events including libraries, archives, museums, various categories of music and performing arts performances, cinemas, botanic gardens, zoological parks and aquariums.

The results of the survey indicate a steady decline in the cultural attendance of Western Australian adults from 2002 to 2010, although the state attendance rates remain above the national level.

Figure 8 summarises how the attendance of adults in Western Australia has changed over time. Whilst attendance at most activities has fluctuated in line with the broader trends in culture and the arts, a notable exception is the significant increase in the attendance at popular music concerts.

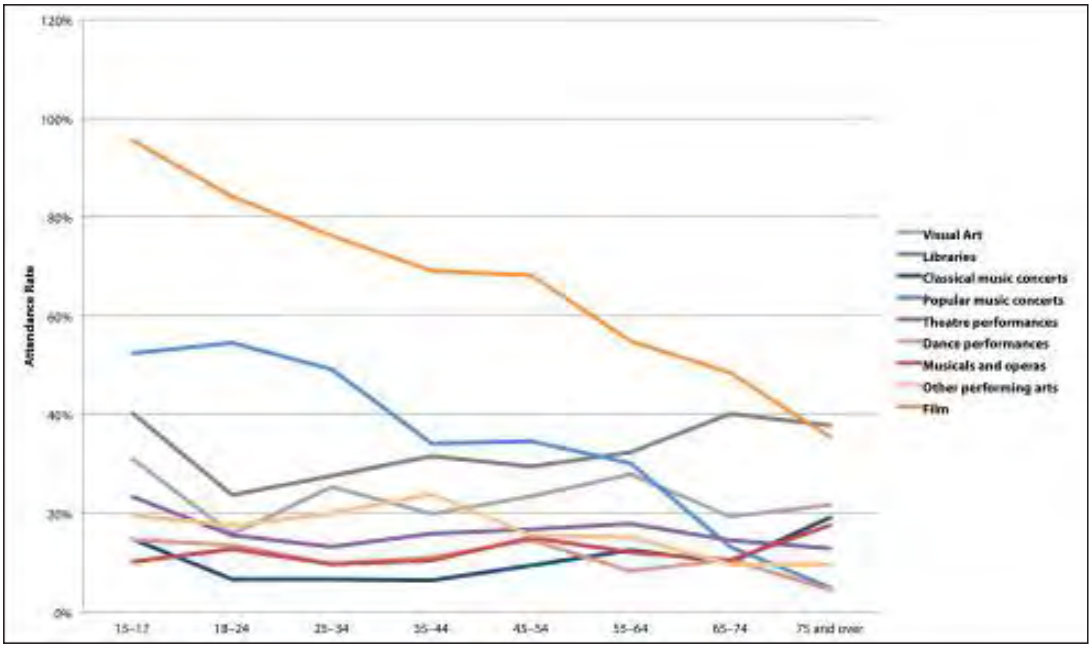
Adult attendance is strongly linked to children's participation, particularly for dance. The 1995 release of the Attendance at Selected Cultural Venues and Events, Australia, made the distinction between attendance at dance events and attendance at children's dance events. In Western Australia, of the 11.9% attendance rate for dance in 1995, 3.0% was

Figure 8: Primary Catchment Adult Attendance Demand Over Time



Source: ABS Cat. 4114.0

Figure 9: Adults Cultural Attendance Rates by Age



Source: ABS Cat. 4114.0

for children's dance. This will be accounted for in the analysis of participation, to avoid double counting.

Figure 9 summarises how the attendance by adults changes with age. The attendance generally declines with age before trending upward at age 65.

The attendance patterns at each cultural venue and event also differ, with the average frequency of attendance at films (3.30 times per annum) being as much as twice that for visual and performing arts.

Current attendance rates

In 2011, there were 237,900 adults living in the primary catchment. Applying the state attendance rates and frequency of attendance to this population, indicates demand for over 1,100,000 attendances per annum (see Figure 10).

Figure 10: Primary Catchment Current Adult Attendance Demand

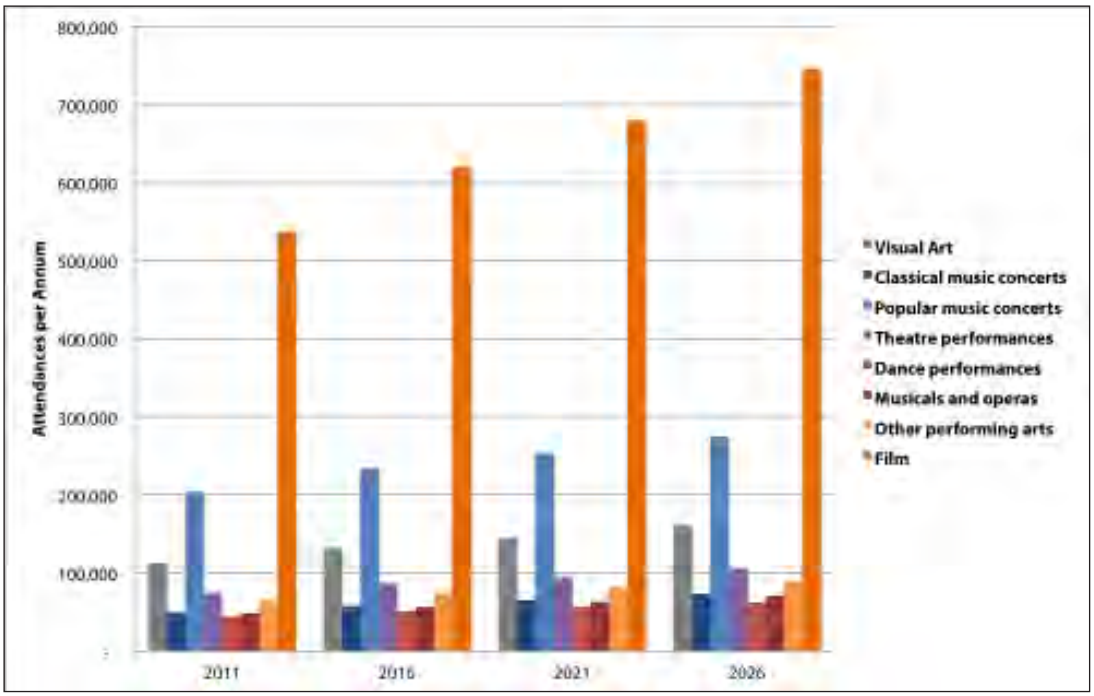
Activity Type	Potential Attendances Per Annum
Visual Art	112,545
Classical music concerts	49,346
Popular music concerts	204,295
Theatre performances	74,532
Dance performances	44,619
Musicals and operas	48,569
Other performing arts	64,788
Film	537,325
Total	1,136,018

Source: Pracsys (2012), based on ABS Cat. 4114.0 and ABS Census of Population and Housing (2011)

Future attendance rates

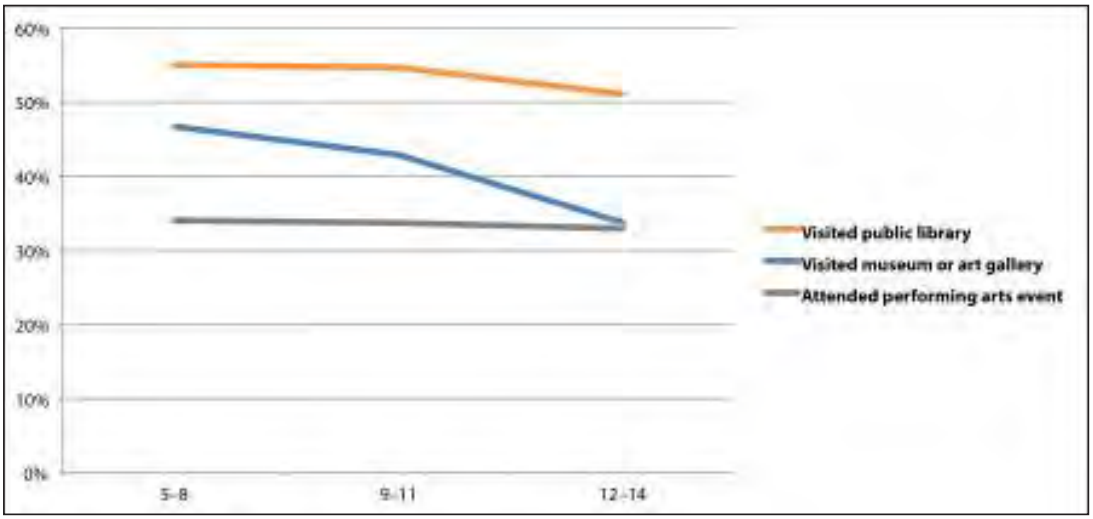
By 2026, the adult population in the primary catchment is expected to grow by 44%, to 342,800. This population growth alone will increase expected demand to nearly 1,600,000 attendances per annum (see Figure 11). This assumes that there is no further decline in the rates of participation in culture and the arts.

Figure 11: Primary Catchment Future Adult Attendance Demand



Source: Pracsys (2012), based on ABS Cat. 4114.0 and ABS Census of Population and Housing (2011)

Figure 12: Children's Cultural Attendance Rates by Age



Source: ABS Cat. 4901.0

Children

Every three years the ABS releases data on the participation of children and young people in cultural and leisure activities. The scope of the 2009 survey included Australian children aged 5 to 14 years, and focused on organised activities conducted outside of school. The survey includes data on the attendance of children at selected cultural events and venues.

Figure 12 summarises how the attendance of children in Australia changes with age.

According to the survey, attendance by children generally declines with age across all activities. The attendance patterns at each cultural venue and event also differ, with the average frequency of attendance to libraries (8.18 times per annum) being three times greater than that for visiting museum, arts galleries and performing arts.

Current attendance rates

In 2011 there were 44,500 children living in the primary catchment. Applying the state attendance rates to this population indicates demand of 336,000 attendances per annum.

Figure 13: Primary Catchment Current Children's Attendance Demand

Total Attendance	5–8	9–11	12–14	Total
Visited public library	78,392	77,964	72,691	229,047
Visited museum or art gallery	22,464	20,636	16,211	59,310
Attended performing arts event	16,174	16,032	15,651	47,857
Total	117,030	114,632	104,552	336,214

Source: Pracsys (2012), based on ABS Cat. 4114.0 and ABS Census of Population and Housing (2011)

Future attendance rates

By 2026, the population of children aged 5 to 14 in the primary catchment is expected to grow by over 25%, to at least 55,500. This population growth alone will cause potential demand to increase to over 432,000 attendances per annum (Figure 14). This assumes that Australian children's attendance rates remain unchanged.

3.4.2 Participation in Culture and Arts Production

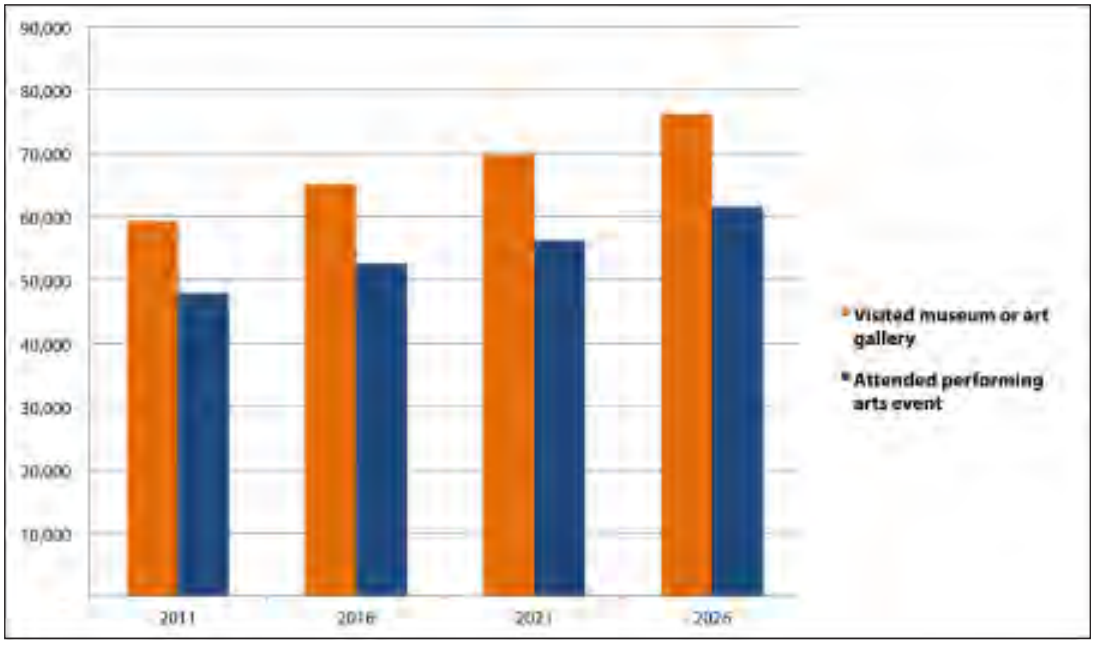
This is the demand from communities of practice to participate in the supply of culture and arts activities. This is expressed in terms of a level of participation per annum for each activity type, which can be further aggregated into a number of events.

Adult

The Cultural Participation Survey is a newly developed survey collected for the first time in 2010-11. The survey collects information about Australian's participation in selected arts and cultural activities.

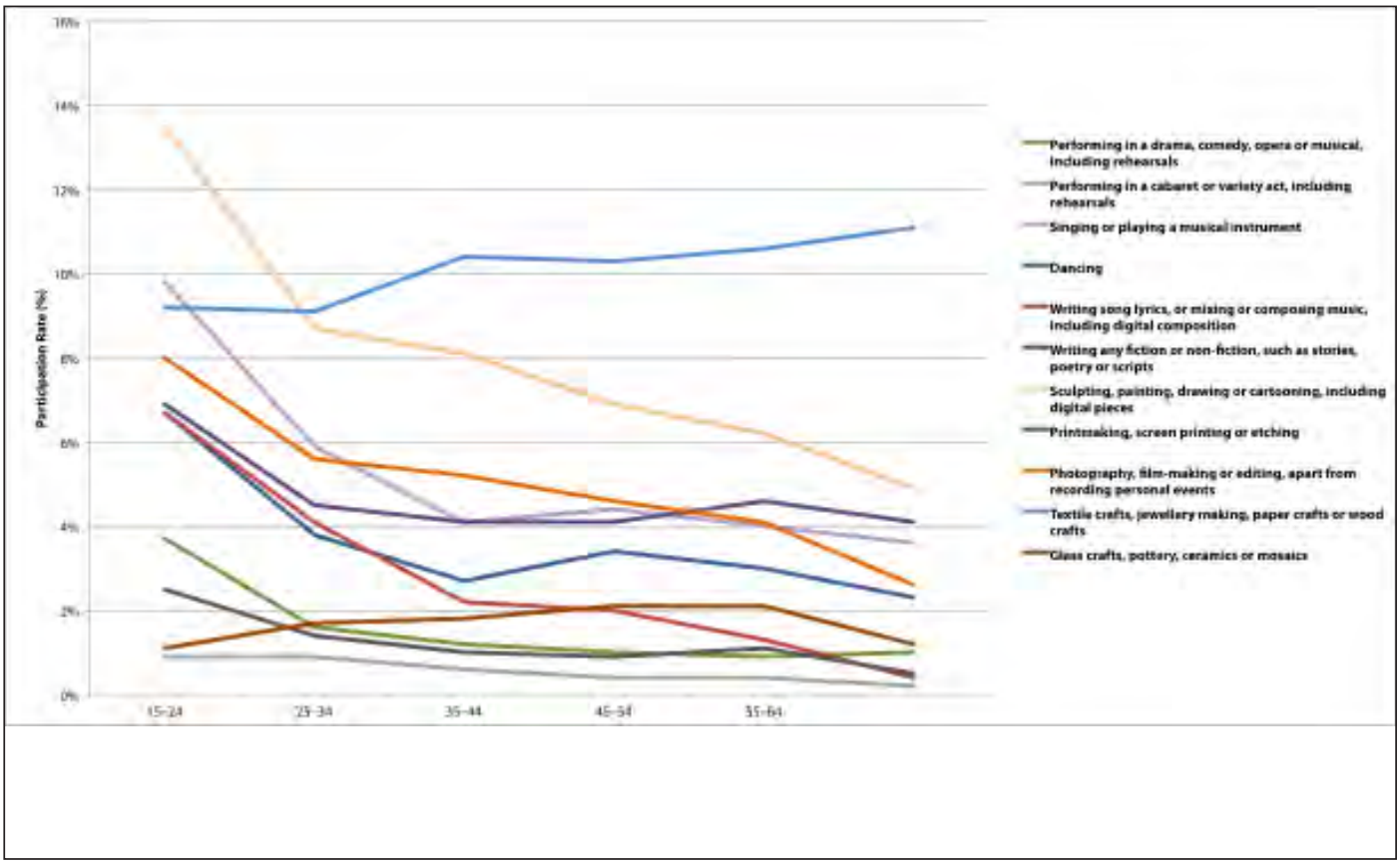
Figure 15 summarises how the participation of adults in Australia changes with age. People aged 15 to 24 years reported the highest participation rate in cultural activities in the 12 months before interview in 2010–11 (34%). Participation rates tended to decrease with age. In contrast to children's participation, adult participation in culture and the arts occurs across all categories, from community to premium.

Figure 14: Primary Catchment Future Children's Attendance Demand



Source: Pracsys (2012), based on ABS Cat. 4901.0

Figure 15: Adult Cultural Participation Rates by Age



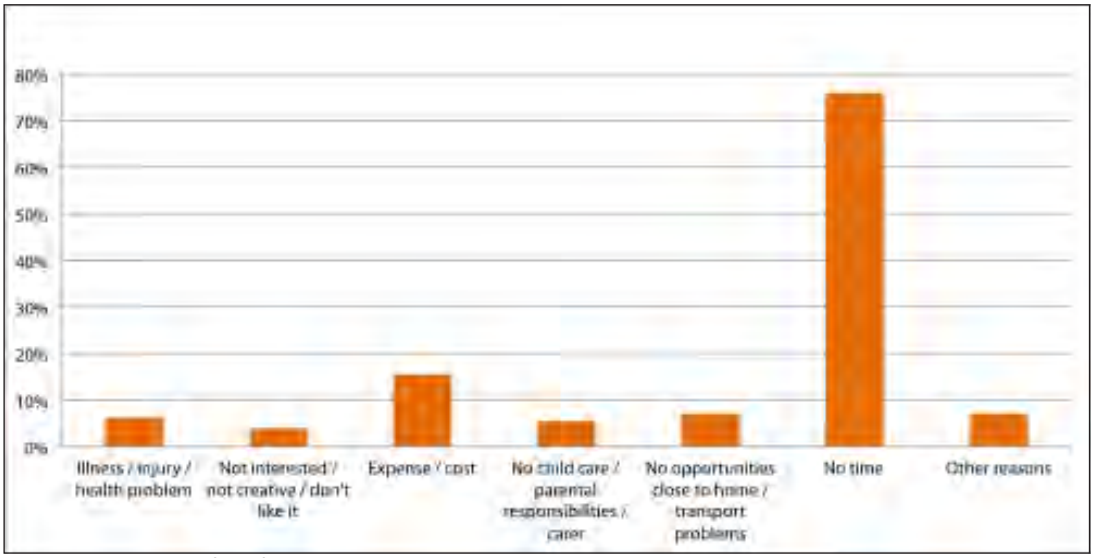
Source: ABS Cat. 4921.0

The survey provides insights into the motivators and barriers to participation by adults in culture and the arts. Exploring the factors that prevent people participating in cultural activities can help inform estimates of latent demand, and how that latent demand may be met.

Figure 16 summarises the barriers to participation for those survey respondents who stated that they would like to engage in more cultural activities (12.9% of total respondents). Overwhelmingly, the most common barrier to increased participation was a lack of time, followed by expense/cost.

No opportunities close to home / transport problems, was cited by 0.9% of total respondents (7% of those respondents who would like to engage in more cultural activities) as a barrier to increased participation. This indicates that improved access to opportunities will likely induce some additional demand for participation. However with a cultural strategy to overcome the other barriers, it will only induce demand from less than 1% of the population.

Figure 16: Barriers to Participation



Source: Pracsys (2012), based on ABS Cat 4921.0

Current participation rates

Applying national attendance rates to the current adult population in the primary catchment indicates that as many as 124,000 adults living in the primary catchment could be expected to participate in culture and arts activities.

According to the 2006 Census, there are approximately 446 residents in the primary catchment employed in culture and the arts, whereas there are approximately 284 jobs in these industries.[10] This suggests a relatively low level of employment self-sufficiency for arts in the primary catchment, and consequently those local residents working in cultural industries are required to commute outside the primary catchment to access employment.

The rest of the participants are engaging in unpaid participation. Typically the unpaid participation of adults has three distinct components

- Informal practice
- Lessons, classes, clubs and interest groups
- Performance and exhibition

Adults participate in a high level of informal practice, with a high proportion of participants not engaging in organised activity such as lessons, classes, clubs or interest groups. Lessons occur regularly, typically on a weekly or monthly basis. Generally this occurs in small, private, local facilities and attracts a minimal audience. Performances and exhibitions occur less frequently, typically at one or two events per annum. Generally this will occur in larger, public or commercially available facilities, and will attract a large audience.

This analysis will focus on the formal participation of adults in the primary catchment. Figure 17 summarises the estimated current total demand for formal participation by adults in the primary catchment.

10 Note that Census 2011 employment data has not yet been released.

Figure 17: Current Adult Formal Participation in Culture and the Arts

Activity Type	Formal Participants
Performing in a drama, comedy, opera or musical, including rehearsals	1,454
Performing in a cabaret or variety act, including rehearsals	424
Singing or playing a musical instrument	4,246
Dancing	5,836
Writing song lyrics, or mixing or composing music, including digital composition	769
Writing any fiction or non-fiction, such as stories, poetry or scripts	1,359
Sculpting, painting, drawing or cartooning, including digital pieces	3,028
Printmaking, screen printing or etching	539
Photography, film-making or editing, apart from recording personal events	1,706
Textile crafts, jewellery making, paper crafts or wood crafts	3,518
Glass crafts, pottery, ceramics or mosaics	968
Total	23,846

Source: Pracsys (2012), based on ABS Cat. 4921.0

The relationship between participation and performance and exhibition events for adults is less clear than for children. It is assumed that all participants in performing and visual arts will engage in some form of performance or exhibition throughout the year.

Future participation rates

By 2026, the population of adults in the primary catchment is expected to grow to at least 342,800. Based on current participation rates, this will see formal participation increase to over 33,000 participants from the current level of 23,800.

Children

Every three years the ABS releases data on the participation of children and young people in cultural and leisure activities. The scope of the 2009 survey included Australian children aged 5 to 14 years and, focused on organised activities conducted outside of school. The results of the survey indicate a steady rise in cultural engagement by Australian children, with an increase in the participation rate for organised cultural activities (30% of children participated in 2003, and 34% in 2009).[11]

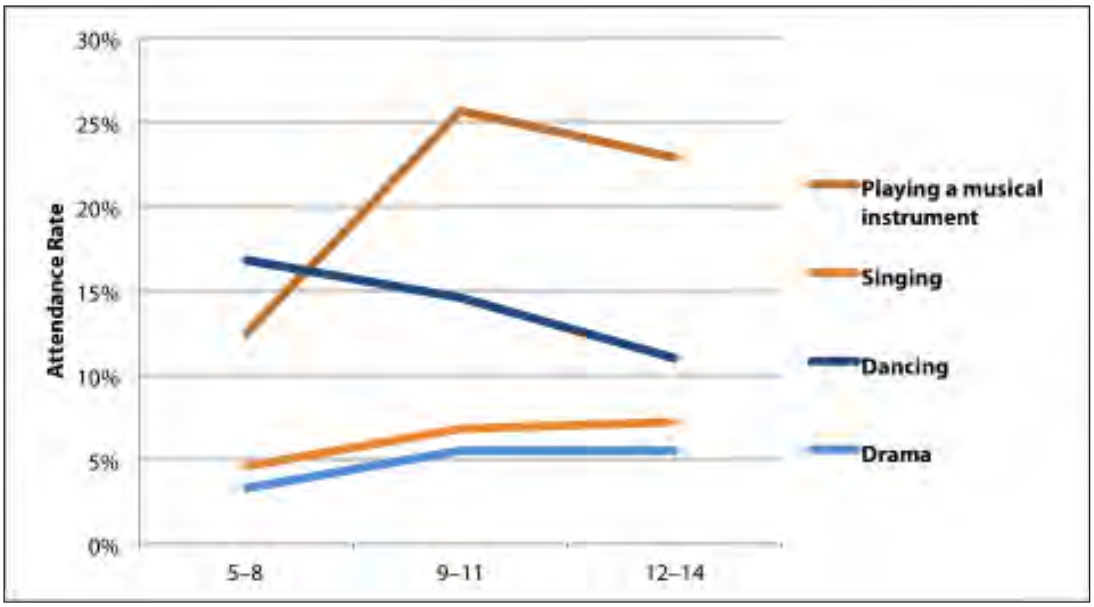
Figure 18 summarises how the participation of children in Australia changes with age.

According to the survey, participation across all activities, with the exception of dance, generally peaks between the ages of 9 and 11. Participation rates for playing a musical instrument, singing and drama did not differ significantly between states, while participation in dancing varied greatly from 9% of surveyed children in Tasmania to 16% in Western Australia. With a few exceptions, children's participation in culture and the arts occurs exclusively at the community level.

Frequency of participation varies according to activity type. Of those children who played a musical instrument, 37% did so more than 52 times during the year. By comparison, 27% of children involved in dancing, 8% of those involved in singing and 5% of those involved in drama did so more than 52 times during the year.

11 ABS Cat. 4901.0, 2009

Figure 18: Current Children's Formal Participation in Culture and the Arts, by Age



Source: Pracsys analysis of ABS. 4901.0 (2009)

Current participation rates

In 2011 there were 44,500 children between the ages of 5 and 14 living in the primary catchment. Applying the national attendance rates to this, indicates that as many as 20,000 children living in the primary catchment currently participate in organised culture and arts activities.

Typically the organised participation of children has two distinct components:

- Lessons
- Performance and exhibition

Lessons occur regularly, typically on a weekly basis during school terms. Generally this occurs in small, private, local facilities and attracts a minimal audience. Performance and exhibition occur less frequently, typically at one or two events per annum. Generally this will occur in larger, public or commercially available facilities, and will attract a large audience.

This analysis will focus on children's participation in performance and exhibition. That is not to say the JPACF should not accommodate children's lessons, just that this type of activity may be better accommodated in a dispersed network of local facilities as opposed to a large regional facility. Stakeholder consultation has confirmed this, with cultural groups conducting their classes in smaller community facilities.

Based on consultation with local organisations, it is assumed that each child participating would perform or exhibit at least once a year.

The number of participants per performance or exhibition varies depending on the activity type, with dance typically accommodating the largest number of participants and drama the smallest. The audience size is directly related to the number of children participating, and it is assumed that there are two audience members per participant.

Figure 19 summarises the estimated current demands for participation by children in the primary catchment. The analysis shows there is currently demand for an estimated 143 children's performance and exhibition events per annum.

Figure 19: Current Children's Participation in Culture and the Arts

	Participants	Events Per Annum	Audience Per Annum
Playing a musical instrument	8,726	44	17,453
Singing	2,694	9	5,387
Dancing	6,366	21	12,732
Drama	2,060	69	4,120
Total	19,846	143	39,692

Source: Pracsys (2012)

Future participation rates

By 2026, the population of children aged 5-14 in the primary catchment is expected to grow by over 25%, to at least 55,500. This will see demand for children's performance and exhibition events increase to 180 per annum.

3.5 STAKEHOLDER CONSULTATION BASED DEMAND MODELLING

Pracsys contacted both community cultural groups within the City of Joondalup and professional arts organisations operating in Western Australia, to gauge the demand for performing arts facilities in the north-west corridor. This was in addition to initial investigations made by the City of Joondalup.

3.5.1 Summary of City of Joondalup Consultation

The City of Joondalup conducted a range of consultation and research prior to this feasibility study, which produced some information on the demand for JPACF facilities from various internal and large institutional stakeholders. The research undertaken by the City was critically examined and verified by Pracsys during the consultation process. This consultation is summarised in Figure 20.

Figure 20: City of Joondalup Stakeholder Consultation Summary

Area	Type	General Findings
Entertainment, Culture and the Arts	Visual Art	The City supports an extensive visual arts program as well as being a patron of the arts. The City has an extensive contemporary art collection, however, the collection is currently too extensive to hang and much of the work remains in storage. It would be desirable for a permanent facility to be provided for the display and storage of the City's art collection. In addition to the City's permanent art collection, three visual art events are also hosted by the City. These are currently limited by a range of venue constraints and the provision of more suitable venue would provide an opportunity for expanding the events and increasing support and acclaim.
	Classical music concerts	There is a shortage of classical music venues and the capacity of existing venues constrains audience numbers. If larger venues were available, it is suggested that audience numbers would increase by 2-3 fold.
	Popular music concerts	The major popular music events are Supafest and Rockit, both of which are both hosted at the Joondalup Arena. These represent the only premium activities currently offered in the primary catchment. At the community level the City hosts a number of events including the Joondalup Rock Eisteddfod. More intimate music venues and practice areas would be desirable for this popular event.
	Theatre performances	Local performing arts groups are currently using general purpose community centres or sports facilities which lack the specialist facilities. Joondalup Entertainers Theatre School would consider moving to alternative facilities depending on cost.
	Dance performances	While dance has strong community of practice in the primary catchment, the number of events that occur within the city even at the community level is low with many local dance schools using external venues for performance and examination.
	Musicals and operas	WAAPA is continually seeking new venues for rehearsals and performances. Their current program is limited by a lack of affordable venues and there is potential for WAAPA to partner with the City in the use of the JPACF.
	Film	Film activity is considered to be well supplied and catered for within the primary catchment through a range of both private and community suppliers. The PIAF film season at the Pines, is the largest popular event in the primary catchment.
Education	Graduation/ Awards Night	Schools and ECU currently access venues outside the primary catchment for large events such as graduations.
	Examination	ECU currently uses external facilities to accommodate large format examinations. They would consider using the JPACF should the facilities be suitable however it is important to note that ECU's Strategic Master Plan includes a conceptual design for a Great Hall and it is the University's intention to accommodate their needs within this facility in the future.
Other	Conference/ Banquet	The Joondalup Health Campus accommodates between 2500 – 2800 staff and hosts a number of seminars and conferences during the course of the year and these functions are always held off the Campus. They would consider using the JPACF should the facilities be suitable. ECU hosts a number of conferences every year and they would consider using the JPACF should the facilities be suitable. The WA Police Academy currently experiences a shortage of lecture and conferencing space. West Coast Institute of Training requires for lecture space and banquet venues for a maximum of 300 people. In addition to this requirement, there is the opportunity for West Coast Institute of Training (WCIT) to utilise the facilities provided within the JPACF as training and workplace experience venues for their students. The potential exists for the Joondalup Resort to utilise the JPACF if the facilities suit their requirements. It's important to note that the resort is embarking on an expansion program in the near future which will increase their capacity to 420 seats (banquet style).
	Workshop	The City's libraries host a number of programs designed to engage various sectors of the community. The programs comprise popular seminars, workshops and activities aimed at adults, youth and children. A number of the more popular events are restricted by venue capacity. Given that the programs are library based, it is desirable for these events and activities to be hosted at local libraries however indications are that the more popular events could be hosted at a larger venue such as the JPACF.

Source: City of Joondalup and Pracsys Interviews (2012)

Visual Arts Services

The City has an extensive visual art collection (in excess of 200 two-dimensional and three-dimensional works), but has limited suitable places to exhibit it. Much of the collection is not currently being displayed at all. The arts storage facilities being used are not fit for purpose. User clients within the City advised that it would be desirable for a permanent facility to be provided for the display and storage of the collection.

The City's visual arts program hosts two main events per year – the Invitation Art Awards and the Community Art Exhibitions. Both of these events are currently held in the Lakeside Shopping Centre. The City Officers responsible for these events indicate that this venue is inadequate, due to a lack of security, limited opening times and exhibiting constraints.

Performing Arts Services

The City's performing arts program hosts a number of events throughout the year, which are currently limited by the lack of a suitable venue. These events are:

- Sunday Serenades: this is a performance of chamber or fine music, held monthly, from April through to December. It is held at the Council Chambers to an audience of 150. It is believed that with a larger venue, the audience could increase to 200 to 300 people.
- Joondalup Eisteddfod: there are four weeks of auditions and heats, with winning performances chosen at the end. A variety of venues are used, and this year it is being held at Sacred Heart College.
- Summer Concerts: outdoor concerts held three times per year. These are held in venues such as Mawson Park, Hillarys, to audiences of up to 7,000 people.
- Valentine's Day Concert: this is the premier event on the City's music calendar, and currently takes place at Joondalup Resort. Audience size can be as many as 8,000 people.

In addition, it was reported that performance companies such as Spare Parts Puppet Theatre; WASO; Yirrikillen & Barking Gecko would be able to make use of the JPACF. It is believed that they would need a 400 to 500 seat auditorium, for one or two night runs. It is also believed that dance companies would use the facility. They would need 300 to 400 seats, for one to two nights at a time, for a total of eight to sixteen nights a year.

Other major events include NAIDOC Week, the Little Feet Festival, Sunset Markets and Joondalup Festival. These are primarily outdoor events, and would not require the JPACF to take place.

Aged and Seniors Community Services

To adequately provide for the needs of seniors, sufficient disabled parking bays within short walking distances of destinations, and preferably without level changes are required. Bus parking without level changes is also a requirement, with seats for waiting.

In terms of facility design, there should be wide aisles and wheelchair bays, and there should be ramps rather than stairs. Passages and toilet cubicles should be sufficiently roomy to accommodate a wheelchair turning circle and operator.

There are a range of adult education programs that might potentially use the JPACF. These include the University of the Third Age, English as a second language classes, and exhibition and community development forums. In addition, there is a major event, the Art of Aging. It occurs four times a year, and would require a 400 seat lecture-style auditorium theatre. It currently occurs at Padbury Hall.

Library Services

The City's Library Services program provides a range of events. Some of these are limited by the size of the available venues and might potentially make use of the JPACF. These include:

- Kids Christmas Activities (currently 70+ children)
- Meet the Authors (these have been between 30 and 360 seat events)
- Children's Book Week – a range of events, including 150 to 200 seat book launches, 30 to 120 seat workshops and lectures, and 150 to 200 seat group performances and lectures
- Computer literacy programs – these are classes of 30 to 40 people, but are unable to accommodate large numbers due to a lack of computers and facilities.

Youth Services

The City offers a range of music and dance programs that could potentially make use of a recording studio at the JPACF. Pracsys consultation has revealed no evidence of demand for recording studios so far, and there are already numerous studios in the northern suburbs. Pracsys has therefore not investigated this in depth.

The major events hosted by the City's Youth Services program include:

- Battle of the Bands – this event plays to a 300 to 400 seat auditorium theatre. There are two days of heats and then one day for the final.
- Youth Forums – this event also requires a 300 to 400 seat auditorium venue, and occurs over one or two days, once a year.

Community groups

There are a range of community groups, who may be interested in using the JPACF for rehearsals or performances. These groups currently conduct their activities at various community centres throughout the City. The community groups were:

- Wanjoo Singers
- Women's Health Works Choir
- Bloco do Norte
- Challenge Brass Band
- Joondalup Eisteddfod
- Joondalup Music Centre
- North Metro Pipe Band Inc.
- Swaggies Linedancing
- The Phyl-Harmonics Inc.
- Wanneroo Folk Music Club Inc.
- Endeavour Theatre Company (successfully consulted with by Pracsys)
- Joondalup Encore Theatre Society
- Limelight Theatre (group)

There have been no specific issues identified regarding shortages of suitable venues, or these groups' venue requirements more generally.

Motor Industry Training Association (MITA)

MITA holds one major function a year, the Apprentice of the Year, which typically hosts 200 people at a sit-down dinner. MITA also has a staff Christmas function for 30 people.

In terms of facilities, MITA has a boardroom with a capacity for 30 people, and a classroom that can seat 16.

WA Police Academy

The WA Police Academy has an auditorium that can seat 100 people and classrooms. Their requirements are for teaching spaces for no more than 30 people, and exam spaces, for no more than 180 people. Presumably the Academy's classroom requirements are being met internally, as this was not raised as an issue. It is not clear where exams are being held at the moment.

The Police Academy holds conferences for one to two days, every alternate year. For this they would need a 200 seat, lecture-style theatre. For lectures they would potentially require a 450 seat theatre. These lectures would be for two hours, three times a year.

There are also training forums and seminars, both requiring lecture-style seating. The forums would occur over one to two days a year, and would require 60 to 70 seats, and the seminars would require between 60 and 150 seats, for one day, four times a year. The seminars would also require breakout rooms with 30 to 40 seats.

The Police Academy would also use a 200 seat banqueting space, one to three times per year.

West Coast Institute of Training (WCIT)

WCIT have several spaces used for teaching. These are four classrooms, for 25 to 30 people each, a lecture room for 60 people and an open plan classroom for 120 people. They currently use lecture theatres at McClarty House.

Edith Cowan University (ECU)

ECU has a conceptual design for a Great Hall, as part of their Strategic Master Plan. If and when this hall is built, then their current requirement for functions and graduations will be accommodated within this building.

ECU's most significant events are its graduation ceremonies. These require raked, auditorium-style seating for 2,500 people. The ceremonies occur over four hours, two to three times per day, four to six days of the year. The stage needs to be tiered, to accommodate seating for 60 to 80 dignitaries. They also require six interpretation booths, thirteen photo booths in the foyer, a VIP robing area for 80 people, and a minimum of 25 seats for the disabled. A cocktail area for 2,500 people is also needed for after the ceremony. Graduations are currently held at the Perth Convention and Exhibition Centre (PCEC), in the Riverside Theatre. According to PCEC's website, Riverside is the largest tiered seating theatre in Perth, and can accommodate 2,500 people.

An examination hall is required, that can hold 800 seats with desks. This would be used for four to eight hours a day, for ten days, twice a year.

ECU also holds occasional conferences, on average three times per year. These conferences are for no more than 200 to 300 people. They require a conference space to accommodate these numbers, a breakout area with 50 lecture theatre-style seats and a pause area, with 20 lounge-style seats.

Lectures have so far been able to be accommodated on campus. Pracsys consultation has found that ECU's current lecture theatre has 372 seats.

Joondalup Health Campus

The Joondalup Health Campus has between 2,500 and 2,800 staff, and holds a number of seminars and conferences throughout the year. These are always held off-campus. They have stated that they would consider using the JPACF if the facilities were suitable.

The Joondalup Health Campus's functions and their requirements are:

- Internal summits: 50 to 60 seats, theatre style; one to two days, four times per year
- GP conferences: 30 to 60 seats, theatre style; breakaway areas, 20 seats, banquet style; half to a full day, six times per year
- Clinical conferences: 60 to 100 seats, theatre style; breakaway areas, 30 seats, banquet style; one to two days, four times per year

In addition, Joondalup Health Campus holds the following banquets:

- Loyalty awards: 100 seats, banquet style; four hours, once a year
- Annual Christmas Dinner: 600 seats, banquet style; four hours, once a year

School theatres

The City of Joondalup also visited Prendiville Catholic College and Sacred Heart College, to investigate the facilities at these two schools' performing arts centres. These facilities are discussed in Chapter 4.

Schools

The City consulted with 73 local schools, to investigate their needs for an external venue, either for graduations, exhibitions or performances. Of the 73 schools consulted, 19 required an external venue. Nine of these required a venue with a capacity of less than 300 people, five required a space for between 300 and 800 people, two required a space for between 800 and 1,200 people, and three required a space for more than 1,200 people.

3.5.2 Professional Arts Producers

To expand upon the existing consultation work conducted by the City, Pracsys consulted with a number of professional arts producers to understand:

- Who was currently excluded from the market and why
- How a new facility would impact on supplier behaviour

Eighteen suppliers were approached and of these nine participated in the research. Only one of the respondents is currently supplying in the primary catchment. Respondents who were not currently supplying in the catchment were asked to rate a range of factors on their importance in explaining why they were not currently supplying. The results are summarised in Figure 21. Of all the factors, the lack of

a suitable facility was the most significant determinant of current supplier behaviour. This was closely followed by the lack of an affordable facility and lack of incentives.

Figure 21: Factors Influencing Supplier Behaviour

Dimensions	Importance (1= Low 5 = High)
Lack of suitable facility	4.00
Lack of affordable facility	3.43
Lack of incentives	3.00
Lack of available local accommodation and other suppliers	1.86
Lack of demand	1.86
Unfavourable regulatory environment	1.86

Source: Pracsys Survey (2012)

The facility requirements varied greatly between respondents, from between 300 to 900 seats in the primary theatre and between 90 to 200 seats in the secondary theatre. The majority of respondents indicated a requirement for rehearsal, dance and workshop space, particularly if it could be also used as a performance space. These responses highlight the need for maximum flexibility, multiple spaces (both indoor and outdoor) and various sizes.

All nine respondents indicated that if the new JPACF anchored by a 600 to 800 seat theatre, 200 to 250 square metre flexible studio and workshop rehearsal space was built, they would consider using it. Half indicated they would use it for popular activities and half for community activities. Unprompted, five respondents expressed concern regarding the fees for using such a facility, indicating they believed they would be unable to afford to use the JPACF without the support of the City. Further consultation is required to understand the sensitivity of producers to the price of facilities.

Although small in its sample size, the survey results support the conclusion that there is strong latent demand, particularly for popular products, in the primary catchment area.

Considered together, the existing community facility base and the new popular and premium facility (the JPACF) cover the full range of venue requirements for arts and cultural activity in the north-west corridor of Perth.

3.5.3 Cultural Organisations in the City of Joondalup

Pracsys contacted 95 local cultural organisations from the 115 identified by the City of Joondalup. Of these, 16 agreed to be interviewed. The organisations that were successfully consulted with were:

- Turning Pointe Dance Academy
- W.A. Stage School
- Wanneroo Civic Choir
- Joondalup School of Music
- Kingsley Church of Christ Craft Group (and Weight Watchers)
- Kindy Dance Time
- Joondalup Community Arts Association
- All That Jazz Dance Studio
- Endeavour Theatre Company
- Cake Decorators' Association
- Afrah Belly Dance Bliss

- Helen O'Grady Drama Academy
- Rise Performing Arts
- Desiree Dance Academy
- Embroiders Guild of WA - Greenwood Group
- Holland Lee Drama and Speech (no longer operating)

One third of these travel outside the north-west corridor to stage performances, with two of them reporting that they travel 40 minutes to the Swan Park Theatre, Midvale. Both noted that there were 20 dance schools in the area, and that they struggled to find a suitable venue. Pracsys was unable to confirm this with Swan Park Theatre, and get an estimate of exactly how many groups travel from the north-west corridor to use their facilities.

Turning Pointe Dance Academy also travels to the Rixon Theatre at Penrhos College, Como, to perform and has travelled to the Mandurah Performing Arts Centre, and spent the night in Mandurah in the process. They stated that other dance schools have done the same. From discussion with the manager of the Lady Wardle Theatre, at St Mary's, the Rixon Theatre is the benchmark facility for school theatres. It can seat 750 people, and one recurring theme from the consultation was that there were many dance schools that would like a larger venue for their performances or are likely to in the future. This helps to explain why these organisations will travel so far. Turning Pointe Dance Academy reported that dance schools currently have no choice but to go to Penrhos, Midvale, or Mandurah, as local stages are too small or seating is inadequate. They also reported that a large performing arts facility would attract many dance schools that are travelling large distances to facilities that are still not ideal, and suggested 900 seats as an appropriate size.

Six of the organisations contacted said that they had trouble booking into existing facilities. This was supported by interviews with the existing performing arts facilities (see Chapter 4).

Almost all of those organisations interviewed said that the JPACF is a good idea, although some expressed reservations about the potential for high usage fees. Five of the organisations raised concerns about price, either of existing facilities or the potential cost of using the JPACF. Based on these interviews, Pracsys is of the opinion that community groups are likely to make only a minor contribution to the financial viability of the JPACF.

Other notable comments from the consultation include:

- Wanneroo Civic Choir have visited the Mandurah Performing Arts Facility and liked it. As mentioned above, Turning Pointe Dance Academy has performed there, and "made a weekend of it", spending the night in Mandurah. They stated that other dance schools have done the same.
- Joondalup Community Arts Association said that arts activities should be in close proximity to each other, that the JPACF should have an area that can be used for exhibitions, and that it is a good idea to have a number of different art forms in one location.
- Turning Pointe Dance Academy stated that if the City built a large performing arts centre in Joondalup, of about 900

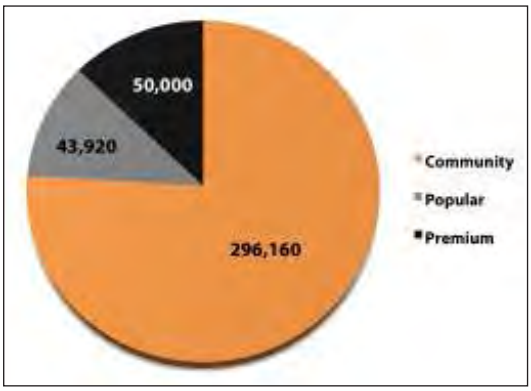
seats, then dance schools would be able to provide a significant amount of business for the centre.

- The size of the change rooms were an issue raised by several of the dance schools.

3.5.4 Summary

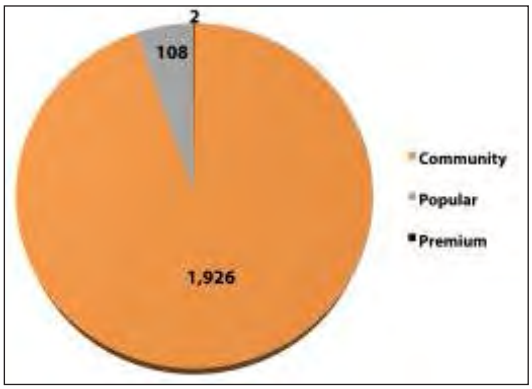
Based on the stakeholder consultation, Figure 22 and Figure 23 summarise the current activity profile of the primary catchment both in terms of event days and attendances.

Figure 22: Activity Profile Attendance Numbers (Attendance per Annum)



Source: City of Joondalup and Pracsys (2012)

Figure 23: Activity Profile (Attendance per Annum, Event Days)



Source: City of Joondalup and Pracsys (2012)

This includes activities currently being undertaken in the City by external suppliers – for example PIAF Film Season at the Pines – and activities by local communities of practice being undertaken outside of the catchment. The current activity profile in terms of events is dominated by community level activity.

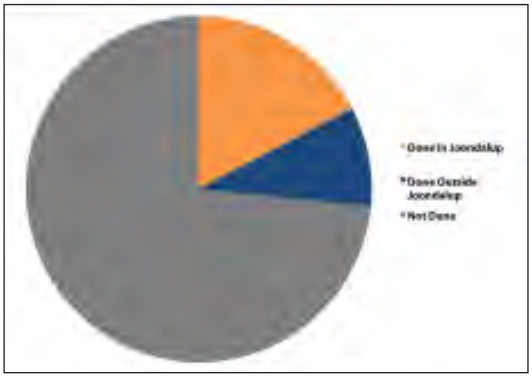
Popular and premium activity has stronger representation in term of attendances. This is due to the three major events, SupaFest, Rock It and the Perth International Arts Festival Film Season at the Pines. The current absence of popular and premium events is due in part to the lack of necessary infrastructure to facilitate the delivery.

Over all, total attendance estimates based on stakeholder consultation were for a total of 390,080 attendances per annum. However, this number is likely to be significantly under estimated, as audience estimates were not available for many events.

3.6 ACTIVITY DEMAND

The demand estimates from the stakeholder consultation represents only 37% of the total demand for attendance anticipated by the demographic demand modelling. This excludes film, which it is understood is predominantly being met through existing commercial facilities as well as demand for conferences, etc., identified in the stakeholder consultation, which were not captured in the modelling (Figure 24).

Figure 24: Demand Gap Summary



Source: City of Joondalup and Pracsys (2012)

The difference between the estimates reflects the demand, particularly for popular and premium activities that is either:

- Being met elsewhere in facilities outside of the primary catchment
- Not being met at all

There are many social, economic and cultural consequences of having the arts and cultural life of residents occurring outside the catchment, including:

- Loss of expenditure to local businesses
- Decreased propensity of community members to participate in culture and the arts
- Loss of cultural capital

The consequences will be exacerbated as demand for entertainment, culture and the arts in the catchment is growing and will continue to grow as a result of strong population growth and growing affluence. While the development of the JPACF should assist to reduce the leakage of activity outside the catchment, the real demand for the facility will come from latent demand.

To avoid double counting, the activity summary only considers, demand for attendance, not participation. While these estimates of participation will not be directly used in estimating the number of events, they will inform the development of the JPACF program of community events.

3.7 BENCHMARKING

To inform the link between activity demand and facility demand, benchmarks for the primary catchment need to be identified. Once the benchmark catchments are determined, the supply of facilities that service them can be examined to understand the infrastructure necessary to accommodate demand and supply of culture and the arts.

Thirteen different locations were analysed and their appropriateness as benchmarks was assessed on the following three criteria:

- Proximity to nearest capital city
- Current catchment population
- Current catchment demographics (including age and income)

The assessment found three catchments to be appropriate benchmarks, Penrith, NSW, Ipswich, Qld and Frankston, Vic. Detailed results of the assessment, and a list of the venues considered are included in Appendix 1.

3.7.1 Penrith

Penrith is a locality in Greater Western Sydney, in the state of New South Wales. It is located approximately 50km west of Sydney CBD. The catchment for the primary culture and arts facility, the Joan Sutherland Performing Arts Centre, encompasses the City of Penrith, as well as the neighbouring Blue Mountains and Hawkesbury.

Figure 25 compares the Penrith Catchment with the primary catchment for the JPACF.

Figure 25: Penrith Catchment

	Penrith	JPACF Primary Catchment Area
Population	316,762	304,500
Median Age	36	35
Median Household Income	1,360	1,630

Source: ABS Census of Population and Housing (2011) and Pracsys (2012)

The population of this catchment is comparable both in size and median age. Like the JPACF primary catchment, the Penrith catchment is forecast to grow to approximately 372,700 residents by 2031.[12,13] While the median income is somewhat lower, this is consistent with the income and cost disparities between Western Australia and New South Wales, so it is likely that both catchments will have similar levels of disposable income.

3.7.2 Frankston

Frankston is a locality in the south east of Melbourne in the State of Victoria. It is located approximately 40km south east of the Melbourne CBD. The catchment for the primary culture and arts facility, the Frankston Arts Centre, encompasses the City of Frankston, as well as the neighbouring Mornington Peninsula.

Figure 26 compares the Frankston Catchment with the primary catchment for the JPACF.

Figure 26: Frankston Catchment

	Frankston	JPACF Primary Catchment Area
Population	271,066	304,500
Median Age	40	35
Median Household Income	1,087	1,630

Source: ABS Census of Population and Housing (2011) and Pracsys (2012)

The population of this catchment is comparable both in size and location, however the demographic characteristic do differ somewhat from the current profile of the JPACF catchment. Like the JPACF primary catchment, the Frankston catchment is forecast to grow significantly to approximately 332,300 residents by 2031.14 This will be driven mainly by growth in the Mornington Peninsula.

12 Forecast i.d. Population projections for Penrith and Blue and Mountains

13 Draft Hawkesbury Futures: Infrastructure Requirements 2006-2036

14 Forecast i.d. Population projections for Frankston and Mornington Peninsula

3.7.3 Ipswich

Ipswich is a locality in the south west of Brisbane, in the state of Queensland. It is located approximately 40km south west of the Brisbane CBD. A culture and arts facility for Ipswich is still in the planning stages, and is 10 to 20 years from construction. Figure 27 compares the Ipswich catchment with the primary catchment for the JPACF.

Figure 27: Ipswich Catchment

	Ipswich	JPACF Primary Catchment Area
Population	166,904	304,500
Median Age	32	35
Median Household Income	1,233	1,630

Source: ABS Census of Population and Housing (2011) and Pracsys (2012)

While the current population of the catchment is significantly less than that of Joondalup, the Ipswich catchment is forecast to grow to approximately 462,000 residents by 2031,[15] making it an appropriate benchmark for the JPACF. Similarly, while the current demographics of the Ipswich catchment differ from that of the JPACF, as Ipswich matures its demographics can be expected to become more consistent with that of the future JPACF catchment, particularly the City of Wanneroo.

15 Queensland Government population projections to 2031 (2011 Edition)

4.0

4 SUPPLY AND GAP ANALYSIS

4.1 MEETING DEMAND

Demand for culture and the arts from the catchment area can manifest in one of the following ways:

1. It can be met locally, with activities occurring at existing local facilities.
2. It can be met outside of the catchment area (i.e. local residents travelling outside the catchment area to attend or participate in cultural activities). This is known as leakage.
3. Not being met at all – activity does not occur, due to the lack of a facility. This is latent demand.

Demand being met locally is relatively easy to measure, especially as there are currently few facilities in the northern suburbs. Using City of Joondalup research and further consultation, Pracsys has developed estimates of demand that is being met locally, as described above in Chapter 3.

Pracsys has also found anecdotal evidence of local cultural groups travelling as far as the Swan Park Theatre, Midvale, and Penrhos College, Como, and even to the Mandurah Performing Arts Centre to stage their performances. Thoroughly measuring leakage would be a major undertaking, and would involve surveying large numbers of residents and cultural organisations in the catchment area.

Latent demand cannot be measured, as it isn't possible to measure something that isn't occurring. To estimate latent demand, Pracsys has used a revealed preference model, also described in Chapter 3.

4.2 EXISTING FACILITIES IN THE CATCHMENT AREA

Building on previous consultation performed by the City of Joondalup, Pracsys interviewed the managers of the performing arts centres at Prendiville Catholic College, Sacred Heart College and St Mary's Anglican Girls School. Interviews were also conducted with ECU, Joondalup Resort, Arena Joondalup, the Joondalup Convention Centre and the Perth Convention Bureau.

Pracsys also attempted to contact the Swan Park Theatre in Midvale, and the Rixon Theatre at Penrhos College, as consultation with cultural organisations in the City of Joondalup revealed that some were travelling to these venues to perform, but was unsuccessful in contacting them.

Previous work undertaken by the City of Joondalup has identified significant performing arts facility - related gaps within the primary catchment area.[16] These gaps have been substantially verified by Pracsys' research. To understand the impact of these gaps an analytical hierarchy of entertainment and performing arts facilities has been developed (Figure 28). This hierarchy is based on the idea that culture and arts facilities should be located to facilitate the most efficient supply of services to the community. In doing so, it is necessary to make the distinction between different facilities built for the same activity/activities in terms of the function, technical capability, profile and catchment.

16 Feasibility Study for the Establishment of a Regional Performing Arts Centre @ Joondalup, APP Projects, 2001.

Figure 28: Performing Arts and Cultural Facility Hierarchy

Level	Function	Technical Capability and Design Sophistication	Profile	Catchment	Examples
1	Multi-purpose, culture and arts specific facility incorporating a range of spaces. Accommodates one or more resident companies.	Incorporates specialist facilities and equipment. Specifically designed and built for purpose. Maintained to a high standard	High	Sub-Regional or Metropolitan	Mandurah Performing Arts Centre, State Theatre Centre
2	Multi-purpose, culture and arts specific facility incorporating a limited range of spaces. May accommodate a resident company.	Specifically designed and built for purpose. Maintained to a reasonable standard. May incorporate some specialist facilities and equipment.	Medium	Local	Secondary Schools, Limelight Theatre
3	General purpose, joint use facility.	Lacks specialist facilities and equipment. Generally built and maintained to a basic level.	Low	Neighbourhood	Primary Schools, Community and Youth Centres, Public Open Space

Source: Pracsys (2012)

The current supply of facilities within the primary catchment area is exclusively level two and three. The only purpose built performing arts venue in the primary catchment is the Wanneroo Repertory Company's Limelight Theatre. While the theatre is attractive and well utilised it is unsophisticated in its technical capability and design. There are also performing arts centres at Prendiville Catholic College and Sacred Heart College, as well as St Mary's Anglican Girls' School, in Karrinyup. External users do have to work around the demands of the host schools, however. Beyond this, facilities are limited to general purpose community centres or sports facilities which lack the specialist facilities and equipment to accommodate popular and premium events or large community audiences.

4.2.1 School-based Performing Arts Facilities

Pracsys consulted with the theatre managers at Prendiville Catholic College, Sacred Heart and St Mary's Anglican Girls' School. Prendiville Catholic College has a 300 seat raked auditorium, with a 60m^2 stage, and limited fly system, due to the lack of void above the stage. St Mary's has 509 seats, with a very steep rake (which affects the acoustics) and a 15m by 16m stage. It does not have a fly tower, but does have a walkway overhead for fitting lights. Sacred Heart has a 545 seat auditorium, a 100m^2 hydraulic stage and an orchestra pit.

The three facilities are all quite heavily utilised, and have limited free capacity, especially during the busy periods on weekends, and at the end of the year, when there are a range of end of year productions by local schools and dance schools. There is more free capacity early in the year, as local schools and dance and drama schools typically stage their productions mid-

year or at the end of the year. All three facilities reported dance schools as being a significant source of bookings, as well as frequent use for drama and music performances. St Mary's reported that drama bookings are not as common, as they generally need to book a facility for a large block of time. The facilities also host conferences and functions.

The managers of all three facilities supported the development of the JPACF, and wanted to see a larger facility than currently exists in the north-west corridor. The feedback received was that the facility should be quite large, with between 750 and 1,000 seats. The manager of Prendiville stated that a facility similar to His Majesty's Theatre or The Regal Theatre would be ideal. A large stage and change rooms are also important considerations.

Facilities managers agreed that there was unmet demand in the north-west corridor, and the manager of Prendiville stated that dance schools have been growing out of the venue. Dance schools are travelling to the Swan Park Theatre in Midvale to stage their productions. This is 40 minutes' drive from Joondalup and the facility is not really suitable, so this is a bit of a problem.

The managers of St Mary's and Sacred Heart both reported that a lot of schools are either building or planning to build performing arts centres. Churchlands Senior High School is due to open one soon, with 450-500 seats.

The manager of Sacred Heart made the point that management is the most important factor in the success of a facility. A successful manager needs a range of skills, not only technical skills, but HR skills, the ability to deal with artistic people and business sense.

4.3 DEMAND BEING MET OUTSIDE THE CATCHMENT AREA

There are two facets to the demand that is leaking out of the catchment area: (i) residents travelling outside of the area to attend events, and (ii) local cultural or arts organisations that are travelling outside of the area to conduct their activities (classes, rehearsals, performances, etc.). Reliably estimating the number of residents travelling elsewhere to attend cultural events would require extensive surveying of local residents.

As mentioned in Chapter 3, Pracsys contacted 115 local cultural organisations, although was only able to successfully consult with a small fraction of these. However, even this small sample revealed evidence of demand leaking out of the primary catchment, with local dance schools in particular travelling as far as Midvale, Como and Mandurah to stage performances, as mentioned above.

4.4 IDENTIFIED GAPS IN FACILITIES

Currently the largest theatre in the catchment area is at Sacred Heart College, at 600 seats. The next two largest facilities are also located at schools (Prendiville and St Mary's). Aside from issues of theatre capacity, school-based performing arts centre are going to have the two problems of being required to meet the needs of the school to which they are attached, and that there will be limits to the types of productions that can be staged at a school-based facility. Productions that are considered to have inappropriately adult content, or to be in some other way controversial might not be

allowed into these facilities, particularly as they are based at schools with religious affiliations. The only other performing arts facility in the catchment area is the Limelight Theatre, which has only 177 seats.

Pracsys consultation has revealed evidence of the inadequacy of the existing provision of facilities in the catchment area. The three main findings were:

1. The school performing arts facilities are heavily booked, and cultural organisations have reported difficulty gaining access to them. This is despite reports from cultural organisations that seating was inadequate.
2. The managers of all three of the school-based performing arts centres felt that building a large performing arts and cultural facility in Joondalup would be a good idea. The managers of the Prendiville Performing Arts Centre, Lady Wardle Theatre, St Mary's, and Sacred Heart Performing Arts Centre suggested a theatre of 750, 900 and 1,000 seats, respectively. Comments from local cultural organisations support this (see Chapter 3 for more detail).
3. Local dance schools have reported travelling some distance to make use of larger facilities – as mentioned, to the Swan Park Theatre, Midvale (600 seats), to the Rixon Theatre, Penrhos College, Como (750 seats), and even to the Mandurah Performing Arts Centre (800 seats).

4.5 LATENT DEMAND – BENCHMARK FACILITIES

In addition to the unmet demand in the City of Joondalup that is leaking out to other areas, there is also a quantity of demand for attendance or participation in cultural activities that is not taking place at all, due to the lack of facilities. This would include activities that residents of the catchment area might not even think to do, as there is no example of it happening anywhere near them.

As this activity is not taking place, it cannot be measured. It must therefore be extrapolated, based on estimates of the level of demand that can be expected of the catchment population. Pracsys is employing two methods to achieve this:

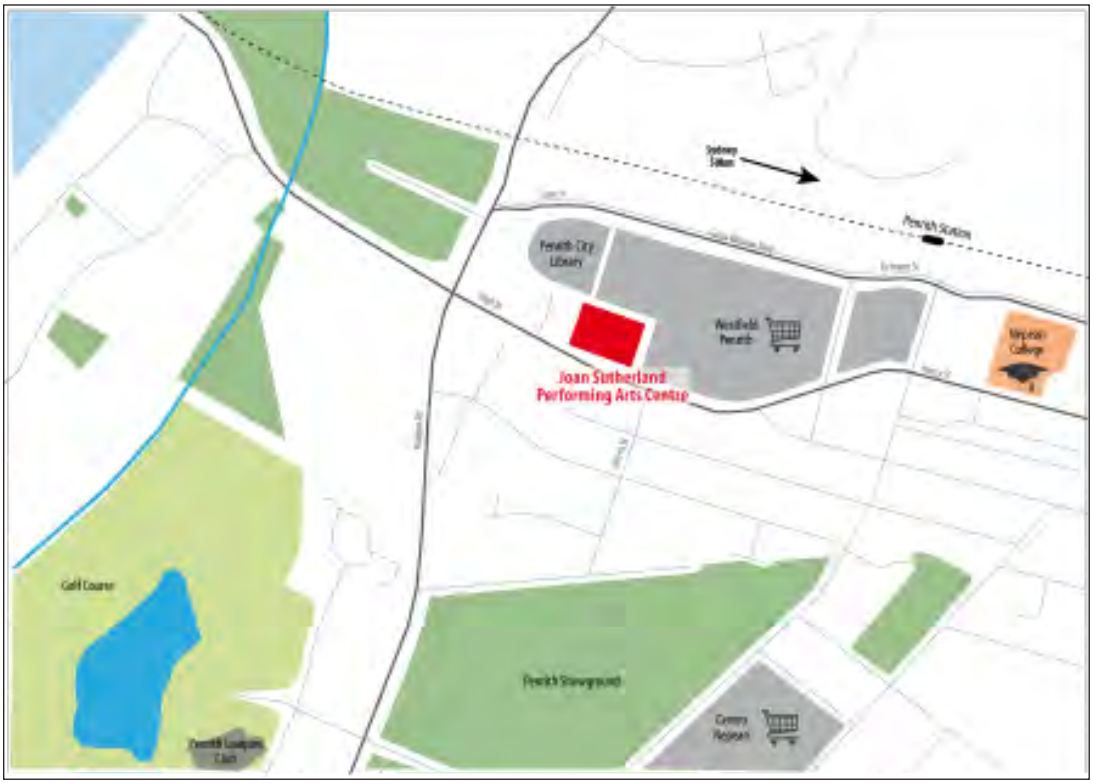
1. Examining the demographic profile of the catchment, and estimating cultural attendance and participation based on state averages. These averages are sourced from various ABS surveys. This analysis is detailed in Chapter 3.
2. Benchmarking – comparing the catchment area with demographically and geographically similar areas served by a performing arts facility. The three facilities that have been used as benchmarks for this study are:
    - Joan Sutherland Performing Arts Centre, Penrith, NSW
    - Frankston Arts Centre, Vic
    - Ipswich Civic Centre, Qld

These facilities have been chosen based on their catchment area's demographic similarity to the City of Joondalup.

4.5.1 Joan Sutherland Performing Arts Centre

The Joan Sutherland Performing Arts Centre is located in Penrith, NSW, 50 km west of the Sydney CBD. According to the centre's website, its facilities are: a 660 seat concert hall, 380 seat drama theatre, 90 seat performance studio and 27 meeting rooms. The largest of these rooms can accommodate 80 people, theatre style or 35, boardroom style. The centre is located in central Penrith.

Figure 29: Local Context of Joan Sutherland Performing Arts Centre



Source: Pracsys (2012)

4.5.2 Frankston Arts Centre

The Frankston Arts Centre is located in central Frankston, Victoria, 40 km south-east of Melbourne CBD. The main theatre is a proscenium arch theatre with seating for 800 people. According to the website, it has the second largest stage in Victoria. The second performance venue is Cube 37, which has seating for 194. Cube 37 can be set with tiered seating or configured for dance or cabaret events or exhibitions. There is also a function centre, which can seat up to 500 theatre style or up to 300 cabaret style.

Figure 30: Local Context of Frankston Arts Centre

Source: Pracsys (2012)

4.5.3 Ipswich Civic Centre

Ipswich is located approximately 40 km west of Brisbane CBD. The Ipswich Civic Centre has a range of rooms that can be used as theatres or for functions. The largest of these, the George Hogg Auditorium is the largest theatre and formal dining room in Ipswich. It can seat 741 in theatre style or 270 banquet style. The next largest room is the Cunningham Room, which can seat 160 theatre style or 130 banquet style. The Civic Centre also has the smaller Lockyer and Logan rooms, which can be used for functions and meetings.

The City of Ipswich is also planning a new performing arts facility, and consultants have prepared a business plan, design model concept and funding model. These studies were funded with Federal Government assistance. The City is now waiting to receive funding assistance from the Federal and Queensland governments to begin construction. The City has advised Pracsys that this is not expected to happen for another ten or twenty years, as mentioned above.

Figure 31: Local Context of Ipswich Civic Centre

Source: Pracsys (2012)

4.6 CONFERENCES AND FUNCTIONS

4.6.1 Existing Facilities in the Catchment Area

There are three major conference and function facilities in the catchment area: the Joondalup Reception Centre, Joondalup Arena and Joondalup Resort. There is also a conference room and lecture theatre at ECU, but it has limited availability for external hires.

There is currently still quite a bit of free capacity at the existing function spaces within the City. Rather than there being evidence of a lack of function capacity, respondents reported that lack of parking and accommodation are bigger issues in terms of their business.

Joondalup Reception Centre

Joondalup Reception Centre has two main conference rooms, that can be combined together. When combined, they can seat 400-500 people, theatre style, or 250, banquet style. In addition, the centre's Glass House room can seat up to 40 in theatre style, and the foyer area can seat 50, banquet style. The reception centre currently has around 300 different customers, and hires include weddings, parties, government department functions and community groups. functions are typically for between 10 and 300 people.

There is quite a bit of free capacity at the Joondalup Reception Centre, although it varies during the course of the year, and the centre is quite quiet in January. Generally the single rooms are more heavily used (as opposed to the combined conference rooms). Overall, the centre is only about 50% utilised, and would like to be busier.

The Reception Centre has lost quite a bit of business due to the lack of free parking nearby. They reported that prospective customers have explicitly told them that they have gone elsewhere for this reason. Due to the current lack of business, the Reception Centre would view additional function space at the JPACF as unnecessary, and a concern. They expected that if the City was managing the facility, then spaces would probably be offered at a low cost, and the Reception Centre could not compete. Theatre facilities would be good, however. They also see Joondalup Arena as a competitor and the library, which has several rooms.

Joondalup Arena

Joondalup Arena has a range of function spaces, in addition to its main indoor stadium. Not including the indoor stadium, the spaces can accommodate between 50 and 300 people theatre-style, between 90 and 350 in cocktail format, or between 60 and 200 people at a sit-down banquet. These spaces can also act as classrooms for between 45 and 120 people. The indoor stadium has retractable seats, and can seat 2,250 theatre-style (i.e. normal stadium format), or a banquet or cocktail function for 1,000 people.

Arena reported that they are not typically seen as a function venue, but this perception is changing. The facility is mainly used by corporate groups during weekdays, while on weekends it is used more for commercial functions and dinners, for up to 250 people. Free capacity is variable during the year and over the course of the week. On Sundays there is not much activity, and Friday night is also not particularly busy. On Saturdays there is a lot of activity. In general, there is quite a bit of free capacity, although it is expected that Arena will get busier in the future. The Sports

Bar (capacity 180) acts as a public bar on Mondays and Thursdays, and is heavily used on Saturdays. During the week it is used for internal purposes, as it is generally free. The stadium is mainly used for community sports events.

Arena does not see any particular merit in building the JPACF, but would not consider it a competitor. They commented that a lot of people in the area want theatre-style seating, and that there is particular demand from drama and dance groups.

Joondalup Resort

Joondalup Resort hosts government department functions, weddings, engagements and small meetings. Weddings are typically for 80 to 160 people, and the majority of conferences are for between 5 and 220 people. Meetings of 30 to 40 people with overnight accommodation included are quite common as well. Joondalup Resort has 70 rooms for accommodation. Joondalup Resort is also about to begin construction on a new function venue, capable of holding between 400 and 450 people. The new venue is expected to be completed by the end of 2013.

Utilisation varies throughout the year. This year, the period from October to December is fairly full, but April to July were quite quiet. A lot of clients book at the last minute and can still be accommodated. Business dropped off during the GFC, but is beginning to pick up again. The distance from central Perth is also a factor limiting the amount of business the Resort receives.

Resort does not see any particular need for further function spaces at the JPACF. For Resort, the bigger issue is a lack of accommodation in the area.

Edith Cowan University (ECU)

ECU's conference room is located in Building 1, the Chancellery building. It is currently only used internally, but is available for commercial hire. This requires permission from the Chancellery, however. The conference room is available for $40 an hour, plus a further equipment charge (if needed) of $100 for four hours. The room can accommodate up to 60 people.

The lecture theatre space can accommodate up to 372 people, seated. This is the main lecture theatre on the campus and is heavily used during class times - 8am to 6pm - during semester. ECU estimated it as being in use 80% of the time. Outside of class times, the theatre is not heavily used. It is available for $100 per hour (without the use of the foyer), or from 9am to 5pm for $600.

ECU's new Building 34 is currently under construction, and will likely have a small conference or meeting space. It is due to open in early 2015. This building is expected to cost $72 million.

4.6.2 Future Demand

While there is currently quite a bit of free capacity in existing conference facilities, rapid population growth and Joondalup's economic development will increase demand over time. Reduced capacity in central Perth will also generate demand for conference space in suburban locations. Population growth will increase demand for community-based functions, such as weddings as well.

According to the Perth Convention Bureau (PCB), Perth CBD conference venues are quite full, so organisers are looking further afield for venues. People will travel 30-40 minutes for a suitable function venue, so there is the potential for increased demand in Joondalup for the types of functions that are currently taking place in central Perth. The lack of accommodation is an issue (see below), however, but if national and international conferences are absorbing a lot of the function capacity in the CBD, then state-based conferences could be held in Joondalup (among other suburban locations).

4.6.3 Shortfalls in Parking and Accommodation

As mentioned above, parking and accommodation were raised as issues by existing facilities in the area, and the Joondalup Reception Centre reported losing business due to the lack of free parking.

Joondalup Resort often hosts conferences of one to two days, with delegates staying the night. They are limited to only 70 rooms of accommodation, however. PCB reported that the typical conference size in Perth is around 300 people, with many of the delegates coming from outside Perth, but that Joondalup Resort was more or less all of the quality accommodation that was on offer in the area. National and inter-national delegates would want to remain reasonably close to the event, so nearby accommodation is important if Joondalup wishes to attract these events. Mandurah was given as a good example of a conference facility being integrated with quality accommodation and into the surrounding urban fabric.

4.6.4 Summary

Based on the above analysis, the case for further conference or function facilities is marginal at the present. In the current market, additional conference facilities at the JPACF would probably be redundant. However, rapid population growth is expected in the catchment area, which will increase demand. Also, as Joondalup matures as an economic centre (a related but distinct concept from the local population-driven economy getting bigger), there will likely be growth in business activity (and so demand for conferences and functions) in excess of population growth.

The feedback from Pracsys consultation is that the greater issue at this stage is parking and accommodation issues, and how facilities are integrated into the surrounding urban fabric. These shortfalls will only become more acute as the market for facilities develops.

5.0

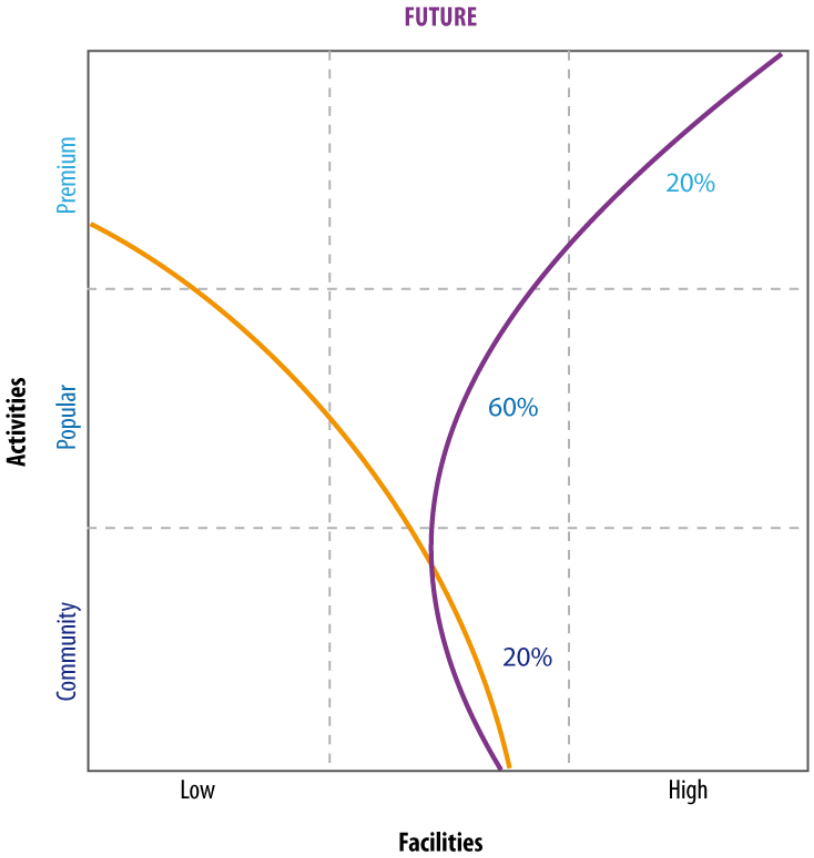
5 SUMMARY - KEY FINDINGS OF MARKET DEMAND ANALYSIS

Key findings from the analysis and consultation are:

- Attendance and participation in culture and the arts in the primary catchment is expected to increase rapidly, due to strong population growth.
- Adult attendance is strongly influenced by children's participation (as parents go to watch their children perform). This is particularly so for children's dance.
- Attendance and participation decreases with age.
- Professional arts producers generally reported that they would use a new facility along the lines of what is being considered for the JPACF, and many stated that they do not produce in the north-west corridor because of the lack of a suitable facility. This suggests that there is considerable latent demand in the primary catchment.
- Many local cultural organisations (especially dance schools) have reported a lack of suitable facilities in the primary catchment, and some are travelling to Midvale, Como and even Mandurah to perform.
- Existing conference and function venues are currently under-utilised, although demand is likely to increase significantly, as the population grows and Joondalup's economy matures. Instead of a lack of function spaces, problems were identified with a lack of quality accommodation and (free) parking.

Based on these findings a proposed future positioning for the JPACF is illustrated in Figure 32. It is anticipated that the programming of the JPACF will comprise 20% community activity, 60% popular activity and 20% premium activity.

Figure 32: Future Activity and Facility Positioning



Source: Pracsys (2012)

6.0

6 MODEL PROGRAM

6.1 METHODOLOGY

The model program has been developed based on the existing programs of performing arts and cultural facilities, the consultation conducted during the market analysis of this study and the expert opinion of experienced managers of performing and visual arts programs. It is important to note that this is just one possible program, based on the type of events that are likely to occur at the JPACF, and has been developed for analytical purposes. There is a wide range of potential programming options that could be pursued, at the discretion of management. The purpose of this model program is to link the demand for arts and cultural events to a facility specification, so that further aspects of the feasibility analysis can be completed.

Examining the programming of existing facilities is particularly important for understanding the full range and variety of events that are likely to be hosted by the JPACF. The facilities examined include all Perth Theatre Trust venues (His Majesty's Theatre, Subiaco Arts Centre, Albany Entertainment Centre and the State Theatre Centre of WA), most major Circuit West venues in Western Australia (Mandurah Performing Arts Centre, Bunbury Regional Entertainment Centre, Queens Park Theatre, Goldfields Arts Centre), commercial venues (like the Astor Theatre) and significant national performing arts centres and cultural facilities. Particular attention has been focused on the current programs of Ipswich Civic Centre, the Joan Sutherland Performing Arts Centre, Penrith, and Frankston Arts Centre, as these facilities serviced communities and catchment areas that have a high degree of similarity to the primary catchment of the proposed JPACF. There was a great deal of consistency between the programs offered by these facilities, in terms of the commercial touring events that were playing.

The art forms and other uses that have been included in the model program are: film, comedy, theatre, dance, music, school uses and visual arts.

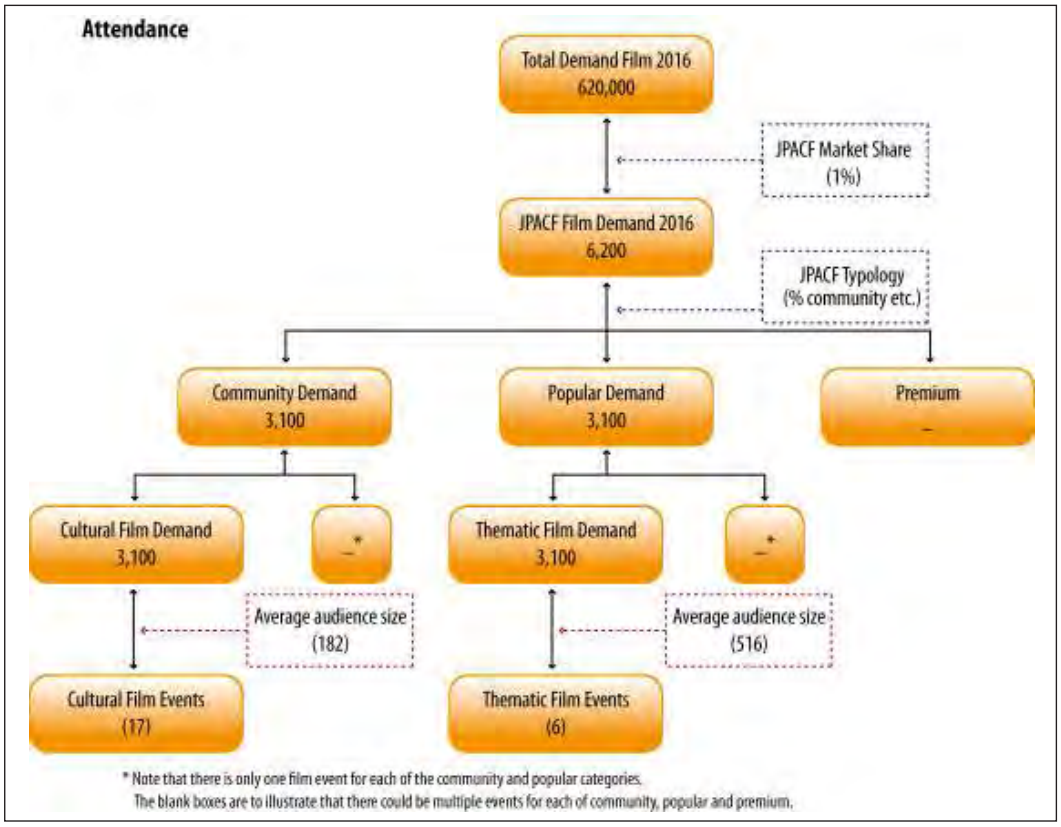
Figure 33 outlines the methodology used to estimate attendance event numbers for the first five arts forms. The methodology uses benchmarking and consultation to estimate a number of events and number of attendees. It also splits activities into premium, popular and community events for each art form, as well as a market share for the JPACF based on 2016 demand forecasts.

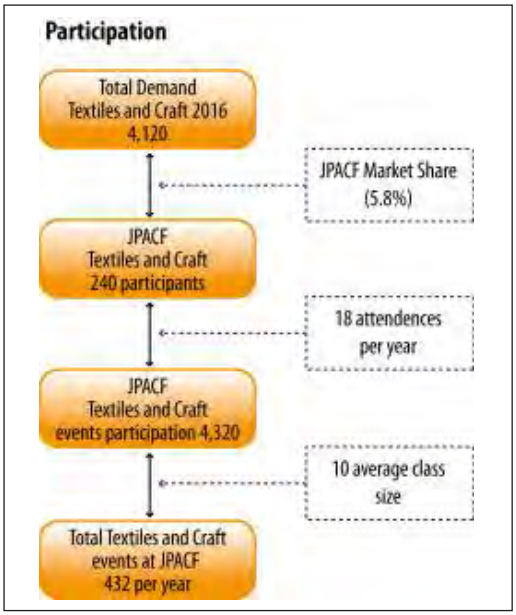
In practice, this split will be determined by the City's cultural policy and management discretion. Community events are unlikely to contribute much to the financial viability of the facility, and the City will have to decide what level of subsidised activity to allow in the JPACF, in line with the requirement of the project philosophies and parameters, which state that the facility should be able to "host a mixture of commercial and community activities that supports the viability and attraction of the venue".[17]

The programs for the remaining three activity types were derived directly from stakeholder consultation.

17 Minutes of Strategic Financial Management Committee – 27.04.2010; Item 2: Joondalup Regional Cultural Facility – Project Philosophies and Parameters, City of Joondalup (2010).

Figure 33: Methodology used to Estimate Attendance and Participation Numbers





Source: Pracsys (2012)

Figure 33 also outlines the methodology used to estimate participation event numbers, using textile crafts as an example.

The model programs will later be calibrated to the accommodation schedule outlined in Chapter 7. To convert events to facility demand, Pracsys has conservatively assumed a one to one relationship between each event and the space required. In reality, there is often one to many relationships, which will allow management greater flexibility to maximise the utilisation of all spaces. A summary of the data used in the model program can be found in Appendix 2.

6.2 FILM ATTENDANCE

Film is potentially the most popular of the cultural and arts activities. By 2016, the primary catchment will generate an estimated 620,000 film attendances per annum. The majority of this demand will continue to be absorbed by the network of commercial cinemas and the existing Perth International Arts Festival's Lotterywest Film Season; however there is scope to develop a niche film program at the JPACF. The film program for the JPACF is assumed to be focused equally on the community and popular segments. The proposed film program implies the capture of 1% film demand in 2016.

Premium (Art House Cinema)

As mentioned above, while no premium film content has been included in the model program, there is the possibility of niche film programming being run at the JPACF.

The Film in the Pines as part of the Perth International Arts Festival has proved to be a successful and enduring event, and demonstrates the viability of art house and European films in the northern corridor. A similar program could be considered for the Art Box, and could be run in a secondary space. This can be extended to weekly or monthly programs like the French Film Festival currently run at Luna Essex and Cinema Paradiso, if attendances warranted it.

Popular

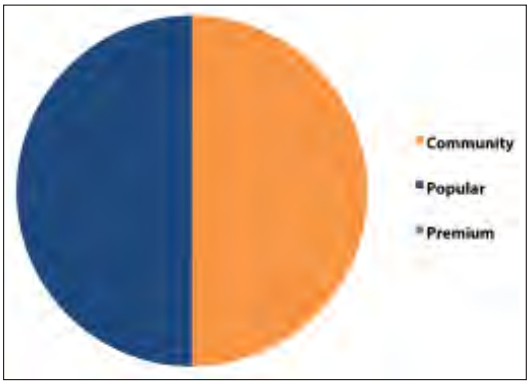
The popular component of the film program is assumed to be delivered in the form of "thematic film events". Examples of these events include anniversary screenings of cult films, and popular film premiers. These events would occur regularly, averaging 17 events per annum and would best be accommodated within a secondary space.

Community

The community component of the program is assumed to be comprised entirely of "film cultural events". Examples of these include Tropfest Australia and touring festivals such as "In the Bin". There is clearly scope for Joondalup to organise its own film festival.

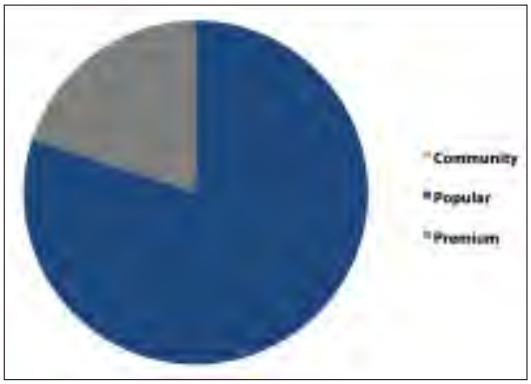
Film cultural events typically occur less frequently, approximately six times per annum; however they are on average larger than the regular popular film program and as such can be accommodated in a diverse range of spaces, including the primary space but also outdoor spaces incorporated on the site.

Figure 34: Model Program – Attendance at Film



Source: Pracsys (2012)

Figure 35: Model Program – Attendance at Comedy



Source: Pracsys (2012)

Summary

The proposed film program for JPACF will attract 6,200 attendees per annum, to around 23 events.

6.3 COMEDY ATTENDANCE

By 2016, adults in the primary catchment are estimated to generate an estimated 75,000 comedy and other performance attendances per annum. The JPACF program implies the capture of 20% of total comedy and other performing arts demand in 2016.

Figure 35 summarises the composition of the theatre program for the JPACF. The program has been weighted toward the popular segment, however with a small premium component which will allow the catchment better access to all levels of the art form. No community comedy activity has been included as it was assumed that this would be better accommodated through the existing network of venues, including pubs and nightclubs.

Premium

The premium segment is planned to accommodate 20% of total comedy and other performing arts attendance at the JPACF, composed of shows for comedy festivals such as the Perth Comedy Festival and the Melbourne Comedy Festival. The program plans for six event days per annum of premium comedy to be accommodated in both the primary and secondary spaces.

Popular

The popular segment is planned to accommodate 80% of total comedy attendance at the JPACF and to be composed of shows primarily from Australian comedians such as Akmal Saleh, Jimeoin and the Umbilical Brothers. The program would also include visiting international comedians on national touring circuits. The program plans for 25 event days per annum of popular comedy to be accommodated in both primary and secondary spaces.

Summary

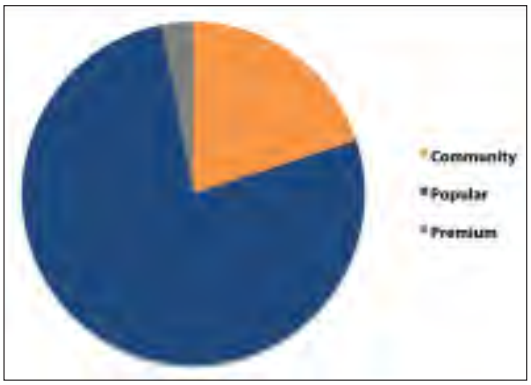
The proposed comedy program for the JPACF is estimated to attract 15,000 attendees per annum, to around 32 events.

6.4 THEATRE ATTENDANCE

By 2016, adults in the primary catchment will generate an estimated 51,500 theatre performance attendances per annum. In addition to this, there will be a large cohort of child attendees. The JPACF program implies the capture of 25% of total theatre performance demand in 2016.

Figure 36 summarises the composition of the theatre program for the JPACF. The program has been weighted toward the popular segment, however with a small premium component which will allow the catchment better access to all levels of theatre, and the presence of which may in turn drive demand for participation and attendance.

Figure 36: Model Program – Attendance at Theatre



Source: Pracsys (2012)

Premium

The premium segment is planned to accommodate 3% of total theatre attendance at the JPACF and to be comprised of contemporary performance from PICA and PIAF, as well as other periodic touring content. The program plans for 11 event days per annum of premium theatre to be accommodated in a secondary space of the JPACF.

Popular

The popular segment is planned to accommodate 77% of total theatre attendance at the JPACF and to be comprised of:

- Touring shows – subsidised (15% of attendance)
- Touring shows – commercial (40% of attendance)
- Local shows – (30% of attendance)
- Contemporary performance (15% of attendance)

Subsidised touring shows include performances such as those presented by Hit Productions and Bell Shakespeare. The program plans for 10 event days per annum to be accommodated in the primary space.

Examples of commercial touring shows include, Certified Male, Busting Out and Mum's the Word. The program plans for 12 event days per annum to be accommodated in the primary space.

Local shows include performance by local companies such as Black Swan Theatre Company and Deckchair Theatre Company. The program plans for 12 event days per annum to

be accommodated in the primary space.

Contemporary Fringe may include shows as part of Fringe World. The program plans for 18 event days per annum to be accommodated in a secondary space.

Community

The community segment is estimated to accommodate 20% of total theatre attendance at the JPACF. The focus of the community theatre program should be on performances by existing local amateur theatre companies such as Endeavour Theatre Group, as well as new theatre groups that may emerge in the future.

The program plans for 27 event days per annum of community theatre to all be accommodated in the primary space.

Summary

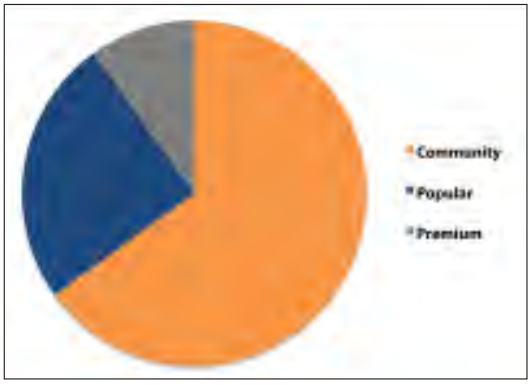
The proposed theatre programme for JPACF will attract 21,500 attendees per annum, to around 90 events.

6.5 DANCE ATTENDANCE

By 2016, adults in the primary catchment will generate an estimated 51,500 dance performance attendances per annum. In addition to this, there will be a large cohort of child attendees. The JPACF program implies the capture of 39% of total dance demand in 2016.

Figure 37 summarises the composition of the dance program for the JPACF. The program has been weighted toward the community and popular segments, however with a small premium component which will allow the catchment better access to all levels of dance, and the presence of which may in turn drive demand for participation and attendance.

Figure 37: Model Program – Attendance at Dance



Source: Pracsys (2012)

Premium

The premium segment is planned to accommodate 10% of total dance attendance at the JPACF and will be comprised mostly of premium contemporary dance. Approximately half the attendance demand will be accommodated in the primary space by performances from companies such as Bangarra Dance Theatre. The balance will be accommodated in the secondary space by companies such as STRUT dance and events such as the Perth Festival. The program plans for 10 event days per annum of premium contemporary dance.

Popular

The popular segment is planned to accommodate 25% of total dance attendance at JPACF and to be comprised of three categories of popular contemporary dance:

- Contemporary dance (63% of attendance)
- Youth contemporary dance (32% of attendance)
- Education-based contemporary dance (5% of attendance)

Contemporary dance includes popular performances such as Burn the Floor and Tap Dogs. The program plans for 5 event days per annum for contemporary dance to be accommodated in the primary space.

Youth contemporary dance includes performances such as those by BUZZ. Buzz Dance Theatre is Australia's premier dance theatre company for children and young people. The program plans for 11 event days per annum for youth contemporary dance to be accommodated in a secondary space.

Education-based contemporary dance includes activities by companies such as WAAPA. The stakeholder consultation revealed that WAAPA is continually seeking new venues for rehearsals and performances. Their current program is limited by a lack of affordable venues and there is potential for WAAPA to partner with the City in the use of the JPACF. This type of popular activity is a good extension of the existing community of practice for dance. The program plans for three event days per annum for education-based contemporary dance to be accommodated in the secondary space.

Community

The primary catchment has a very strong community of practice for dance, particularly for children. The community segment is planned to accommodate 65% of total dance attendance at the JPACF and to be comprised of two categories of activity:

- Local dance school performance (60%)
- Community dance company performances (40%)

The local dance school performances and approximately half the community dance company performances will need to be accommodated in the primary space. The balance will be able to be accommodated in a secondary theatre space.

Summary

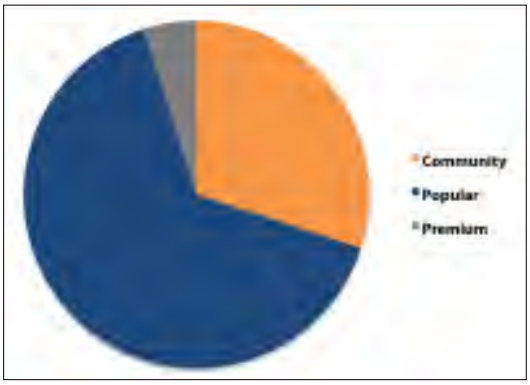
The proposed dance programme for JPACF will attract 20,000 attendees per annum, to around 52 events.

6.6 MUSIC ATTENDANCE

Second only to film, music is one of the most popular culture and arts activities. By 2016, adults in the primary catchment will generate an estimated 349,000 music performance attendances per annum. In addition to this, there will be a large cohort of child attendees. There is currently strong leakage of demand outside the catchment, particularly for large format popular music. While the JPACF is unlikely to curb this leakage significantly, it will go some way to address the leakage of small and medium scale music events outside the catchment. This JPACF program implies the capture of around 15% of total music demand in 2016.

Figure 38 summarises the composition for the music program for the JPACF. The program has been weighted heavily toward the popular segment.

Figure 38: Model Program – Attendance at Music



Source: Pracsys (2012)

Premium

The premium segment is planned to accommodate 5% of total music attendance at the JPACF and to be comprised of:

- Contemporary chamber music (40% of attendance) e.g. Musica Viva and Tura events
- Contemporary orchestral music (40% of attendance) e.g. WASO Horizons and the Philip Glass Ensemble
- Traditional opera and orchestra (20% of attendance) e.g. Perth Symphony Orchestra and WA Opera

The program plans for five event days per annum for premium music to all be accommodated in the primary space.

Popular

The popular segment is planned to accommodate 63% of total music attendance at the JPACF and will be comprised of four categories of popular music:

- Popular classical (25% of attendance) e.g. Artists such as Teddy Tahu Rhodes, Tom Burlinson and Todd McKenny
- Popular contemporary (25% of attendance) e.g. Artists such as the Waifs and Missy Higgins
- Popular contemporary thematic (25% of attendance) e.g. Tim Rogers and Friends do The Beatles
- Popular youth (25% of attendance) e.g. Artists such as Snow Patrol, The Panics and Matt Corby

The program plans for 60 event days per annum of popular music to all be accommodated in the primary space of the JPACF.

Community

The community segment is assumed to accommodate 30% of total music attendance at the JPACF and to be comprised of components of the City's existing program as well as a number of new programs the City may opt to deliver.

Sunday Serenades (25%) – This is an existing program run by the City of Joondalup, currently accommodated in the civic chambers. The new JPACF will allow this program to be accommodated either in the larger primary space or a range of other spaces within the JPACF.

Morning Melodies – (25%) This or a similar program could potentially be introduced by the City of Joondalup. It would be a regular program targeted at seniors and incorporating morning tea and music concerts in the secondary space or other space.

Themed nights – (25%) This or a similar program could potentially be introduced by the City of Joondalup. It would be a series of quarterly community concerts based on a theme, similar to the City's existing Valentine's Day concert. The new JPACF will allow this program to be accommodated in the large primary space.

School holiday concerts – (25%) This or a similar program could potentially be introduced by the City of Joondalup. It would be a series of quarterly community concerts. The new JPACF will allow this program to be accommodated in the large primary space.

The program plans for 56 event days per annum of community music events to be accommodated in the JPACF.

Summary

The proposed Music program for the JPACF is modelled to attract 52,000 attendees per annum to around 122 events.

6.7 VISUAL ARTS ATTENDANCE

Programming for visual arts incorporates a range of community and popular shows. The key community uses will be the Joondalup Community Art Exhibition (14 event days), as well as a number of school exhibitions which are addressed below. In addition, the JPACF is planned to support a program of 12 popular art exhibitions per annum requiring 12 opening night functions and totalling 240 event days.

6.8 SCHOOL USE

Consultation with schools in the primary catchment was conducted by the City of Joondalup. The resulting needs and program analysis revealed that the proposed JPACF would have the capacity to accommodate existing annual demand for 15 graduation ceremonies, 38 performances and 12 exhibitions, as well as any additional demand that may emerge in the near future.

6.9 JOONDALUP EISTEDDFOD

The Joondalup Eisteddfod is a major annual performing arts competition which has been running for 25 years. It provides an opportunity for local performers, musicians, poets, choirs and groups of all ages to display their talents in front of a live audience and receive critical feedback from professional adjudicators. The competition takes place over four weekends and is currently hosted at Sacred Heart College. It is envisaged that the JPACF will provide an opportunity to bring this major event into the Joondalup City Centre.

6.10 ARTS AND CRAFTS PARTICIPATION

By 2016, as many as 11,300 adults in the primary catchment will participate formally in the following arts and crafts activities:

- Textile crafts, jewellery making, paper crafts or wood crafts
- Glass crafts, pottery, ceramics or mosaics
- Printmaking, screen printing or etching
- Photography, film-making or editing, apart from recording personal events
- Sculpting, painting, drawing or cartooning, including digital pieces

The JPACF program of visual arts and craft courses implies the capture of between 3.5% and 7% of total adult formal arts and craft

participation in 2016, depending on the frequency of attendance of individuals. The program would be comprised of components of the City's existing program as well as a number of new courses.

The program is structured into four terms of nine weeks, with 10 courses running per term. Figure 39 outlines the modelled number of courses and participants in the JPACF visual arts and craft program. This assumes that each participant completes one nine-week course per annum. If participants complete more than one course per annum, the market share of the JPACF will be lower.

The arts and crafts activities would ideally be accommodated in custom studio space.

Figure 39: JPACF Visual Arts and Craft Participation Program

	Formal Participants in the Primary Catchment (2016)	JPACF weekly courses/ events per annum	JPACF Participants per Annum	Market Share
Textile crafts, jewellery making, paper crafts or wood crafts	4,120	24	240	5.83%
Glass crafts, pottery, ceramics or mosaics	1,128	4	40	3.55%
Printmaking, screen printing or etching	613	4	40	6.53%
Photography, film-making or editing, apart from recording personal events	1,952	8	80	4.10%
Sculpting, painting, drawing or cartooning, including digital pieces	3,467	40	400	11.54%

Source: Pracsys (2012).

6.11 MUSIC PARTICIPATION

By 2016, as many as 4,900 adults and 11,600 children in the primary catchment will participate formally in music. The JPACF will provide the opportunities for music courses, as well as rehearsal and practice.

The proposed program is structured into four terms of nine weeks, with 10 courses or weekly rehearsal/ practice times running per term. Figure 40 outlines the potential number of weekly events and participants in the JPACF Music participation program. This assumes that each participant completes one nine-week course or nine weeks of events such as rehearsals per annum. If participants complete more than one course per annum, the market share of the JPACF will be lower.

Figure 40: JPACF Music Participation Program

	Formal Participants in the Primary Catchment (2016)	JPACF weekly courses/ events per annum	JPACF Participants per Annum	Market Share
Singing or playing a musical instrument	16,469	133	1,328	8%

Source: Pracsys (2012)

The music courses and rehearsals should be accommodated in practice or rehearsal spaces. Note that this refers to music learning and practice, not final performances.

6.12 DANCE PARTICIPATION

By 2016, as many as 6,700 adults and 6,600 children in the primary catchment will participate formally in dance. The JPACF will provide the opportunities for dance courses, as well as rehearsal and practice.

The dance program is structured into four terms of nine weeks, with 10 courses or weekly rehearsal/ practice times running per term. Figure 41 outlines the potential number of weekly events and participants in the JPACF dance participation program. This assumes that each participant completes one nine-week course or nine weeks of events such as rehearsals per annum. If participants complete more than one course per annum, the market share of the JPACF will be lower.

Figure 41: JPACF Dance Participation Program

	Formal Participants in the Primary Catchment (2016)	JPACF weekly courses/ events per annum	JPACF Participants per Annum	Market Share
Dancing	13,300	72	720	5%

Source: Pracsys (2012)

The dance participation would also be best accommodated in rehearsal rooms. As with music, this analysis refers to learning and practice, not final performances.

6.13 THEATRE PARTICIPATION

By 2016, as many as 2,140 adults and 2,100 children in the primary catchment will participate formally in theatre. The JPACF will provide the opportunity for additional theatre courses, as well as rehearsal and practice.

The theatre program is structured into four terms of nine weeks, with 10 courses or weekly rehearsal/ practice times running per term. Figure 42 outlines the potential number of weekly events and participants in the JPACF theatre participation program. This assumes that each participant completes one nine-week course or nine weeks of events such as rehearsals per annum. If participants complete more than one course per annum, the market share of the JPACF will be lower.

Figure 42: JPACF Theatre Participation Program

	Formal Participants in the Primary Catchment (2016)	JPACF weekly courses/ events per annum	JPACF Participants per Annum	Market Share
Theatre	4,232	30	296	7%

Source: Pracsys (2012)

Theatre participation should take place in a rehearsal or practice space. Once again, this refers to learning and practice only, not final performances.

7.0

7 DETAILED DESIGN DESCRIPTION

This detailed design description is based on the assumed facility identified in the model program, as outlined in Chapter 6.

For the detailed design description, three options were considered:

- A traditional performing arts centre.
- An "Art Box" design, reflecting a contemporary architectural engagement with the environment, and that includes facilities for both visual and performing arts.
- A cultural campus, spread over a larger area.

However, at the conclusion of benchmarking investigations, consultation and programming, it was decided that the study would focus on the Art Box as a representation of a complete cultural community arts centre.

The design is intended to fulfill the requirements set out in the Project Philosophies and Parameters that the facility be 'world class' and 'state of the art'. However, the precise meaning of such terms is open to a wide range of interpretations. It will be important for the City to develop a clear and precise understanding of what these terms mean in the context of the JPACF, to properly assess different design options.

7.1 LOCATION

The site selected for the JPACF is 400m from the Joondalup CBD and the Joondalup train station, representing a five minute walk from both activity nodes.

The site sits adjacent to the intersection of Collier Pass and Grand Boulevard, in a section of road that has limited pedestrian activation, and is unlikely to be activated in the near or mid future. As such, the site should be considered as a destination site, rather than one that is part of an immediate urban context.

The site has excellent proximity to West Coast Institute of Training (WCIT) and Edith Cowan University and should draw activity from its relation to this education precinct.

The site is at the southern end of the Joondalup Central Walk, a pedestrian walk that links the Joondalup Health Campus to the north of the CBD, with the ECU campus. The Art Box will become an important link in this chain of activity, and will contribute to the activation and surveillance of this pedestrian trail.

7.2 THE BRIEF

The Art Box will play an extremely important role in the cultural and civic life of the City of Joondalup and the greater northern suburbs. While the exact accommodation schedule is yet to be confirmed, the JPACF should incorporate:

- A lyric theatre of 850 seats, including a fly tower, of the highest mechanical standard, lighting and acoustic specifications
- A 200 seat black box theatre that will accommodate a variety of non-traditional theatre stagings and performances
- A range of rehearsal spaces that can also serve as places for small performances, and general community activities
- Theatre support space such as box office, green room, make up and change areas, backstage workshops, etc.

- A foyer that will serve both theatres, but that can also function as a reception and exhibition space
- A dedicated art gallery
- Spaces for the practice of fine art and crafts
- Curatorial storage
- Bars and catering facilities (the proximity to the WCIT Hospitality School should be factored into this activity)
- Offices and managerial spaces
- An undercroft car park to cater for staff, and patrons of the JPACF

The primary purpose of the JPACF will be the delivery of a wide range of performances, including drama, dance and music. It should also be able to accommodate secondary functions such as conferences and civic receptions, which will add to its financial viability. The building design will need to respond to this mix of uses without compromising its primary role.

Figure 43: Proposed JPACF Site

Source: Peter Hobbs, Architect (2012)

The attached functional diagrams map out the basic relationship of the spaces and activities at scale, and suggest the basic response to site in terms of orientation, aspect and functionality.

Special care should be made in the design of the building to reduce the staffing numbers required to run the building, as this becomes a large part of the operation costs of any facility.

Figure 43 shows the broader context of the proposed site.

7.3 RESPONSE TO CONTEXT

The proposed location of the JPACF, at the intersection of Collier Drive and Grand Boulevard means that it will be viewed as an iconic building and part of the entry sequence of buildings that mark the southern gateway to the Joondalup City Centre.

The proposed location of the JPACF allows it to become a hub between the "knowledge precinct" of ECU and WCIT, the bustling transit-orientated commercial centre of Lake Side Shopping Centre, and the civic precinct of the Joondalup City Centre. While still in their relative infancies, these institutions and sectors will mature with time, and the Art Box will become a key driver in the activity of Joondalup.

Furthermore, the location of the JPACF will become on important link in the Central Walk that extends from the Joondalup Health Campus south through the City Centre to ECU, and will become important in activating the Central Park. Similarly, while currently located in an undeveloped section of Grand Boulevard, the construction of the JPAFC will become an important driver to the development of adjacent sites, and should be designed to promote activation and pedestrian connections.

Special architectural attention will be needed to facades facing Grand Boulevard, and in particular, consideration of the bulk and form of elements such as the fly tower.

The foyer of the building should face north, with a forecourt being proposed for an extension of Collier Pass across Grand Boulevard. This aspect will also overlook the ornamental lake of WCIT.

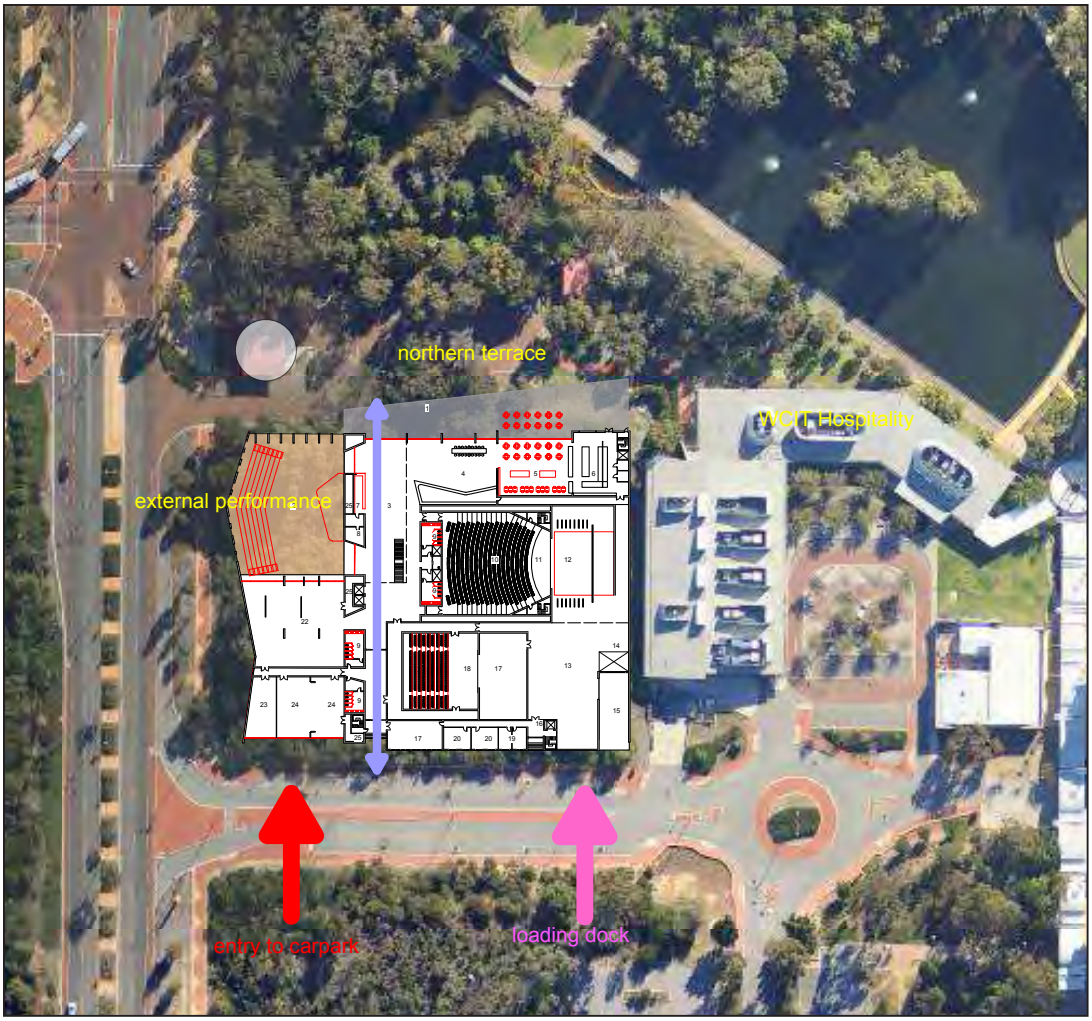
The landscape of this northern approach to the JPACF should be considered to enhance the safety and visual surveillance of pedestrians approaching the building via the Joondalup Central Walk. Vegetation should be cleared and site lines and lighting improved. Ancillary activities, such as bars and restaurants, should face north over this space.

Servicing is at the south of the building, and adjacent to the loading dock of the WCIT hospitality building that is to the immediate west of the site. This space should be orientated and screened as much as possible to reduce its visibility from Grand Boulevard.

Offices have been arranged so as to overlook Grand Boulevard, contributing to the visibility of this pedestrian path.

Figure 44 shows the site of the JPACF, to give local context.

Figure 44: Local Context of JPACF Site



Source: Peter Hobbs, Architect (2012)

7.4 SCHEDULE

Figure 45 outlines the schedule of areas of the proposed JPACF design. The sizes and specification of these spaces match industry and benchmark standards, and will need to be iteratively reviewed in consultation with stakeholders in a cost benefit analysis based on final project funding.

This schedule will be used for the preliminary capital cost estimate by the quantity surveyor, Ralph Beattie Bosworth. This will be an estimate of the total capital cost of the development, including fit-out and work done on surrounding areas.

Figure 45: Proposed Schedule of Areas for the JPACF

Schedule Of Areas (note- all figures expressed as net)	m^2	m^2
External Areas		1150
Collier Pass extension		
Forecourt	200	
Sculpture Court	200	
External Performance Space	750	
Front of House		1180
Foyer	400	
Bars	180	
Restaurant	180	
Kitchen	100	
Box Office/Information Centre	40	
Toilets	250	
Staff Change	30	
Conference and Reception		570
Conference Room 1 (Overflow Rehearsal)	85	
Conference Room 2 (Overflow Rehearsal)	85	
Exhibition/Reception	300	
Store	100	
Visual Arts		905
Art Gallery	400	
Craft Studio	95	
Drawing and Painting Studio	230	
Curatorial Storage	180	
Management		275
Offices	100	
Meeting Rooms	30	
Seminar Room	100	
Toilets	30	
Kitchenette	15	
Lyric Theatre		900
850 Seat Auditorium	540	
Orchestra Pit	60	
Fly Tower	100	
Stage	170	
Bio Box	30	
Black Box Studio Theatre		510
220 (moveable seats)	480	
Bio Box	30	
Back of House		960
Offices	50	
Toilets	60	
Dressing Rooms	120	
Green Room	40	
Backstage	340	
Workshop	100	
Storage	150	
Loading Docks	100	
Rehearsal		780
Rehearsal Room 1	270	
Rehearsal Room 2	95	
Rehearsal Room 3/4	225	
Toilets and Changes rooms	100	
4 off Practice Rooms at $15m^2$	60	
Music Studio (including sound equipment)	30	
Commercial Office Space		425
General Office Space	375	
Toilets and Amenity	50	
Undercroft Parking		5500
200 bays	5500	

Source: Peter Hobbs, Architect (2012)

7.5 "THE ART BOX" DESIGN

The Art Box is proposed to be an activated facility for the practice of both performing and visual arts, encompassing the full range of premium, popular and community product. It should represent best practice in all regards, and position Joondalup as the central hub of all cultural activities in the northern corridor, and will, through its design and management, become the catalyst for a rich and diverse range of artistic endeavour. In this sense, this proposal is for a community arts centre, rather than a performing arts centre. This is an important distinction: while performance arts centres have limited capacity to activate an area, a true community arts centre becomes a 24/7 space.

The extensive stakeholder consultation, demographic analysis and the analysis of previously identified benchmarks indicate a number of key drivers for the Art Box:

- The northern corridor is currently under-serviced in terms of quality performance spaces
- There is a large demand for community-based performance such as dance schools and graduations
- There are limited opportunities for practice and exhibition of fine arts and craft
- The City has an extensive art collection that will grow with time and deserves curatorial storage
- The synergies and opportunity to collaborate with ECU, WCIT and the WA Police Academy will continue to grow
- There is currently un-tapped latent demand for the full range of cultural pursuits
- The population of the northern corridor is growing steadily, and this demand will increase accordingly.

The ethos for the Art Box design is that it should combine both community practice and local, national and international performance opportunities within a common physical and management structure, that will ensure maximized utilization and community benefit. Combining this diverse range will encourage the cross–subsidisation of more marginal practice and performances, while providing a venue for large premium and popular performances and exhibitions.

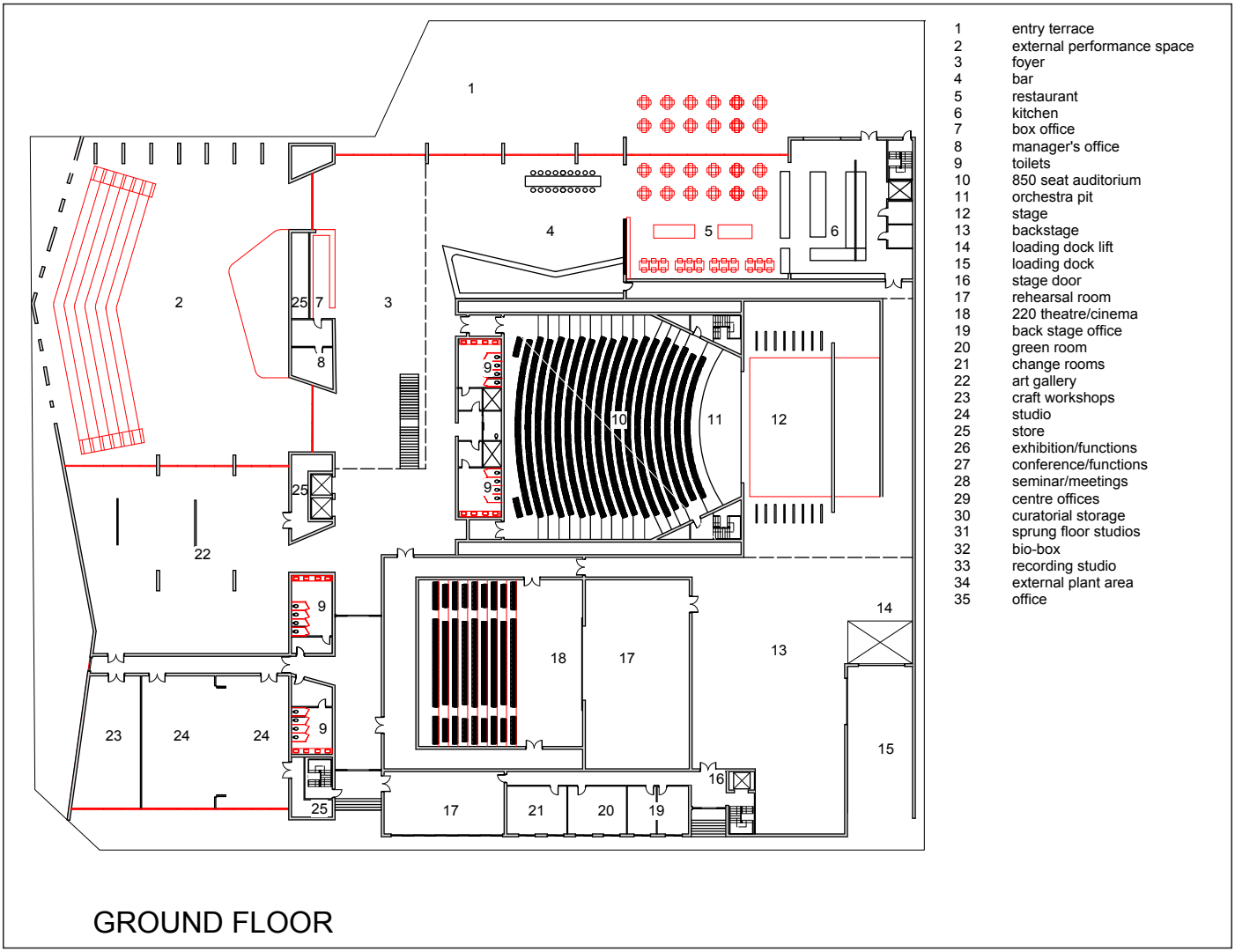
The inclusion of spaces such as visual art studios, craft studios, and sprung floor rehearsal spaces will ensure a steady daytime utilisation, and will help boost the viability of a café and restaurant. The inclusion of a small arts and craft shop such as FORM or the Art Gallery of WA Art Shop, should be considered to provide a commercial outlet for local, national and international product.

The inclusion of a dedicated conference and function space is currently difficult to support within the current market, with existing facilities within the region under-utilised. However, the co-location of conference and seminar rooms adjacent to a large auditorium is a common feature within most of the benchmarks analysed, and will also improve viability of the proposed café, bar and restaurant.

The proposed Art Box should also include the potential for general office space that can be let commercially, or become overflow to the requirements of City of Joondalup administration. The logic behind this is two-fold, it enhances the general activity within the building and precinct, while ensuring that the undercroft car park is fully utilised.

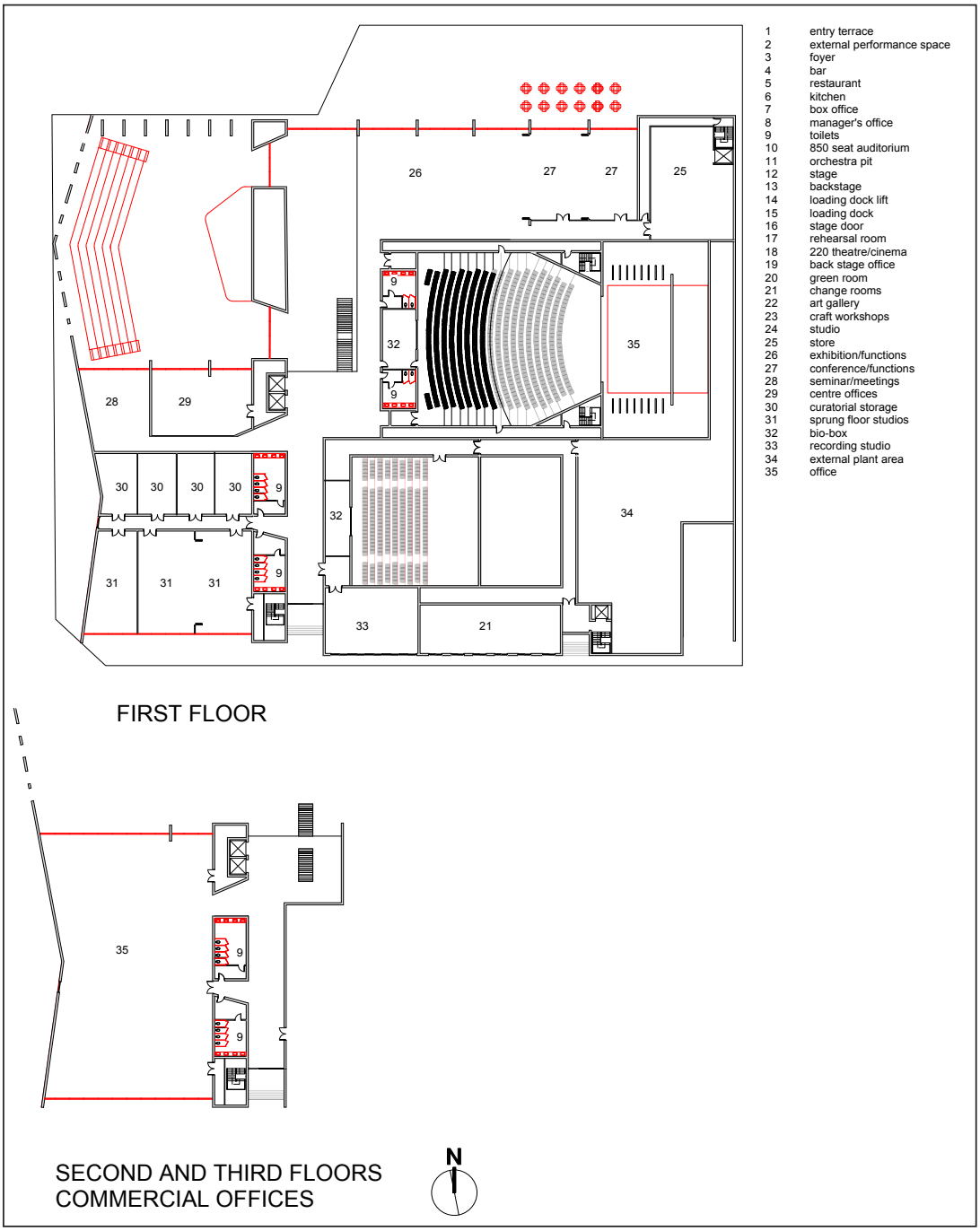
Figure 46 shows the proposed floor plan of the facility, which is across three levels, including one level of undercroft car parking.

Figure 46a: Proposed Floor Plan of the JPACF



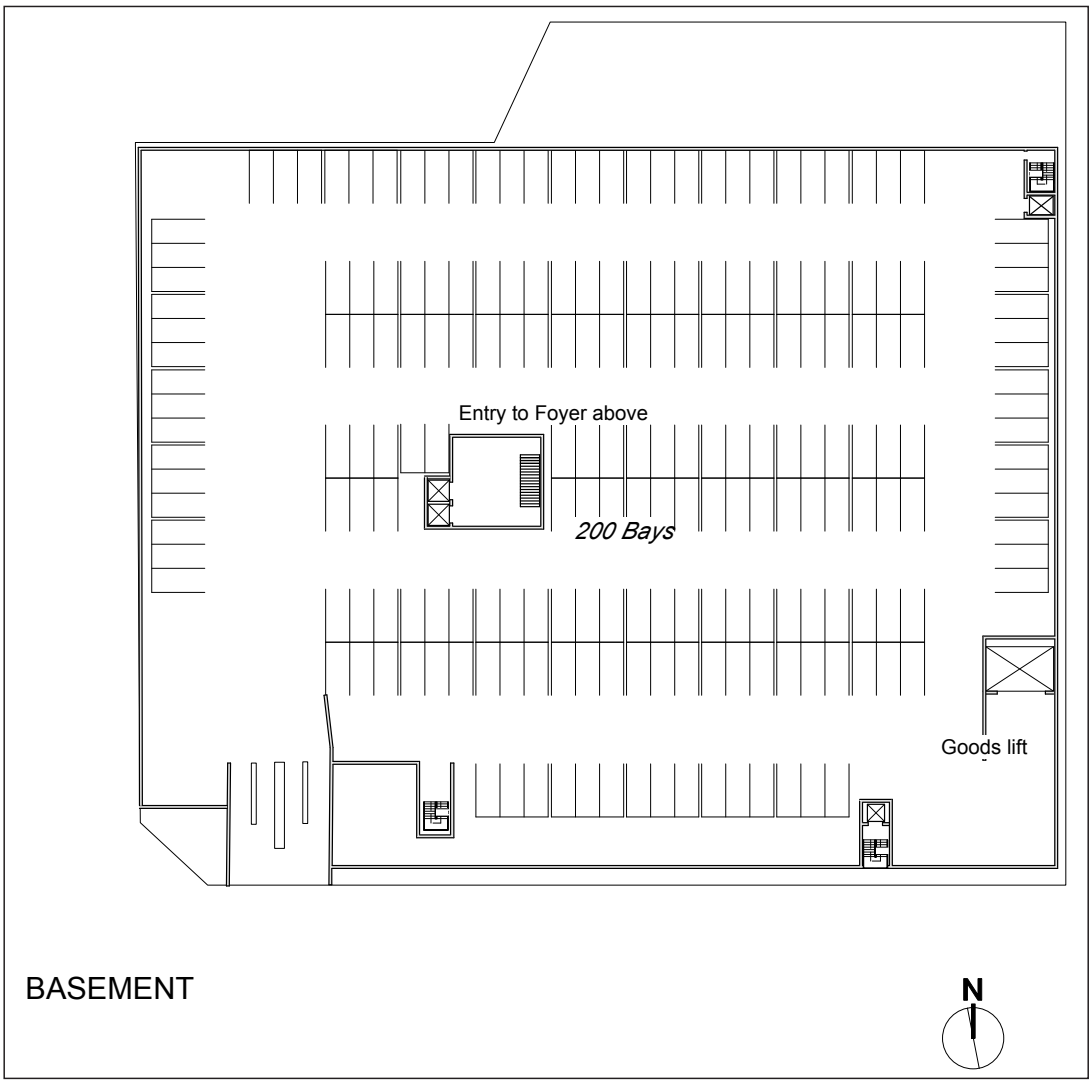
Source: Peter Hobbs, Architect (2012)

Figure 46b: Proposed Floor Plan of the JPACF



Source: Peter Hobbs, Architect (2012)

Figure 46c: Proposed Floor Plan of the JPACF



Source: Peter Hobbs, Architect (2012)

8.0

8 FACILITY

8.1 PRIMARY SPACE

8.1.1 Usage from Model Program

Under the model program, the primary space is 58% utilised, with music accounting for 26 percentage points of this and theatre a further 10 percentage points. Film use only accounts for two percentage points of utilisation. There is two percentage points of Joondalup Eisteddfod use programmed into this space. This space is also expected to hold six large school graduations and 15 large school performances per year.

The primary space is where most of the commercial popular events have been programmed. These are the events that will contribute considerably to the financial viability of the JPACF. These include the touring commercial theatre and contemporary popular dance events. The main space will also have premium dance events, which will not only generate revenue, but will also encourage community participation in dance. Popular and premium music events are also exclusively held in the primary space, and there are three different premium music events per year included in the model program.

It is also envisaged that the main space will house community film events, large comedy festivals, and the performances of local dance school, which was identified as a currently unmet need.

8.1.2 Space specification

In addition to the requirements of the program above, the analysis also considers the school-based performing arts centres in the primary catchment area in determining the capacity of the JPACF's main space. These facilities are at Prendiville Catholic College, Sacred Heart College and St Mary's Anglican Girls' School[18]. The local school-based centres have a capacity of 300, 545 and 509 seats, respectively. Consultation with the managers of these facilities and cultural organisations in the primary catchment revealed that these facilities are heavily utilised, to the point that some potential users were having trouble getting in to them, so presumably something of similar size at the JPACF would also be well-used. In addition, some of the current users considered these facilities to be of inadequate capacity, particularly dance schools. This suggests that there would be some merit in building a facility that is larger than these existing facilities. The Limelight Theatre, Wanneroo was not considered a suitable benchmark for the JPACF, as it is quite a small facility.

The limited availability and relatively small capacity of the school-based performing arts facilities has led to many cultural organisations in the area travelling as far the Swan Park Theatre, Midvale, the Rixon Theatre at Penrhos College, Como and the Mandurah Performing Arts Centre. These facilities are somewhat larger than the school-based centres. The Rixon Theatre at Penrhos College and Mandurah Performing Arts Centre have 750 and 800 seats, respectively, and the Swan Park Theatre has 594 seats. As they are frequently used by cultural groups within the area, despite being an inconveniently long distance away, there is a demonstrated demand for such a facility in the area. Figure 47 details the existing performing arts facilities that have been identified as servicing the primary catchment area.

18 St Mary's Anglican Girls School has been considered even though it is just outside the primary catchment area, being located in the City of Stirling.

Figure 47: Performing Arts Facilities Servicing the Primary Catchment

Source: Pracsys (2012)

The three identified benchmark facilities - Joan Sutherland Performing Arts Centre, Frankston Arts Centre and Ipswich Civic Centre have primary performance spaces with a capacity of 660, 800 and 741 seats, respectively.

Based on this benchmarking and the model program, an auditorium of 850 seats has been assumed for this analysis.

The auditorium would be a lyric theatre arranged over two levels to ensure audience proximity to the stage, provided in a typical stalls, upper circle and boxes arrangement. Given that the proposed auditorium is larger than a typical facility. Consideration should be given to blocking off sections with large curtains, to ensure a sense of intimacy in performances with smaller audience numbers. The seating area occupies some 540 square metres. The auditorium should have acoustic values suitable for both the spoken word and classical music.

An orchestra pit of some 40 to 60 square metres should be provided, ideally mechanised so that the pit floor can be raised to stage level to provide a stage thrust.

The stage should be behind a proscenium arch of roughly 5 x 10m, and be 20 x 10m deep inclusive of wings, serviced by a fly tower of 15 metres.

The backstage area is shared with the black box theatre, and should have good adjacency to workshop and loading docks.

8.2 SECONDARY ("BLACK BOX") SPACE

8.2.1 Usage from Model Program

The utilisation rate of the secondary space from the model program is 58%, and has been programmed with the broadest range of different uses. Seventeen percentage points of this is theatre, a higher rate than the main space. There are also nine percentage points of dance, 11 percentage points of music, 6 percentage points of comedy, 5 percentage points of film and eight percentage points of schools use, for medium-sized performances and graduations. There are also Joondalup Eisteddfod events programmed into this space.

Popular and premium level comedy (Australian comedy and comedy festivals, respectively) is shared with the main space. Theatre is also represented at all three levels of the activity

categorisation, with amateur drama, and popular- and premium-level contemporary performances. Smaller dance events have also been programmed in at community, popular and premium level, including education-based contemporary dance. Music has mostly been programmed into the primary space, and has been limited to the hypothetical weekly "Morning Melodies" performances, aimed at seniors and covering 40 event days per year.

8.2.2 Space specification

As with the main auditorium, the specification of the secondary space was developed with reference to the three benchmark facilities identified above.

The Joan Sutherland Performing Arts Centre has a 380 seat drama theatre as a secondary space. Frankston has the 194 seat "Cube 37". The Ipwich Civic Centre's second space is the Cunningham Room, which can seat 160 people, theatre style, but is not specifically a performing arts-based facility.

For the secondary space, a "black box" studio theatre is proposed, with 200 moveable seats, allowing the space to be re-configured for different uses. It is 510 square metres in size, including an external circulation corridor that allows actors to enter the performance space from a number of different quarters.

This theatre configuration is suitable for more avant-garde stagings, and is an inherently flexible performance space. It is ideal for smaller, more intimate performances, and can also be used as a theatrette for film, dance and seminars. As a flat floor space, it can also be used for rehearsals, dance classes and workshops. It is the ideal companion to the lyric theatre.

8.3 CONFERENCE ROOMS

8.3.1 Usage

As explained above, research to date has found little demand for additional conference or function use in the primary catchment area. Lack of suitable short-stay (hotel) accommodation in the city centre is a major constraint to attracting conferences. However, demand is likely to increase over time as the catchment population grows and Joondalup matures as an activity centre. Also, the project philosophies and parameters stated that such uses should be considered. Therefore, some free capacity has been left for conferences to take place. Two conference overflow rooms have been included in the design.

8.3.2 Space specification

The conference rooms are flexible spaces that use operable walls to divide the space into different sized modules, from 20 person seminar work-shop spaces, that combine to cater for up to 120 person seminars. Adjacent to the upper foyer space, these rooms can also be expanded to provide larger reception and exhibition areas. In the proposed Art Box, these spaces are linked by a lift to the primary kitchens of the restaurants, so would be ideal for larger dinners, weddings and conference functions.

These spaces should be provided with mobile audio-visual carts that allow a range of seating configurations. They are ideal for trade and training workshops, and can also be used as over flow rehearsal spaces.

8.4 FOYER EXHIBITION AREA

8.4.1 Usage from Model Program

The model program has shown a very high utilisation rate for visual arts in the combined reception area and exhibition space. The unmet needs of the City's Visual Arts Services (a large collection stored in unsuitable facilities and the annual visual art events held in Lakeside Joondalup), as identified in prior City of Joondalup research, provides a strong argument for a separate art gallery space. See below for detail of the proposed art gallery.

The exhibition/reception area has been programmed with exhibition openings, over a total of 12 event days per year. Most of the visual arts events have been assigned to a dedicated gallery space, however. The exhibition/reception area will also hold the opening for the Invitation Art Awards, and school visual arts exhibitions for 12 events days per year.

8.4.2 Space specification

The combined foyer and exhibition area is essentially the primary ground floor circulation space of the Art Box, with a nominal area of 300 square metres, and is ideal for the display of various travelling exhibitions such as trade shows and expos, with mobile partitions to be used to provide ultimate flexibility. However, due to the general nature of the space, and its function as circulation for large numbers it is not necessarily suitable for the display of high value works.

An important design feature of the foyer space and various entrances will be to facilitate controlled entrances from various locations that allows the building to be partially opened and segmented. For example, the operation of the black box theatre for weekend art house movies should not require the entire complex to open, and this principle should apply to the various subsets of use within the Art Box, including dance rehearsal space, drawing and craft spaces, etc.

8.5 ART GALLERY

8.5.1 Usage from Model Program

The model program has an 83% utilisation rate for the art gallery. This includes the Joondalup Community Art Exhibition over two weeks, the Invitation Art Awards over three weeks, and art exhibitions in the popular category for a further 240 event days.

8.5.2 Space specification

Over the last 20 years, the City of Joondalup has assembled over 200 pieces of fine art, and has an ongoing commitment to enhance and grow this significant collection. Currently, the City has no opportunity to display this collection in a quality, well lit space. The Art Box proposes an Art Gallery of some 400 square metres, that should include curatorial quality air conditioning and lighting.

8.6 CRAFT STUDIO

8.6.1 Usage from Model Program

The craft studio has been assumed to be 100% utilised, for adult participation. The breakdown, based on ABS surveys of adult participation, were assumed to be:

- 60% textile crafts, jewellery making, paper crafts or wood crafts

- 10% glass crafts, pottery, ceramics or mosaics
- 10% printmaking, screen printing or etching
- 20% photography, film-making or editing, apart from recording personal events.

8.6.2 Space specification

Located on the south side of the Art Gallery, the craft studio is 95 square metres, and should be serviced with water and power to enable classes for ceramics, pottery and printmaking. The space is light with large south windows, and can be programmed for a wide range of community based crafts practice. The fit out should include adequate storage of various materials, and include long central work benches.

Surfaces should be hard-wearing and durable.

8.7 DRAWING AND PAINTING STUDIO

8.7.1 Usage from Model Program

The drawing and painting studio was assumed to be used solely for adults' sculpting, painting, drawing or cartooning, including digital pieces (which is a single category in the ABS survey19).

8.7.2 Space specification

The drawing and painting studio is 230 square metres, that can be divided into two smaller spaces with an operable wall. In its larger format, the space is essentially square, making it ideal for larger life drawing and painting classes. The space requires adequate ventilation, lighting and drainage, including traps for the capture of various solvents, etc.

8.8 PERFORMANCE REHEARSAL SPACES

8.8.1 Usage from Model Program

Based on the activity included in the model program, two rehearsal spaces have been deemed necessary for the JPACF. A range of adults' and children's activities have been included in these spaces.

8.8.2 Space specification

The four rehearsal rooms are of varying size. The largest is 270 square metres, and is located directly behind the black box theatre and is adjacent to the stage of the lyric theatre. As such, it becomes the primary rehearsal space for both the theatres, and is also adjacent to the loading docks and works shops, making it suitable for becoming a workspace for large scenery pieces.

The other rehearsal spaces are located above the craft and drawing studios, and are essentially a duplication of them. It is envisaged that the larger space will be of 220 square metres and will be set up predominantly as a dance studio, complete with mirror and bar. Large south windows provide views back over ECU.

19 ABS Cat No. 4921.0 Participation in selected cultural activities (2010 - 11)

8.9 PRACTICE ROOMS

8.9.1 Usage from Model Program

For the model program, it has been assumed that four practice rooms be included in the JPACF. Singing and playing musical instruments, by both adults and children, have been programmed into these spaces.

8.9.2 Space specification

The four practice rooms are 15 square metres each.

8.10 ADMINISTRATION/OFFICE SPACE

General purpose open planned offices for up to six support staff, two managers offices and a meeting room is minimum for centre management, and has been located on the first floor. Additional offices for technical staff (head mechanist, head audio lighting technician) are proposed and will be located within the backstage/workshop area.

A stage door office should be provided to control the loading dock, green room and stage door.

A box office and general administration desk will be allocated centrally within the foyer space, providing invigilation for the complex during operational times

8.11 CURATORIAL STORAGE

The City currently has a collection of over 200 works of fine art, and is continuing this acquisition policy. However, there is no formal curatorial storage space for these works. As the value of this collection grows, specialist storage space will be required, that is fire proof, and has controlled humidity, dust and light levels. In the model proposed, this space is located directly above the art gallery.

8.12 EXTERNAL PERFORMANCE SPACE

The Art Box design suggests an external forecourt to the building that should be designed to function as a small external performance area. In the model proposed, sculptural tiered seats face a large blank wall that would be suitable for projected signage and movies, while the space is also served with some technical storage areas and a small back stage change room. Designing this kind of flexibility of use can only enhance the JPACF's utilisation.

8.13 RETAIL, FOOD AND BEVERAGE

A number of food and beverage opportunities exist within the Art Box, and the viability and quality of this offer will be a function of:

- The quality and management of the premises
- The general activation of the Art Box
- The Art Box's capacity to capture passing pedestrian trade along Grand Boulevard, and from the adjacent education precincts

The café bar must be suitable to cater for large audience of up to 800 patrons, and a caterers' kitchen has been provided for functions and receptions. However, given that West Coast Institute of Technology Hospitality is

immediately next door to the Art Box, the opportunity to negotiate a shared use should be investigated.

Ideally, a restaurant should be developed as a stand-alone commercial venture, that faces north over Central Park, and becomes a destination in its own right. This café restaurant should have external entrances separate for the complex, but that can then open into the foyer space.

8.14 COMMERCIAL OFFICES

One opportunity to improve the commercial viability of Art Box is to develop additional general purpose office space, that can be leased at commercial rates. The proposed design has located this space above the western wing of the Art Box overlooking Grand Boulevard. The floor plate is some 425 square metres, and the design is flexible enough to add up to two additional floors and maintaining the height limit defined by the fly tower. This space could be overflow for the City's administration, and would ideally be the space for community development, art offices, etc.

As commercial space, the yield would also support the general viability of the car park space and cafes.

8.15 CARPARKING

The Art Box has been designed to sit over a 200 bay car park basement, that can also be utilised for long term storage. Access is shown from Teakle Court.

Given that the total capacity of the Art Box is in excess of 1,000 patrons, the provision of this parking is an essential, albeit expensive amenity. The cost benefit of this parking will be greatly enhanced with daytime paid parking.

9.0

9 OPERATIONS ANALYSIS

This chapter identifies the key management tasks and responsibilities required to run a performing arts and cultural facility. From these management tasks, a proposed management structure will be developed, based on a structure typical of existing performing arts and cultural facilities.

The management tasks and responsibilities are grouped into four areas of focus:

- Program management
- Facility management
- Equipment management
- Administrative tasks

There are significant overlaps in the required tasks and responsibilities between the different areas of management focus. Additionally, activities that are in principle statutory requirements or obligations, such as occupational health and safety, are significant tasks for the management team.

The list of tasks has been informed by position descriptions from the State Theatre Centre of Western Australia, and as such reflects current venue staffing requirements.

9.1 PROGRAM MANAGEMENT TASKS

Program management tasks are those that are primarily focused on the development, management, promotion and reporting of core program activity. This includes both entrepreneurial and subsidised activity, including but not limited to performances, exhibitions, workshops, events and other cultural activities.

Program management tasks include:

- The overall responsibility for the program activities housed within and developed through the venue including artistic, corporate and community access, financial, technical and marketing requirements
- Develop the annual and medium term programs and budget
- Represent and promote the facility at industry and community forums
- Develop and promote strategic partnerships to support an effective overall artistic program
- Manage all aspects of ticketing services – including the provision of point of contact retail and online services, staffing and hardware and software operation
- Manage all aspects of the facility's communications strategy, including traditional and online marketing, signage and publicity, and corporate, program and event branding
- Liaison with regular hirers, both professional and community
- Generate external hiring business (artistic and non-artistic) through the promotion of the venue's services and facilities
- Manage all enquiries for venue usage and negotiate with potential hirers
- Assist all hirers in their requirements for quotes, site inspections, food and beverage liaison, marketing, promotions and ticketing

- Coordinate and document event/ performance requirements for the front of house operation, including rostering and managing front of house staff
- Create contracts for hirers of the facility
- Monitor performance outcomes and manage any issues arising
- Prepare monthly program reports and statistics
- Report incidents, damage to property and equipment failure
- Ensure that appropriate technical stage staff are rostered to meet the needs of hirers
- Plan projected expense budgets for hirer's technical requirements

9.2 FACILITY MANAGEMENT TASKS

Facility management tasks relate to the proper and efficient operation of the facility, including responsibility for issues of safety, training, public movement, cleaning and minor maintenance.

Facility management tasks include:

- The overall professional management responsibility for the physical venue including but not limited to issues of maintenance, financial, technical, security and signage
- Implement the annual facility budget and forward planning of the venue
- Develop routine and ongoing maintenance, repair and replacement schedules
- Promote strategic partnerships and sponsorships to support effective overall facility operation
- Supervise staff and related contractors
- Oversee and monitor environment health and safety policies and procedures, including liaison with City officers
- Neighbourhood and precinct liaison, including but not limited to ECU, WCIT and Joondalup Business Association
- Manage safety incidents, damage to property and significant facility failure
- Provide ongoing training for front of house staff and volunteers
- Oversee the development and implementation of evacuation procedures
- Ensure efficient provision of services for the venue and all related events
- Develop and project-manage the capital works project

9.3 EQUIPMENT MANAGEMENT TASKS

These are the tasks concerning the maintenance, repair and operation of program-specific technology and the facility.

Equipment management tasks include:

- The overall professional management responsibility for the technical and performance requirements of the venue including but not limited to issues of maintenance, financial management, training and security
- Supervise staff and related contractors

- Work closely with City officers to ensure the ongoing smooth management of the JPACF
- Report damage to property and equipment failure
- Participate in and provide ongoing technical and equipment training
- Develop and implement programs for the maintenance, upgrade and purchase of technical equipment
- Oversee the implementation, installation and operation of stage lighting and audio equipment
- Oversee the implementation, installation and usage of studio and craft workshop facilities
- Manage stores and back of house facilities.
- Develop stage, workshop and technical department budgets and input into annual operational budgets
- Project-manage the capital works projects for stage and technical areas

9.4 ADMINISTRATIVE TASKS

These are the standard administrative services required for the operation of the facility, both in day-to-day management and issues of compliance and possible integration with the City's corporate services. These tasks will differ somewhat, depending on the management's the relationship to the City (see discussion of different management models in Chapter 10).

Administrative tasks include:

- The overall professional management responsibility for the administrative requirements of the venue, including human resources, financial, customer service and day-to-day compliance
- Contribute to the development of administrative budgets for the venue
- Supervise staff and related contractors
- Report damage to property and equipment failure
- Participate in and provide ongoing training
- Create contracts for hirers of the facility
- Maintain the venue diary and advanced planner
- Coordinate and document event/ performance requirements for the front of house operation, including rostering and managing front of house staff and volunteers
- Ensure that a venue management system is maintained and regularly updated
- Prepare monthly venue management reports and statistics
- Ensure that the venue's services and facilities are in a fit and proper state to be used by clients
- Report incidents, damage to property and equipment failure
- Develop and implement programs for the maintenance, upgrade and purchase of technical equipment for all performance spaces
- Ensure monitoring of health and safety procedures throughout the building
- Payroll, recruitment and other HR, and compliance

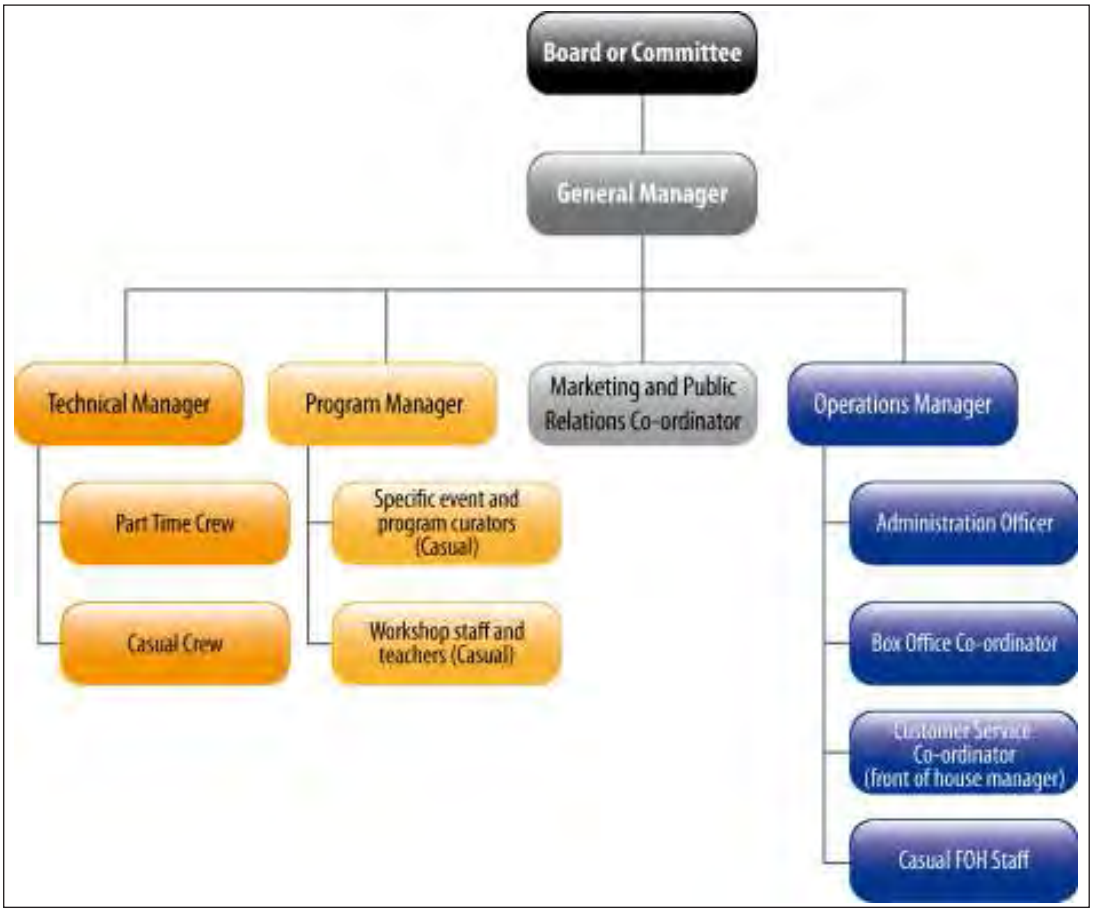
- Oversee discipline and grievance procedures
- Assist with the planning and scheduling of capital works and ongoing maintenance for the venue
- Oversee and ensure ongoing compliance with venue management system policies and procedures for the employment and management of the technical department staff

9.5 ORGANISATION DESIGN

In order to best facilitate the tasks listed, a suggested organisational structure would be as outlined in Figure 48.

This organisational structure has a traditional demarcation between facility and administrative services, and directly links program development and promotion to the general manager. Other organisational models might be suitable, depending on the preferred relationship of the JPACF to the City of Joondalup, especially in the provision of administrative services.

Figure 48: Proposed Organisational Design



Source: Pracsys (2012)

9.6 POSITION DESCRIPTIONS

9.6.1 General Manager

To oversee all aspects of facility operation, with particular reference to program development and promotion, including community engagement and commercial/entrepreneurial development, and the development of grants and sponsorship strategies, as required by the program and for the overall efficient operation of the facility. The general manager also acts as the primary interface between the City of Joondalup and the facility, ensuring effective and timely reporting and interpretation and implementation of current strategic priorities and goals. Finally, this position, in conjunction with the program manager, represents the facility at local, national and international performing arts markets and forums.

9.6.2 Performance Staff

Program Manager

The program manager develops annual programs of activities in conjunction with the general manager, oversees and implements program operation and acts as a point of contact for all community hirers and users. The program manager also acts as a point of liaison between the facility and the City of Joondalup's community development staff.

Technical Manager

Oversees the effective use of technical resources and associated personnel, ensures training and maintenance for all back of house staff and undertakes all scheduling and rostering of staff and crew, as required by the program. The technical/facilities manager acts as a point of liaison between the facility and the City of Joondalup's infrastructure and regulatory services staff.

Crew

Casual or part time crew will be required to deliver the annual/seasonal program, to perform the technical tasks required to run the facility.

9.6.3 Marketing and Public Relations Manager

The marketing and public relations manager will oversee the implementation of the facility's communications plan. This would include oversight of all marketing and public relations activities, as well as traditional and online marketing strategies. Additionally, this role provides program-based reporting, and patron and activity analysis. Finally this position develops and services all sponsorship and grant requirements, in conjunction with the general manager. The marketing and public relations manager also acts as a point of liaison between the facility and the City of Joondalup's marketing services staff.

9.6.4 Administration Staff

Operations Manager

The operations manager is responsible for the effective management of the administration of the facility, with purview of all financial, contractual and HR compliance with City of Joondalup reporting requirements. The operations manager is also responsible for all rostering, cleaning and maintenance required by the facility, in conjunction with the technical manager. Also acts as the main point of contact

for food and beverage and other non-arts users and hirers, and contractors. Acts as a point of liaison between the facility and the City of Joondalup's infrastructure and corporate services staff.

Administrative Staff

Administrative staff provide day-to-day administration, customer service and box office operation.

Front of House Manager

The front of house manager oversees the effective management of the facility after hours and in performance mode, and develops rosters and front of house staff training, in conjunction with the operations manager.

9.7 GOVERNANCE

The JPACF management structure will ultimately be responsible to a board or committee, depending on whether the facility is managed as a department of the City or as a more independent entity. It is envisaged that this board or committee will include community and arts industry representation, as well as representation of the City of Joondalup – both elected members and City officers.

Irrespective of the membership makeup, the following are seen as the primary roles of any governance structure:

- Decision Making – primarily in approving operational and program recommendations from management
- The assessment and revision of strategy and risk
- Performance and financial oversight
- Compliance
- Management selection, evaluation and succession
- Board evaluation and succession
- Stakeholder relationships
- Fundraising

These roles can be shared between the City of Joondalup and an external committee should the facility's preferred operation model be as a department or function within the City's corporate structure. In this case most of the board functions may be provided through officers of the City or a committee of elected members.

10.0

10 MANAGEMENT MODEL

The following chapter develops some useful criteria for assessing different management options, and uses these criteria to assess some of the management models in existing performing arts and cultural facilities.

It is important to note that there is no one best model of facility management, and that each has both advantages and disadvantages. Therefore, there is no recommendation of which model should be employed by the JPACF, but instead a discussion of the strengths and weaknesses of each. With this analysis, the City can then make an informed decision on which of these models best meets its cultural policy objectives and other requirements.

This chapter also contains a preliminary discussion of risk management.

Both the assessment criteria for the different management models and the risk management assessment are informed by the JPACF Project Philosophy and Parameters, as this is the best guide to the City's criteria for the success of the project.

10.1 MANAGEMENT OPTIONS

Four management options have been identified for the JPACF, based on existing management models for arts and cultural facilities in Australia. These options represent different levels of independence from the City's hierarchy.

It should be noted that under all models the City will be ultimately responsible for all significant capital maintenance and expenditure.

10.1.1 Independent or Arm's Length Relationship

This model involves an independent or arm's length relationship between the City and JPACF management. Under this model, the City would provide a fixed subsidy, and the board and management would be free to run the facility as a commercial and entrepreneurial organisation, with minimal interference and within the capacity dictated by the financial support.

The City's objectives and community cultural requirements would only be addressed through annual review and or reporting to the City.

Under this option the facility would have the greatest capacity to directly source and apply for external grants and enter into sponsorship arrangements, where the City may not be able to. Inversely the facility would have greater administrative and compliance costs, with payroll, HR, audit and governance costs.

This is the model currently being employed to manage the Bunbury Regional Entertainment Centre and the Joan Sutherland Performing Arts Centre, in Penrith, NSW.

10.1.2 Outsourced Management

Under the outsourced management model, a third party organisation manages the facility on behalf of the City. As with the independent management option, the City would have little control over the day-to-day running of the facility, with the management team being accountable for end results as determined by the tendered agreement.

This is the style of management adopted by all Perth Theatre Trust venues, with management provided through AEG Ogden's. There are very few potential tenderers for this model.

The benefits of this model are that the City can enter into a long term outsourcing program.

10.1.3 The JPACF as a Department within the City of Joondalup

Instead of being run by an external organisation, the JPACF could instead be managed as a department within the City. Under this model the full-time staff would be officers of the City, and so would fit into the City's regular hierarchy. The City would therefore maintain full control of the operations of the JPACF.

This management model is used for the Frankston Performing Arts Centre, Victoria, which is run as a department of Frankston City.

10.1.4 The City's Cultural Program Contained within the JPACF

This model is similar to the above, involving running the JPACF as a department of the City, but with the facility containing the City's entire cultural program, and management being responsible for the City's entire cultural budget. This is the model adopted by the Glasshouse in Port Macquarie, NSW.

In addition to being a performing arts venue, the Glasshouse delivers education and training programs, gallery and heritage services and programs that enhance the development of creative and cultural industries. It also provides a visitor information centre. The centre recoups its costs from the performing arts program, catering, venue hire and event services.[20]

20 Glasshouse Port Macquarie 3rd Anniversary Report (2012)

10.2 ASSESSMENT CRITERIA

As discussed above, there is no one best management model, and each model represents a trade-off between different benefits. Management options should be assessed according to a range of criteria.

As mentioned above, the criteria are informed by the JPACF Project Philosophy and Parameters, although not all of the precepts set out in this document are relevant to deciding between different management models (for example, considerations relating to the design of the facility).

10.2.1 JPACF Project Philosophy and Parameters

The JPACF Project Philosophy and Parameters sets out the JPACF vision as aspiring to:

- Create synergies with the existing educational institutions and reinforce the Joondalup City Centre as the creative and educational centre of the northern corridor
- Provide a world class, state of the art centre incorporating innovative and sustainable design, that is architecturally symbiotic with the existing natural and built environment
- Project an ambience of cultural significance, providing an easily recognised entry statement to the City that creates strong visual and physical linkages to existing and future civic buildings, learning precinct, green areas and transport hub.

- Become a place to celebrate imagination and creativity, inspiring individuals and the community to take part in the arts and raise the aspirations of all users.
- Create an inclusive environment where people of all ages and levels of cultural awareness can develop and nurture a strong sense of the possibilities that the arts can provide.
- Provide a facility that can host a mixture of commercial and community activities that supports the viability and attraction of the venue.

The document expands these into a range of development parameters:

- Governance
- Land use and built form
- Fiscal responsibility and commerciality
- Sustainability considerations
- Liaison protocol

10.2.2 Proposed Assessment Criteria

The proposed assessment criteria for assessing the JPACF management options are:

- Promotion of culturally significant activity – more independence will probably mean more culturally significant activity (at the expense of community involvement)
- Community engagement – if the JPACF was managed by the City, there would probably be greater community involvement, as an independent organisation would probably put more weight on commercial or artistic goals. There is probably a trade-off between these first two criteria.
- Formal or explicit financial risk to the City – if the JPACF is an independent organisation, then there is no explicit financial risk to the City. However, it is unlikely that the City would allow the JPACF to close down, so this is probably illusory.
- Flexibility regarding staffing, investment and other management issues – an independent body would probably have more flexibility with assigning staff than if the JPACF was a part of the City, and so subject to the City's HR policies. Also, if the centre was tied to the City financially, then decisions concerning re-investment, expansions and upgrades, or maintenance might be affected by the City's other financial responsibilities.
- Responsiveness – this is a measure of the ability of management to respond to changing requirements of the community, the City or the arts industry, rather than being unnecessarily bureaucratic.

Figure 49 displays how each of the four management models can be expected to perform against each of the five assessment criteria.

Figure 49: Management Options for the JPACF

Source: Pracsys (2012)

10.3 DISCUSSION

The independent/arm's length management model and the two within-City models can be expected to produce stronger outcomes in terms of promoting culturally significant activity and community engagement. This is particularly so for the "Glasshouse model", as it sends a clear signal to the public and artistic community that the City valued and is engaged with the arts and cultural life of the community.

The tendered management model would most likely provide the lowest expectation for innovative programming and growing community engagement, as the management would only be incentivised to provide services at the level considered appropriate in the tender agreement.

The greatest financial risk is associated with the independent/arm's length model, as the City still be financially responsible, but with less formal control and purview. The lowest level of financial risk can be expected to come from the outsourced management model, as they are given a fixed contract to provide certain services.

The independent management of the outsourced management model and arm's length/independent model will also have greater freedom to make staffing, investment or programming changes, making the JPACF more flexible and responsive organisationally. This is both in terms of employment structures and the schedule of fees and charges. Additionally, an arm's length management model escapes the perception of being a bureaucratised function of the City, allowing a more casual approach to negotiations with commercial presenters. Beneficially, this model also allows the City to be less associated with controversial programming choices, making the venue management more accountable.

The two within-City models can be expected to be less flexible than the external management models. The within-City models are likely to be bound by more rigorous reporting requirements within the City's structure.

10.4 PRELIMINARY RISK MANAGEMENT ASSESSMENT

The following preliminary risk management assessment uses the City of Joondalup's Risk Management Framework to assess the potential risks arising from the operations of a performing arts and cultural facility. Risk management should be an ongoing process, and the JPACF's management should adhere to the specific principles laid out in the Framework.

It should be noted that the following is only a preliminary risk management assessment, and does not deal in detail with the process of implementing risk management.

10.4.1 City of Joondalup Risk Management Framework

The City of Joondalup's Risk Management Framework has been designed to comply with AS/NZS ISO 31000:2009 ("the Standard"), which supersedes AS/NZS 4360:2004. The Framework bases its definition of risk on that found in the Standard:

> *"Risk is defined by the Standard as "the effect of uncertainty on objectives". An effect is a deviation from the expected and can be either positive or negative. Objectives can have different aspects e.g. financial, environmental, political, and health and safety. Risk is often expressed in terms of a combination of the consequences of an event and the associated likelihood."*[21]

The Framework also addresses the issue of risk appetite – the amount of risk to which an organisation is prepared to be exposed before it judges action to be necessary. The City's stated risk appetite is "risk prudent". It will be for the JPACF's board or the responsible committee within the City to interpret the precise meaning of risk prudent in relation to the JPACF's operations.

Figure 50 presents the Framework's risk assessment matrix, which will be used to assess the risks that the JPACF is exposed to.

Figure 50: City of Joondalup Risk Assessment Matrix

Likelihood	Consequences			
	Catastrophic	Major	Medium	Minor
Almost Certain	Catastrophic (1)	Extreme (2)	High (3)	Moderate (4)
Possible	Extreme (2)	High (3)	Moderate (4)	Low (5)
Unlikely	High (3)	Moderate (4)	Low (5)	Low (5)

Source: City of Joondalup (2011)

The risk assessment criteria are based on the likelihood and consequences of a particular risk occurring. The consequences are defined as either:

- Catastrophic – death, loss of system or plant, significant impact on operating environment such that public interest or regulatory intervention occurs or could reasonably occur
- Major – major injury, severe disruption to service or project, major damage to system, unplanned localised damage to operating environment

21 City of Joondalup, Risk Management Framework, May 2011, page 1.

- Medium – minor injury, some disruption to service or project delivery, minor damage to system, non-damaging to operating environment
- Minor – less than the above

And the likelihood is defined as:

- Almost certain – likely to occur during the life of an individual project, activity or system, or very often in operation of a large number of similar items
- Possible – likely to occur at some time or several times in the life of an individual project, activity, or system, or very often in operation of a large number of similar items
- Unlikely – remote, but possible to occur sometime in the life of an individual project, activity, or system, or it may be possible, but unlikely, to occur in the life of a large number of similar items

Clearly, those risks that have major or catastrophic risks, and are almost certain or possible should be given the most attention. Those that are only of minor consequence and are unlikely to occur can possibly be ignored. The combination of consequence and likelihood are combined to give one of the following overall threat levels, as shown in Appendix 3:

- Catastrophic
- Extreme
- High
- Moderate
- Low

10.4.2 Sources of Risk for the JPACF

The likely risks to the JPACF have been grouped into four categories:

- Governance risk
- Market risk
- Operations/management risk
- Financial risk

The specific risks are laid out in the risk register, which appears in Appendix 3.

In summary, the most significant areas of risk that will need to be mitigated against are occupational health and safety, program or usage risks, or the facility underperforming, and potentially exposing the City to financial risk.

Appropriate recruitment and management practices can mitigate most of the higher-order threats that have been identified.

11.0

11 CAPITAL REQUIREMENTS

The construction cost of the JPACF was developed by the Quantity Surveyor, based on the Art Box design described above. As capital works involve a substantial cost, it is not expected that the City of Joondalup would fund the project's construction without financial assistance from the state or federal governments, or some other source.

11.1 PRELIMINARY CAPITAL COST

The Art Box design option for the JPACF has been costed by the Quantity Surveyor, with an estimate of $78 million, including contingencies, fees, fit-out and other related costs. Figure 51 provides a summary of the order of magnitude costing. The full costing can be found in Appendix 4.

Figure 51: Order of Magnitude Costing for the JPACF Art Box Design.

Cost item	Cost
Clear site, preparation, etc.	205,000
Basement car park (200 bays)	8,400,000
Extra for roof slab (outside of building line over)	160,000
Ground floor	28,371,500
First floor	13,233,000
General	3,450,000
Sub-total	53,819,500
Contingency and Escalation to 2014	11,427,127
Sub-total	**65,246,627**
Fit Out and Fees	12,791,254
Estimated Current Construction Cost (excl. GST)	**78,037,881**
Levels 2 and 3 commercial offices, incl. contingencies, fees, fit-out, etc.	8,750,000
Additional basement level car-park (extra 200 bays)	13,720,000

Source: Pracsys (2012)

The cost estimate also includes the additional cost of adding two floors of commercial office space to the centre and an extra basement level of underground car parking, with 200 additional bays. Both of these options have the potential to provide additional revenue to the facility, offsetting the operating costs of delivering the cultural program. This will be discussed further in the funding strategy section of the report.

11.1.1 Exclusions

The following items are excluded from the financial analysis:

- Land Cost (the model assumes the Land has been gifted to the City)
- Legal Cost
- Local authority management fee (it is expected that the City will waive this)
- Green star rating and non code ESD initiatives (at this stage of the design process the cost of ESD initiatives is unknown)
- GST (it is unknown what the City's GST liability will be)
- Tax depreciation

11.2 FUNDING SOURCES

If the City financed construction in its entirety, the cost of capital would be $6.55 million per annum, assuming government rate financing. This is clearly not a feasible option, and the City will need to consider its options for sourcing part or all of the capital costs through other public or private sector sources.

In addition to the City's contribution to the construction costs of the JPACF, funding could

potentially be sourced from either state or federal governments, or the private sector.

11.2.1 Western Australian Government

The Western Australian Government is the most likely source of funding assistance for constructing the JPACF.

There are no regular culture and arts programs for funding capital works, with ongoing programs generally being intended to support arts activities and producers instead. Therefore, the JPACF would be handled as a distinct project, and would probably be arranged through a political lobbying process.

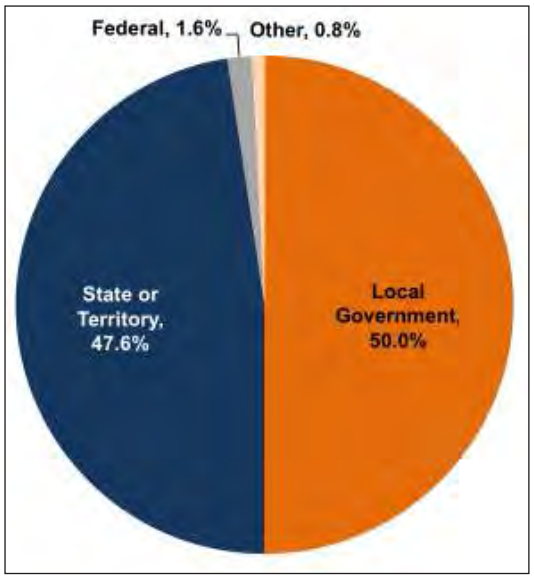
The Department for Culture and the Arts (DCA) has a wide range of regular funding programs, but these are aimed at arts producers, rather than infrastructure or facility development. There are programs for art development and marketing, supporting artists in residence, etc. Capital funding for the JPACF would therefore have to be a raised as special, one-off project, and would most likely not go through the DCA. This would have to be agreed between the City of Joondalup and the Western Australian Government at a ministerial level, probably the Minister for Local Government. The DCA would instead be able to provide funding to help deliver the program, once the facility had been constructed.

11.2.2 Australian Government

The Australian Government also provides support to the arts. The Australia Council for the Arts (commonly referred to as just "The Australia Council") is the Government's official arts funding and advisory body. Annual funding distributed by the Australia Council is currently running at $160 million[22]. As with the DCA, however, the Australia Council does not fund capital works, but would be able to provide support for specific programs that take place at the JPACF.

As shown in Figure 52, federal funding for performing arts centre capital works has been quite limited, so it should not be assumed that the federal government would contribute to the construction costs of the JPACF.

Figure 52: Sources of Capital Funding for Performing Arts Centres



Source: 2009 Economic Activity Report (APACA, 2012)

11.2.3 Private Sector and Lotterywest

There is also the potential for sponsorship funding to be provided by major organisations operating in the catchment area. Major organisations in the area include Lendlease, the owners of Lakeside Joondalup Shopping

22 http://www.australiacouncil.gov.au/about

Centre, Edith Cowan University and the West Coast Institute of Technology.

Lotterywest should also be approached for funding, as it disburses the proceeds of its gaming activities to a range of community organisations, including providing significant support for the arts in Western Australia. Lotterywest's "Big Ideas" funding program is intended to support ideas that are out of the ordinary, and that "might provide enjoyment for large numbers of people, help to bring about important change, or create a major community asset"[23]. Examples of community assets that have been developed with funding from this program include the Lotterywest Federation Walkway in Kings Park, Albany Biodiversity Park and National Memorial to HMAS Sydney (Geraldton).

Current sponsors of the Joondalup Eisteddfod and other City cultural programs might also be prepared to provide some support for developing the JPACF.

Figure 53: Comparison of the Traditional PAC and Art Box Design

	Traditional PAC	Art Box
Cost	$58.8 million	$79.5 million
Discussion	· Allows performances in the two performance spaces · Limited community activity and engagement · Contains rehearsal spaces as well as performance space	· Allows for substantial community activity, in addition to professional performances in the two main spaces · Significant visual arts potential · Purpose built art and craft workshop and learning spaces, improving community engagement, as per the Project Philosophies and Parameters

Source: Ralph Beattie Bosworth, Peter Hobbs Architect and Pracsys (2012)

23 http://www.lotterywest.wa.gov.au/grants/grant-types/big-ideas

11.3 TRADITIONAL PERFORMING ARTS CENTRE DESIGN

For the purposes of this feasibility study, Pracsys has developed two designs: a traditional performing arts centre design, and a cultural community arts centre, dubbed the "Art Box" – as discussed above. In addition to the performance and rehearsal spaces contained in the Trad PAC design, the Art Box also contains designated arts and crafts workshop spaces, a gallery and exhibition space and conference facilities, as well as commercial office space, which the City could either use for its own purposes or lease out. The Art Box will be significantly more expensive than the Trad PAC design, but meets the requirements of the Project Philosophy and Parameters more fully. Figure 53 outlines a brief summary of the difference between the two designs.

The schedule of areas for the Trad PAC design can be found in Appendix 5.

11.3.1 The Program of the Traditional PAC Design

The program for the JPACF will vary considerably in terms of diversity and scale under the two options. The program for the Traditional PAC will have a much greater focus on performing arts due to the absence of the art gallery, craft studio and drawing and painting studios. While these spaces were not anticipated to be revenue drivers for the facility, the loss will affect the facility's ability to provide opportunities for local residents to attend and participate in these disciplines.

It may also have a small impact on the use of other spaces as the benefits from the co-location of a diverse range of culture and

arts activities will not be realized. The cost saving of not providing visual arts and craft opportunities within JPACF needs to be considered against the cost of alternative options for their provision elsewhere in the City of Joondalup, or indeed the implications of not providing them at all.

The Traditional PAC also contains a smaller main theatre. The effect of this will be two-fold:

- It will limit the annual number of hires, particularly for community groups such as local dance schools who have identified a need for a larger theatre space
- It will reduce the level of ticket revenue that can be generated from the presentation of commercial events

11.4 FUNDING STRATEGY

Given the scale of the JPACF, funding will have to be drawn from a range of sources, including contributions from the City, the Western Australia Government and potentially other sources of funding, as described above.

The 2009 Economic Activity Report prepared by the Australian Performing Arts Centres Association provides aggregate data on the sources of capital for performing arts centres around Australia, as shown in Figure 52.

As shown in Figure 52, capital funding has overwhelmingly been provided by local and state or territory government. Private sector or federal government funding is still a possibility for the JPACF, however.

Based on discussions with the City, out of the total capital cost of $79.5 million, it has been assumed that $23 million would be funded from the City's reserves, with the remainder being required as a loan from Treasury. See below for further discussion of financing costs.

11.5 OPTIONS FOR REDUCING THE CAPITAL COST

In developing the initial cost estimate developed for the JPACF, the Quantity Surveyor assumed a high-quality regional performing arts facility. This would be commensurate with the Albany Entertainment Centre and somewhat below the specification of the State Theatre Centre.

To provide the City with options for reducing the capital cost of the JPACF, the Quantity Surveyor has provided additional estimates of the construction cost if certain facilities were left out. These are:

- Restaurant and bar
- Art gallery, workshop and studio
- Exhibition and conference space
- Basement carpark
- External performance space
- Level 1 storage space

The estimated cost of the facility without each of these facilities is summarised in Figure 54, along with a summary of the effects of leaving out each particular facility. Note that these identified savings are relative to the preferred Art Box design.

Figure 54: Options for Reducing Capital Cost

	Capital Cost Saving	Effect on the JPACF's Function
Cost less restaurant and bar	$3.1 million	· Loss of revenue · Reduced activation · Loss of a more complete "night out" for those attending performances or classes
Cost less art gallery, workshop and studio	$4.3 million	· Reduced cultural significance of the JPACF · Potentially reduced synergies and exchange of ideas between different art forms · JPACF potentially becomes seen as a less attractive venue for premium-level performances · Reduced community participation
Cost less exhibition and conference space	$5.2 million	· Loss of revenue from conferences and exhibitions
Cost less basement carpark	$11.5 million	· Staff and patrons will still have to park somewhere, and it could be highly inconvenient if there is not parking on-site. There would be limited space for parking on the site surrounding the facility. · Potentially significant lost revenue from parking fees
Cost less external performance space	$1.8 million	· The external performance space is a cheap and adaptable space, that would give the JPACF considerable further performance options, especially if utilisation levels become very high.
Cost less Level 1 storage space	$700,000	· Lack of storage space may impede the efficient functioning of the facility

Source: Ralph Beattie Bosworth, Peter Hobbs Architect and Pracsys (2012)

11.5.1 Restaurant and Bar

Constructing the JPACF without the restaurant and bar is estimated to save $3.1 million. However, leaving the restaurant out of the JPACF would result in lost revenue from the restaurant's operations. For the purposes of this study, this has been assumed to be 10% of program revenue - $99,000 in 2016. In addition there is assumed to be catering revenue from this facility.

The restaurant would also be expected to contribute to the activation of the site, as audience members, artists or people participating in conferences or art or craft facilities would remain on the site for some time after productions or other events had finished. Providing the restaurant would also allow for a complete "night out" at the site, and those wishing to eat out before or after an event would have to travel elsewhere, almost certainly by car.

11.5.2 Art Gallery, Workshop and Studio

Constructing the JPACF without the art gallery, workshop and studio is estimated to save $4.3 million. The gallery would provide some revenue from art sales, although it is not certain how much this would be.

The art gallery contributes to the JPACF being a site of cultural significance (one of the requirements of the Project Philosophies and Parameters), and this would be lost if the gallery was not included. As a result of this, the producers of world class performing arts may view the JPACF as a less desirable venue for their events. The gallery also provides the opportunity for the exchange of ideas resulting from having multiple art forms being undertaken at the one site.

Removing the workshop and studio facilities from the JPACF would significantly reduce the extent to which it fulfils its community engagement role, as laid out in the Project Philosophy and Parameters.

11.5.3 Exhibition and Conference Space

Constructing the JPACF without the exhibition and conference space is estimated to save $5.2 million. The conference facilities could potentially be a source of revenue for the facility in the future, although Pracsys consultation identified considerable unused conferencing capacity in the area.

11.5.4 Basement Car Park

Constructing the JPACF without the basement car park is estimated to save $11.5 million. While this is a significant capital cost saving, it has been estimated that the car park would generate $333,000 in the first year of operation (2016).

In addition to this, staff and patrons will still need to access the JPACF somehow. There will be limited space for parking surrounding the facility, and it could be highly inconvenient if there is not parking on-site.

11.5.5 External Performance Space

Constructing the JPACF without the external performance space would save an estimated $1.8 million.

The external performance space requires only a small investment, but would give the JPACF considerable further performance options, especially if utilisation levels become very high. It could accommodate a wide range of uses and could perhaps be upgraded to a more elaborate performance space at some time in the future.

11.5.6 Level 1 Storage Space

Constructing the JPACF without the storage space on level one is estimated to reduce the construction cost by $700,000. Inadequate storage space may impede the efficient functioning of the facility, especially if the facility is being heavily utilised.

12.0

12 TRADING ANALYSIS

The following trading analysis has been based on the design and model program outlined in Chapter 6. For the purposes of this study, it has been assumed that the JPACF is run as a department or division within the City of Joondalup, rather than being run as an arm's length commercial venture or with the management contracted out, as discussed in Chapter 10. This has been considered to be a natural default option, as all revenues and expenses apply to the City, rather than to a contractor who the City then supplies funding to.

It has also been assumed that the management model would not materially affect the JPACF's operational cash flows, but only how they are accounted for. In practice it is possible that there might be differences in costs under different management models, but it is not possible to reliably model this, and so it has not been examined. Cost differences between the different management models would most likely be found in staffing costs, and the staff would be subject to the City's pay scales.

12.1 METHODOLOGY

A discounted cash flow model was created, utilising capital cost estimates determined by RBB and operating cash flow estimates prepared by Pracsys.

12.2 ASSUMPTIONS

The evaluation model used assumptions about key inputs and variables. The model has been developed to be flexible, such that interest rates, project start and completion dates, and other parameters that affect the NPV can be changed and the output will self-adjust. The output reported is based on a number of predetermined values, however – a "base case".

The extent to which these assumptions hold true in the market, will affect the validity of the results. The following assumptions underpin the analysis:

- All revenues and expenses were converted to 2012 values and escalated according to a 2.5% CPI factor
- Construction is assumed to commence in 2014 for a duration of two years
- The facility is assumed to commence operations in 2016
- The present values of the annual net cash flows are calculated over a 20-year period, and are discounted at 6%

The cost escalation and discount factors were determined in consultation with the City.

12.3 REVENUES

12.3.1 Program Revenue

In the market analysis component of this study the potential demand for culture and performing arts activities was explored. This potential demand was then correlated with the expected or required penetration rate to identify the amount of demand required to sustain the facility through an indicative program.

Program revenue for the JPACF will be derived from two sources:

- Rentals
- Presenting events

Rentals

For rentals, the performance spaces will be let to a producer of an event for a fixed fee. The theatre does not otherwise participate in revenues generated by the event, and ticket sales go to the producer. In addition to the rental of the space, users are also charged for the use of specialised staff and optional equipment, such as audio, visual and lighting systems.

Rentals can be structured to generate consistent cash flows, however, they are not typically large revenue generators.

Presenting events

To present events the JPACF will contract with a touring company for a package show. This is a fixed cost and a fixed number of performances. The JPACF provides the advertising and promotion and collects all of the revenues. In the case of presenting events, the JPACF takes all the risk. There is broad trend towards this type of entrepreneurial programming.

Utilisation

Utilisation is a key revenue driver for a performing arts centre. A performing arts venue with a variety of programming is generally considered "fully booked" when 330 days are used in the course of the year. The rest of the year is taken up with facility and equipment maintenance, holidays, etc.

To gauge the assumptions about utilisation, a market comparison of the utilisation of existing venues in Western Australia was conducted, national benchmarks were examined. Without a resident theatre company, the maximum utilisation of the two main theatre spaces is likely to be in the order of 70%, or 231 event days per annum. This is due to a range of factors including the fact that most performing arts and community organisations prefer a Friday, Saturday or Sunday for their event. The maximum utilisation for all other spaces is assumed to be 90%, or 297 days per annum.

The facility is assumed to operate below these maximums in the first year of operation, as a new facility will likely require time to develop its staff's expertise in maximising utilisation. Utilisation is assumed to increase at a rate of 8% per annum (in line with projected population growth for the main trade area) until the maximum utilisation in reached.

Occupancy

Occupancy is the second key revenue driver for cultural and performing arts centres. Occupancy is the proportion of a venue's total capacity that is used for a given performance. For example, if 600 people attended an event in an 800 seat theatre, then the occupancy rate would be 75%. Occupancy affects the revenue from ticket sales, but does not directly affect the revenue from rentals.

Based on industry experience, average occupancies were assigned to each of the events during the programming stage. In the interest of maintaining a conservative analysis, these are assumed to remain constant. However, depending on the expertise of the JPACF's staff, it is possible that the JPACF could achieve above average occupancy rates for its events, which will improve viability.

Rental Fees

An industry comparison of venue hire and standard service fees[24] was conducted for existing venues in Western Australia, as well as identified national benchmarks. For the JPACF, the venue hire and service fees are based on the average of these. The escalation of these fees is assumed to be 2% above CPI, in line with the expected increase in costs. This will need to be balanced with the aim of promoting access and allowing local arts and cultural groups to continue to rent the facility at a reasonable rate.

Figure 55: Rental Fees

	City of Joondalup Rate	Community Rate	Commercial Rate
Primary Space	$1,550	$1,550	$4,970
Secondary Space	$820	$820	$1,860
Conference Room 1	$300	$300	$600
Conference Room 2	$300	$300	$600
Exhibition/Reception	$300	$300	$600
Craft Studio	$75	$75	$125
Drawing and Painting Studio	$75	$75	$125
Rehearsal Rooms	$75	$75	$125
Practice Rooms	$-	$-	$-

Source: Pracsys (2012)

It is important to note that the revenue generated from City of Joondalup hires, is essentially internal revenue.

Ticket Pricing

Ticket pricing will vary greatly based on the type of event being presented and the space used. The average ticket price for the main space is based on typical ticket charges at the Mandurah Performing Arts Centre Boardwalk Theatre, where the price is usually between $40 and $50 for evening shows, and between $20 and $25 for its Morning Melodies program, which is staged during the day and aimed at seniors. By contrast, ticket prices at the State Theatre Centre can range for $20 to over $150 per ticket. Tickets to shows held in the State Theatre Centre's secondary performance space - Studio Underground - typically sell for $20, $25 or $30 and $23 has been taken as a reasonable mid-point. Ticket prices are escalated at 2% above CPI to keep in line with the rising costs of operations.

Figure 56: Average Ticket Prices

	Average Ticket Price
Primary Space	$40
Secondary Space	$23

Source: Pracsys (2012)

Total Program Revenue

At 2016 the program revenue for the JPACF is estimated to be $2,442,676 Approximately 52% will be derived from rental and the balance from entrepreneurial programming.

As previously discussed, the COJ program in the JPACF incorporates the following existing programs:

- Sunday Seranades
- Joondalup Invitation Art Awards
- Joondalup Community Art Exhibiton
- The Joondalup Eisteddfod

If the City is currently using external facilities to host these events, there may be cost savings

24 Service fees include items such as ushers, technical support and utilities.

to the City from relocating these events to the JPACF. While quantification of this is beyond the scope of this study, it is something to be cognisant of when estimating the impact of the project on the City's cash flows.

12.3.2 Additional Sources of Revenue

As a stand-alone cultural and performing arts facility the JPACF would not generate enough revenue to cover its operating costs, and so other sources of revenue will be needed to make up some of the shortfall.

Food and Beverage

The front of house bar is expected to be cost neutral and is seen as an opportunity to provide attendees with light refreshments. In addition to this, the JPACF will be able to generate revenue from catering for events. Catering revenue for the JPACF is estimated at 5% of total rental revenue, which in 2016 would be $64,230 per annum.

Additional parking

The current design has 200 parking bays for the centre's use. Based on estimates provided by the City, the JPACF can expect to generate $1,500 per bay per year in parking revenue. In 2016, the revenue from parking is estimated at $331,144. No escalation of the revenue has been assumed beyond CPI, however as increasing demand for parking creates further pressure, there may be scope for increasing charges (and therefore, revenue). There is the possibility of adding another floor of basement parking, which can then provide additional revenue for the City. This was costed by the Quantity Surveyor, and the capital cost to build this extra level is estimated at $13.7 million. Assuming $1,500 per bay per year, the return on investment for this extra floor of parking would therefore be 2.1%. Unless a third party funds the capital cost, the revenues to the City from the additional parking do not justify the additional investment.

Commercial Offices

The current design allows for 375 square metres of commercial office space which the City could lease and charge a commercial rent for. Assuming a rental yield of $400 per square metre, and assuming a growth rate in rental returns of 2% above CPI, based on increased demand for commercial floorspace in Joondalup, in 2016 the revenue of commercial office leases is estimated at $178,878.

There is the possibility of adding another two floors of commercial office space (2,500 square metres) which can then provide additional revenue for the City, The capital cost to provide this is estimated at $8.75m and this would result in additional $1.0m in unescalated revenue annually (11% return on investment per annum).

Restaurant

The current design allows for a 180 square metre restaurant, which the JPACF could lease to a commercial operator. Assuming a commercial operator is able to achieve an industry average turnover of $5,000 per square metre, the JPACF could charge a commercial rent equivalent to 10% of total revenue, or $500 per square metre. No growth in this yield above CPI has been assumed, as the viability of the restaurant itself has not been assessed in detail. At 2016 the revenue from the restaurant lease is estimated at $99,343 per annum.

Sponsorships and Grants

The amount the JPACF receives in sponsorship and grants will be directly related to how active management is in pursuing these opportunities. Conservatively, the JPACF could expect to attract $50,000 per annum in sponsorship for the art gallery and $50,000 per annum in grants. Revenue from sponsorship and grants is assumed to increase at 2% per annum above CPI, based on the facility management developing expertise in attracting and accessing alternative funding sources.

City Contribution

Finally, the operation of the JPACF will likely require recurrent funding from the City to break even. The contribution required in 2016 to achieve break-even operations estimated to be $496,000. It is important to note that operating the JPACF represents a significant increase in the provision of culture and arts activity by the City of Joondalup. As such the City needs to consider what proportion of the recurrent funding required to run the facility is an increase in their program activity (a cost the City is currently avoiding) versus what proportion is compensating for deadweight loss.

12.4 EXPENSES

12.4.1 Program Costs

Venue Hire and Service Fees

A market comparison of the cost of venue hire and standard service fees[25] was conducted for existing venues in Western Australia, as well as identified national benchmarks. For the JPACF, the venue hire and service fees are based on the average of these.

Figure 57: Venue Hire and Service Fees

	City of Joondalup Rate	Community Rate	Commercial Rate
Primary Space	$1,550	$1,550	$2,470
Secondary Space	$820	$820	$1,060
Conference Room 1	$300	$300	$300
Conference Room 2	$300	$300	$300
Exhibition/Reception	$300	$300	$300
Craft Studio	$75	$75	$75
Drawing and Painting Studio	$75	$75	$75
Rehearsal Rooms	$75	$75	$75
Practice Rooms	$-	$-	$-

Source: Pracsys (2012)

At 2016, the cost of income from rentals is conservatively estimated at $832,933. As the cost of rental income is comprised of labour and utilities, the cost will be sensitive to the changing prices of these inputs. As such the growth rate in costs has been estimated at 2% above CPI.

25 Service fees include items such as standard ushers, technical support and utilities.

Cost of presented events

The role of JPACF management will be to balance opportunity and risk to ensure that the cost of presenting events remains equal to or less than the revenue generated. Conservatively, the cost of presented events is assumed to be 90% of the revenue generated. This equates to $1,042,276 in 2016.

Cost of Food and Beverage

The front of house bar is expected to be cost neutral and is seen as an opportunity to provide attendees with light refreshments. The cost of catering revenue for the JPACF is estimated at 70% of total revenue, which in 2016 would be $44,961 per annum.

12.4.2 Undistributed Operating Expenses

Staffing

Culture and performing arts activity is very labour intensive. As such staffing represents one of the most significant costs to the JPACF. This is compounded by the assumption that the JPACF is contained within the City of Joondalup, due to the high staffing costs linked to the local government award relative to the industry award.

Figure 58 summarises the estimated cost of fulltime staff for the JPACF in the base year. A 40% allowance for on-costs has also been included.

Figure 58: JPACF Full-time Staffing Costs

Position	Average Gross Annual Income	On-Costs	Total
General Manager	81,360	23%	100,073
Technical Manager	67,836	23%	83,438
Program Manager	67,836	23%	83,438
Marketing and Public Relations Co-ordinator	67,836	23%	83,438
Operations Manager	62,776	23%	77,214
Administration Officer	67,836	23%	83,438
Box Office Co-ordinator	56,865	23%	69,944
Customer Service Co-ordinator	56,865	23%	69,944
Total	529,210	23%	650,928

Source: Pracsys (2012)

Staffing costs are assumed to escalate at 2% per annum above CPI. Note that staffing costs do not include a visual arts curator.

Marketing

The marketing budget of performing arts and cultural facilities varies greatly. A well-managed, multi-channel marketing budget will be critical for translating latent demand into revenue and attracting sponsorship for the JPACF. The initial marketing budget for the JPACF is conservatively assumed to be $150,000 in 2012 dollars. This equates to $178,878 at 2016. As marketing relates to both venue marketing and event marketing, this expense does not represent an entirely net new expense to the City of Joondalup, as the City will already have marketing budgets for many of the existing programs that it is assumed will be accommodated at the JPACF.

Administration

The administrative costs of the JPACF are estimated at 5% of total program revenue. This equates to $122,134 at 2016.

12.4.3 Building operations and maintenance

Increasing operations and maintenance costs presents a challenge for all facilities managers, and under-estimating the ongoing costs of building operation and maintenance has been an issue for a number of cultural and arts facilities in Australia.

Figure 59 summarises the estimated building operations and maintenance costs and growth rates.

One of the most significant costs of operating the facility will be energy costs. Once detailed designs are undertaken for the JPACF, options for improving energy efficiency and reducing the ongoing operating costs can be explored in more detail.

Figure 59: Building Operations and Maintenance Costs

Item	Cost ($/m^2)	Growth rate above CPI
Rates and Taxes	-	0.0%
Insurance	7.60	0.0%
Air-Conditioning	8.30	0.0%
Lifts	6.70	0.0%
Fire Protection	1.40	0.0%
Energy	25.90	3.0%
Cleaning	14.90	0.0%
Buildings Staff	6.90	2.0%
Security	2.80	2.0%
Repairs and Maintenance	6.20	0.0%
Management	11.00	0.0%
Sundries	4.30	0.0%
Void Allowance and Contingency	2.70	0.0%

Source: Rawlinsons Australian Construction Handbook (2012)

At 2016, the building operations and maintenance costs are estimated to be $736,473.

12.4.4 Capital Replacement

In addition to annual repairs and maintenance, the JPACF will incur capital replacement expenses. Some costly capital replacements can be prevented for an extended period through routine maintenance, it is envisaged that the following capital items will need to be replaced after 25 years.

Figure 60: Capital Replacement

Capital Replacement Item	Cost (M $2012)
Mechanical Plant	5.0
Lifts and Escalators	1.6

Source: RBB 2012

12.5 FINANCIAL PERFORMANCE

12.5.1 Finance Costs

As previously discussed, out of the total capital cost of $78 million it has been assumed, based on discussions with the City, that $23 million would be funded from the City's reserves and the remainder being required as a loan from Treasury. The annual cost of capital would be $4.5 million, based on an interest rate of 5% and loan term of 20 years.

12.5.2 Pre-Opening and Development Budget

The pre-opening budget of major facilities such as the JPACF is often under-estimated, but this phase is critical to ensure the facility opens successfully. The pre-opening budget is set to equal the first year's undistributed operating expenses and will cover:

- Recruitment
- Contracting distributers
- Leasing tenancies
- Program development
- Bookings
- Marketing
- Administration

12.5.3 Results

Figure 61 summarises the estimated operating and project NPV of the facility before and after financing costs.

Figure 61: JPACF Operating and Project NPV, Before and After Financing Costs

Position	Before Financing Costs	After Financing Costs
18 Year Operating NPV	775,347	-47,460,023
20 Year Project NPV	-21,554,768	-73,654,550

Source: Pracsys (2012)

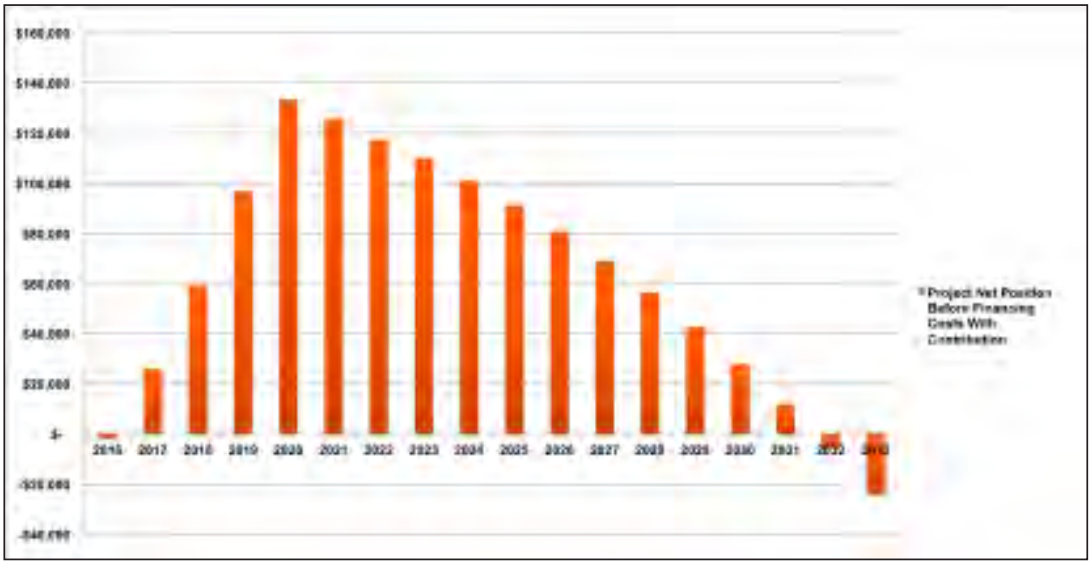
It should be noted that the JPACF's financial position carries a high level of risk. There is limited scope for realised revenues to be significantly higher than what is projected, as a high level of utilisation has been assumed. However, there is considerable risk that demand will not be as strong as expected, and that projected income will not eventuate. In addition, a lower utilisation rate would not significantly reduce the costs of operating the facility.

Figure 62a shows the estimated position of the facility before financing costs. This illustrates the gradual improvement in financial performance over the first five years of operation as the facility reaches the maximum level of utilisation. Beyond this, costs for the facility are escalating more rapidly than revenues. Note that this chart includes an assumed annual City contribution to the facility, and is therefore not a representation of the overall financial position of the City.

Figure 62b shows the estimated position of the facility before financing costs and without the assumed annual City contribution to the facility. This better reflects the operating position of the facility.

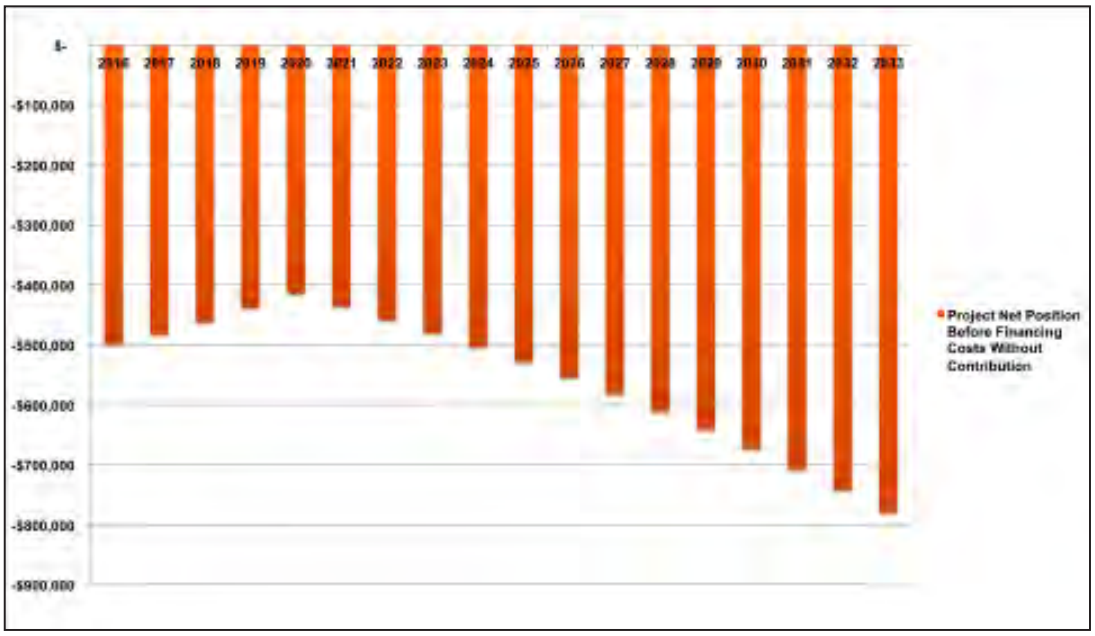
Figure 62c breaks down the estimated position of the facility, as shown in Figure 62b, into the different drivers. The three major costs centres

Figure 62a: JPACF Net Operating Position, Before Financing Costs (2016 - 2033)



Source: Pracsys (2012)

Figure 62b: JPACF Net Operating Position, Before Financing Costs (2016 - 2033)



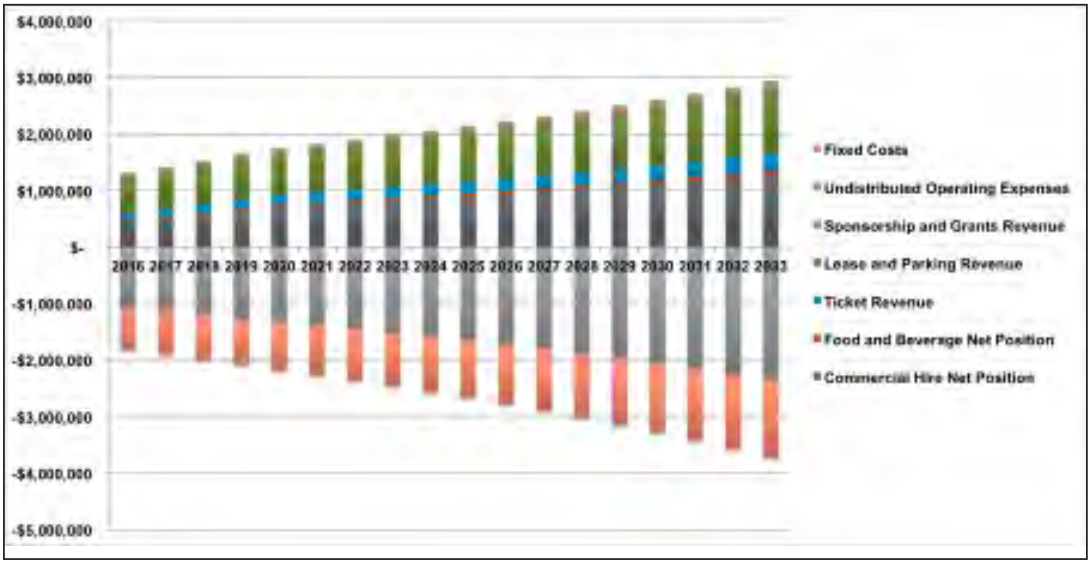
Source: Pracsys (2012)

are fixed costs, undistributed operating costs (staffing, marketing and administration) and program costs. The major profit centres are commercial hires, and presented events. Lease and parking revenue also represent a major revenue stream.

Figure 63 presents the estimated net operating position of the facility after financing costs and without the City's assumed annual contribution to operations. This illustrates that the total expected annual cost of the facility to the City would be in the order of $5.0 to $5.3 million per annum.

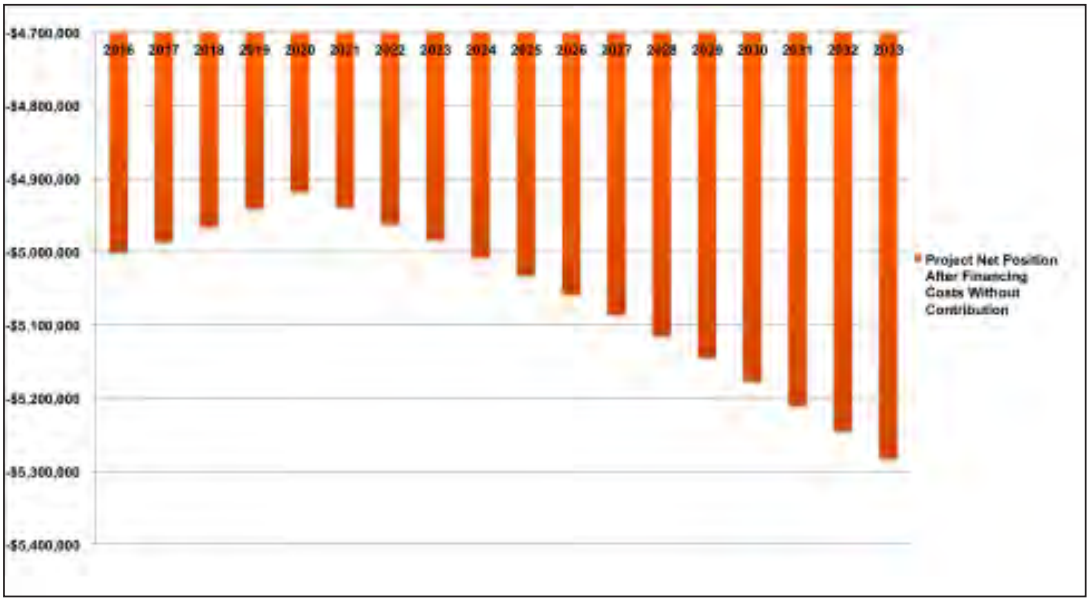
In particular, the escalation of labour and utilities costs is expected to erode the JPACF's profitability.

Figure 62c: JPACF Net Operating Position, Before Financing Costs (2016 - 2033)



Source: Pracsys (2012)

Figure 63: JPACF Net Operating Position, After Financing Costs (2016 - 2033)



Source: Pracsys (2012)

13.0

13 SENSITIVITY ANALYSES

To make the investment analysis developed in Chapter 12 more robust, a range of scenarios were modelled, to determine their effect on the investment performance of the JPACF. Scenarios have been modelled for the following variables:

- Capital cost
- Labour costs
- Energy costs
- Utilisation

13.1 CAPITAL COSTS

Given the capital intensive nature of the project, the project's economics can be expected to be highly sensitive to variations in capital costs. Figure 64 outlines the sensitivity of the project NPV to changes in the capital cost of the facility – i.e. if the actual construction cost varies from the order or magnitude costing provided by the Quantity Surveyor.

Figure 64: Capital Cost Sensitivity

Capital Cost ($2012, $millions)	18 Year Operating NPV (After Financing, ($2012, $millions)	20 Year Project NPV (After Financing, ($2012, $millions)
58.0	-13.08	-36.28
69.0	-30.27	-54.96
78.0	-47.46	-73.65
88.0	-64.65	-92.35
98.0	-81.84	-111.06

Source: Pracsys (2012)

13.2 LABOUR COSTS

Culture and arts facilities are highly labour intensive. Labour cost scenarios were investigated because labour rates can vary considerably, depending on geographic location, availability of skilled labour, the management model adopted, and broader macro-economic and labour market conditions.

Figure 65 outlines the sensitivity of the project NPV and operating NPV to changes in labour costs.

Figure 65: Labor Cost Sensitivity

Annual Staffing Cost ($2012)	18 Year Operating NPV (After Financing, ($2012, $millions)	20 Year Project NPV (After Financing, ($2012, $millions)
500,000	-44.71	-70.93
600,000	-46.53	-72.74
650,000	-47.46	-73.65
700,000	-48.35	-74.54
800,000	-50.17	-76.34

Source: Pracsys (2012)

13.3 ENERGY COSTS

Energy costs are the single biggest cost item in the building's operation. Energy costs were investigated using a sensitivity analysis because energy prices can vary considerably, and there have been significant increases in the cost of energy in recent years in Western Australia.

Figure 66 outlines the sensitivity of the project NPV to changes in the real growth rate of energy costs.

Figure 66: Energy Cost Sensitivity

Real Growth of Energy Costs (in excess of CPI)	18 Year Operating NPV (After Financing, ($2012, $millions)	20 Year Project NPV (After Financing, ($2012, $millions)
1%	-46.84	-72.99
2%	-47.13	-73.30
3%	-47.46	-73.65
4%	-47.83	-74.06
5%	-48.24	-74.51

Source: Pracsys (2012)

13.4 UTILISATION

Utilisation of the two main spaces is a key revenue driver for a performing arts centre. A change in the utilisation rate equates to a change in the level of attendances, and so in the level of revenue. The utilisation rate was investigated using a sensitivity analysis because utilisation rates can vary greatly between facilities, depending on the level of underlying demand and the expertise of the facility management in attracting productions and members of the community.

Figure 67 outlines the sensitivity of the project NPV to changes in the maximum utilisation of the two main spaces.

Figure 67: Utilisation Sensitivity

Maximum Utilisation Rate (%)	18 Year Operating NPV (After Financing, ($2012, $millions)	20 Year Project NPV (After Financing, ($2012, $millions)
40%	-49.25	-75.48
50%	-48.65	-74.87
60%	-48.05	-74.26
70%	-47.46	-73.65
80%	-46.89	-73.07

Source: Pracsys (2012)

13.5 CONCLUSION

Assessing the feasibility of the project is challenging as conventional measures of project success such as NPV, IRR and payback period are insufficient to fully capture the investment decision. Ultimately, the feasibility of the project will be determined by the City's ability and willingness to provide ongoing funding. The development of the JPACF will require considerable funding from the City of Joondalup, both in the form of capital financing costs and an annual contribution to operations. As demonstrated by the experience of benchmark performing arts facilities in Albany and Port Macquarie, there is a potential risk of over-investing in a single, cash flow negative cultural and arts facility, with long-term ramifications for the City's future budget.

14.0

14 RECOMMENDATION AND NEXT STEPS

14.1 RECOMMENDATION

If the City of Joondalup were to proceed with the JPACF, then an ongoing funding contribution will almost certainly be required, and Pracsys is unaware of any major performing arts or cultural facility that does not require financial support. Based on this study's market research, modelling and hypothetical design and program, this contribution has been estimated at $450,000 per annum for the facility's operations. There will also be financing costs associated with the City's contribution to the capital cost (assumed to be $4.5 million per annum in this feasibility assessment). It will be for the City to decide whether this is a justifiable expense, and whether it is the most cost-effective means of achieving its cultural policy objectives, taking into account that the funding required for the JPACF could potentially be invested in other cultural facilities or programs.

In considering whether to proceed with the project, it should be borne in mind that, while this is an additional cost to the City of Joondalup, it presents the City with the opportunity of providing a comprehensive cultural and artistic program to ratepayers. Currently, the City's cultural life is being subsidised by other local governments – as shown by the reports detailed in the stakeholder consultation description in Chapter 3 of local dance schools travelling as far as the Mandurah Performing Arts Centre to stage their productions. In addition to this, there is no way to measure the cultural and arts activity that residents of the City are not enjoying, due to the lack of suitable facilities.

14.2 DRAFT SOCIAL IMPACT ASSESSMENT

The following section summarises those factors that the City should take into account when developing a detailed social impact assessment of the JPACF, once the final design has been developed.

Although the social impact of the arts has become an increasingly familiar phrase in policy debates, again, few studies have attempted to define it. A notable exception is Comedia's discussion document, The Social Impact of the Arts (1993). It presented a working definition of the social impact of the arts, which is described as being concerned with:

'those effects that go beyond the artefacts and the enactment of the event or performance itself and have a continuing influence upon, and directly touch, people's lives.'(Landry et al, 1993)

According to this definition, the social impact of the arts are those effects which are sustained beyond actual arts experiences, and have resonance with the life activities and processes of individuals. For Lingayah et al (1996), one way of looking at the social impacts of an activity is by considering its 'effects on people and the way in which they relate'. In their working paper, Creative Accounting: beyond the bottom line (1996), the authors suggested that the distinction between economic, financial, environmental and social impacts arising from such activity is likely to be blurred in reality.

The European Task Force on Culture and Development in In From The Margins: A contribution to the debate on Culture and Development in Europe (1997) identified the social contribution of arts and culture as shown in Figure 68.

Figure 68: Social Contribution of Culture and the Arts

Direct social impacts	Indirect social impacts
The arts and culture provide 'socially valuable' leisure activities, 'elevate' people's thinking and contribute positively to their psychological and social well-being and enhance their sensitivity.	The arts enrich the social environment with stimulating or pleasing public amenities. They are a source of 'civilising' impacts and of social organisation (e.g, amateur arts). Artistic activity, by stimulating creativity and a disregard for established models of thinking, enhances innovation. Works of art and cultural products are a collective 'memory' for a community and serve as a reservoir of creative and intellectual ideas for future generations. Arts and cultural institutions improve the quality of life and so in urban areas enhance personal security and reduce the incidence of street crime and hooliganism.

Source: The European Task Force on Culture and Development (1997)

Coalter (2001)[26] identifies a number of generic research needs relating to outcome definition and measurement across the cultural sector, but recognises that in some areas, this is both contentious and also presents substantial theoretical and methodological problems. He adopts Bovaird et al's (1997)[27] distinction of 'intermediate' and 'strategic' outcomes to refer to the impact that participation in cultural services has on individuals or groups or the immediate impact of investment (eg, jobs); and the broader (more amorphous) outcomes which are often the product of the successful achievement of the intermediate outcomes (community development, reduced levels of crime, increased social cohesion, improved quality of life), respectively.

He suggests that the most urgent issue for cultural services to address, through research, is the issue of intermediate outcomes: the extent to which services achieve:

- Personal social capital outcomes and practical outcomes associated with participation
- Personal confidence and self-esteem outcomes
- Educational impacts
- Local economic impact and regeneration
- Health promotion.

Equally, however, effort should also be directed towards addressing strategic outcomes, such as: increased social cohesion, community development, community empowerment, social inclusion, a sense of local identity, improved community safety and sustainable development, all of which he asserts, depend on the successful achievement of intermediate outcomes. Although he acknowledges the difficulties in measuring and proving such 'cause-and- effect' relationships.

Figure 69 outlines a template for assessing economic, social and cultural impact.

26 Coalter, F, Cultural Services: Realising the Potential, Research Agenda (2001)

27 Bouaird et al, Approaches to estimating the wider economic and social benefits resulting from sports participation (1997)

Figure 69: Social Contribution of Culture and the Arts

Area of Impact	Factors to consider
Organisation	Art form and activities, amenities provision and opening hours.
Income	Contributed income– grants, lottery awards, donations, sponsorship, earned income– admissions, sales, fees, membership, room hire, café/bar, bookshop, interest.
Outgoing: Staff Costs	Wages, travel, training, running costs, marketing, fund-raising, VAT, National Insurance and PAYE, local trade as percentage of turnover.
Capital Improvements	Income and expenditure.
Attendances and Performances	Total number of audience opportunities (for example, performances, cinema screenings) in city/town, region, nationally and internationally, number of admissions/attendees (paid full, concessions, free, website and hits.
Staffing	Paid, full- and part-time staff and volunteers, mix of artistic, marketing and technical staff, board.
Current and Future Plans and Challenges	Facilities development
Cultural Benefits and Impact	Work which took place which otherwise wouldn't have reached the area, new work created, role of organisation in promotion of a positive image for city/town, contribution to tourism
Social Capital	Contribution to the communication of ideas, information and values, helping improve participant's skills in planning and organising, improving understanding of different cultures and lifestyles, improving the understanding of the role of arts and culture in the community, partnership building, active membership of staff/board in other organisations and artistic collaboration with others.
Building and developing Communities	Contribution to developing sense of community identity, social cohesion, recreational opportunities, development of local enterprise, improvement of public facilities and amenities, and help to convey history and heritage of an area
Social Change and Public Awareness	Contribution made to stimulating and developing public awareness of important issues and changing people's attitudes on political, ethnical, religious or moral issues
Human Capital	Contribution to improving participant's human and communication skills, analytical and problem-solving skills, creative talents, and social awareness.

Source: The European Task Force on Culture and Development (1997)

A1

APPENDIX 1: CATCHMENT BENCHMARKS

Catchment	Distance from Nearest Capital City	Population (2011)	Median Age (2011)	Median HH Income (2011)	Appropriateness as Benchmark
Joondalup	26km	304,483	35	1,630	
Mandurah	72km	107,606	41	1,091	Located too far from the Metro Area, catchment is too small, and demographics are not consistent
Bunbury	175km	154,518	39	1,202	Located too far from the Metro Area, catchment is too small, and demographics are not consistent
Moonee Valley	7km	107,443	38	1,377	Located too close to the Metro Area, catchment is too small, and demographics are not consistent
Whitehorse	15km	151,334	39	1,317	Located too close to the Metro Area and catchment is too small but demographics are consistent
Frankston	40km	271,066	40	1,087	Location and catchment size are appropriate but demographics are not consistent
Geelong	75km	210,875	39	1,049	Located too far from the Metro Area, catchment is too small, and demographics are not consistent
Townsville	1335km	174,462	33	1,381	Located too far from the Metro Area, catchment is too small, but demographics are consistent
Port Macquarie	420km	72,696	47	837	Located too far from the Metro Area, catchment is too small, and demographics are not consistent
Darwin	N/A	120,586	33	1,806	Catchment is too small but demographics are consistent
Albany	326km	83,329	36	1,045	Catchment is too small, and demographics are not consistent
Hobart	N/A	211,656	39	1,065	Catchment is too small, and demographics are not consistent
Penrith	50km	316,762	36	1,360	Location, catchment size and demographics are all appropriate
Ipswich	40km	166,904	32	1,233	Not a good current benchmark but worth exploring on the basis of growth and planning for facilities

A2

APPENDIX 2: EVENTS IN MODEL PROGRAM

The following tables summarise the data from the model program used in this study.

FILM

Total Demand	619,909
Total Demand to be captured	6,199 (1%)
Community	
% Demand	50%
Attendees	3,100
Events	Film cultural events
% Attendees	100%
Attendees	3,100
Event Days Per Annum	
Facility	Primary Space
Popular	
% Demand	50%
Attendees	3,100
Events	Thematic film programming
% Attendees	100%
Attendees	3,100
Event Days Per Annum	17
Facility	Secondary Space
Premium	
% Demand	0%
Attendees	-
Events	
% Attendees	
Attendees	-
Event Days Per Annum	
Facility	

COMEDY

Total Demand	74,591	
Total Demand to be captured	11,189 (15%)	
Community		
% Demand	0%	
Attendees		
Events		
% Attendees	0%	
Attendees		
Event Days Per Annum		
Facility		
Popular		
% Demand	80%	
Attendees	8,951	
Events	Australian Comedy (Small)	Australian Comedy (Large)
% Attendees	30%	70%
Attendees	2,685	6,266
Event Days Per Annum	16	9
Facility	Secondary Space	Primary Space
Premium		
% Demand	20%	
Attendees	2,238	
Events	Comedy festival (Small)	Comedy festival (Large)
% Attendees	30%	70%
Attendees	671	1,566
Event Days Per Annum	4	2
Facility	Secondary Space	Primary Space

THEATRE

Total Demand	86,141			
Total Demand to be captured	21,535 (25%)			
Community				
% Demand	20%			
Attendees	4,307			
Events	Amateur Drama			
% Attendees	100%			
Attendees	4,307			
Event Days Per Annum	27			
Facility	Secondary Space			
Popular				
% Demand	77%			
Attendees	16,582			
Events	Touring Shows Subsidised	Touring Shows Commercial	Local Shows	Contemporary Performance
% Attendees	15%	40%	30%	15%
Attendees	2,487	6,633	4,975	2,487
Event Days Per Annum	10	12	12	18
Facility	Primary Space	Primary Space	Primary Space	Secondary Space
Premium				
% Demand	3%			
Attendees	646			
Events	Contemporary Performance			
% Attendees	100%			
Attendees	646			
Event Days Per Annum	11			
Facility	Secondary Space			

DANCE

Total Demand	51,380		
Total Demand to be captured	20,038 (39%)		
Community			
% Demand	65%		
Attendees	13,025		
Events	Dance School Concerts	Large Performances	Small Performances
% Attendees	60%	30%	10%
Attendees	7,815	3,907	1,302
Event Days Per Annum	11	5	7
Facility	Primary Space	Primary Space	Secondary Space
Popular			
% Demand	25%		
Attendees	5,010		
Events	Contemporary Dance	Contemporary Youth	Education based contemporary dance
% Attendees	63%	32%	5%
Attendees	3,156	1,603	250
Event Days Per Annum	5	11	3
Facility	Primary Space	Secondary Space	Secondary Space
Premium			
% Demand	10%		
Attendees	2,004		
Events	Contemporary Performance		
% Attendees	100%		
Attendees	646		
Event Days Per Annum	11		
Facility	Secondary Space		

MUSIC

Total Demand	348,765			
Total Demand to be captured	52,315 (15%)			
Community				
% Demand	30%			
Attendees	15,694			
Events	Morning Melodies	Sunday Serenades	Themed Nights	School Holiday Concerts
% Attendees	35%	25%	15%	25%
Attendees	5,493	3,924	2,354	3,924
Event Days Per Annum	37	10	4	6
Facility	Secondary Space	Primary Space	Primary Space	Primary Space
Popular				
% Demand	65%			
Attendees	34,005			
Events	Popular Classical	Popular Contemporary	Popular Youth	Popular Contemporary Thematic
% Attendees	25%	25%	25%	25%
Attendees	8,501	8,501	8,501	8,501
Event Days Per Annum	14	14	16	15
Facility	Primary Space	Primary Space	Primary Space	Primary Space
Premium				
% Demand	5%			
Attendees	2,616			
Events	Contemporary Chamber	Contemporary Orchestral	Traditional Opera and Orchestral	
% Attendees	40%	40%	20%	
Attendees	1,046	1,046	523	
Event Days Per Annum	2	2	1	
Facility	Primary Space	Primary Space	Primary Space	

VISUAL ARTS

Community				
Events	Joondalup Community Art Exhibition	City of Joondalup Art Collection		
Event Days Per Annum	14	365		
Facility	Art Gallery	Curatorial Storage		
Popular				
Events	Exhibition openings	Exhibition	Invitation Art Awards Opening	Invitation Art Awards
Event Days Per Annum	12	240	1	21
Facility	Exhibition/Reception	Art Gallery	Exhibition/Reception	Art Gallery

SCHOOL USE

Community				
Events	Graduation (Small)	Graduation (Medium)	Graduation (Large)	Performance (Small)
Event Days Per Annum	5	4	6	-
Facility	Rehearsal Room 1	Secondary Space	Primary Space	Rehearsal Room 1
Events	Performance (Medium)	Performance (Large)	Exhibition	
Event Days Per Annum	23	15	12	
Facility	Secondary Space	Primary Space	Exhibition/Reception	

JOONDALUP EISTEDDFOD

Community				
Events	Primary Space	Secondary Space	Rehearsal Room 1	Rehearsal Room 2
Event Days Per Annum	8	8	8	8
Facility	Primary Space	Secondary Space	Rehearsal Room 1	Rehearsal Room 2
Events	Practice Room 1	Practice Room 2		
Event Days Per Annum	8	8		
Facility	Practice Room 1	Practice Room 2		

2016 - Calendar of Events - Main Space

Music: Community - Sunday Serenades

Music: Community - Themed Nights

Music: Community - School Holiday Concerts

Music: Popular - Classical, Contemporary, Youth, Contemporary Thematic

Music: Premium - Contemporary Chamber, Orchestral, Traditional Opera and Orchestral

Dance: Community - Dance School Concerts

Dance: Community - Large Performances, Popular - Contemporary Dance and Premium - Contemporary Dance Large Scale

Theatre: Popular - Touring Shows Subsidised, Commercial, Local Shows

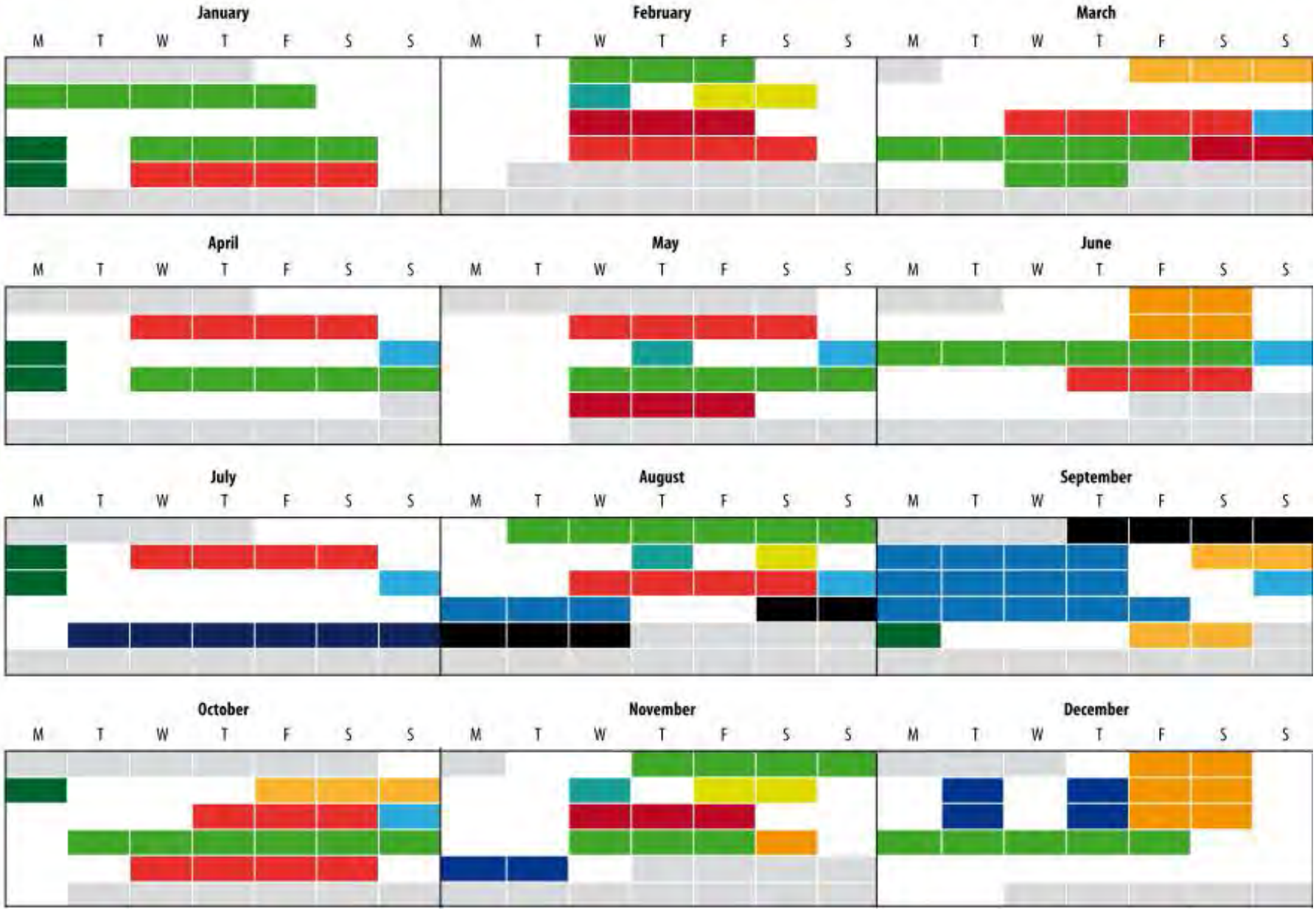
Comedy: Popular - Australian Comedy, Premium - Comedy Festival

Film: Community - Film cultural events

School: Community - Graduation

School: Community - Performance

Eisteddfod: Community - Eisteddfod Primary Space



2016 - Calendar of Events - Secondary Space

Music: Community - Morning Melodies

Dance: Community - Small Performances

Dance: Popular - Comemporary Youth, Education based contemporary dance, comtemporary dance small

Theatre: Community - Amateur Drama

Theatre: Popular, Premium - Comtemporary Performance

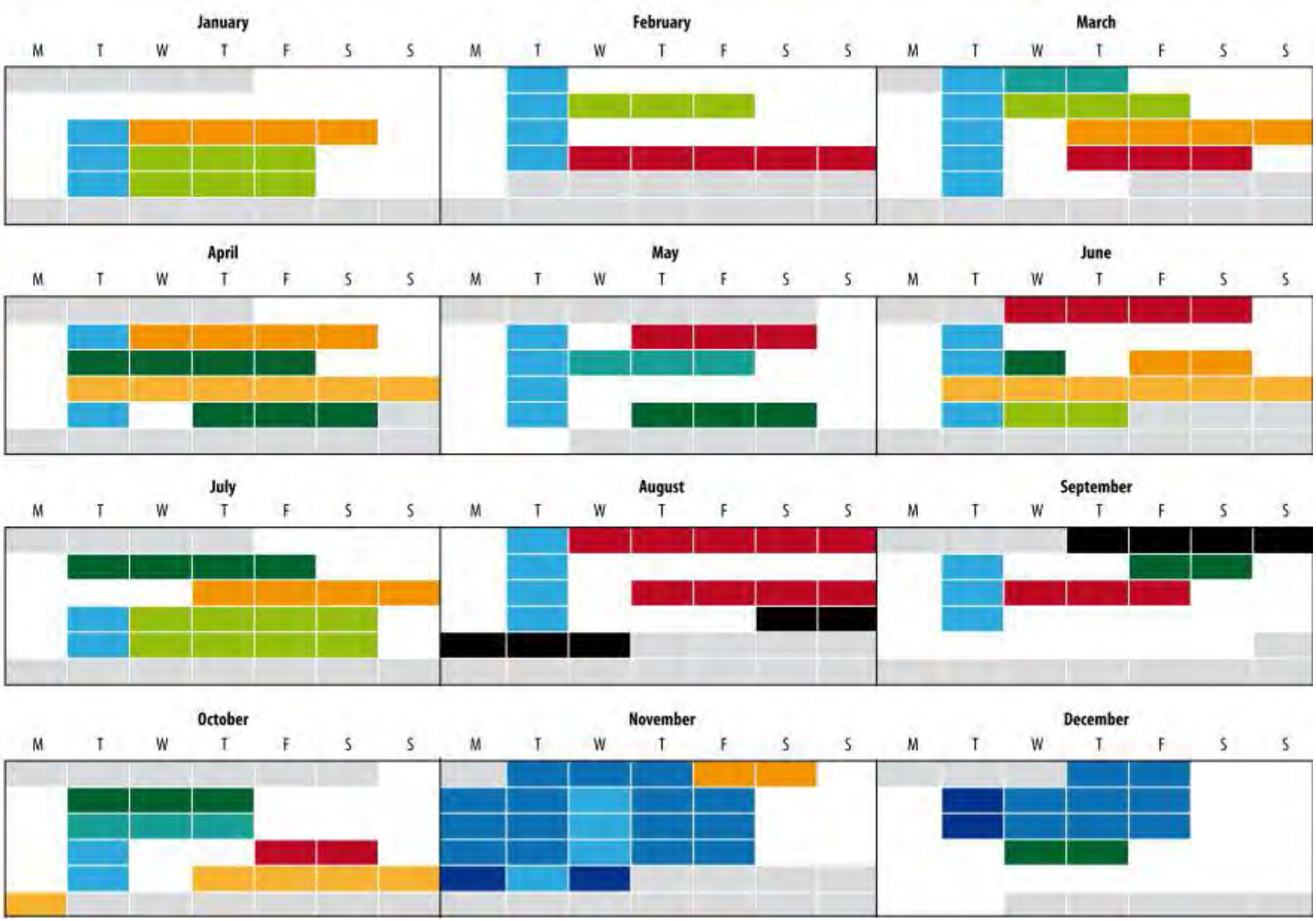
Comedy: Popular - Australian Comedy, Premium - Comedy Festival

Film: Popular - Thematic film programing

School: Community - Graduation

School: Community - Performance

Eisteddfod: Community - Eisteddfod Primary Space



A3

APPENDIX 3: JPACF RISK REGISTER

GOVERNANCE RISKS

Events	Consequences	Rank	Likelihood	Threat Level	Mitigation	Project Philosophy & Parameters
Failure of Financial Oversight	Financial loss and public embarrassment	3	Unlikely	Moderate (4)	Regular financial reporting and approval of forward planning	Fiscal responsibility and commerciality
Board/committee is out of touch with community needs	Community disillusionment and loss of reputation	2	Unlikely	Low (5)	Community and industry representatives on the board/committee	Liaison protocol
Failure to address and recognise strategic issues	Disconnect between operations and stakeholders	3	Possible	Low (5)	Ongoing revision and review of strategic documentation and planning by board/ committee	Governance

MARKET RISKS

Events	Consequences	Rank	Likelihood	Threat Level	Mitigation	Project Philosophy & Parameters
JPACF is not used to the level expected	Lack of revenue, community dissatisfaction, loss of reputation, venue becomes a white elephant	3	Possible	High (3)	Pro-active and entrepreneurial management	Fiscal responsibility and commerciality
Marketing ineffective or inappropriate	Bad image - perceived as irrelevant or a white elephant	2	Possible	Moderate (4)	Dedicated officer and agreed communications strategies for all activities	Fiscal responsibility and commerciality
Lack of commercial hiring	Financial loss and lack of culturally significant activity (premium and popular programs)	3	Unlikely	Moderate (4)	Pro-active and entrepreneurial management	Fiscal responsibility and commerciality
Lack of community hiring	Some financial loss, loss of activation and engagement with the community; community dissatisfaction	3	Unlikely	Moderate (4)	Pro-active and entrepreneurial management	Fiscal responsibility and commerciality
Lack of community engagement	Diminishing elected members support; decreasing revenue	2	Unlikely	Moderate (4)	Community representation on board/ committee	Liaison protocol

OPERATIONS AND MANAGEMENT RISKS

Events	Consequences	Rank	Likelihood	Threat Level	Mitigation	Project Philosophy & Parameters
Key staff perform poorly	Financial loss, community dissatisfaction, ineffective use of council resources	3	Highly dep't on recruiting process	High (3)	Adopt effective recruitment processes	Governance
Significant accidents to patrons or staff	Possible death or serious injury	4	Possible	High (3)	Health and safety standards and training	
Significant accidents or damage to facility	Possible interruption or delay to program delivery, reduced site access and financial loss	2	Possible	Moderate (4)	Building and equipment safety standards and thorough staff training	
Lack of meeting, functions or conference hires	Some financial loss. Model program presented in Chapter 6 does not include significant corporate hires, and these are not believed to be necessary for the facility to be adequately utilised	1	Research suggest soft initial demand for these services	Moderate (4)	Pro-active and entrepreneurial management	Fiscal responsibility and commerciality
City provides reduced or reducing funding, due to competing priorities	Operations compromised, with inadequate staffing, necessary maintenance being deferred, subsidised community programs being cut, or other saving measures.	3	Possible	High (3)	Formalised and positive links with City and elected members	Governance

FINANCIAL RISKS

Events	Consequences	Rank	Likelihood	Threat Level	Mitigation	Project Philosophy & Parameters
Continual failure to meet budget targets	Unpredictable financial exposure, public embarrassment and ineffective use of City resources	3	Performing arts highly variable business model	High (3)	Recognised areas of risk and safe programming within annual program	Fiscal responsibility and commerciality
Too expensive to use	Financial loss, low utilisation	3	Unlikely	Moderate (4)	Fees and charges based on benchmarked norms	Fiscal responsibility and commerciality
Increasing capital maintenance costs	Financial loss, risk of costs being covered through program cuts	2	Unlikely, if design and construction handled well	Low (5)	Facility figures within the City's CAPEX plan	Fiscal responsibility and commerciality

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APPENDIX 4: CAPITAL COST ESTIMATES FROM RALPH BEATTIE BOSWORTH

ORDER OF MAGNITUDE COSTING

JOONDALUP PERFORMING ARTS CENTRE

PETER HOBBS ARCHITECT

16 OCTOBER 2012

Ralph Beattie Bosworth
Construction Cost Consultants
Ralph & Beattie Bosworth Pty Ltd as trustee for the Ralph & Beattie Unit Trust No. 2 ABN 58 260 502 981

12 Kings Park Road West Perth Western Australia 6005
PO Box 456 West Perth Western Australia 6872
Telephone 08 9321 2777 Facsimile 08 9481 1783
Email info@rbb.com.au www.rbb.com.au

Order of Magnitude Costing

Clear site, preparation, etc	m^2	8,200	$ 25	$ 205,000
Basement carpark	m^2	7,000	1,200	8,400,000
Extra for roof slab (outside of building line over)	m^2	400	400	160,000
Ground Floor				
Front of house - foyers, bar restaurant, etc	m^2	1,860	4,000	7,440,000
Extra for kitchen and bar equipment				1,500,000
External performance space (unroofed)	m^2	930	500	465,000
• extra for 10m high screen	m^2	600	1,000	600,000
• extra for tiered seating	No.	300	800	240,000
Entry terrace north forecourt	m^2	850	500	425,000
Art gallery	m^2	460	3,600	1,656,000
Workshops and studio	m^2	370	3,800	1,406,000
Lyric Theatre				
• stage and fly tower	m^2	520	4,000	2,080,000
• auditorium incl seating	m^2	760	6,000	4,560,000
• extra for dress circle and bio box	m^2	480	3,000	1,440,000
Theatre/cinema	m^2	510	5,000	2,550,000
Rehearsal and green rooms	m^2	410	4,000	1,640,000
Backstage	m^2	650	3,500	2,275,000
Loading dock	m^2	135	700	94,500
First Floor				
Front of house - exhibition, conference, functions	m^2	1,060	4,000	4,240,000
Foyer void	m^2	440	2,000	880,000
External terrace 5m wide	m^2	200	1,200	240,000
Seminar, meetings and offices	m^2	685	3,800	2,603,000
Studios (sprung floor)	m^2	370	4,000	1,480,000
Recording studio	m^2	150	4,500	675,000
Circulation, stores, etc	m^2	440	3,500	1,540,000
Plant room	m^2	510	2,500	1,275,000
Plant deck	m^2	200	1,500	300,000
General				
Entry canopies				450,000
Sculpture court				200,000
Signage, screening and sundry works				200,000
External works/landscaping, etc to Grand Boulevard				500,000
Roadworks, landscaping, etc to northern paths				750,000

Site services and headworks				800,000
Transformer upgrade				300,000
Fire tanks and pumps				250,000
sub-total				$ 53,819,500
Planning Contingency - allow 6%	m^2	600	4,000	2,400,000
Escalation to start date @ 4% p.a - say January 2014				2,152,780
Design Contingency - allow 7%				3,767,365
sub-total				$ 62,139,645
Construction Contingency - allow 5%				3,106,982
sub-total				$ 65,246,627
Building Act 2011 compliance - allow 0.7%				456,726
Public Art - allow 1%				652,466
Furniture, Fitments & Equipment				700,000
Theatre Technical Equipment				2,500,000
Consultant Fees - allow 13% of construction costs				8,482,062
BMW Fee (not procured through BMW)				excl
Estimated Current Project Cost (excl GST)				**$ 78,037,881**

This order of magnitude estimate has been prepared from net area schedules and concept plans and without consultants input and should be considered indicative only at this stage.

The following are not included:

- land, legal and funding costs
- local authority management fee
- green star rating and non code ESD initiatives
- GST

FUNCTIONAL BREAKDOWN

Basement carpark	$ 11,500,000
Lyric theatre complex	46,037,881
GF restaurant and bar	3,100,000
GF art gallery, workshop and studio	4,300,000
GF external performance space	1,800,000
GF theatre/cinema and rehearsal	5,400,000
L1 storage	700,000
L1 exhibition and conferences	5,200,000
Estimated Current Project Cost (excl GST)	**$ 78,037,881**

OPTIONS

Levels 2 and 3 commercial offices incl contingencies, fees, etc (vacant NLA - excl fixed fitout)	m^2	2,500	$ 3,500	$ 8,750,000
Additional basement level incl contingencies, fees	m^2	7,000	$ 1,960	$ 13,720,000

A5

APPENDIX 5: ACCOMMODATION SCHEDULE

JOONDALUP PERFORMING ARTS CENTRE		
SCHEDULE OF AREAS (note- all figures expressed as net)	**Area**	
EXTERNAL AREAS		**400**
Collier Pass extrension	Item	
Forecourt	200	
Sculpture Court	200	
FRONT OF HOUSE		**1295**
Foyer	600	
Bars	200	
Restaurant	150	
Kitchen	50	
Box Office	15	
Toilets	250	
Staff Change	30	
LYRIC THEATRE		**1180**
550 Seat Auditorium	500	
Orchestra Pit	50	
Fly Tower	200	
Stage	200	
Bio Box	30	
Backstage	100	
BLACK BOX STUDIO THEATRE		**530**
200 moveable seats	400	
Bio Box	30	
Backstage	100	
BACK OF HOUSE		**620**
Offices	50	
Toilets	60	
Dressing Rooms	120	
Green Room	40	
Workshop	100	
Storage	150	
Loading Docks	100	
REHEARSAL AND FUNCTION		**710**
2 off Rehearsals rooms at 150m2	300	
2 Multipurpose space- functions at 100m2	200	
Toilets and Changes rooms	100	
4 off Practice Rooms at 15m2	60	
Music Studio including sound equipment	50	
MANAGEMENT		**175**
Offices	100	
Meeting Rooms	30	
Toilets	30	
Kitchenette	15	
UNDERCROFT PARKING		**5500**
200 bays	5500	

A6

APPENDIX 6: DISCOUNTED CASHFLOW MODELLING

Operations Cash Flow

Revenue	2012	2013	2014	2015	2016	2017	2018	2019	2020
Program Revenue									
CoJ Hire	$ -	$ -	$ -	$ -	$ 113,312	$ 127,946	$ 144,469	$ 161,334	$ 168,675
Community Hire Revenue	$ -	$ -	$ -	$ -	$ 214,357	$ 242,039	$ 273,296	$ 308,589	$ 348,441
Commercial Hire Revenue	$ -	$ -	$ -	$ -	$ 956,922	$ 1,080,499	$ 1,220,034	$ 1,377,590	$ 1,537,383
Subtotal - Rental Revenue	*$ -*	*$ -*	*$ -*	*$ -*	*$ 1,284,591*	*$ 1,450,483*	*$ 1,637,799*	*$ 1,847,513*	*$ 2,054,499*
Ticket Revenue	*$ -*	*$ -*	*$ -*	*$ -*	*$ 1,158,084*	*$ 1,307,639*	*$ 1,476,508*	*$ 1,614,482*	*$ 1,687,941*
Subtotal - Program Revenue	*$ -*	*$ -*	*$ -*	*$ -*	*$ 2,442,676*	*$ 2,758,123*	*$ 3,114,307*	*$ 3,461,995*	*$ 3,742,440*
Other Income									
Food and Beverage Revenue	$ -	$ -	$ -	$ -	$ 64,230	$ 72,524	$ 81,890	$ 92,376	$ 102,725
Art Gallery Sales Commission	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
Restaurant Lease	*$ -*	*$ -*	*$ -*	*$ -*	*$ 99,343*	*$ 101,827*	*$ 104,372*	*$ 106,982*	*$ 109,656*
Commercial Office Lease	*$ -*	*$ -*	*$ -*	*$ -*	*$ 178,878*	*$ 186,927*	*$ 195,339*	*$ 204,129*	*$ 213,315*
Parking Revenue	*$ -*	*$ -*	*$ -*	*$ -*	*$ 331,144*	*$ 339,422*	*$ 347,908*	*$ 356,606*	*$ 365,521*
Sponsorship and Grants	*$ -*	*$ -*	*$ -*	*$ -*	*$ 119,252*	*$ 124,618*	*$ 130,226*	*$ 136,086*	*$ 142,210*
Council Contribution	*$ -*	*$ -*	*$ -*	*$ -*	*$ 496,716*	*$ 509,134*	*$ 521,862*	*$ 534,909*	*$ 548,281*
Subtotal - Other Income	*$ -*	*$ -*	*$ -*	*$ -*	*$ 1,289,562*	*$ 1,334,453*	*$ 1,381,597*	*$ 1,431,087*	*$ 1,481,709*
Total Revenue	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,732,238**	**$ 4,092,575**	**$ 4,495,904**	**$ 4,893,082**	**$ 5,224,148**

Expenses	2012	2013	2014	2015	2016	2017	2018	2019	2020
Variable Costs									
Cost of CoJ Hire Revenue	$ -	$ -	$ -	$ -	-$ 113,312	-$ 127,946	-$ 144,469	-$ 161,334	-$ 168,675
Cost of Community Hire Revenue	$ -	$ -	$ -	$ -	-$ 214,357	-$ 242,039	-$ 273,296	-$ 308,589	-$ 348,441
Cost of Commercial Hire Revenue	$ -	$ -	$ -	$ -	-$ 505,263	-$ 570,513	-$ 644,189	-$ 727,379	-$ 808,724
Cost of Food and Beverage Revenue	$ -	$ -	$ -	$ -	-$ 44,961	-$ 50,767	-$ 57,323	-$ 64,663	-$ 71,907
Other Program Costs	$ -	$ -	$ -	$ -	-$ 1,042,276	-$ 1,176,875	-$ 1,328,857	-$ 1,453,034	-$ 1,519,147
Subtotal - Variable Costs	*$ -*	*$ -*	*$ -*	*$ -*	*-$ 1,920,169*	*-$ 2,168,140*	*-$ 2,448,133*	*-$ 2,714,999*	*-$ 2,916,893*
Undistributed Operating Expenses									
Marketing	$ -	$ -	$ -	$ -	-$ 178,878	-$ 186,927	-$ 195,339	-$ 204,129	-$ 213,315
Staffing	$ -	$ -	$ -	$ -	-$ 776,244	-$ 811,175	-$ 847,678	-$ 885,823	-$ 925,686
Administrative and General	$ -	$ -	$ -	$ -	-$ 122,134	-$ 137,906	-$ 155,715	-$ 173,100	-$ 187,122
Total Undistributed Operating Expenses	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 1,077,256**	**-$ 1,136,009**	**-$ 1,198,732**	**-$ 1,263,052**	**-$ 1,326,123**
Fixed Charges									
Rates and Taxes	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Insurance	$ -	$ -	$ -	$ -	-$ 54,528	-$ 55,892	-$ 57,289	-$ 58,721	-$ 60,189
Air-Conditioning	$ -	$ -	$ -	$ -	-$ 59,551	-$ 61,039	-$ 62,565	-$ 64,130	-$ 65,733
Lifts	$ -	$ -	$ -	$ -	-$ 48,071	-$ 49,273	-$ 50,505	-$ 51,767	-$ 53,061
Fire Protection	$ -	$ -	$ -	$ -	-$ 10,045	-$ 10,296	-$ 10,553	-$ 10,817	-$ 11,087
Energy	$ -	$ -	$ -	$ -	-$ 208,556	-$ 220,027	-$ 232,128	-$ 244,895	-$ 258,364
Cleaning	$ -	$ -	$ -	$ -	-$ 106,904	-$ 109,577	-$ 112,316	-$ 115,124	-$ 118,002
Buildings Staff	$ -	$ -	$ -	$ -	-$ 53,484	-$ 55,891	-$ 58,406	-$ 61,035	-$ 63,781
Security	$ -	$ -	$ -	$ -	-$ 21,704	-$ 22,681	-$ 23,701	-$ 24,768	-$ 25,882
Repairs and Maintenance	$ -	$ -	$ -	$ -	-$ 44,484	-$ 45,596	-$ 46,736	-$ 47,904	-$ 49,102
Management	$ -	$ -	$ -	$ -	-$ 78,923	-$ 80,896	-$ 82,918	-$ 84,991	-$ 87,116
Sundries	$ -	$ -	$ -	$ -	-$ 30,852	-$ 31,623	-$ 32,413	-$ 33,224	-$ 34,054
Void Allowance and Contingency	$ -	$ -	$ -	$ -	-$ 19,372	-$ 19,856	-$ 20,353	-$ 20,861	-$ 21,383
Total Fixed Charges	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 736,473**	**-$ 762,646**	**-$ 789,884**	**-$ 818,237**	**-$ 847,756**
Total Expenses	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 3,733,898**	**-$ 4,066,794**	**-$ 4,436,750**	**-$ 4,796,289**	**-$ 5,090,772**
Operating Surplus / Deficit	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 1,660**	**$ 25,781**	**$ 59,155**	**$ 96,793**	**$ 133,376**
Cumulative Surplus / Deficit	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 1,660**	**$ 24,121**	**$ 83,275**	**$ 180,069**	**$ 313,445**
Financing Costs (Interest and Principle)	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**
Capital Replacement Cost	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Net Position After Financing Costs and Capital Replacement	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 4,504,484**	**-$ 4,477,042**	**-$ 4,443,669**	**-$ 4,406,031**	**-$ 4,369,447**
Cumulative Position after Financing Costs and Captal Replacement	**$ -**	**$ -**	**$ -**	**$ -**	**-$ 4,504,484**	**-$ 8,981,527**	**-$ 13,425,196**	**-$ 17,831,226**	**-$ 22,200,674**

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	$ 176,349	$ 184,373	$ 192,762	$ 201,533	$ 210,702	$ 220,289	$ 230,313	$ 240,792	$ 251,748	$ 263,202	$ 275,178	$ 287,699	$ 300,789
	$ 393,438	$ 444,247	$ 436,827	$ 456,703	$ 477,483	$ 499,208	$ 521,922	$ 545,670	$ 570,498	$ 596,455	$ 623,594	$ 651,968	$ 681,632
	$ 1,607,334	$ 1,680,468	$ 1,756,929	$ 1,836,870	$ 1,920,447	$ 2,007,828	$ 2,099,184	$ 2,194,697	$ 2,294,555	$ 2,398,958	$ 2,508,110	$ 2,622,229	$ 2,741,541
	$ 2,177,122	*$ 2,309,088*	*$ 2,386,519*	*$ 2,495,105*	*$ 2,608,633*	*$ 2,727,326*	*$ 2,851,419*	*$ 2,981,158*	*$ 3,116,801*	*$ 3,258,616*	*$ 3,406,883*	*$ 3,561,896*	*$ 3,723,962*
	$ 1,764,742	*$ 1,845,038*	*$ 1,928,987*	*$ 2,016,756*	*$ 2,108,519*	*$ 2,204,456*	*$ 2,304,759*	*$ 2,409,626*	*$ 2,519,263*	*$ 2,633,890*	*$ 2,753,732*	*$ 2,879,027*	*$ 3,010,022*
	$ 3,941,864	*$ 4,154,126*	*$ 4,315,506*	*$ 4,511,862*	*$ 4,717,151*	*$ 4,931,782*	*$ 5,156,178*	*$ 5,390,784*	*$ 5,636,065*	*$ 5,892,505*	*$ 6,160,614*	*$ 6,440,922*	*$ 6,733,984*
	$ 108,856	$ 115,454	$ 119,326	$ 124,755	$ 130,432	$ 136,366	$ 142,571	$ 149,058	$ 155,840	$ 162,931	$ 170,344	$ 178,095	$ 186,198
	$ -	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
	$ 112,398	*$ 115,208*	*$ 118,088*	*$ 121,040*	*$ 124,066*	*$ 127,168*	*$ 130,347*	*$ 133,606*	*$ 136,946*	*$ 140,369*	*$ 143,879*	*$ 147,475*	*$ 151,162*
	$ 222,914	*$ 232,945*	*$ 243,428*	*$ 254,382*	*$ 265,829*	*$ 277,792*	*$ 290,292*	*$ 303,356*	*$ 317,007*	*$ 331,272*	*$ 346,179*	*$ 361,757*	*$ 378,036*
	$ 374,659	*$ 384,025*	*$ 393,626*	*$ 403,467*	*$ 413,553*	*$ 423,892*	*$ 434,489*	*$ 445,352*	*$ 456,485*	*$ 467,898*	*$ 479,595*	*$ 491,585*	*$ 503,875*
	$ 148,610	*$ 155,297*	*$ 162,285*	*$ 169,588*	*$ 177,220*	*$ 185,194*	*$ 193,528*	*$ 202,237*	*$ 211,338*	*$ 220,848*	*$ 230,786*	*$ 241,171*	*$ 252,024*
	$ 561,988	*$ 576,038*	*$ 590,439*	*$ 605,200*	*$ 620,330*	*$ 635,838*	*$ 651,734*	*$ 668,028*	*$ 684,728*	*$ 701,846*	*$ 719,393*	*$ 737,377*	*$ 755,812*
	$ 1,529,425	*$ 1,578,968*	*$ 1,627,192*	*$ 1,678,432*	*$ 1,731,430*	*$ 1,786,251*	*$ 1,842,962*	*$ 1,901,635*	*$ 1,962,344*	*$ 2,025,164*	*$ 2,090,175*	*$ 2,157,461*	*$ 2,227,107*
	$ 5,471,289	**$ 5,733,094**	**$ 5,942,698**	**$ 6,190,294**	**$ 6,448,581**	**$ 6,718,032**	**$ 6,999,140**	**$ 7,292,419**	**$ 7,598,408**	**$ 7,917,669**	**$ 8,250,790**	**$ 8,598,384**	**$ 8,961,092**

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	-$ 176,349	-$ 184,373	-$ 192,762	-$ 201,533	-$ 210,702	-$ 220,289	-$ 230,313	-$ 240,792	-$ 251,748	-$ 263,202	-$ 275,178	-$ 287,699	-$ 300,789
	-$ 393,438	-$ 444,247	-$ 436,827	-$ 456,703	-$ 477,483	-$ 499,208	-$ 521,922	-$ 545,670	-$ 570,498	-$ 596,455	-$ 623,594	-$ 651,968	-$ 681,632
	-$ 845,521	-$ 883,992	-$ 924,214	-$ 966,265	-$ 1,010,230	-$ 1,056,196	-$ 1,104,253	-$ 1,154,496	-$ 1,207,026	-$ 1,261,946	-$ 1,319,364	-$ 1,379,395	-$ 1,442,158
	-$ 76,199	-$ 80,818	-$ 83,528	-$ 87,329	-$ 91,302	-$ 95,456	-$ 99,800	-$ 104,341	-$ 109,088	-$ 114,052	-$ 119,241	-$ 124,666	-$ 130,339
	-$ 1,588,268	-$ 1,660,534	-$ 1,736,089	-$ 1,815,081	-$ 1,897,667	-$ 1,984,011	-$ 2,074,283	-$ 2,168,663	-$ 2,267,337	-$ 2,370,501	-$ 2,478,359	-$ 2,591,124	-$ 2,709,020
	-$ 3,079,776	*-$ 3,253,964*	*-$ 3,373,420*	*-$ 3,526,910*	*-$ 3,687,385*	*-$ 3,855,161*	*-$ 4,030,571*	*-$ 4,213,962*	*-$ 4,405,697*	*-$ 4,606,156*	*-$ 4,815,736*	*-$ 5,034,852*	*-$ 5,263,938*
	-$ 222,914	-$ 232,945	-$ 243,428	-$ 254,382	-$ 265,829	-$ 277,792	-$ 290,292	-$ 303,356	-$ 317,007	-$ 331,272	-$ 346,179	-$ 361,757	-$ 378,036
	-$ 967,341	-$ 1,010,872	-$ 1,056,361	-$ 1,103,897	-$ 1,153,573	-$ 1,205,483	-$ 1,259,730	-$ 1,316,418	-$ 1,375,657	-$ 1,437,561	-$ 1,502,252	-$ 1,569,853	-$ 1,640,496
	-$ 197,093	-$ 207,706	-$ 215,775	-$ 225,593	-$ 235,858	-$ 246,589	-$ 257,809	-$ 269,539	-$ 281,803	-$ 294,625	-$ 308,031	-$ 322,046	-$ 336,699
	-$ 1,387,349	**-$ 1,451,523**	**-$ 1,515,564**	**-$ 1,583,873**	**-$ 1,655,260**	**-$ 1,729,864**	**-$ 1,807,831**	**-$ 1,889,313**	**-$ 1,974,467**	**-$ 2,063,458**	**-$ 2,156,461**	**-$ 2,253,656**	**-$ 2,355,232**
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	-$ 61,694	-$ 63,236	-$ 64,817	-$ 66,438	-$ 68,098	-$ 69,801	-$ 71,546	-$ 73,335	-$ 75,168	-$ 77,047	-$ 78,973	-$ 80,948	-$ 82,971
	-$ 67,376	-$ 69,061	-$ 70,787	-$ 72,557	-$ 74,371	-$ 76,230	-$ 78,136	-$ 80,089	-$ 82,091	-$ 84,144	-$ 86,247	-$ 88,403	-$ 90,613
	-$ 54,388	-$ 55,748	-$ 57,141	-$ 58,570	-$ 60,034	-$ 61,535	-$ 63,073	-$ 64,650	-$ 66,266	-$ 67,923	-$ 69,621	-$ 71,362	-$ 73,146
	-$ 11,365	-$ 11,649	-$ 11,940	-$ 12,238	-$ 12,544	-$ 12,858	-$ 13,180	-$ 13,509	-$ 13,847	-$ 14,193	-$ 14,548	-$ 14,911	-$ 15,284
	-$ 272,575	-$ 287,566	-$ 303,382	-$ 320,068	-$ 337,672	-$ 356,244	-$ 375,837	-$ 396,508	-$ 418,316	-$ 441,324	-$ 465,597	-$ 491,204	-$ 518,221
	-$ 120,952	-$ 123,976	-$ 127,076	-$ 130,252	-$ 133,509	-$ 136,847	-$ 140,268	-$ 143,774	-$ 147,369	-$ 151,053	-$ 154,829	-$ 158,700	-$ 162,668
	-$ 66,651	-$ 69,651	-$ 72,785	-$ 76,060	-$ 79,483	-$ 83,060	-$ 86,797	-$ 90,703	-$ 94,785	-$ 99,050	-$ 103,508	-$ 108,165	-$ 113,033
	-$ 27,047	-$ 28,264	-$ 29,536	-$ 30,865	-$ 32,254	-$ 33,705	-$ 35,222	-$ 36,807	-$ 38,463	-$ 40,194	-$ 42,003	-$ 43,893	-$ 45,868
	-$ 50,329	-$ 51,587	-$ 52,877	-$ 54,199	-$ 55,554	-$ 56,943	-$ 58,366	-$ 59,826	-$ 61,321	-$ 62,854	-$ 64,426	-$ 66,036	-$ 67,687
	-$ 89,294	-$ 91,526	-$ 93,814	-$ 96,160	-$ 98,564	-$ 101,028	-$ 103,553	-$ 106,142	-$ 108,796	-$ 111,516	-$ 114,303	-$ 117,161	-$ 120,090
	-$ 34,906	-$ 35,778	-$ 36,673	-$ 37,590	-$ 38,529	-$ 39,493	-$ 40,480	-$ 41,492	-$ 42,529	-$ 43,592	-$ 44,682	-$ 45,799	-$ 46,944
	-$ 21,918	-$ 22,465	-$ 23,027	-$ 23,603	-$ 24,193	-$ 24,798	-$ 25,418	-$ 26,053	-$ 26,704	-$ 27,372	-$ 28,056	-$ 28,758	-$ 29,477
	-$ 878,494	**-$ 910,508**	**-$ 943,855**	**-$ 978,600**	**-$ 1,014,805**	**-$ 1,052,540**	**-$ 1,091,876**	**-$ 1,132,889**	**-$ 1,175,657**	**-$ 1,220,262**	**-$ 1,266,794**	**-$ 1,315,342**	**-$ 1,366,002**
	-$ 5,345,618	**-$ 5,615,995**	**-$ 5,832,840**	**-$ 6,089,383**	**-$ 6,357,450**	**-$ 6,637,565**	**-$ 6,930,278**	**-$ 7,236,163**	**-$ 7,555,820**	**-$ 7,889,877**	**-$ 8,238,991**	**-$ 8,603,850**	**-$ 8,985,172**
	$ 125,670	**$ 117,099**	**$ 109,859**	**$ 100,911**	**$ 91,132**	**$ 80,467**	**$ 68,861**	**$ 56,256**	**$ 42,588**	**$ 27,792**	**$ 11,799**	**-$ 5,466**	**-$ 24,080**
	$ 439,115	**$ 556,214**	**$ 666,072**	**$ 766,984**	**$ 858,115**	**$ 938,582**	**$ 1,007,444**	**$ 1,063,699**	**$ 1,106,288**	**$ 1,134,080**	**$ 1,145,879**	**$ 1,140,412**	**$ 1,116,332**
	-$ 4,502,824	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**	**-$ 4,502,824**
	$ -	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	-$ 4,377,153	**-$ 4,385,725**	**-$ 4,392,965**	**-$ 4,401,913**	**-$ 4,411,692**	**-$ 4,422,357**	**-$ 4,433,962**	**-$ 4,446,568**	**-$ 4,460,236**	**-$ 4,475,031**	**-$ 4,491,025**	**-$ 4,508,290**	**-$ 4,526,904**
	-$ 26,577,827	**-$ 30,963,552**	**-$ 35,356,517**	**-$ 39,758,430**	**-$ 44,170,122**	**-$ 48,592,479**	**-$ 53,026,441**	**-$ 57,473,009**	**-$ 61,933,245**	**-$ 66,408,276**	**-$ 70,899,301**	**-$ 75,407,591**	**-$ 79,934,496**

Appendix 3 - Joondalup Performing Arts and Cultural Facility - Architectural Design Competition Design Report: ARM Architecture (2013)

JOONDALUP PERFORMING ARTS & CULTURAL FACILITY

ARCHITECTURAL DESIGN COMPETITION

STAGE 2

PREPARED FOR THE
CITY OF JOONDALUP
JULY 2013

ARM
ARCHITECTURE

CONTENTS

A. DESIGN SOLUTION

THE WINNING DESIGN DELIVERS A VENUE THAT EXCITES AND INSPIRES BOTH USER AND PATRON. IT BRINGS VITALITY AND AN ENHANCED SENSE OF PLACE TO THE PRECINCT IN WHICH IT WILL BE SITED. ABOVE ALL, IT ACHIEVES DESIGN EXCELLENCE IN BOTH FORM AND FUNCTION.

VIEW ALONG GRAND BOULEVARD INTO ENTRY FORECOURT

AERIAL VIEW

WHAT BELONGS?

Our design hinges on capturing an immutable quality that belongs to the location, the region and the community of that place. Europeans settlement has long had a difficult relationship with occupying the Australian space, especially where the visual and climatic character of the landscape has little relationship to the rolling fields of Europe. Architects, attempting to deal with this difficulty, have travelled two paths: on the one hand, all buildings are classical temples upon their “chora”, and on the other hand, they are organic huts, embedded within their environment. New Norcia or Kings Park Education Centre. The heart of the new suburb of Joondalup cannot be a temple or a hut. The new cultural centre must transcend this dilemma and become both of the landscape and a significant and permanent cultural “place”. Too temple-like and it alienates itself from the wider terrain and the community. Too organic and it disappears into a parody of the landscape and its subtle texture. The building can carry a civic gravitas and come from the ground itself.

This part of the Swan Coastal Plain and in particular the Yanchep-Joondalup chain is an old coastal dune system, underlain by Tamala limestone. We are so familiar with the presence of eroded limestone that we almost don’t see it. Its form, its colour and its texture is the very foundation of our location.

The action of water on the Tamala has created serrations, caverns and even the fossil sands of the Spearwood dune system. Ground water of the Gnangara bubbles from the limestone at Lake Joondalup. In this south western part of the continent, the caves, the beach front & cliffs, the pinnacles at Nambung National Park, are so familiar, so remarkable. Could the “animus” represented in limestone create a meaningful emblem, a profound leitmotif, for a new complex on Central Park.

As well, the wash of water on this landscape, especially on the shores of the Lake, produces another familiar effect, the ripples of the water edge. This undulated surface is dynamic and at the same time a static illustration of the water that made it. In the dry season, the water level drops, exposing the rippled bed of the lake. When full, the lake shimmers with the rippling water: perhaps giving the location its name: the Nyungar word, “Doondalup”, meaning “the lake that glistens”.

Here then are two aspects of the eternal effect of water on the landscape that are characteristic of our region; the crenelated limestone and the rippled ground. These markings suggest a strategic direction for our scheme. Our design springs from these natural traits of the Joondalup region.

VIEW FROM LEVEL 1 INTO MAIN ENTRY FOYER

A CULTURAL LANDFORM

The scheme is structured in being a large eroded block. The scale of the block is such that it carries the dignity of a significant civic building and yet it is permeable and opened out to the street and to the gardens. On the exterior the erosion generates openings, cloisters, garden spaces and fenestrated gaps. On the inside, the erosion creates spaces, inner courtyards, foyers and elevated decks or terraces. The experience is of an abstracted cliff-scape, a terrain that is inhabited by performance and community activities. The strategy provides a range of options for spatial types; from open, light and natural spaces for informal public uses though to dark, curated spaces necessary for performance and art. From the new gardens, one moves from the stone piazza, through a cloistered entry plaza, amongst the limestone pinnacles, into the cove of the foyer and the inner terrain beyond. Within the building, fissures and holes provide views out and connection to the exterior. As well, gaps and erosions allow for courts, garden retreats and community enclaves up through the building. The whole exterior is rendered as both stone building and landform. It could recall the memory of a stone ruin of the early settler or the rocky outcrop of a beach head. The intention is to inhabit the building as if occupying a limestone block; not in a kitsch way, but in a way that illuminates the memory of the landscape and its texture.

INSIDE THE ROCK

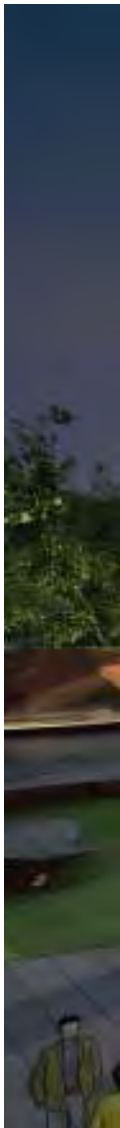
The layout of the building is structured on the procession from the parkland and the eroded façade, through to the remarkable interior landscape. From the north western corner the building works diagonally from public through performance spaces to back-of-house, loading and car parking access on the south eastern corner. The public spaces are shaped and finished on the theme of erosion and polishing, stone that has been worn open and stone that has been cut sheer through. These spaces provide a remarkable journey through to the performance spaces of Hall, Black Box and rehearsal spaces and upper level galleries and foyers. For the performer the back of house is a logical and practical array of spaces that are designed to meet the primary needs of show making; proximity of loading to stage and storage; adjacency of dressing rooms and stage, etc.

LIMESTONE IN ALL ITS SCALES

If you cut and polish a piece of travertine, a limestone made by geothermally heated supersaturated alkaline springs, you create a block with holes, fissures and gaps, but also beautifully grained and polished faces. The strategic trajectory for the JPACF utilises this allegorical act.

The building is rendered as an abstracted block. It is "cut" on its outer perimeter, but is perforated with gaps and caverns through its entire mass. It is both natural and manmade. The raw and the polished. The space and the surface.

The building can be finished in the traditional limestone of our region. The building will use an array of limestone finishes, roughhewn, sawn, honed, as cladding for the exterior and the interior primary spaces.



VIEW FROM JINAN GARDENS INTO ENTRY FORECOURT

B. URBAN DESIGN

THE WINNING DESIGN DEMONSTRATES HOW THE JPACF WILL FIT WITHIN, INTERACT WITH AND ENHANCE THE EXISTING PRECINCT.

CONTEXT/PRESENCE

The JPACF sits within the central activity zone of Joondalup, adjacent to the major shopping centre, to the rail station and the substantial hub of education facilities in the central city. Importantly it is adjacent to Joondalup's central park land and the green spine that notionally links through to the Lake. Any new building must establish its presence in the context of the mass of the giant mall and the relatively low scale educational facilities. The cultural centre building is of a scale that can generate a civic identity but it is by no means as imposing as the shopping centre.

We have chosen to create a density for the complex by choosing a simple geometric block, incorporating the car parking (more on this later), ensuring the new building is neither overwhelmed by it massive neighbour, but also does not suffer as a formal folly.

ACTIVATED EDGES

A primary rule of new public buildings is that they are not fortresses. Unlike the cultural facilities of the 1960s and 70s, contemporary public buildings need to operate 12 hours a day, 7 days a week. They need to open to their surroundings, integrated into the ant tracks that surround them. They should be active participants in their precincts, contributing activities to the neighbouring parks and streets. Our Proposal opens the building up to the park and forecourt area, with active uses, foyers, cafes and community spaces opening onto this important public realm. This is a key part of the design, critical to the experience of the new facility. During the day, active uses, small performances, displays etc., organised within the foyer are then visible to the park and forecourt users, inviting them to enter. In the evening the open foyers and café vistas allow everyone to see what's happening and be seen.

On Grand Boulevard, the building balances openings and solid façade commensurate with its face towards the main road; not closed but protected, with openings to allow vision in without intrusion from the vehicular environment. The south and east are the facades are formal and enclosed due to the nature of their interior spaces. But they are again by no means "back", more formal and helping create the dignified mass of the building, in balance with the very open north and north-west. We have located the car parking on the eastern side with access off Teakle Crt, away from the main public faces of the building.

OPEN BUILT FORM

The eroded mass of the building creates both a presence along Grand Boulevard, but it is also permeable and "broken down" into small elements. The intention is for a striking form but one that as you get closer, dissolves, and opens up to the visitor, welcoming you to the interior and its events.

PARKING

We have chosen to include the parking as a built structure above the ground, as part of the overall mass of the JPACF. This decision has been made for 4 reasons:

1/ The car parking levels assist in the scaling up of the building to help in generating a critical civic mass, particularly in the context of the Lakeside Joondalup Shopping Centre.

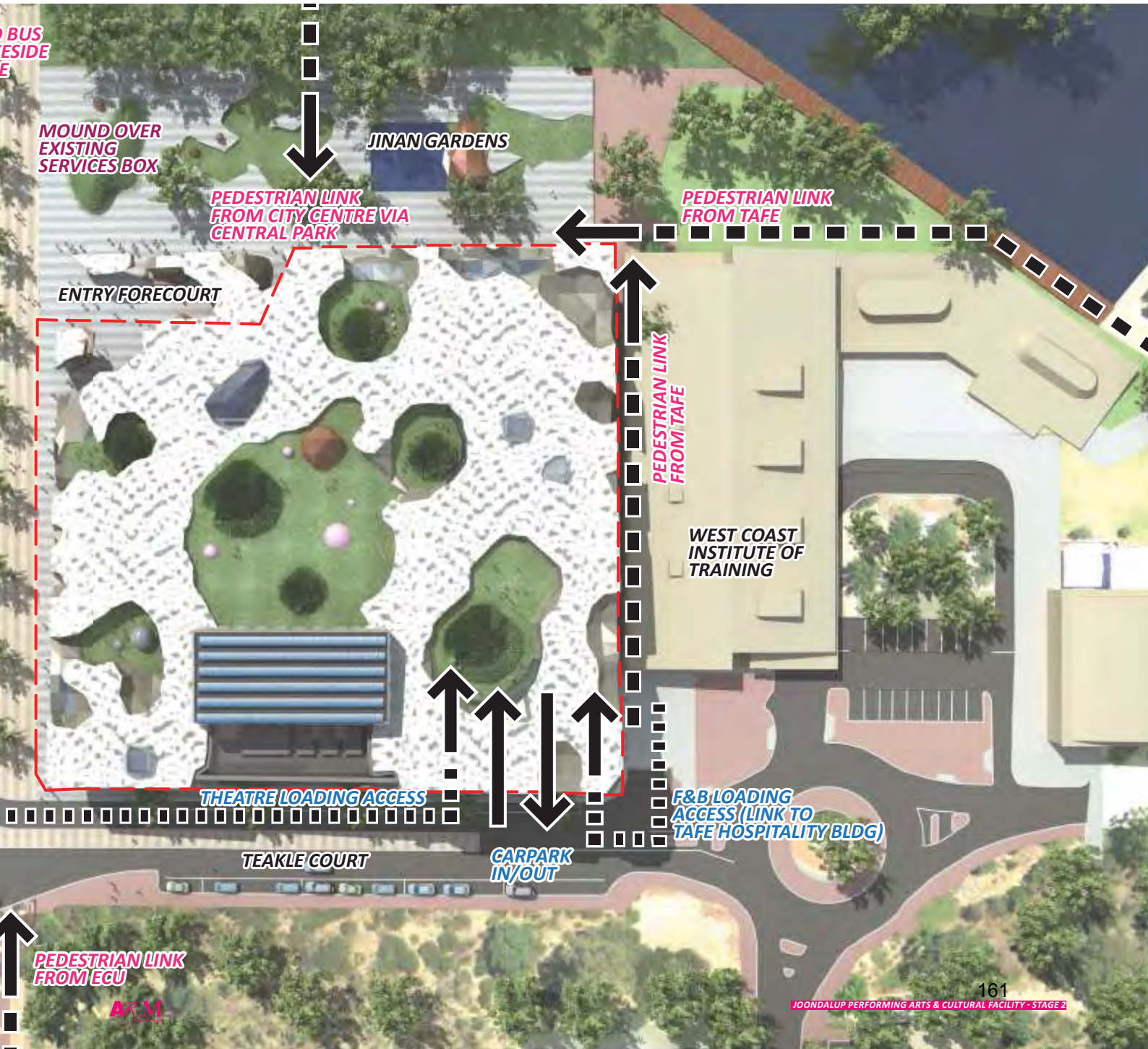
2/ Underground car parking is expensive and environmentally problematic.

3/ An open undercroft option creates a poor urban design outcome with negative street level experience and buildings detached from the street line.

4/ The decision to provide the extent of car spaces as nominated is easily varied through the design phase, should further research require more (or less).

SITE PLAN

VIEW OF THE BUILDING FROM GRAND BOULEVARD GATEWAY



VIEW FROM GRAND PROMENADE INTO NEW LANDSCAPE

LANDSCAPE MASTERPLAN & JINAN GARDENS

We have chosen to consider the masterplanning of the area to the north of the site as part of our scheme, to incorporate the proposed Jinan Gardens into a new activated forecourt for the buildng.

The landscape scheme takes geological ideas of 'porosity', dissolution and amorphous overprinting and deploys these within a slightly elevated plinth. The design accommodates a building forecourt and amphitheatre with secondary 'spill-over' and event spaces as well as external dining and cafe zones.

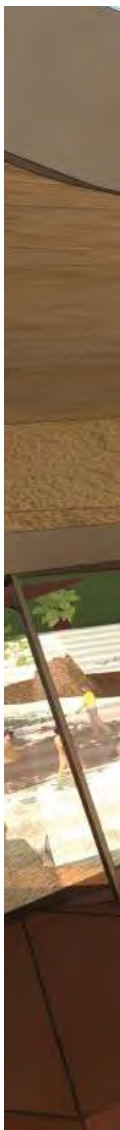
Historic cultural references to the style of Jinan gardens include formal still water bodies and informal sunken lakes and stream that connect to the existing lake to form a cleansing system that expresses stormwater capture from the site.

An abundance of natural rock and cut stone evoking the Jinan garden aesthetic builds upon the geological references. Leafy green planting zones are used to separate areas and organise the outdoor spaces around the building. Some planter beds become lowered akin to sinkholes dropping below forecourt level.

The nearby existing parklands are retained for visual and contextual reasons, and are characterised by a 'geometric bush school' aesthetic. A clear threshold and level change between forecourt plinth (including Jinan garden) and bush landscape allows for both to cohabit adjacent to one another. This integrated approach is preferred over a discrete walled garden typical of Chinese gardens around the world. Structures and landscape features would become contemporary interpretations of the Jinan garden style.

A formal avenue of mature trees is retained and is strengthened by ground surface treatments that invite promenading and the opportunity to view the landscape scheme from a moving vantage point.

Trees selected for the outdoor zones will be clear stem, small leafed and open canopied, providing shade but allowing the building architecture to express itself.



VIEW FROM FOYER INTO LANDSCAPE AND ROOFTOP COURTYARDS

C. FUNCTIONALITY

THE WINNING DESIGN DEMONSTRATES A CLEAR UNDERSTANDING OF HOW A PERFORMING ARTS FACILITY FUNCTIONS, THE RELATIONSHIP OF ITS COMPONENT PARTS, FLOW PATTERNS, ENVISAGED ACOUSTIC CHARACTERISTICS AND PROVIDES COMMENTARY ON HOW PRIMARY BUILDING SERVICES ARE ADDRESSED.

BUILDING LAYOUT

On analysis of the brief, we grouped the functions into three zones:

- Theatres
- Community spaces
- Carpark

The three zones have discrete entries and circulation, allowing the truly multifunctional uses of the Cultural Facility to function independently from each other, while still belonging together in a single building.

This could also have benefits for operational costs (restricting services to only the area of the building being used), and potential staging of construction.

THEATRE ZONE

The two theatre spaces are central to the building. Back-of-house support areas are immediately behind both theatres, with direct access to loading off Teakle Court. Two rehearsal spaces are located behind the Black Box, suitable for use by touring shows. The two spaces can be opened into one larger space for small performances.

Foyer spaces are adjacent to the park and the Grand Boulevard corner, maximising visibility for pedestrian and vehicle traffic, activating the park space, and enjoying northern light and a green aspect. Foyer spaces are split over multiple levels centred around large voids, allowing the space to be easily separated for different events, while maintaining connection and sense of place. Restaurants and bars spill out of into carved-out forecourts, courtyards and rooftop spaces.

The Art Gallery is considered as a performance space, with similar requirements for efficient front-of-house and back-of-house access. Lifted to a prominent location above Grand Boulevard, the Gallery is accessible from the main foyer and loading dock, and has a unique opportunity for a Sculpture Courtyard above the street.

COMMUNITY ZONE

The feasibility study highlighted community spaces as some of the most highly utilised in the building. It made sense to us to cluster together the studios for crafts and visual arts, with some of the lesser-utilised spaces such as ancilliary rehearsal rooms and conference rooms, allowing them to be flexibly programmed for anything from dance classes to community meetings.

The community spaces are located overlooking the park, along the main pedestrian desire line from the TAFE. A small upper-level courtyard provides vantage points into the foyer and the park.

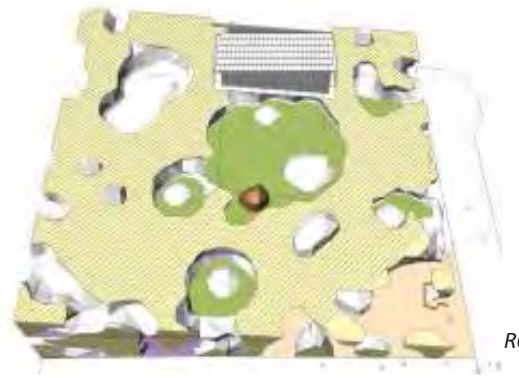
CARPARK ZONE

By placing the carpark above ground, it becomes an efficient space with the potential for natural ventilation and lighting, effectively separate from the theatre and community zones. This frees up the theatre and community zones from the mechanical ventilation of an underground carpark through the building above, and the associated negative strucutral and acoustic impacts of such a design restriction.

GROUND

LEVEL 1

LEVEL 2



ROOF

LYRIC THEATRE

THEATRE DESIGN

The main theatre is designed for optimal staggered sightlines with an intimate connection to the stage and good visibility even from the ends of the rows and the rear of the auditorium. While the seating has been designed in the continental style, wider than average rows have been provided to ensure comfortable access to every seat. The seating layout is also fully DDA compliant with excellent distribution of wheelchairs through all ticketing levels.

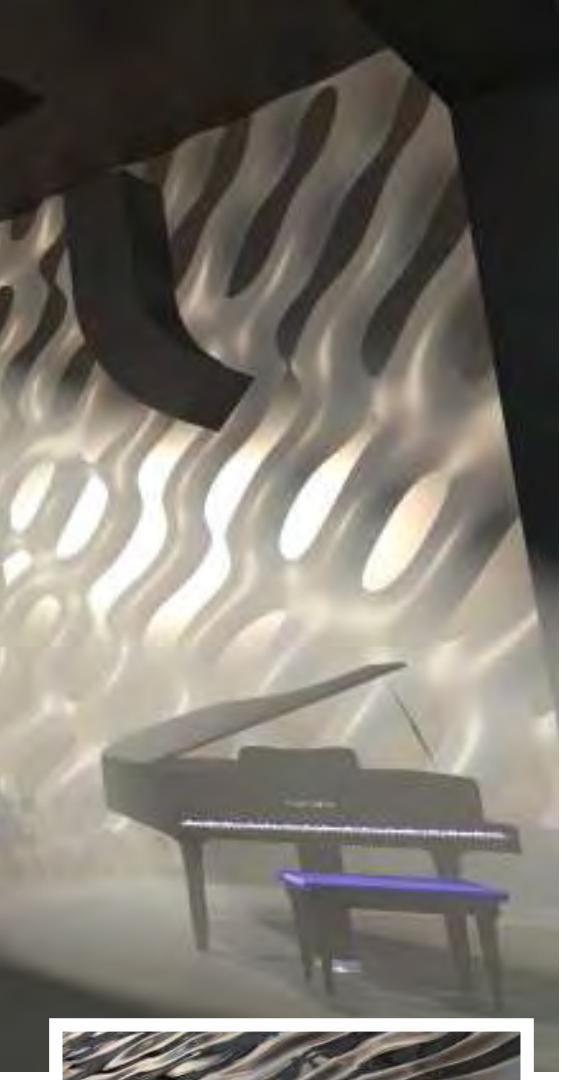
The stage designs and back of house area will allow for many varied activities to occur simultaneously and includes wide corridors and loading paths to ensure that performers and technical equipment can easily transit to the main theatre, black box and rehearsal rooms. These layouts are designed with efficiency and safety in mind so that technical staff can safely manage most projects, saving the theatre time and money.

Our review of the stated goals of Council for the new facility suggests to us that a strong foundation has been laid with much thought already given to the desires for the new facility. The practical nature of supporting an arts facility will require some mixture of commercial and community programming to keep the facility financially sound. We can help the team meet this goal by ensuring that all performance spaces are properly designed to support the needs of both touring acts and speakers as well as community arts groups. Examples of Schuler Shook's project experience in this regard include our recent work for Arts Centre Melbourne and Dallas City Performance Hall. The Arts Centre Melbourne brief required a space that could support everything from Broadway touring to a children's show. We helped create a solution by designing a new Technical Zone over the stage that allows the technical staff to set up for one type of production and quickly 'change over' to support the different needs of another production type.

We understand Council's interest in creating a facility that is an attractive place of wonder and excitement that will nurture an appreciation for the arts. We want the Joondalup Performing Arts and Cultural Facility to be a place that is just as enjoyable for technical theatre staff and artists as it is for community members who come to see a show or participate in an inclusive arts event.

Our goal is to create a place that everyone wants to return to – the artists because it supports their art well, and the community because it gives them a sense of belonging, as audience members and active participants.

LAKE JOONDALUP



ACOUSTIC DESIGN

FLEXIBLE REQUIREMENTS

The wide range of performance types intended for the auditorium calls for careful planning.

The length of time for the sound in a room to decay by 60dB is referred to as the reverberation time of the room. The reverberation time of a room is proportional to the volume of the room and inversely proportional to the amount of acoustic absorption contained in the room. Traditionally a venue for spoken theatre has a low reverberation time so that the speech intelligibility is preserved. However, most venues with a low reverberation time are not suited to the performance of classical unamplified music because the sound quality is dry and does not assist in blending the sound of the instruments.

The acoustics of the 850 seat Auditorium have been specifically designed to suit a wide range of performance types. These include:

- Dance with live and pre-recorded accompaniment
- Spoken theatre
- Contemporary popular music
- Chamber music
- Small scale opera
- Orchestral music.

Unlike other existing venues in Western Australia this Auditorium will be a true multi-purpose venue offering uncompromised acoustic conditions for the full range of uses referred to in the brief.

THEATRE & SPOKEN PERFORMANCE

The Auditorium is designed to be an intimate venue for spoken theatre, with a volume of 5,500 m3. The design reverberation time in the room is in the range 0.9 – 1.1 seconds. Speech clarity and communication from the stage to the audience are enhanced by early reflections from the specifically designed curved walls at the front of the audience area, and the curved ceiling panels adjacent to the proscenium and between the lighting bridges. Distribution of the reflection coverage is controlled by the design of these surfaces, and this ensures the excellence of the listening conditions in all parts of the audience.

The materials for the seats, wall and ceiling materials are chosen to provide an even frequency response in the room while naturally assisting projection of sound from the stage.

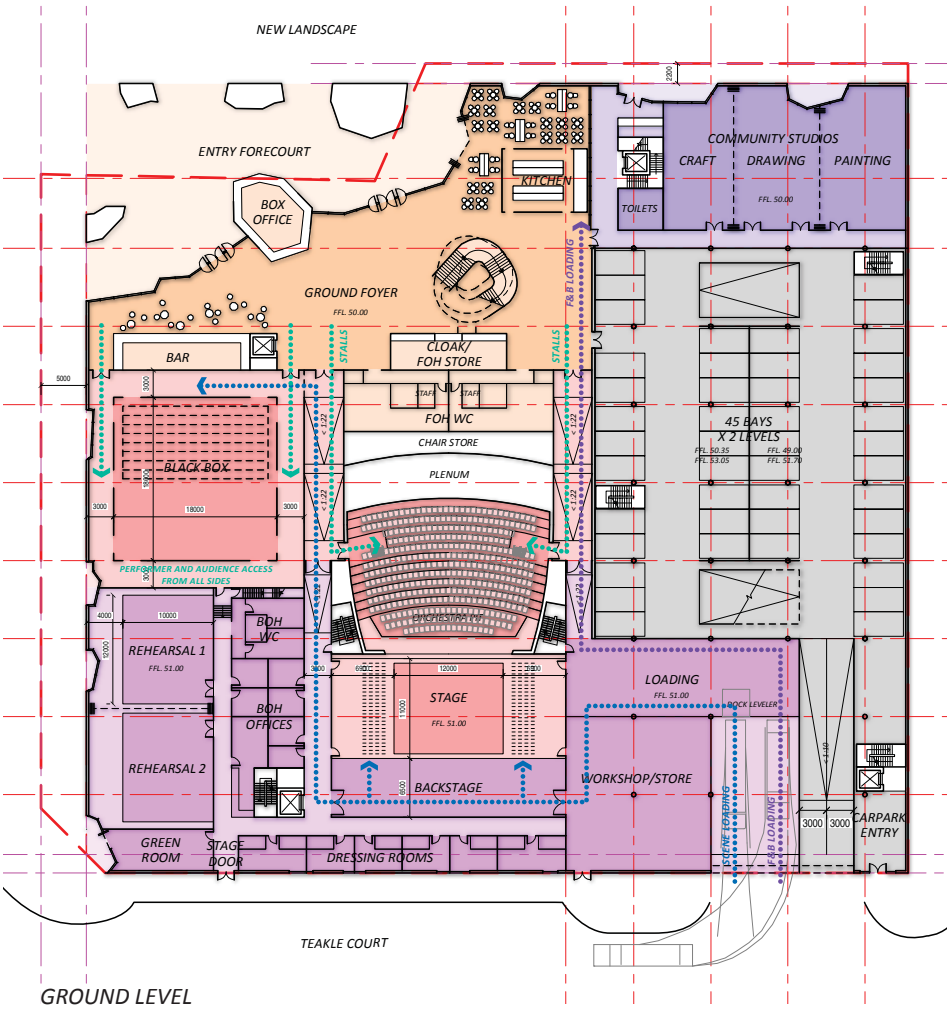
DANCE

For Dance presentations with pre-recorded accompaniment and amplified Concerts the specified reverberation time is ideal and a sound system including loudspeakers mounted adjacent to the theatre proscenium will be used. For performances requiring live musical accompaniment an orchestra pit is provided for up to 30 musicians. The curved wall and ceiling surfaces around the proscenium promote even sound distribution from the pit and the stage and allow the musicians direct feedback of the sound in the auditorium.

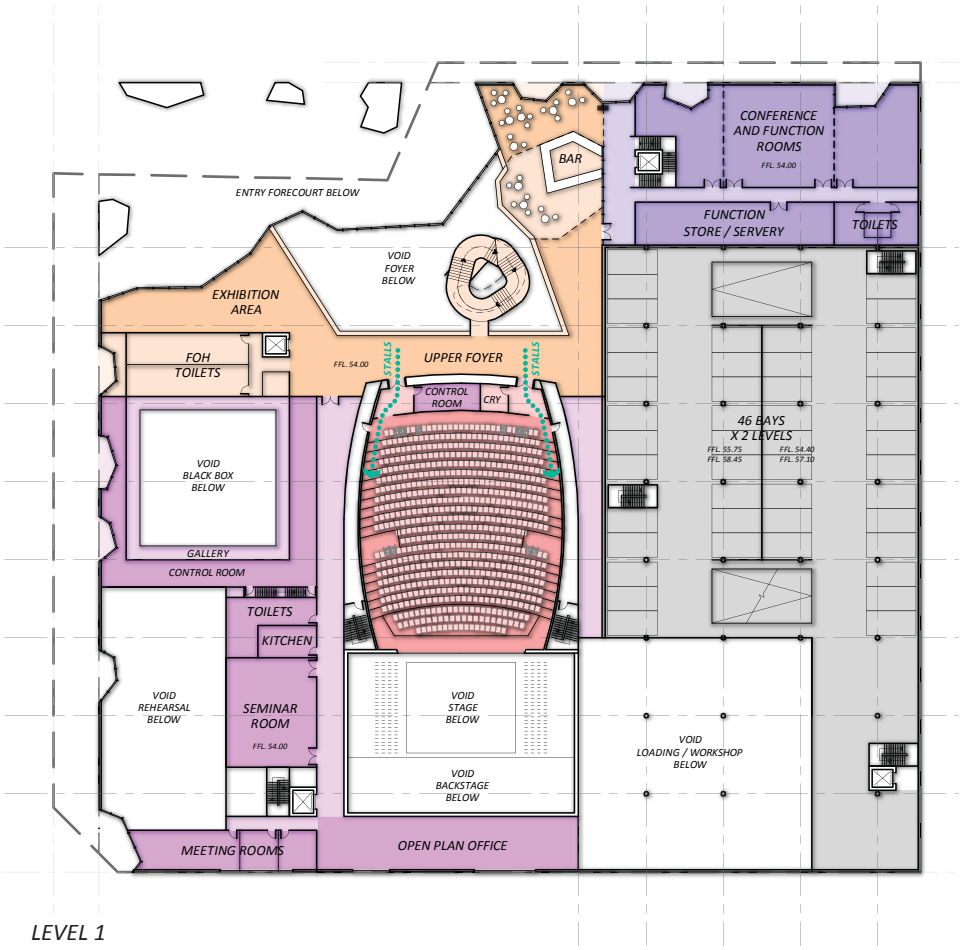
MUSIC

Most auditoria with this specification prove unsuccessful for chamber and orchestral music, due to the intimate natural reverberation time in the auditorium and the insufficient feedback for orchestral musicians seated on the main stage under the fly tower. This Auditorium is designed to include an electronic enhancement system that is proven to successfully address these issues.

With this system the reverberation time and strength of early reflections is enhanced using an array of loudspeakers positioned in the auditorium and fly tower. The audience hears a seamless blend of the performers' true sound and subtle levels of processed sound to simulate the presence of a larger room. The musicians on stage hear the effect of a stage shell without the need to provide large temporary wall and ceiling panels. This established technology allows the room dimensions to remain fixed at an economically attractive size while providing an acoustic environment that has no compromise. The system is tailored to each individual installation, and changes the acoustic conditions in the auditorium from a touch screen. A range of settings is programmed at the time of installation to cater for different sizes of orchestra and program types.



GROUND LEVEL



LEVEL 1

BUILDING STRUCTURE

GROUND FLOOR

The soil bearing capacity for the area is expected to be between 200 to 300 KPa for large footings on engineered soil; however this will need to be confirmed by a geotechnical investigation. The adoption of pad footing under the columns will probably be feasible.

The rafts supporting the stair and core walls (main stability elements) will probably be 650 to 800mm thick.

A 120mm to 150mm thick slab on ground will be proposed for the site depending on the geotechnical investigation report and the traffic/use expected for the floor.

The grids shown at the loading dock area are working well structurally however considerations may be given on what vehicular access must be provided.

LEVELS 1 AND 2

The carpark framing is typically formed by post tensioned band beams (generally 320mm deep) and 160mm slab on metal tray.

An acoustic barrier is required to isolate the carpark to the remaining structure. An expansion joint (which allows ground and structure movements reducing cracking and other serviceability issues) is proposed to run along with the acoustic barrier.

The proposed stair in the foyer can be made as a reinforced concrete structure or steel framed.

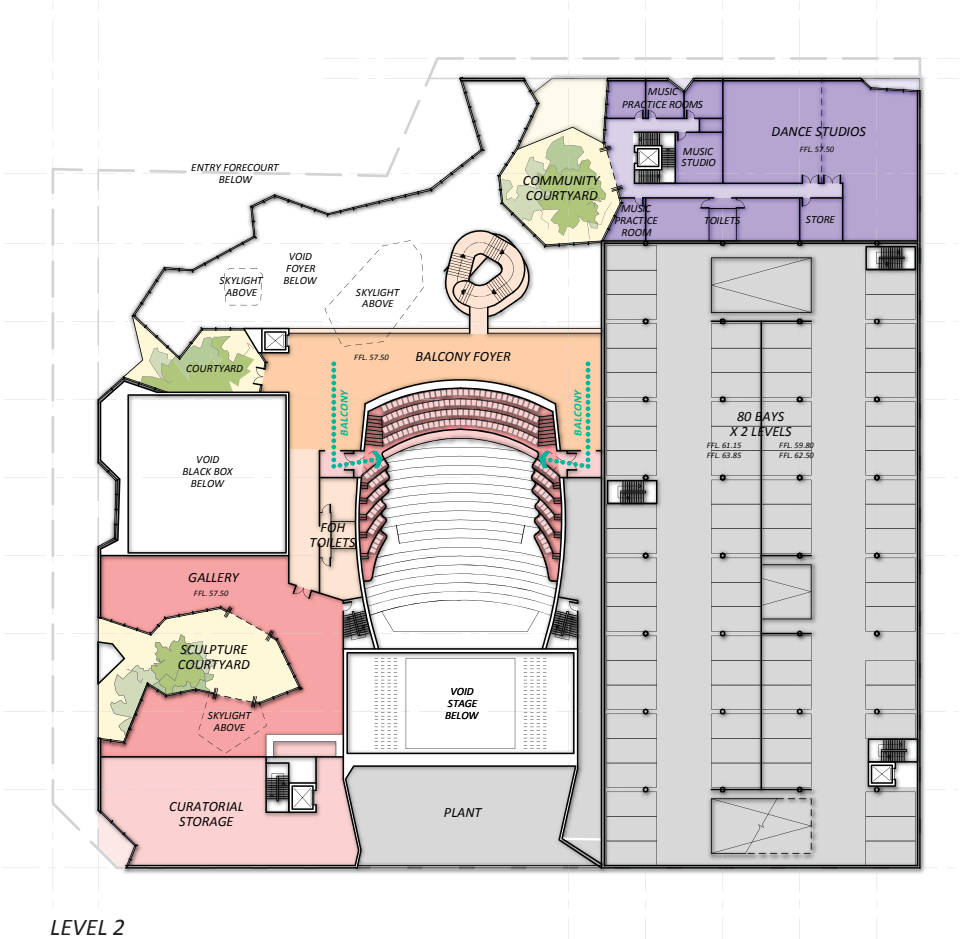
We are proposing a concrete frame for the remaining structure due to the nature of the building. The concrete walls or columns surrounding the voids can be used to support band beams or /and slabs between them. Steel columns and trusses will be required to support the Foyer facade.

ROOF STRUCTURE

Roof steel trusses are proposed to cover the gallery, the black box and the theatre areas. These trusses can be 2000mm deep and will support catwalks, grid mesh floors, lighting bridges and flying systems as required. A light weight roof system is proposed to cover the remaining area.

The gallery, the black box and the theatre perimeter walls can be 150mm to 180mm thick precast panels. Internal cladding will make this acoustically appropriate for the theatre requirements. Walls can also be light weight walls between braced steel or concrete columns.

The main lateral stability elements are required to extend and provide stability to the roof framing.



LEVEL 2

INTERIOR FOYER

ENVIRONMENTALLY SUSTAINABLE DESIGN

KEY ESD DESIGN FEATURES

We have investigated a number of potential solutions to integrate into the design and add value for the City of Joondalup. These are as follows:

1/ CLIMATICALLY APPROPRIATE DESIGN

The design features opportunities to take advantage of the annual diurnal range with potential for natural ventilation and night purging through the incorporation of high level windows and ventilation.

2/ THERMAL LABYRINTH

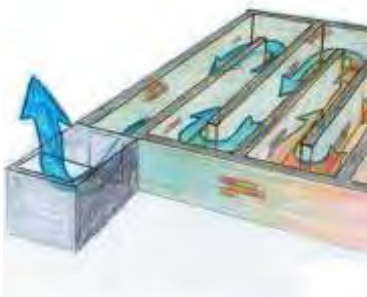
A thermal labyrinth located underneath the building would pre-cool/heat incoming air and thereby reduce mechanical heating/cooling demands. By locating the 400 parking bays above-ground, we allow for the possibility of a thermal labyrinth.

Based on previous experience with the design and integration of thermal labyrinths, a cooling of the incoming air by between 5 – 7 degrees C has been achieved (i.e. 33 degree ambient air exiting the labyrinth at 26 – 28 degrees). The air would then be distributed via underfloor ductwork to each level of the building as part of a displacement ventilation strategy.

The concept is based on a passive heating/ cooling strategy where outside air is pre-treated by drawing it through an extensive underground network that utilises a thermal network with the ground to moderate its temperature. The relatively stable ground temperature and its temperature lag compared to the average ambient temperature throughout the year result in the existence of a significant variation in the ambient temperature and the source temperature for the labyrinth.

There is gaining popularity for the installation of thermal labyrinths with the use of concrete pipes, technically referred to as earth-air heat exchangers. These installations make use of available pre–cast concrete piping typically used for stormwater runoff management to facilitate the exchange of heat with the ground whilst minimising cost due to the availability of such products on a large and affordable scale.

The benefits of these air-treatment options are largely centred on the ability of the system to supply a building with a consistently attenuated diurnal range hence providing substantial energy savings due to the minimal input required from the mechanical system. Coupled with the extremely low maintenance costs and long applicable life times, the installation of a thermal labyrinth or earth-air heat exchanger represents a highly plausible method for economic and environmental savings for the Joondalup Performing Arts & Cultural Facility.



THERMAL LABYRINTH DIAGRAM

3/ PV (PHOTOVOLTAICS)

Photovoltaics generate electrical power by converting solar radiation into direct current electricity. The benefits of photovoltaics are self-explanatory. PVs fit most types of designs, with a number of different size options. We can put together a simple feasibility study within the next stage of the design to show the cost and energy advantages.

4/ RAINWATER RECYCLING

The shallow rake of the roof is ideal for rainwater collection. This can be used within the building to reduce potable water usage, or externally for irrigation of landscape or rooftop green courtyards.

The rooftop courtyard in the community zone has the potential to become an education tool in sustainable lifestyles.

5/ SOLAR GLARE AND SOLAR CONTROL

In response to the importance placed on achieving good indoor environmental quality (IEQ) considerable emphasis has been placed on provide good solar control both in respect to solar glare and occupant comfort.

The external shading provisions proposed range from dedicated external shades to window; roof overhangs; verandahs; covered walkways; and self shading from building form.

Based on the bid design assessments the proposed design response performs exceedingly well providing good shading for 80% of working hours. Most spaces experience shading for over 90% of working hours and no space is shaded less than 80% of this period. The proposed architectural design response therefore exceeds current industry best practice in terms of solar control and provides an optimised solution for glare reduction and solar access, which contributes to improved occupant comfort.

BUILDING SERVICES

The design of building services in entertainment projects is particularly important. Issues that need to be correctly addressed include:

- Architectural compatibility
- Acoustic considerations
- System sizing
- Integrated ticketing systems
- Air distribution
- Fresh air control
- Heating system design
- Control room / biobox conditioning
- Trade waste applications

DISPLACEMENT AIR CONDITIONING SYSTEM

For the 850 seat theatre, we are using a displacement system to achieve low running costs, high occupant thermal comfort, and maximum air freshness. The displacement system introduces air at low level in the occupied zone which rises to high level taking odour and contaminants with it. The air distribution is working with the natural convection currents rather than working against these. The displacement system also allows for stratification meaning that the heat from the lighting is removed from high level maximising the temperature gradient above the occupied zone. Supply air is introduced to the occupied zone at 18°C, this results in a very low temperature gradient in the occupied zone, and maximum occupant comfort. An additional benefit of this high supply air temperature is that the outdoor economy cycle works effectively at ambient temperatures of up to 22°C, meaning annually in Perth the economy cycle provides 100% free cooling for 47% of the daytime and partial free cooling for an additional 25% of the year. This results in significantly less power consumption because the cooling does not run at all for 47% of the year.

LOAD ANALYSIS

The air conditioning must be properly sized to allow for the patron movements. Patrons move from the foyer, to the theatre before performances, during intermission, and after the performance. Understanding this means that the design of the entry foyer air conditioning systems are not oversized, causing spatial, cost and acoustic issues.

Understanding how the lighting operates (the balance between radiant heat, and convective heat from each light) means that the air conditioning system can be used to remove this heat in the most effective way.

INTEGRATED TICKETING

We have previously developed a ticketing interface so that air conditioning responds to ticket sales, operating hours etc. This results in reduced operational costs.

ART GALLERY

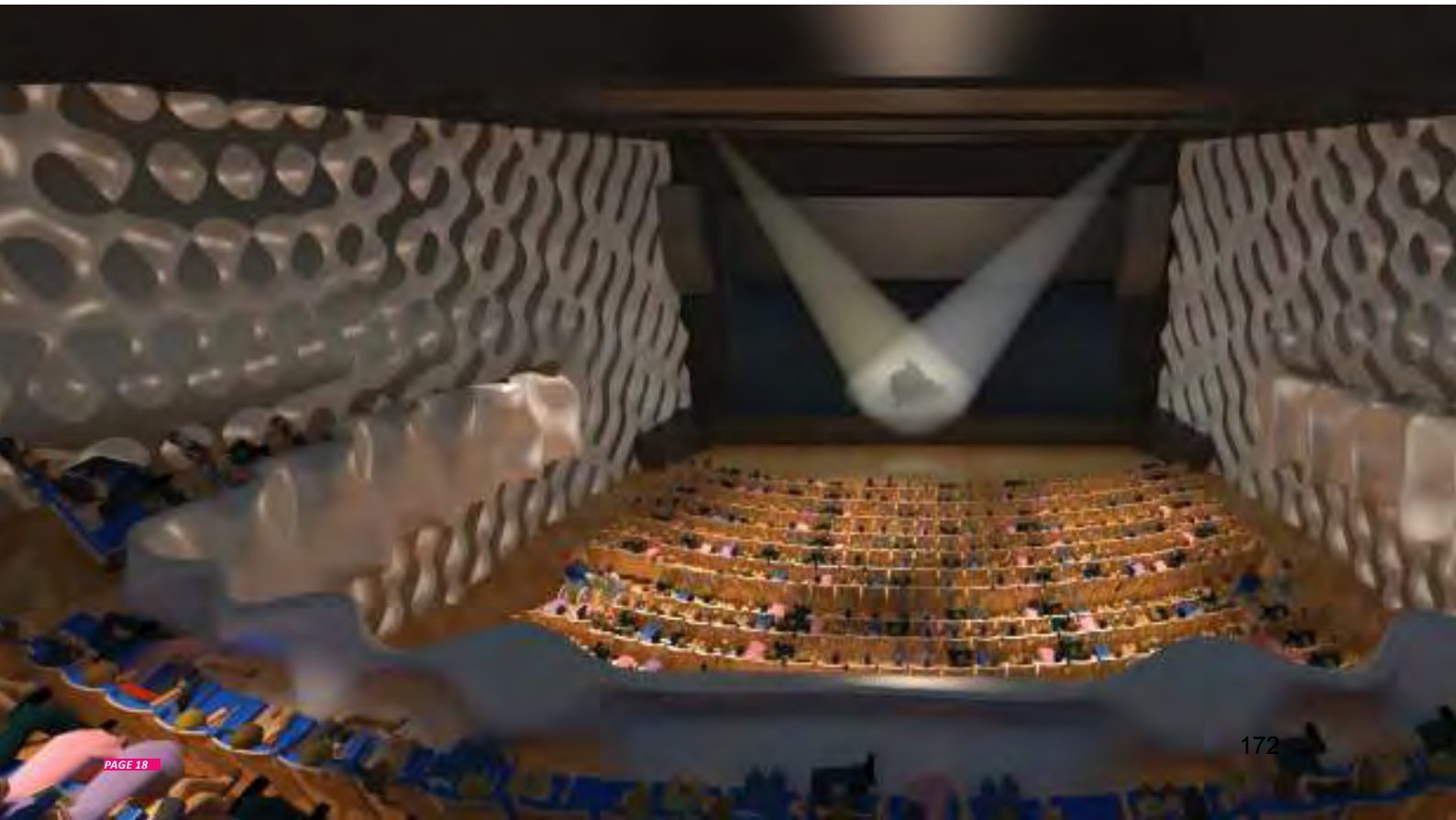
In order to protect the works on display the system is required to control temperature, humidity, and the maximum rate of change for the environmental conditions. In addition to this, the air conditioning uses filtration to provide fine particle control of airborne pollutants minimising damage to works on display.

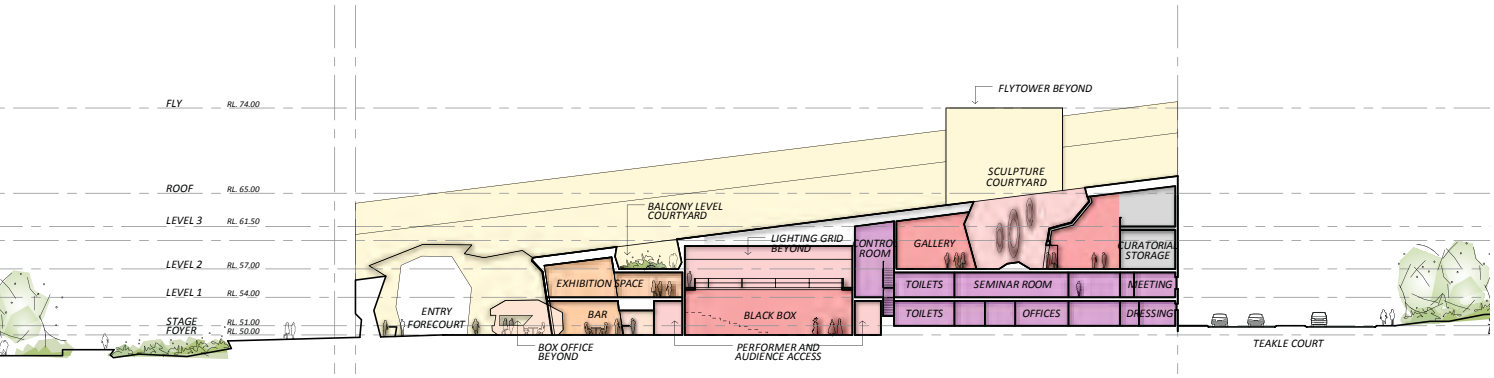
ACOUSTIC CONSIDERATIONS

Noise control is important. The design must avoid sound levels that are tonal. The most effective approach is to control noise at the source, and consider regenerated noise by considering duct air velocity and duct fittings configurations, and using acoustic lined ductwork. It is normal to design to PNC25, however we have completed designs that achieved PNC20.

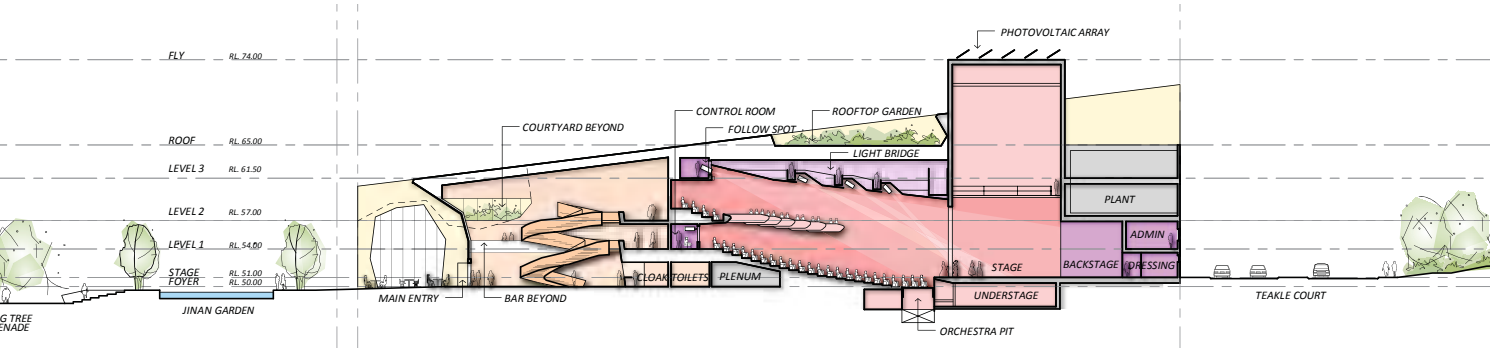
CONTROL ROOM CONDITIONING

Because the load profile is significantly different to the remainder of the building, the control room should be served from a separate system. The high heat loads mean air distribution is extremely important.

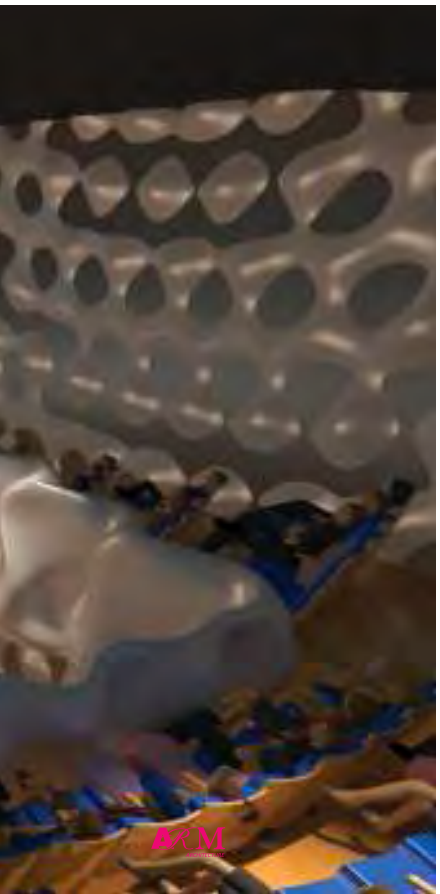




LONG SECTION THROUGH LYRIC THEATRE



LONG SECTION THROUGH BLACK BOX



HYDRAULICS DESIGN APPROACH

Understanding of the operating profiles is important as it will allow us to customise the systems and minimised construction cost as well as the operational cost of the building. Clever design solutions supported by the detail studies and alternative solutions to a known operational need can help to reduce the whole life building cost as well can help to build modern and suitable building,

STORM WATER

The theatre has a large roof area with large catchments per outlet, hence syphonic technologies are often appropriate. Acoustic issues relating to break out noise from the downpipes needs to be integrated in the building. The design will consider the rainfall patterns for Joondalup, to maximise the opportunities to use recycled water in the building. This understanding leads to a cost effective system design, and maximum benefits. Community studio facilities will have a high usage therefore we are proposing to consider a storm water recovery system that could serve the community studios during winter time. This will help to reduce water bills and increase the sustainability of the building.

POTABLE WATER STORAGE SYSTEM

This requires a high capital expenditure, hence a full understanding of the operating profiles and energy sources will allow the storage system to be properly integrated with the solar, gas, and electric hot water energy sources, enabling minimised whole of life costs.

CENTRAL HOT WATER USING GAS AS THE ENERGY SOURCE

We can propose an alternative design to conventional electrical hot water cylinders. The centralised hot water plant utilizing gas heating option could help to reduce electricity bills and reduces carbon footprint of the building. It could also enable to use renewable heat energy sources like solar preheating system.

BASE LOAD SOLAR HEATING SYSTEMS

Optimising the solar collector area vs storage volumes for the facility usage profile means not overcapitalising and maximising returns. Similar to the storm water recycle option, we would design a system that serves areas with a high utilisation like community studio or offices. The detail study could show if this option would be beneficial for the building and if it could help minimise whole of life costs.

FIXTURE SELECTION

Low water usage and robust design are required. Sizing of service ducts is important for maintenance and continuity of operation. Using simple design solutions for easy access to services ducts within the toilet we could achieve significantly improved maintenance or repair of services even during major events.

D. COST

THE COST ESTIMATE PROVIDED INCLUDES AN ELEMENTAL BREAKDOWN AND OVERALL COST PER SQUARE METRE CONFIRMED BY A QUANTITY SURVEYOR. IN ADDITION, THE ECONOMIC SUSTAINABILITY PRINCIPLES INCORPORATED IN THE DESIGN MINIMISE ON-GOING OPERATIONAL COSTS.

COST PLAN / DONALD CANT WATTS CORKE

The current day costs for the project are summarised in the following table. A detailed budget assement is included in the Appendix.

The comparable client's budget in the Feasibility Study is $91.76m exclusive of GST. We are therefore providing a solution that can meet the client's budget.

SCOPE

The Opinion of Probable Cost allows for the architects' layouts and design intent based on the clients brief. The budget allows for the full 400 car parking spaces.

The OPC allows for the construction of the building and the immediate external works. It does not include for the masterplan external works areas and associated cost.

The costs have been built up to include, and reflect the structure of the clients orginal budget. Therefore they are based on January 2014 prices. For specific assumptions and exclusions refer to next page.

CONTINGENCY

The project is currently at concept stage. Based on best practice we would be expecting the following allowances for contingency:

- Design Contingency – 5.00%, and
- Construction Contingency – 3.50%

Dependent upon the final procurement solution and the balance of risk between the client and the contractor some or all of the contingency allowances may be transferred into any potential contract sum with a contractor.

ESCALATION

The Perth and Western Australian markets have seen a marked change in construction activity and therefore pressure of labour, plant and material. In the lead up to 2008 the market was extremely overheated as a result of over demand directly related to the resources market. We were seeing prices for key materials such as steel and concrete at $12,000/t and $500/m3+ respectively in 2008.

The market has changed considerably over the last two years with demand weakening resulting in a rebalance of cost pressures. The State government produce a retrospective view on non-residential building prices which is extracted below. We have seen over the last two years that markets have been contracting but latterly at a slower rate of contraction. Key materials such as steel and concrete are now around $7,000/t and $400/m2.

Going forward we are expecting the market to start to tighten again but not until late 2013/ early 2014. We would expect prices to remain static through this year based on current expectations and going into 2014 to increase by:

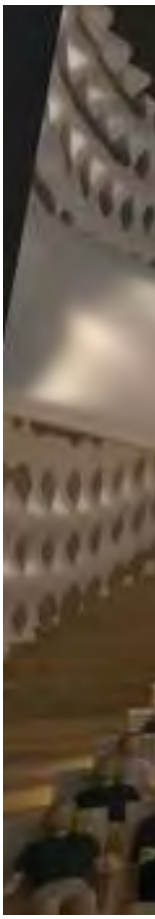
- Calender Year 2013 - 0%
- Calender Year 2014 - 3%
- Calender Year 2015 - 3%
- Calender Year 2016 – 3.5%
- Calender Year 2017 - 3.5%
- Calender Year 2018 – 3.5%
- Calender Year 2019 – 4%
- Calender Year 2020 – 4%

The above opinions are exactly that, opinions. Escalation by its very nature is dynamic and continually changing therefore they will be subject to change. We will, of course, keep you advised as and when changes occur.

EXCLUSIONS

The following are exluded from the Opinion of Probable Estimate:

1/ Abnormal Site Conditions
2/ Major services diversions (provisional allowance has been made)
3/ Piling
4/ Green Star rating and non code ESD initiatives
5/ Solar panels to roof
6/ Masterplan external works area
7/ Escalation beyond January 2014 (as per clients budget)
8/ Client Costs
9/ Land, legal and finance costs
10/ Leasing fees, display suite, marketing etc
11/ All Loose FFE
12/ Sprinklers to Car Park – engineered solution
13/ Assumed natural ventilation to 50% of parking
14/ GST



ELEMENT	TOTAL $	FECA RATE $SQM	GFA RATE $SQM
Substructure	$ 1,757,000	$ 72	$ 72
Superstructure	$ 30,118,000	$ 1,231	$ 1,231
Finishes	$ 5, 068,000	$ 207	$ 207
FFE	$ 2,575,000	$ 105	$ 105
Services	$ 21,301,000	$ 870	$ 870
TOTAL BUILDING WORKS	***$ 60,819,000***	***$ 2,485***	***$ 2,485***
External Works	$ 1,650,000	$ 67	$ 67
External Services	$ 1,350,000	$ 55	$ 55
Main Contractor Prelims	$ 8,667,000	$ 354	$ 354
CURRENT DAY BUILD COSTS	***$ 72,486,000***	***$ 2,962***	***$ 2,962***
Design Contingency	$ 3,618,000	$ 148	$ 148
Construction Contingency	$ 2,820,000	$ 115	$ 115
Furniture, Fitments and Equip.	$ 700,000	$ 29	$ 29
Theatre Technical Equip.	$ 2,500,000	$ 102	$ 102
Professional Fees	$ 8,600,000	$ 351	$ 351
JANUARY 2012 BUILD COSTS	***$ 90,724,000***	***$ 3,708***	***$ 3,708***

LYRIC THEATRE

VIEW INTO MAIN FOYER

DELIVERING A COST-EFFICIENT DESIGN SOLUTION

We believe a successful project that finishes on time and on budget begins with clear communication between the owner and the full design team. The owner must communicate the needs and wishes for the facility. The design team must communicate the costs involved in meeting those wishes.

Schuler Shook will calculate anticipated costs for all of the theatre equipment systems, and we will update these estimates at each phase of the project, to assure that they are kept current with the design and with current technology and product availability.

WHOLE OF LIFE

We believe that the Joondalup Performing Arts and Cultural Facility project represents a unique opportunity to create a truly optimal Whole of Life (WOL) solution that:

- Delivers a low risk adjusted Net Present Value (NPV) cost to the City;
- Incorporates a process that, after bid date, will continue to create savings for the City; and
- Substantially de-risks the performance of the operations through the implementation of detailed analysis identifying risk and abatement issues upfront, and implementation of appropriate risk management strategies.

WOL analysis involves analysing a range of design options and their associated capital of expenditures and on-going operational costs across the life of the Project and optimising these cost outcomes for the Project.

We believe that it is during the design stage that the greatest WOL gains can be achieved. WOL analysis can be applied to whole building systems or to single elements or items of equipment to identify the most cost effective design option over the life of the project. It takes the traditional comparison of capital cost options during the design process through to the next generation by comparing the total Net Present Value (NPV) of construction and operations costs of the asset options over their contract lifetime.

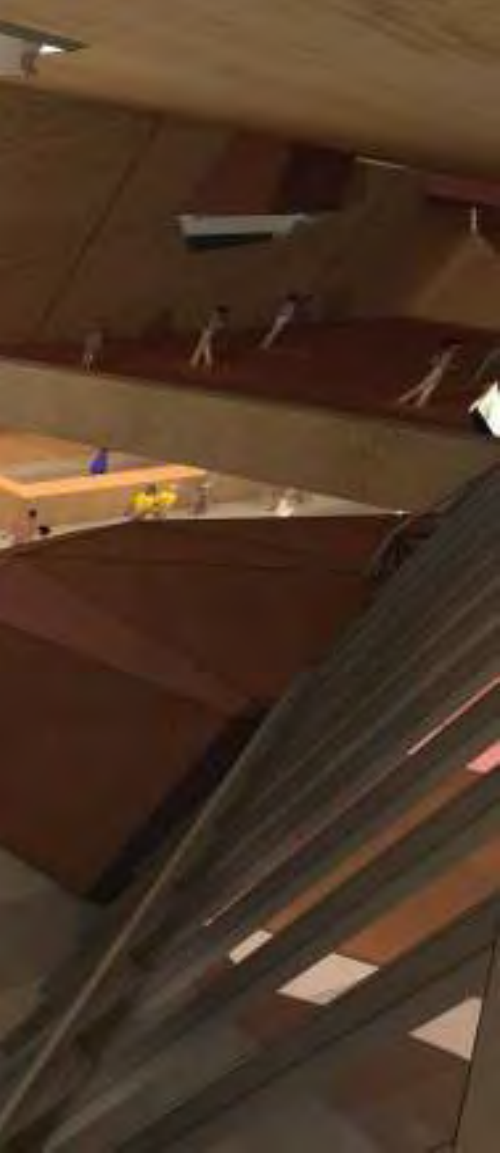
APPROACH AND METHODOLOGY

Our WOL process can be summarised as follows:

- Identification of a range of options and alternatives for comparison;;
- Identification and quantification of the required input costs from those who will be responsible for designing, constructing, operating and maintaining the facility; and
- Optimisation of the options selected and feed it back into the design process.

Our Whole Of Life approach and considerations for the various new work packages attempted to design facilities that:

- Provides a facility that is appropriate to the climate, is sustainable and of low maintenance;
- Has a design that will serve for greater number of functional years thus reducing the life-cycle impact of the facility.
- Have involved intensive interaction throughout the Bid phase between all parties to produce a design solution that is inherently robust and that reduces the risk of systems failure and maintenance.



Accurate budget control means delivering a project for an agreed total outturn cost at the end of the project. Achieving this requires a number of essential factors to be put in place at the outset of the project.

SCOPE & BUDGET ALIGNMENT

The alignment of the available budget and the desired scope must be tested as early as possible. While the project sponsor will doubtless have undertaken a verification process on this before the appointment of the architect, it is not unusual for a mismatch between budget and scope to arise in the early project phases, for example through less budget being approved than was requested, or through additional scope being included late in the process. It is, however, the earliest possible identification of the extent (if any) of this mismatch that will allow it to be managed appropriately. Client agencies usually have high expectations of scope and possibly unrealistic expectation of what budget is required to deliver that scope, so early advice is the best way to defuse and adjust expectations without causing unnecessary angst.

This is achieved through an early test with the cost planner, usually based on discussions, rough sketches, area schedules and some predictions about materials and engineering systems. We work with the cost planner to decide what areas should have more or less contingency allowances made, dependent on the degree of certainty of design.

Once an initial assessment is available, strategies can be put in place. These will include contingency setting, scope adjustment and design innovation to save cost and/or time. The aim is to get the early project settings right, with an appropriate contingency in place. We also look for what we call 'design contingencies' – areas of scope that if necessary, and in the unlikely event that contingencies are exhausted before completion, can be used to defer or eliminate scope and therefore cost in a way which is not affecting the fundamental functional requirements of the project, and which can be reinstated later should funds become available.

VIEW INTO MAIN FOYER

CONTINGENCY SETTING

We work closely with the cost planner in this area. While early contingencies tend to be percentage amounts based on experience, we like to move towards a risk based assessment of contingency as soon as possible. This approach sees all the significant items of cost risk analysed and allowances made for each item, depending on the nature of the risk. The individual allowances are totaled and become the project contingency. In this way it is made very clear that the contingency allowances are not available to use for scope until the PCG or the Project Director decides that the specific risk has passed, and that the amount of contingency allocated to that risk can be released to scope.

In this way, attention is focused on the specifics of cost risk, so that the contingency is appropriate to the risk profile of the project. Typically this will take the form of a spreadsheet with line items for each cost risk, which is reviewed on a regular basis with the cost planner and BMW Project Director. It may be included in the regular project reporting if the Project Director so decides. (Note that it is important that the Cost Planner's scope of seres is aligned with the adopted strategy in this area)

There may also be a separate client contingency which is solely at the client's discretion and may be used for any purpose the client sees fit – this is to be decided in conjunction with the client at the outset. It may for example be applied to some completely unexpected event which causes the project to suffer a cost or scope impost that cannot be otherwise dealt with. Equally it could be applied to discretionary scope late in the project, such as fit out Value Management

VALUE MANAGEMENT

There must be an ongoing process of value management, which is an attitude within the design team to continually question whether emerging design solutions really represent the best value for money for the project. This is a process that relies on both innovation (for example using common materials in uncommon ways) and strategy (for example, not spreading scarce budget out over large areas of the project where there is little impact or benefit, but concentrating it into areas where there is a real and perceived benefit).

For ARM, this is a normal way of working, as we are accustomed to delivering buildings with modest budgets and high aspirations.

This project is of a scale that would warrant one or two formal value management sessions during the development of the design. Typically this would be a facilitated half day workshop, where all the basic design assumptions are examined and questioned to verify that the right choices are being made, and that lateral solutions are not being overlooked.

CONSTRUCTION DOCUMENTATION & TENDERING

There is an art to getting the best value out of a tender process through the way a project is documented. This includes showing the necessary information only, clarity and simplicity of the documents and the referencing systems, and dealing with any more complex or non-traditional areas (if any) in a specific way aimed at assisting tenderers to understand the intent easily without pricing unnecessary risk.

As an example of the latter, an area of the project that might be perceived a high risk by tenderers because it was too much work for them to price, or because it might involve suppliers or construction techniques with which they may not be familiar, can be excised from the tender and priced with the appropriate expert sub contractors and/or suppliers

in advance of the main tender, and this information can be supplied to tenderers to assist them and to avoid unnecessary risk loading. We have used this technique very successfully in several projects in the past. It may also be worth considering an industry briefing if there are any aspects of the design or procurement model that would benefit from early industry input, or where the industry may approach the tender more competitively with a better understanding of what is required.

Increasingly, the industry is becoming accustomed to the benefits of BIM in varying degrees, and using a procurement system that allows the design team and the contractor to fully co-operate in a BIM environment is another way to deliver best value for money and hence control costs. The selection of the correct procurement system given the BIM aspirations of the project is very important, and is something we look forward to discussing with you in more detail.

NIGHT VIEW FROM GRAND BOULEVARD

'Schuler Shook brought great value to the Gallagher Center. They kept the theatre's needs in focus, even with a tight budget. Scores of details would have been easy for us to miss without their professional guidance. I felt their personal attention and credibility as working theatre professionals a winning combination.'

CATHERINE SPRINGFIELD, DIRECTOR OF PERFORMING ARTS, XAVIER UNIVERSITY

CONSTRUCTION ADMINISTRATION

Naturally enough, cost control continues with a high focus during construction. At this point, the remaining contingency would be analysed more closely and the line items in the contingency management spreadsheet allocated to components of the project identified through the tender process and trade breakdowns. There would also need to be some contingency allocated to contractural claims, dependent on the assessment of the track record of the successful tenderer, industry conditions prevailing at the time, and the relationship of the accepted tender to the Cost Planners view of the correct costs, amongst other factors.

We will also have in place a protocol that will prevent the issuing of any instructions to the Contractor without there being an assessment of any cost or time implications of the claim, referred to the Project Director where required (usually above a delegated limit for the Superintendent's Representative).

The ongoing management and reporting of variations is therefore linked to the contingency management tool, and is designed to keep the Project Director and the PCG appraised of the situation regarding variations approved and pending (or anticipated) and the remaining contingency pool.

MANAGING EXPECTATIONS & BUDGETS

We have no doubt that the project will be starting out with the stakeholders' expectations being in advance of the budget that is available. This is 'situation normal' for most public projects these days, and it requires a process of modifying expectations while driving the maximum 'bang for your buck' from the budget and the brief. This is addressed in three ways:

- Regular and strategic communication with stakeholders, taking them on the journey so that they gain a full appreciation of what is and what is not possible within the project parameters, and more importantly, that they believe it. Then the process of prioritizing needs can start, leading to a common acceptance of a brief and a sound base for design to start.
- Strategic design in terms of how and where to apply scarce budget to maximum effect for the stakeholders. Simply put, this means spending the money where it makes a difference, and not where it really doesn't matter.
- Through the innovative use of ordinary building materials and methods we reinvent tried technologies in creative and unusual ways. We strive for maximum impact without maximum cost.

Examples of how we have used innovation in this area include:

- Promedicus, head office , Richmond (Geodesic side wall, 'straight' refurbishment of existing building)
- National Museum of Australia (Highly figured public space, utilitarian exhibition hall structure and linings)
- Marion Cultural Centre (Gestured and complex public facades, regular planning, cost effective rear and side facades)

All of our projects are built with hard working budgets, so this strategy is always being explored and refined to maximum effect. It can be used in methods of production as well as design, for example using BIM to drive manufacture without shop drawings, or to employ industrial processes not normally used in building construction.

'This impressive project, which is the latest addition to Victoria's cultural landscape, has reached the milestone of practical completion three months ahead of schedule.'

FORMER PREMIER MR JOHN BRUMBY, STATE GOVERNMENT OF VICTORIA AT PRACTICAL COMPLETION OF THE MRC & MTC PROJECT

PHASE I – DESIGN COMPETITION

6 WEEKS — **27 JUNE 2013**

Review project objectives, engage sub-contractors/ consultants, and develop

- Review of the proposed site and it constraints
- Analysis of the external factors having a bearing on the site, such as traffic movement.
- A review of the proposed facilities to be incorporated into the facility
- Engage any sub-contractors/consultants
- Development of a concept design for the facility concentrating on organisation and massing, planning of primary elements,
- Detailed assessment of the design option
- Presentation of design

PHASE II – COMPETITION DESIGN REVIEW AND FUNCTIONAL AND TECHNICAL BRIEF

6 WEEKS — **17 FEBRUARY 2014**

12 WEEKS

Review of competition design with Design Team, Quantity Surveyor, the PWG, Project Design Group (PDG) and other Council representatives and key stakeholders.
Preparation of a detailed Functional and Technical Brief (FTB) fully describing the characteristics and performance standards required to be achieved in the Project, including:

- A review of the proposed facilities to be incorporated into the facility
- Contribution to cost plans/estimates, construction programs and other relevant documentation.
- Participation in community consultation and stakeholder engagement forums
- A statement of design philosophy and objectives;
- Overall building and external area design requirements;
- All heritage and collection environment standards for collection and heritage item storage.
- Area details of building finishes and of fittings and movablefurniture and equipment;
- Specific performance standards for building elements, operational requirements, and operational provisions including structure, engineering services, external works, horizontal and vertical circulation, security, access control, retailing and food and beverage services, traffic access/egress and goods handling etc.

PHASE III – PROJECT DELIVERY STRATEGY

PHASE IV – PROJECT DEVELOPMENT (CONCURRENT WITH PHASES II & III)

4 WEEKS — **17 MARCH 2014**

31 MARCH 2014

Assist the Project Manager, Principal and the Quantity Surveyor to prepare a Project Delivery Strategy for the Project. The Strategy will address matters such as:

- The establishment of a master cost and time plan including suitable design and construction contingencies;
- The selection of an initial project delivery strategy and delivery method. Risk areas, demolition of existing buildings, decanting and relocation of current services, commissioning and handover of the Project;
- Determining a recommended project strategy to deliver the project;
- The identification, recommendation and co-ordination with the Principal's Contracts and Purchasing Unit of any contracts which may deliver benefits to the Principal and which are appropriate for the Project;
- Preparation of an external authority approval requirement matrix; and
- Identification of the necessary legal approvals and requirements.

Develop for the PCG's approval, a schematic design development solution for the Project that is consistent with the Functional & Technical Brief and within the master cost and time plan.

- Provide the general administration services necessary for the scope of this phase including consultation, meetings and communications :
- Ensure that design development solutions are consistent with the, Building Code of Australia, Building Regulations and all Acts and Laws affecting the Project
- Prepare the schematic design development documents consisting of drawings and other documents illustrating the general scope, scale and relationship of the project components, including:
  - Preliminary and developed sections and elevations
  - Preliminary and developed selection of building systems and materials
  - Space allocation and utilisation plans based on functional relationships, consideration of materials, systems and equipment and development of conceptual design
  - Functional plans that clearly show the alternate uses of multi-use spaces, including special equipment required for special modes.
  - Development of approximate and detailed dimensions, areas and volumes
  - Perspective sketches
  - Documentation and information for construction of a Project model (model maker to be engaged by the Principal and managed by the Project Manager)
  - Area analysis on net and gross to establish building efficiency
- Co-ordination between the architectural work and all engineering and other involved disciplines for the Project
- Participation in value management studies to ensure efficiency and effectiveness of design development solutions
- Provide regular reporting to and/or attend Project Control Group, Project Working Group and Project Design Group meetings as required.

PHASE V – CONTRACT DOCUMENT PREPARATION FOR TENDER

28 WEEKS — **13 OCTOBER 2014**

Take the Project as approved by the Principal together with the Functional and Technical Brief and the schematic design/development documents and, based upon the selected delivery method, develop the project documentation to a state suitable for tender.

- Develop the nominated specific Project solution to full documentation stage that allows a contractor to achieve construction costs within the ceiling cost approved by the Principal and produce a project solution that is consistent with the Principal's fully developed requirements.
- Provide the services necessary to prepare construction documents for approval by the Principal consisting of drawings, specifications and other documents setting forth in detail the requirements for construction of the Project. The services include:
- Co-ordination between the architectural work and all engineering disciplines for the Project; and review and checking of documents prepared for the Project
- Authority consulting/review/approval services relating to applicable laws, statutes, regulations and codes of regulating entities
- Undertake such design reviews as may be prudent to ensure that design of all disciplines is consistent and in accordance with the FTB.
- Undertake design presentations.
- Advise and assist the Principal and Project Manager to develop the nominated specific Project solution to a documented design stage consistent with that suitable to achieve construction outturn cost within the ceiling cost approved by Principal.
- Brief and co-ordinate the other consultants to carry out the necessary design elements.

PHASE VI – TENDER, AWARD AND PROJECT DELIVERY

8 WEEKS — **24 NOVEMBER 2014**

**Assist the Project Manager to prepare the Project documentation,
put the project/s to tender and award the construction contract/s.**

- Assist the Quantity Surveyor to revise the tender document cost plan and provide a final adjusted cost plan to accord with the delivery method selected for presentation to the Project Control Group.
- Respond to tender queries and requests for information
- Assist as required with the analysis of the tenders received and select the most suitable contractor for each contract.
- Prepare the documentation necessary to facilitate the construction contract.

PHASE VII – CONSTRUCTION ADVICE AND CONTRACT ADMINISTRATION

NOV 2014 ***NOV 2016***

Assist the Project Manager to review compliance with design intent under the construction contract.

- Provide regular reports identifying design progress and design achievements and any project risks;
- Review compliance with construction documentation
- Review contractor submissions, shop drawings for compliance with the Contract, Drawings and Specifications.
- Provide to the Contractor an explanation or a correction of any discrepancy in the Contract Documents
- Provide advice when required on departure or change to design intent with suggestions as to remedy
- Attend regular site meetings, where required.
- Provide specialist advice in respect to constructability, quality control etc
- Assist the Project Manager and Quantity Surveyor to assess variations, where required.

PHASE VIII – DEFECTS LIABILITY PERIOD

NOV 2016 ***NOV 2017***

Attend regular inspections of the building during the defects liability period under the contract and report any matters arising in connection with such inspections and recommend appropriate action.

- Monitor the rectification of defects and completion of all outstanding items.
- Provide update a master defects list
- Organise and attend regular defects meetings on site.
- Evaluate as the completion of all outstanding defects for the provision of Final Completion.

E. TRAFFIC MANAGEMENT & PARKING

THE WINNING DESIGN ADDRESSES VEHICULAR TRAFFIC PATTERNS, INCLUDING LARGE VEHICLE ACCESS/EGRESS AND PARKING FOR PATRONS, PERFORMERS AND STAFF.

The layout of the building is structured on the procession from the parkland and the eroded façade, through to the remarkable interior landscape. From the north western corner the building works diagonally from public through performance spaces to back-of-house, loading and car parking access on the south eastern corner.

All vehicle access is off Teakle Court, keeping the front of the building free from unsightly loading and service areas. Similarly, the existing services building at the entry to the site, if unable to be relocated, will be screened or incorporated into the landscape.

SERVICE VEHICLE ACCESS

An articulated 19m truck can reverse successfully into the theatre loading dock with modifications to the median on Teakle Court. Service access for food & beverage and associated delivery, is adjacent but separate to the scene loading area, with a separate internal path through the building.

DROPOFF ZONE

A dropoff zone for taxis and coaches can be integrated into Grand Boulevard in front of the building. Upon a thorough review of options, this was proven preferable to bringing vehicles into the forecourt area of the building, with associated ramping, kerbing and lane marking creating a barrier to pedestrian access.

CARPARK ACCESS AND EGRESS

The carpark is designed primarily to function on event nights, with large numbers of patrons arriving and leaving together. The queuing distances, entry and exit widths, and number of boom gates have been designed to deal efficiently with this volume of traffic.

Based on a 400-space car park and tidal event flow, the length of queuing space required is approximately 180 metres. This can be halved if 2 lane are provided. Lanes must be 2.7m. If a single queuing lane is provided, an additional “breakdown” strip of 2.0m must also be provided. There are no specifications as to what proportion of the queuing space can be provided off road within the car park site, however all queuing will necessarily be outside of the ticket barriers. This advice is based on Australian Standard 2890.1:2004 Off Street Parking utilising Table 3.3 and Appendix D.

Based on full occupancy of a 400-space car park and tidal event flow, and the likely need to supply 2 queuing lanes, the car park will require 2 entry ticket barriers. The exit flow of vehicles may also require 2 ticket barriers unless the quantity of exiting vehicles can be limited to less than 300 vehicles/hr. If this case only one exit ticket barrier will be required.

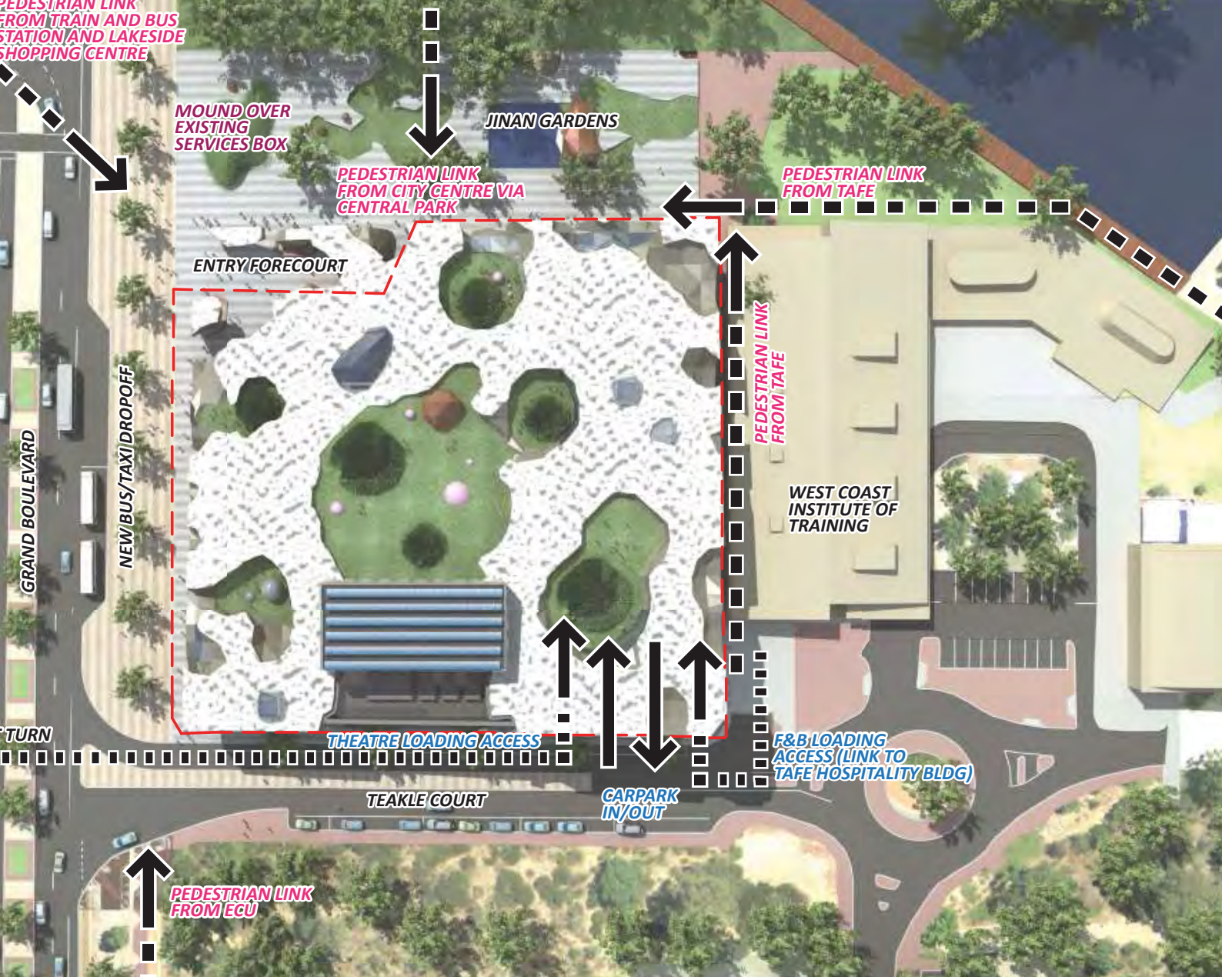
Additionally, the car park is classed as a Category 2 Parking Facility with a category 4 access requirement. This dictates an access and egress width of between 6.0-8.0 metres each, suggesting that two lanes will be provided at entry and exit.

Pedestrian access to the carpark is independent from the main building, to allow use as public short-term parking. There is also an internal access to the main foyer, which can be opened during building operating hours.

ROAD MODIFICATIONS

Given the importance of the new facility, there is a need to provide a right turn out of Teakle Court onto Grand Boulevard. In a 60km/hr speed zone, standards require a minimum of 85 metres between intersections. Based on plans provided, there is approximately 100m between the Collier Pass and Teakle Court intersections. Traffic analysis would be required in the next stage of design to test the feasibility for the right hand turn, especially when considering the use by heavy vehicles.

The suitability of a right turn out of the car park onto Teakle Court will depend upon the anticipated flow of vehicles out of the facility, the need for queuing space on Teakle Court, and the design of the intersection with Grand Boulevard. The left-out only design has the benefit of requiring vehicles to use the roundabout, creating a longer queuing capacity for vehicles exiting onto Grand Boulevard. The right-out option would need to be analysed in the next stage of design as part and separate to the right-turn facility from Teakle Court onto Grand Boulevard.



EXTERNAL VIEW FROM GRAND BOULEVARD

APPENDIX 1
THE PROJECT TEAM

THE ARM ARCHITECTURE TEAM

ARM Architecture has a long history of capability in the development of cultural and arts institutions. Over the past 5 years ARM has completed 3 major performing arts buildings: the recent redevelopment of Hamer Hall Arts Centre, the Melbourne Recital Centre, & the Melbourne Theatre Companys theatre. This has resulted in ARM becoming one of the leading architecture firms in theatre and auditorium design and acoustics in the country.

The ARM team for this project reflects the wide range of experience and skills the ARM office has developed in its overall structure so each project team has the capacity to address all the aspects and complexities of a project. Ian McDougall as overseer brings the reputation of an innovative thinker especially in the area of urban design. Peter Bickle as project director has extensive experience in project delivery ranging from client and stakeholder consultation, design delivery, programme planning and design team coordination. Andrew Lilleyman has been instrumental in the design of many of ARM's recent buildings including the award-winning Perth Arena. Jonothan Cowle and Will Pritchard have worked assiduously on the delivery of the arts and cultural buildings designed by ARM with particular skill in resolving complex functional requirements of the buildings. Jenny Watson is a young architect who has the ability to independently manage the design skills necessary for complex presentations and design documents easily understood by stakeholders.

IAN MCDOUGALL

DIRECTOR IN CHARGE

B ARCH (HONS) /RAIA

Ian McDougall is a Founding Director of ARM Architecture. He was Project Director of the Melbourne Docklands Masterplan, Yarra Edge at Victoria Harbour, and the review of New Quay. He was Design Director for the Albury Library/Museum, One East Melbourne residential tower Shrine of Remembrance and the Melbourne Recital Centre/Southbank Theatre, and Hamer Hall. He is currently the Design Director on the Shrine Galleries of Remembrance and the Geelong Library and Heritage Centre project. Ian was also recently appointed to the Melbourne Festival Board of Directors.

PETER BICKLE

PROJECT DIRECTOR

Peter is Project Director at ARM, contributing a plethora of knowledge gained over 25 years' experience in Melbourne and Sydney.

Since 2002 Peter has been responsible for managing the design and delivery of several significant projects. Peter's design skills and project management experience, built up over many years, have equipped him to handle any building type at any scale.

Peter is currently Project Architect on the Geelong Library. Prior to this he was Project Architect for Hamer Hall redevelopment, MTC Theatre and Melbourne Recital Centre, and for the redevelopment of the Melbourne Central retail precinct.

ANDREW LILLEYMAN

SENIOR DESIGN DIRECTOR

B ARCH (HONS) /RAIA

Andrew is the director of the ARM Perth office during which he has been director in charge for the Wanangkura Stadium in South Hedland and the Perth Arena stadium. Andrew is currently design director for Elizabeth Quay Masterplan. He has also worked on a broad spectrum of projects in Melbourne and Sydney as well as Perth, including the Melbourne Theatre Company and the Melbourne Recital Hall, the Albury Library/Museum, 140 William Street bid, the Shrine of Remembrance Visitor Centre, CUB commercial tower and winter-garden, and the winning design for the King Street Wharf commercial and residential complex in Sydney.

He has taught design, Australian architectural history and advanced computing at the University of Western Australia for a number of years and taught design at RMIT while living in Melbourne. He has also been involved in the production of architectural exhibitions and publications within Western Australia.

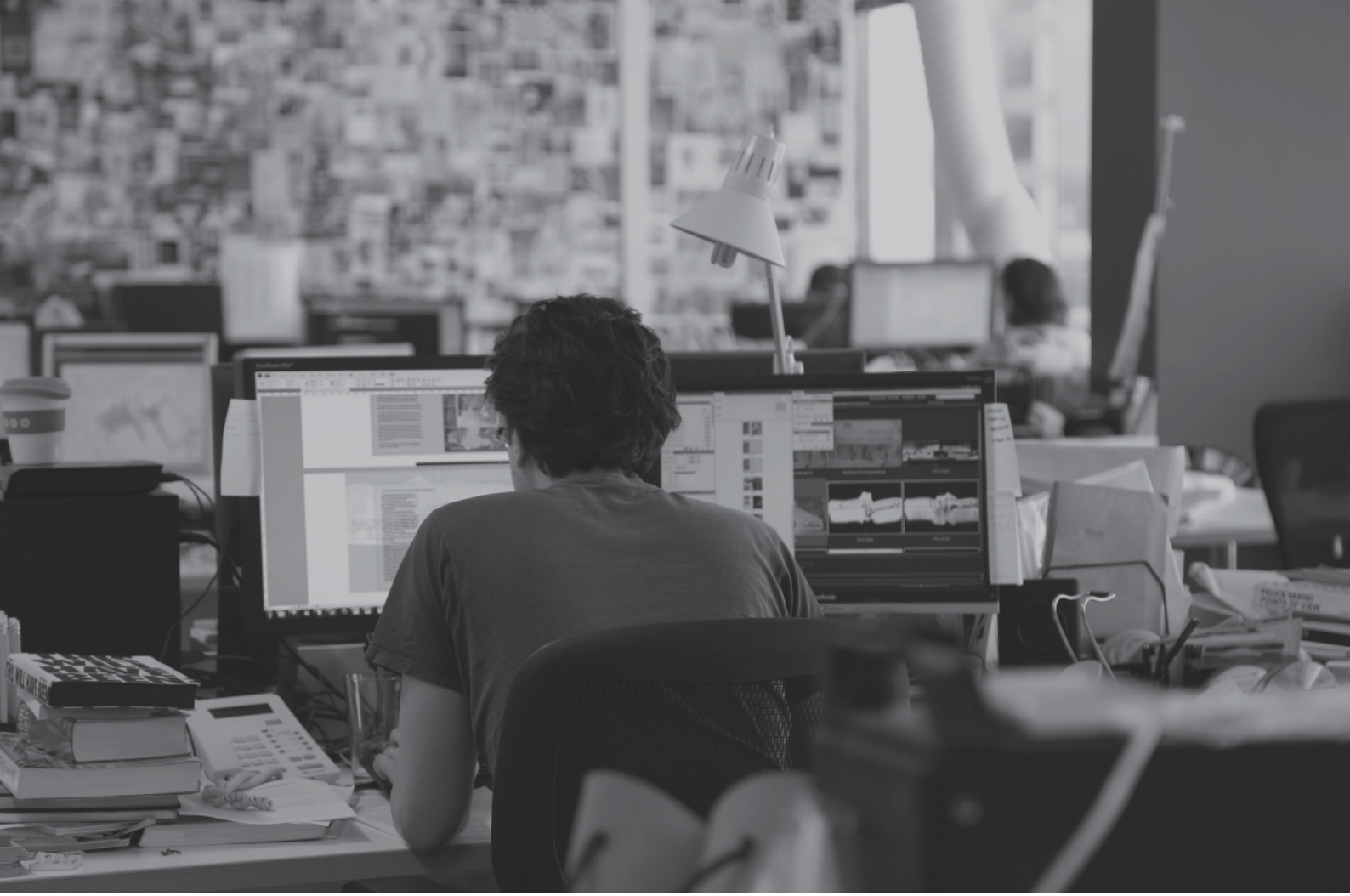
JONOTHAN COWLE

DESIGN ARCHITECT

B ARCH (HONS)/RAIA

Jonothan is a Senior Designer and Associate of ARM Architecture and has extensive experience working over a broad range of projects from retail, masterplanning, high density residential, performing arts, and sports and entertainment venues. Jonothan has also had the opportunity to specialise in the design of a wide range of Auditorium typologies, having worked on the MTC theatre, Melbourne Recital Centre, Perth Arena and recently the Arts Centre redevelopment.

In addition to his role at ARM, Jonothan has been involved in the production of architectural exhibitions and publications, and has been a Design tutor and lecturer at RMIT since 2004. Jonothan is currently working on the Geelong Library & Heritage Centre.



WILLIAM PRITCHARD

PROJECT TEAM

William Pritchard joined ARM in 2002 after invaluable work on civic projects in The Netherlands. His broad Architectural experience in design and project procurement has provided rewarding client engagement in culturally significance civic projects. He is a key team leader with valuable insight into specific building functions & challenges. As project architect of the Albury Library/Museum and Theatre Architect for the Melbourne Recital Centre/ Southbank Theatre projects William developed technical expertise in this area to lead the Auditorium team of Melbourne's Hamer Hall and supporting operational spaces. William is now working on the design co-ordination & procurement of the new Geelong Library and Heritage Centre.

JENNY WATSON

PROJECT TEAM

Jenny has been with the ARM Perth office since 2006, and has recently completed her Masters of Architecture at the University of Western Australia. She has worked on projects such as the Perth Arena, Elizabeth Quay and the Wanangkura Stadium, from early conception stages to construction documentation. Currently Jenny is working on Elizabeth Quay and Murdoch Mixed-Use Precinct masterplans, involving resolution of design options, preparation of feasibility studies, collaboration with consultant teams and preparation of material for presentations and public documents.

THE SCHULER SHOOK TEAM
THEATRE PLANNERS

Schuler Shook provides theatre planning, consulting and technical systems design services for performing arts facilities worldwide. We collaborate with architects, engineers, acousticians, performing arts organizations, as well as municipalities and government officials to translate artistic needs into design and construction requirements.
First established in Australia in 2009, our practice began in the US in 1986. Schuler Shook was founded by partners Duane Schuler and Robert Shook. Our original offices in Chicago and Minneapolis were supplemented in 2001 with the addition of our Dallas office, followed by our Melbourne office in 2009. We have grown to over 35 full time employees, our consultants coming from backgrounds as diverse as theatrical lighting, technical direction, architectural lighting, electrical engineering, and interior design.

Schuler Shook excels at working collaboratively and creatively to achieve excellence in design. We strive to inform the design process in the most positive ways possible to reinforce the architectural concepts and to assure that the building supports the work of the artists engaged there.

Our projects include opera houses, civic theatres, professional theatres, concert halls, dance theatres, ballrooms, worship spaces, and performance venues for universities and colleges; they range from less than 100 seats to over 15,000 seats.

Our practice is continually sharpened with the experience that each project brings. We maintain an openness to the unique aspects of every performing arts facility and each stakeholder. We believe in flexibility, practicality, and expandability. Above all, we design theatres that work, both now and in the future.

We are committed to continuing education in all aspects of our practice, and in serving our profession by regularly presenting and attending local, national, and international educational opportunities. We are also deeply committed to sustainability, and our designers work to improve the sustainability and energy efficiency of arts buildings.

ROBERT SHOOK
ASTC PARTNER
B FINE ARTS / M FINE ARTS

Robert Shook, ASTC, a founding partner of Schuler Shook, will provide general internal overview of the team's efforts. Robert Shook enthusiastically brings to every project a wealth of experience in professional theatre, having been involved in the planning of auditoria and audience areas for hundreds of theatres around the world. His depth of experience as a professional theatrical designer provides him with a keen understanding of backstage operations and technical systems. A noted expert in the field, he is featured in the stage lighting textbooks, Scene Design and Stage Lighting and also Stage Lighting: Foundations and Applications. He promotes intimacy and flexibility in theatre design and is a strong proponent of the collaborative process in the development of successful performing arts facilities.

JIM HULTQUIST
SENIOR THEATRE CONSULTANT
B ARTS / M FINE ARTS

Schuler Shook's theatre planning team for this project will be led by Senior Theatre Consultant Jim Hultquist, ASTC, LEED® AP. As Project Manager, Jim will be serving as the primary point of contact throughout the process. Jim has over 12 years of experience as a theatre consultant in Australia and the US. He was Schuler Shook's Project Manager for the Arts Centre Melbourne's refurbishment of Hamer Hall, with ARM Architecture, as well as the Project Manager for the Bendigo Theatre project that includes a new 1,000-seat theatre. Jim will be available to all design team members as the day-to-day liaison throughout the process for the duration of this project. Jim will attend site visits, stakeholder meetings, and design meetings. Jim is a theatre consultant with a broad range of experience from black box theatres to multi-venue performing arts centers. He also works with manufacturers and other partners to increase the sustainability and energy efficiency of theatre buildings.

RICHARD STUART
THEATRE & PRODUCTION CONSULTANT

Working with Jim for the extent of this project will be noted Australian Theatre and Production Consultant, Richard Stuart. Richard has a great deal of background in planning and design for regional arts centres as well as considerable experience with touring companies throughout Australia and New Zealand. His wealth of relevant experience will serve the Joondalup Performing Arts and Cultural Facility well. Richard brings over 35 years of technical theatre and production experience to the team. He has served as Executive Manager of Production Services for the Queensland Performing Arts Trust, Technical Director at Sydney Opera House, and Technical Manager for the Melbourne International Festival of the Arts. Richard worked closely with Jim Hultquist and ARM Architecture on the Hamer Hall project at Melbourne Arts Centre.

THE MARSHALL DAY TEAM
ACOUSTIC DESIGN

Established in 1981, Marshall Day Acoustics has grown to become one of Australia's largest and most respected acoustic consultants. The engineers in our Adelaide, Melbourne, Perth and Sydney offices provide environmental noise assessment, architectural acoustics and vibration consulting services across Australia.

Our staff are linked across our extensive network of offices to form one team of engineers, architects, musicians, designers and scientists. Our company philosophy, technical resources and uniquely creative working environment, result in an enviable level of staff retention that provides our clients with stable and committed project teams.

Our projects represent our proud history as an innovative, creative and specialist acoustic consultancy at an international and local level. Our experience encompasses performing arts design, building acoustics, planning & resource consents, environmental noise, industrial & marine noise control, sound system design and structural dynamics & vibration analysis. Our projects include major centres in the USA, Australia, New Zealand, China, Singapore, Malaysia, Hong Kong, the Pacific Islands and the Middle East.

PETER FEARNSIDE
MANAGING DIRECTOR

B SCIENCE, FIE AUST, CPEng, MAAS

Peter graduated from The City University, London in 1971 with a Bachelor of Science degree in Mechanical Engineering. He has worked as an acoustical consultant in England, Australia, USA, New Zealand and Malaysia. Since 1987 Peter has been the managing partner of Marshall Day's Melbourne office.Peter has extensive experience in the acoustic design and theatre planning of performing arts centres, television, film and radio broadcasting facilities and specialist buildings

Peter has managed the acoustics and theatre design of many major performing arts projects including Hamer Hall Redevelopment, Melbourne Guangzhou Opera House, China, Melbourne Symphony Orchestra's Rehearsal Hall, Beijing TV Studio Theatre, State Theatre Centre, Perth WA.

BEN WILSON
ASSOCIATE

B SYSTEMS ENGINEERING, B ASIAN STUDIES, AAS, MIOA

Ben Wilson is the Managing Consultant with the Perth office specialising in building and room acoustics, environment noise assessment, industrial noise control, hearing conservation, and theatre systems.

Ben graduated from the Australian National University in 2000 with a Bachelor of Engineering (Hons) in Systems Engineering, and a Bachelor of Asian Studies (Indonesian). He is a Member of the Australia Acoustical Society and the Institute of Acoustics.

Ben has worked as a consultant in Australia and the UK where he has provided acoustic consultancy advice on a wide range of construction projects in the education, healthcare, commercial, and residential sectors.

PETER EXTON
ASSOCIATE

B SCIENCE (HONS), GRAD.DIP MUSIC

Peter Exton is a Senior Consultant with the Melbourne office specialising in concert hall design and development.

Peter graduated from the University of Western Australia in 1985 with an Honours Degree in Physics and then completed a Graduate Diploma of Music at the Tasmanian Conservatorium.

Peter began consulting work with Marshall Day Acoustics in 2004 and continues to perform as a professional violinist throughout Australia. Peter is also involved in ongoing research in concert hall design and development.

Recent project experience includes the Guanghzou Opera House, China, Queensland Performing Arts Centre and Xian Concert Hall, China

JOHN ALEKNA
ASSOCIATE

B APPLIED SCIENCE & PHYSICS

John Alekna is an Associate with the Melbourne office specialising in building acoustics, environmental noise control and sound system design.

John has been involved in acoustic consulting since 1989 after graduating from the University of Technology, Sydney in 1988 with a degree in Applied Physics. John established the Brisbane office for Sydney based RFA Acoustic Design in 1993 and managed the office for over 10 years for RFA, and then Hyder Consulting from 2002. John joined the Melbourne office of Marshall Day Acoustics in 2003.

Recent project experience includes the State Theatre Centre, Perth, Queensland Performing Arts Centre Redevelopment and AAMI Park, Melbourne

THE DONALD CANT WATTS CORKE TEAM

QUANTITY SURVEYOR

Since 1966, DCWC has helped some of Australia's most respected organisations turn their ideas into reality. Our reputation has been built on integrity, passion and reliability and we are now Australia's largest privately owned cost and project management services provider.

We offer nationwide service delivery through our offices in Melbourne, Canberra, Sydney, Brisbane, Regional Queensland, Adelaide and Perth. This unified national structure ensures you receive consistently outstanding results through all phases of your construction project.

In every state and territory, we have partnered with government, private and public organisations to deliver some of Australia's most advanced and complex developments across a wide range of sectors.

Whatever your projects' challenges, our team will work with you to transform your ideas into reality. We are committed to providing you with a service that is focused on delivering outstanding results.

NEIL DICKSON

DIRECTOR

B SCIENCE (HONS), MRICS

Neil's market sector experience cuts across all sectors but specifically includes commercial developments, infrastructure/mixed use, sport and leisure,administration and culture and assembly.

He sits on the GBCA WA State Leadership Group and the WA PCA Sustainability Committee. Neil's expertise includes cost planning, procurement and cost management of building projects.

Neil specialises in providing client's with project set-up, financial and delivery advice across all procurement models to ensure realistic expectations are set and continually monitored.

THE CUNDALL TEAM
ENVIRONMENTALLY SUSTAINABLE DESIGN

Cundall was formed in Australia in August 2003 and in just over eight years the firm has grown to be one of Australia's largest Sustainability Consultant in the built environment.

With offices in Sydney, Melbourne, Adelaide and most recently Perth, we have the capability and capacity to work across Australia. Our award winning projects across all states and territories of Australia demonstrates our depth of knowledge and experience.

We work across all sectors of the property, infrastructure and construction industries delivering sustainability, ESD and Engineering services. Our client base includes national, state and local governments, developers, builders, architects, project managers, property/ portfolio managers and engineering consultants.

As a sustainability consultancy our three core service offerings are Sustainability, ESD and Engineering. Each offering is unique and independent in its own right but all work better together.

Our independence and size allows us to provide all three core services or provide any one of them as an independent service.

MARK PITMAN
ASSOCIATE, MANAGER WA
PHD MECH, B ENGINEERING (HONS)

Mark is an experienced industry consultant as well as academic researcher. He has implemented innovative techniques and technologies derived from his research experience in the design of several high-profile projects in WA. Application of the new technologies and techniques have been instrumental in achieving a high-level of environmental consideration in these designs while also enabling cost-savings through high-quality design analysis.

Mark continues to maintain links to academe, lecturing in Building Science and Sustainable Design at Curtin University.

OLIVER GRIMALDI
SENIOR ESD CONSULTANT
M ENGINEERING (HONS)

Oliver has over 6 years experience in the design and construction industry across the public and private sectors, in the UK and Australia.

As Senior ESD consultant, Oliver enjoys being part of Cundall's successful and productive Perth team. Oliver specialises in energy efficiency in buildings, particularly using thermal dynamic modelling software.

Oliver is passionate about fusing sustainable design with wonderful architectural spaces, where buildings and nature live as one.

THE BRETT REEVE & ASSOCIATES TEAM
MECHANICAL & HYDRAULIC ENGINEERING

Reeve & Associates is a boutique building services consultancy with offices in Perth and Auckland.

Reeve & Associates work with other design professionals to integrate as part of the team needed to deliver sustainable entertainment buildings. Our has a team who have worked together on a wide range of projects for the last 15 years. Every member of team has a track record of completing entertainment projects. This experience is also supplemented by work on key New Zealand cinema and entertainment projects including Berkley Cinemas Mission Bay Art deco cinema (4 theatres), City Impact Church (2,500 seat auditorium with full TV broadcast facilities), Berkley Cinemas Whangaparaoa, Force Entertainment Centre, and Imax Auckland.

BRETT REEVE
MECHANICAL ENGINEER
BE MECH (HONS)

Brett has 20+ years' experience in mechanical and hydraulic design of multi-service complex installations on large and small projects in Australia and New Zealand. Brett specialises in Healthcare, Entertainment, Commercial, Hotel and High Rise Residential facilities.

BEATA RAKOWSKA
HYDRAULICS ENGINEER
BE WATER & ENVIRONMENTAL

Beata has 7+ years' experience in and hydraulic and environmental design of buildings and infrastructure in Australia, England and Europe. Beata has a specialist degree in hydraulic services, and hence specialises Healthcare, Retail, infrastructure, and entertainment projects.

THE AECOM TEAM

LANDSCAPE ARCHITECTS

Context, idea, narrative and creative outcomes are central to our design position. Our designers share a desire for theoretically-based applications and a fine grain appreciation to issues of problem solving.

Whether working on the Perth City Link, a major urban redevelopment, Yokine regional playground, or Perth's new northern suburb Alkimos, AECOM's approach to landscape design considers the individuality of the site and the client, as well as the financial mechanisms, implementation and maintenance of the project. The environments we create share an emphasis on texture, animation and a sense of place.

We are award-winning and published professionals – landscape architects, urban designers, ecologists and environmental specialists, many of whom hold multiple academic qualifications from institutions in Australia and abroad. We approach each project from a holistic perspective assemble teams which best suit the particular issues being addressed so our clients profit from the acumen and experience of every member of AECOM.

Over the last few years, our portfolio of work in Western Australia has been building, particularly in the realms of water resource management, cultural centres and new communities. Our practice is growing, with a strong team of local professionals based in Perth.

DAMIEN PERICLES

PRINCIPLE LANDSCAPE ARCHITECT

M LANDSCAPE ARCHITECTURE

Damien Pericles re-joins the Perth AECOM Design and Planning team in 2012 with 12 years' experience as a Principal Landscape Architect and director of design.

Damien is an accomplished designer, client and project manager and team leader. He has worked on a full spectrum of project types, sizes and phases including numerous competitions in Australia, Europe and Asia. With a background in graphic design, horticulture and fine arts, he completed his Masters in Landscape Architecture at ETH in Zurich in 2006.

TOBY TIMCKE

ASSOCIATE LANDSCAPE ARCHITECT

Toby is a landscape architect based in AECOM's Design + Planning studio in Perth and has nine years experience in landscape design and construction in Australia and the United Kingdom. Toby specialises in the project management and detailed documentation of a broad range of projects – from small-scale private residences to large urban, public realm and commercial landscapes.

FARON MENGLER

ASSOCIATE DIRECTOR-

ENVIRONMENTAL DESIGN & WATER MANAGEMENT

Faron Mengler is an Associate Director of AECOMs Design + Planning Studio in Perth. Recognised as a leader in the field of Applied Environment within the firm, he specialises in the application of practical designs and plans that address sustainability opportunities and outcomes for land developments, natural areas, public open spaces, educational campuses and recreational environments. As a senior project manager, with over 14 years related experience, Faron has accomplished a diverse project portfolio including: landscape planning, environmental assessment and the design, documentation and implementation of public open spaces and natural areas sites throughout Western Australia. He is currently involved in the design of the Karratha Senior High School and the concept planning for a tertiary learning environment at the former Sunset Old Men's Home. Faron has also recently been involved in planning sporting ovals and recreation spaces for the Shire of Kalamunda and City of Stirling.

TING LIU

LANDSCAPE ARCHITECT

M URBAN DEVELOPMENT & DESIGN

Ting Liu holds a Masters in Urban Development and Design from the University of New South Wales and a Postgraduate Diploma in Urban and Regional Planning from the University of Sydney. In her studies, Ting's major focus has been on urban growth, the transformation of urban forms and placing making. Her postgraduate experience, together with her undergraduate studies in landscape architecture at Shanghai's Tongji University, has equipped Ting with a holistic understanding of design and planning, from large scale urban planning, to small scale site layout.

THE AECOM TEAM
TRANSPORT PLANNERS

AECOM has vast experience in the design of traffic management facilities for local roads and public transport. This experience has included all stages of design from feasibility, to concept, to preliminary to detailed design. We use our highly experienced multi-disciplined team to deliver a one stop shop. Our services include:

- Traffic engineering and planning services
- Landscape Architecture
- Geometric design
- Pavement design
- Drainage design, including water sensitive urban design
- Signs and line-marking
- Roadway accommodation works, such as driveways and services
- Street lighting
- Footpath and cycleway design
- Public Transport Priority and Facilties
- Road Safety Audits
- Project management and contract administration
- Support during construction

SHONA GATENBY
PRINCIPAL TRANSPORT PLANNER

B TOWN PLANNING (HONS)

Shona is a Principal Transport Planner within the Western Australian Strategic Planning and Advisory Team. Her role includes project managing numerous projects, where she is responsible for day to day co-ordination of the project team and tasks, budget management, preparation of scope of works and ensuring work is completed on time and to high quality.

Shona also has detailed and extensive experience across a broad spectrum of transport planning focus areas, and specialises in taking a strategic approach to multi-disciplinary and master planning projects that can include a range of engineering, planning, environmental, social, economic, and sustainability parameters.

Shona has particular expertise in transport planning for passenger rail, light rail, buses, taxis, cycling and walking, specifically route alignment feasibility, strategic network planning, impact studies, public transport prioritisation, public transport accessibility, transit oriented development, terminus and depot planning, concept layout and design, and services review.

TERESA MATASSA
SENIOR TRANSPORT PLANNER

B SCIENCE

Teresa is a Senior Transport Planner for AECOM in Western Australia. She has 8 years experience private consultancy in Australia and local government in New Zealand. Teresa comes from a multi-disciplinary background and this is reflected in her diverse range of transport experience, from creating safe routes to schools to strategic planning projects for major port and freight precincts in Perth. Teresa is an experienced project manager and has effectively managed a range of projects at AECOM.

Teresa has particular experience in integrated transport planning for activity centres and how to integrate the transport and travel needs of the community with urban development. She has experience in investigating and developing transport infrastructure projects to address safety and access issues, with particular experience in walking and cycling planning. This included a focus on improving access for pedestrians with disabilities, for which Teresa was selected for a 2007 delegation visit to Japan to assist the Japanese government with planning for more inclusive cities.

Teresa also has a keen interest in travel planning and is experienced in creating travel plans for places of employment and education, and working on the WA 'TravelSmart' Household Program.

THE WINWARD TEAM
STRUCTURAL ENGINEERING

Winward Group focuses the energy of a dynamic, creative, experienced and highly skilled group of professionals who share and promote a common appreciation of high quality design. This translates into a comprehensive understanding of the built form and of critical stages in design and construction processes.

There is great depth and breadth of experience within Winward Group, combined with a drive to continually develop and improve. Our goal is to be recognised as the benchmark practice for quality of service and delivery of optimal project outcomes for our clients.

We are challenged by the most complex projects to which we can add greatest value through the application of creative thinking supported by expertise, experience and a focus on buildability.

We have earned an outstanding reputation for delivering economic and readily buildable design solutions and our services are highly sought in competitive PPP and Design & Construct competitions, where we have a very high success rate.

KEVIN WINWARD
EXECUTIVE CHAIRMAN
DIP. CIVIL ENG, DIP. MANAGEMENT

Kevin is the Executive Chairman of Winward Structures and has worked previously on projects such as Melbourne Convention Centre, Hilton Hotel, One40 William Street, and Melbourne Underwater World Aquarium.

ANTHONY MCCULLOUGH
STATE MANAGER, WA
B. CIVIL ENGINEERING (HONS)

Anthony McCullough is the state manager for Winward Structures and has worked on projects such as the London 2012 Olympic Stadium, 140 William St Retail, UAE University, Al Ain Campus and Northam Senior High School Performing Arts Centre.

PETER HINDMARSH
DIRECTOR
B. ENGINEERING (CIVIL)

Peter is a director of Winward Structures and has worked on projects such Altona Performing Arts Centre, the Victorian Arts Centre and the Bioscience Research Centre - La Trobe University.

MAURICE DI GIOVANNI
SENIOR STRUCTURAL ENGINEER
B. ENGINEERING (ARCHITECTURE)

Maurice is a senior structural engineer with experience working on projects such as Moorilla Museum of Old and New Art (MONA), Moorilla Library and Northam Senior High School Performing Arts Centre

THE WOOD & GRIEVE TEAM
ELECTRICAL ENGINEERING

Wood and Grieve Engineers was formed by Tony Wood and Kip Grieve in March 1961. Initially based in West Perth, this two-man consultancy specialised in structural and mechanical engineering.

LILIANA MIRONOV

ELECTRICAL PROJECT ENGINEER

BE (HONS), MIEAUST, CPENG, NPER (ELEC)

Liliana has been selected as the Electrical Project Engineer because of her extensive experience on secondary school projects, her excellent communication skills and her specific knowledge of Electrical Services for schools.

As the Project Engineer, Liliana will be involved in detail for all aspects of the project including schematic design, design development, documentation and construction phase. Liliana will be the main point of contact for communication with the Architect and she will attend all project planning meetings. Liliana will review all reports, specifications, drawings, proposals, costings and recommendations, prior to issue to the Architect and Client.

ROBERT HOLMES À COURT

SENIOR ELECTRICAL ENGINEER

BSC(ENG), MSC(ENG)

Rob has been selected for this project due to his extensive experience in similar projects and inside knowledge of the PA venue requirements. He will be involved in all aspects of the project.

THE ID/LAB TEAM
WAYFINDING

ID/Lab 'Shape Behaviour in the Built Environment'. We develop strategies that address the wayfinding needs of people, by creating easy to navigate, legible spaces, and by developing wayshowing stimuli and tools such as signage and maps. Our recommendations are based on a thorough understanding of how people behave when they navigate. Through a combination of human factors science, environmental psychology and experience, we develop evidence-based strategies that make wayfinding work. As part of making a space navigable we design effective 2D and 3D elements that support wayfinding and experiences of people. The outcomes include wayfinding and signage programs, architectural- and window-super graphics, maps, interpretive signage and branded environments. ID/Lab worked with ARM on the development of the wayfinding and signage program for the redevelopment of Hamer Hall, part of Melbourne Arts Centre. We had to carefully balance fitting in the new signage design with John Truscott's original interiors and assuring that the wayfinding information could be seen, interpreted and used by the visitors to this unique concert hall. The developed signage system is sympathetic to the history of the theatre, and performs to the standards required. The design was so well received that the Arts Centre will implement this now throughout the whole precinct.

MICHEL VERHEEM

DIRECTOR

Michel has over 25 years experience in wayfinding, branding, signage and graphic design, both in Australia and Europe. He has a detailed understanding of human behaviour across a wide range of environments, and a thorough knowledge of best practice guidelines and legislation, including DDA requirements. This experience allows him to provide highly efficient information and wayfinding strategies, which will enable users to effectively navigate a site, whilst meeting commercial and operational objectives.

THE JMG TEAM
BUILDING COMPLIANCE & CERTIFICATION

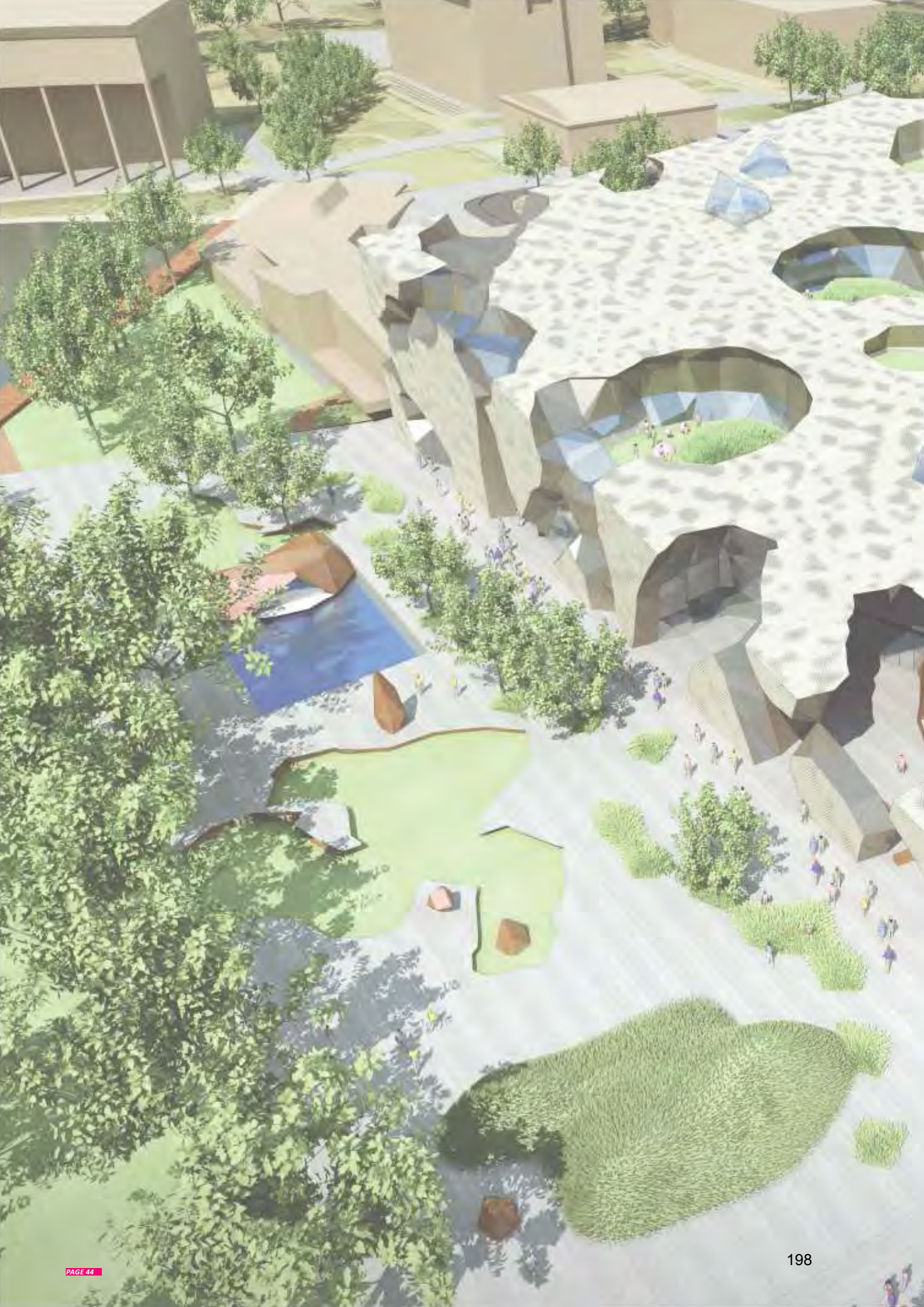
JMG Building Surveyors is the largest and most experienced independent Building Surveying and Certification consultancy in Western Australia.

JMG was established in 2000 under the name John Massey Group Pty Ltd. and now trades under JMG Building Surveyors. Our growth has been the result of developing strong professional relationships with our clients. As a company we pride ourselves on our 'can do' ethos and value add when ever possible.

JMG now employs 17 staff incorporating 9 qualified Building Surveyors and an Accessibility Consultant and our staff have over 100 years of experience in the building industry. The majority of our Building Surveyors are level 1 accredited and hold post graduate or degree qualifications from around Australia and overseas. This enables JMG to certify compliance for the design and construction for all manner and types of buildings. A number of our staff have also gained accessibility accreditation.

JMG is proud to be part of the design teams for many of the largest building projects in the Western Australia and we look forward to providing our expertise and assistance on your next project no matter how large or how small. Our philosophy is to provide a professional certification role that encompasses the sophistication of your design.

JMG specializes in commercial and industrial buildings assessments to assist all stakeholders develop and complete building designs that provide optimum levels of serviceability, life safety and amenity for the benefit of the whole community. Our technical team understands your needs in relation to design flexibility and achieving the highest quality outcomes for your projects.



APPENDIX 2
DETAILED COST PLAN

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Preliminaries					
	Design contingency calculated as % of Net Project Cost				
A	% of NPC	12	%	72,229,544	8,667,545.23
					8,667,545
Substructure					
A	Building				
B	Allowance for ground bearing slab including foundations complete	7,096	m2	225.00	1,596,600
C	Allowance for thickenings to core and stairs	154	m2	250.00	38,500
D	Allowance for thickenings to stair landing	20	m2	250.00	5,000
E	Allowance for lift pits; standard	2	No	7,500.00	15,000
F	Allowance for goods lift pit	1	No	15,000.00	15,000
G	Car Park				
H	Allowance for ramp	226	m2	350.00	79,100
I	Allowance for car park lift pits	1	No	7,500.00	7,500
J					0
					1,756,700
Columns					
	Building				
A	Allowance for RC columns; 600 x 350	1,308.00	m	450.00	588,600
B	Allowance for columns to facade	39	t	8,000.00	312,000
	MSCP				
C	Concrete Columns	1,049	m	450.00	472,045
					1,372,645
Upper Floors					
	Building				
A	Allowance for concrete slab to upper floor complete	6,073	m2	450.00	2,732,850
B	Extra over allowance for raked slab to theatre	1,011	m2	500.00	505,500
C	Allowance for edge details to voids	800	m	100.00	80,000
D	Allowance for glass balustrading to voids	50	m	1,500.00	75,000
E	Allowance for edge detailing to theatre		item		200,000

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Upper Floors					*(Continued)*
	Parking				
F	Allowance for concrete slab to decks	11,102	m2	385.00	4,274,270
G	Extra over allowance for ramps to each level	1,000	m2	100.00	100,000
					7,967,620
Staircases					
A	Allowance for RC Stairflights complete; per rise	121	m	3,500.00	423,500
B	Allowance for feature stair to lobby; per m rise	9	m	50,000.00	450,000
					873,500
Roof					
	Building				
A	Allowance for steel trusses	72	t	6,000.00	432,000
B	Allowance for roof structure and surface	4,664	m2	600.00	2,798,400
C	Allowance for glazed roof lights	200	m2	1,200.00	240,000
D	Allowance for mansafe points	1	Item	50,000.00	50,000
E	Allowance for drainage to ground	225	m	200.00	45,000
F	Allowance for green roof complete with slab and build up	1,800	m2	750.00	1,350,000
	Car Park				
G	Allowance for roof structure and surface	2,400	m2	450.00	1,080,000
H	Allowance for sealer to slab	2,665	m2	50.00	133,250
I	Allowance for drainage	200	m	200.00	40,000
					6,168,650
External Walls, Windows and Doors					
	Building				
A	Allowance for glazed facade	2,100	m2	1,750.00	3,675,000
B	Allowance for solid facade	2,300	m2	750.00	1,725,000
C	Allowance for glazed entry doors				
D	- single	5	No	2,500.00	12,500
E	- double	5	No	5,000.00	25,000
F	- revolving	2	No	35,000.00	70,000
G	- allowance for auto	5	No	5,000.00	25,000
H	Allowance for solid doors				
I	- single	2	No	1,500.00	3,000
J	- double	2	No	3,000.00	6,000

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
External Walls, Windows and Doors					*(Continued)*
K	Allowance for fire doors				
L	- single	2	No	2,500.00	5,000
M	- double	2	No	5,000.00	10,000
	Car Park				
N	Allowance for cladding including framing	2,400	m2	750.00	1,800,000
O	Allowance for doors to entry				
P	- double doors	1	No	5,000.00	5,000
Q	Allowance for fire doors				
R	- single	13	No	2,500.00	32,500
S	Allowance for boom gate / roller shutters	1	No	20,000.00	20,000
					7,414,000
Windows					
A	Included in External Wall		Note		
					0
External Doors					
A	Included in External Wall		Note		
					0
Internal Walls					
	Building				
A	Demise wall to 'Black Box'	1,008	m2	700.00	705,600
B	Demise wall to 'Theatre'	2,310	m2	750.00	1,732,500
C	Demise wall to 'Stage'	200	m2	750.00	150,000
D	Demise wall to 'Back of Stage'	210	m2	750.00	157,500
E	Demise wall to 'Rehearse 1'	210	m2	300.00	63,000
F	Demise wall to 'Dressing Rooms, BOH etc'	280	m2	300.00	84,000
G	Demise wall to 'Loading / Workshop/Stores'	525	m2	300.00	157,500
H	Demise wall to 'Plant/Services'	275	m2	300.00	82,500
I	Demise wall to 'Community Space'	1,480	m2	200.00	296,000
J	Demise wall to 'Toilets/Cloak etc'	1,183	m2	200.00	236,600
K	Demise wall to 'Rehearse 2'	210	m2	300.00	63,000
L	Demise wall to 'Control Room'	342	m2	300.00	102,600
M	Demise wall to 'Gallery'	600	m2	300.00	180,000
N	Demise wall to 'Curatorial Store / Plant'	387	m2	250.00	96,750
O	Demise wall to 'Meeting Rooms/Office'	372	m2	200.00	74,400

Elemental Breakdown

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Internal Walls					*(Continued)*
P	RC Concrete core walls	1,676	m2	400.00	670,400
	Car Park				
Q	RC Concrete core walls	809	m2	400.00	323,600
R	Demise wall to Building	788	m2	350.00	275,800
					5,451,750
Internal Screens					
	Building				
A	Allowance for moveable screens	56	m2	1,300.00	72,800
B	Allowance for sundry glazed screens		item		100,000
					172,800
Internal Doors					
	Building				
	Allowance for doors into -				
A	Demise wall to 'Black Box'	4	No	5,000.00	20,000
B	Demise wall to 'Theatre'	12	No	10,000.00	120,000
C	Demise wall to 'Stage'	4	No	10,000.00	40,000
D	Demise wall to 'Back of Stage'	4	No	10,000.00	40,000
E	Demise wall to 'Rehearse 1'	4	No	7,500.00	30,000
F	Demise wall to 'Dressing Rooms, BOH etc'	15	No	2,500.00	37,500
G	Demise wall to 'Loading / Workshop'		item		75,000
H	Demise wall to 'Community Studios Art/Dance/Music'		item		70,000
I	Demise wall to 'Toilets/Cloak etc'	75	No	1,200.00	90,000
J	Demise wall to 'Rehearse 2'	4	No	10,000.00	40,000
K	Demise wall to 'Control Room'	2	No	10,000.00	20,000
L	Demise wall to 'Gallery'	2	No	10,000.00	20,000
M	Demise wall to 'Curatorial Store / Plant'	4	No	7,500.00	30,000
N	Demise wall to 'Office/Meeting'	10	No	1,200.00	12,000
O	RC Concrete core walls	10	No	2,500.00	25,000
	Car Park				
P	RC Concrete core walls	12	No	1,500.00	18,000

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Internal Doors					*(Continued)*
Q	Demise wall to Building	5	No	1,500.00	7,500
					695,000
Wall Finishes					
	Building				
A	Paint to walls	25,277	m2	25.00	631,925
B	Allowance for features to foyer area	2,527	m2	250.00	631,750
					1,263,675
Floor Finishes					
	Building				
A	to 'Black Box'	324	m2	100.00	32,400
B	to 'Theatre'	1,455	m2	150.00	218,250
C	to 'Stage'	284	m2	500.00	142,000
D	to 'Back of Stage'	168	m2	500.00	84,000
E	to 'Rehearse'	364	m2	100.00	36,400
F	to 'Dressing Rooms'	139	m2	100.00	13,900
G	to 'Loading / Workshop'	661	m2	50.00	33,050
H	to 'Plant/Services'	287	m2	50.00	14,350
I	to 'Community''	1,523	m2	175.00	266,525
J	to 'Toilets/Cloak etc'	453	m2	185.00	83,805
K	to 'Control'	155	m2	250.00	38,750
L	to 'Gallery'	1,476	m2	250.00	369,000
M	to 'Curatorial Store'	187	m2	100.00	18,700
N	to 'Office'	520	m2	100.00	52,000
O	to 'Foyer'	1,433	m2	250.00	358,250
P	to 'General Circulation'	2,075	m2	50.00	103,750
	Car Park				
Q	Sealer to parking	12,719	m2	50.00	635,950
					2,501,080
Ceiling Finishes					
	Building				
A	to 'Black Box'	324	m2	150.00	48,600
B	to 'Theatre'	1,455	m2	200.00	291,000
C	to 'Stage' - no ceiling required	284	m2	0.00	0
D	to 'Back of Stage' - no ceiling required	168	m2	0.00	0
E	to 'Rehearse' - no ceiling required	364	m2	0.00	0

Elemental Breakdown

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Ceiling Finishes					*(Continued)*
F	to 'Dressing Rooms'	139	m2	110.00	15,290
G	to 'Loading / Workshop'	661	m2	0.00	0
H	to 'Plant/Services'	287	m2	0.00	0
I	to 'Community"	1,523	m2	110.00	167,530
J	to 'Toilets/Cloak etc'	453	m2	115.00	52,095
K	to 'Control'	155	m2	115.00	17,825
L	to 'Gallery'	1,476	m2	150.00	221,400
M	to 'Curatorial Store'	187	m2	150.00	28,050
N	to 'Office'	520	m2	110.00	57,200
O	to 'Foyer'	1,433	m2	250.00	358,250
P	to 'General Circulation' (assume ceiling to 20%)	2,075	m2	22.00	45,650
	Car Park				
Q	Sealer to parking - excluded	12,719	m2	0.00	0
					1,302,890
Fitments					
	Building				
A	Refer to Theatre Allowance on summary page for black box, theatre, stage, back of stage and rehearse fitments				
B	to 'Black Box'		m2		
C	to 'Theatre'		m2		
D	to 'Stage'		m2		
E	to 'Back of Stage'		m2		
F	to 'Rehearse 1'		m2		
G	to 'Rehearse 2'		m2		
H	to 'Dressing Rooms, BOH etc'	385	m2	150.00	57,750
I	to 'Loading / Workshop'	652	m2	200.00	130,400
J	to 'Plant/Services'	649	m2	200.00	129,800
K	to 'Conference'	473	m2	100.00	47,300
L	to 'Community Studios Art/Dance/Music'	1,073	m2	150.00	160,950
M	to 'Toilets/Cloak etc'	281	m2	500.00	140,500
N	to 'Box Office'	50	m2	2,750.00	137,500
O	to 'Bio Box'	48	m2	200.00	9,600
P	to 'Gallery'	440	m2	200.00	88,000
Q	to 'Curatorial Store / Plant'	408	m2	200.00	81,600
R	to 'Admin'	389	m2	200.00	77,800

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Fitments					*(Continued)*
S	to 'Foyer'	2,550	m2	150.00	382,500
T	to 'General Circulation'	3,848	m2	50.00	192,400
U	to 'Bar'	89	m2	3,500.00	311,500
V	to ' Restaurant' - fitout by tenant				
W	Retractable seating to Black box	200	No	400.00	80,000
X	Seating to theatre	850	No	350.00	297,500
	Car Park				
Y	Wheel stops	400	No	125.00	50,000
Z	Barriers	400	No	500.00	200,000
AA	Ticket machines - by operator	0	No	50,000.00	0
AB	Booths - by operator		Item		0
					2,575,100
Special Equipment					
	Building				
A	Allowance for kitchen equipment	1	item		750,000
B	Allowance for bar equipment	1	item		250,000
					1,000,000
Sanitary Fixtures					
A	WHB	50	No	1,100.00	55,000
B	Urinals	40	No	1,500.00	60,000
C	WC's	50	No	1,300.00	65,000
D	Cleaner Sinks	10	No	1,000.00	10,000
E	Kitchen sinks	10	No	1,000.00	10,000
F	Sundry	1	Item	50,000.00	50,000
					250,000
Sanitary Plumbing					
A	Soil, vent and waste	1,640	FCU	275.00	451,000
					451,000
Water Supply					
A	Cold water supply	260	FCU	750.00	195,000
B	Hot water supply	170	FCU	1,000.00	170,000
					365,000
Gas Service					
A	Allowance for gas supply to restaurant only		Item		25,000
					25,000
Space Heating					

Elemental Breakdown

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Space Heating					*(Continued)*
A	Not applicable		Note		
					0
Ventilation					
A	Allowance for mechanical extract to toilets	1,066	m2	200.00	213,200
B	Allowance for mechanical extract to kitchen	300	m2	400.00	120,000
C	Allowance for ventilation to Car park - assume 50%		Item		500,000
					833,200
Evaporative Cooling					
A	Not applicable		Note		
					0
Air Conditioning					
A	Allowance for air conditioning to theatre	1,278	m2	1,000.00	1,278,000
B	Allowance for air conditioning to black box	324	m2	1,000.00	324,000
C	Allowance for air conditioning to all other areas	9,902	m2	550.00	5,446,100
					7,048,100
Fire Protection					
	Building				
A	Allowance for fire alarms and smoke detection	11,504	m2	75.00	862,800
B	Allowance for sprinklers	11,504	m2	125.00	1,438,000
	Car Park				
C	Allowance for fire alarms and smoke detection	12,766	m2	50.00	638,300
					2,939,100
Light and Power					
	Building				
A	Allowance for light and power	11,504	m2	225	2,588,400
B	Extra allowance for enhance light and power to stage	827	m2	1,000.00	827,000
C	Allowance for light fittings	11,504	m2	50.00	575,200
	Car Parking				
D	Allowance for light and power	12,766	m2	100.00	1,276,600
					5,267,200
Communications					
	Building				
A	Allowance for data and comms generally	11,504	m2	75.00	862,800

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Communications					*(Continued)*
B	Extra over for enhanced allowance to stage and black box areas	827	m2	250	206,750
	Car Parking				
C	General allowance	12,766	m2	5.00	63,830
					1,133,380
Transportation Systems					
	Building				
A	Allowance for feature lift to lobby	1	item	350,000	350,000
B	Allowance for goods lift to back of house	1	item	400,000.00	400,000
	Car Parking				
C	Allowance for 13 passenger lift; standard	2	item	250,000.00	500,000
					1,250,000
Special Services					
	Building				
A	Allowance for security	11,504	m2	25	287,600
	Car Parking				
B	Allowance for security	12,766	m2	35.00	446,810
					734,410
Centralised Energy Systems					
A	Not applicable		Note		
					0
Alterations and Renovations					
A	Not applicable		Note		
					0
Site Preparation					
A	Not applicable		Note		
					0
Roads, Footpaths and Paved Areas					
A	Allowance for footpath and paved area	1	Sum	750,000	750,000
					750,000
Boundary Walls, Fencing and Gates					
A	Not applicable		Note		
					0
Outbuildings and Covered Ways					

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Outbuildings and Covered Ways					*(Continued)*
A	Not applicable		Note		
					0
Landscaping and Improvements					
A	Allowance for landscape and improvement	1	Sum	900,000	900,000
					900,000
External Stormwater Drainage					
A	Allowance for extenal stormwater, external sewer drainage, external water supply, external gas supply, external communication	1	Sum	800,000	800,000
					800,000
External Sewer Drainage					
A	Included in 37XK		Note		
					0
External Water Supply					
A	Included in 37XK		Note		
					0
External Gas					
A	Included in 37XK		Note		
					0
External Fire Protection					
A	Allowance for External fire protection	1	Sum	250,000	250,000
					250,000
External Electric Light and Power					
A	Allowance for external lighting and power	1	Sum	300,000	300,000
					300,000
External Communications					
A	Included in 37XK		Note		
					0
External Special Services					
A	Included in 37XK		Note		
					0
Design Contingency (5%)					
	Design contingency calculated as % of Net Project Cost				
A	% of NPC	5	%	72,365,400	3,618,270.00
					3,618,270
Construction Contingency (3.5%)					
	Construction contingency calculated as % of NPC and Design Contingency				

Elemental Breakdown

DONALD CANT WATTS CORKE

Project: Joondalup Performing Arts & CUltural Facilities **Details:** Indicative Cost plan
Building: Joondalup Performing Arts & Cultural Facilities

Autocode	Description	Quantity	Unit	Rate	Total
Construction Contingency (3.5%)					*(Continued)*
A	% of NPC	4	%	76,731,199	2,685,591.95
B	% of Design Contingency	4	%	3,837,000	134,295.00
					2,819,887
Clients Costs					
A	Not applicable		Note		
					0
Public Art (1%)					
A	Included in Facade		Note		
					0
Furniture, Fitments and Equipment					
A	Allowance for furniture, fitments and equipment	1	Sum	700,000	700,000
					700,000
Theatre Technical Equipment					
A	Allowance for Theatre Technical Equipment	1	Sum	2,500,000	2,500,000
					2,500,000
ESD Options					
A	Excluded		Note		
					0
Professional Fees and Disbursements					
	Professional fees calculated as % of Net Project Cost				
A	% of NPC	12	%	71,660,805	8,599,296.60
					8,599,297
Escalation to January 2014					
A	Escalation included in unit rate and projected to Jan 2014		Note		
					0
	0				**90,716,799**

APPENDIX 3
COMPETITION SUBMISSION FORM

7. SUBMISSION FORM

COMPLETE AND RETURN WITH SUBMISSION

7.1 Competition Finalist:

The Competition finalist is as follows:

FINALIST CORPORATE INFORMATION	
FULL COMPANY NAME	*ASHTON RAGGATT MCDOUGALL PTY LTD (TRADING AS ARM ARCHITECTURE)*
ADDRESS FOR NOTICES	*PO BOX 2729, CLOISTERS SQ WA 6850*
EMAIL ADDRESS FOR NOTICES	*arm.perth@armarchitecture.com.au*
TELEPHONE NUMBER	*(08) 6102 4030*
Name and position of the individual nominated as the Finalist's contact	*ANDREW LILLEYMAN* *SENIOR ASSOCIATE, HEAD OF PERTH OFFICE*

7.2 Undertaking

The Finalist agrees to be bound by the conditions of the Competition contained within this brief.

7.3 Attachments

Response instruction: Finalist to attach its submission in response to this brief including, but not limited to the components outlined in Section 3.5.

7.4 Execution

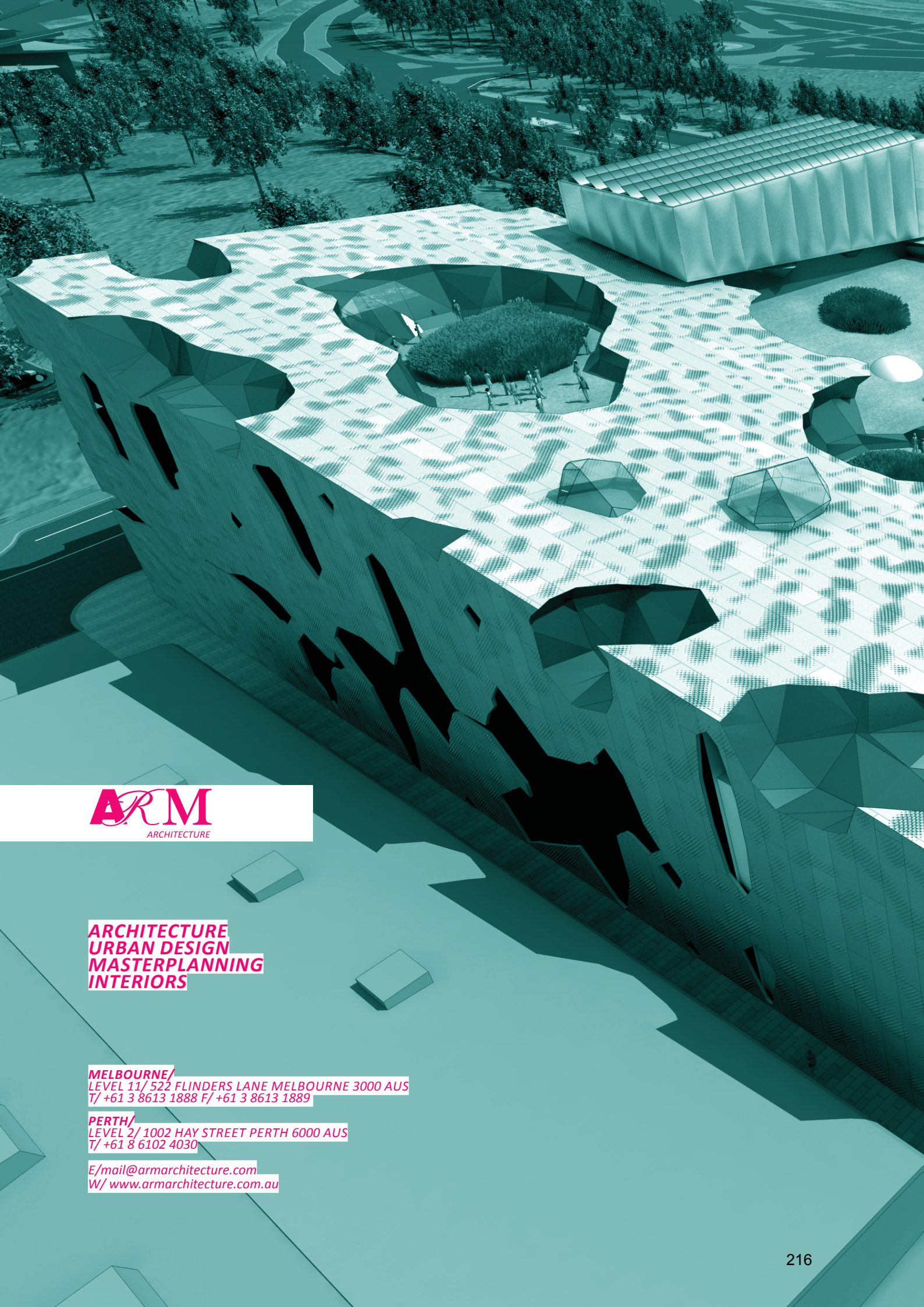
This submission is dated the *9TH* day of *JULY* 2013.

Authorised signatory of the Finalist:

Signature

ANDREW LILLEYMAN

Print Name



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Appendix 4 - JPACF Briefing Paper - Financial and Scenario Evaluation: City of Joondalup (September, 2016)

City of Joondalup

Joondalup Performing Arts and Cultural Facility

Briefing Paper

FINANCIAL AND SCENARIOS EVALUATION

UPDATED SEPTEMBER 2016
SCHEMATIC DESIGN

CONTENTS

VERSION CONTROL

	Date	Author	Details
1	16 Sep 2016	SFA	o Initial version to DCS, MFS and City Projects
2	19 Sep 2016	SFA	o Minor changes to text, Revised version to above parties
3	22 Sep 2016	SFA	o Minor changes to text, following review with CEO 21 Sep 2016 o Provided for Deloitte as part of Business Case Review

INTRODUCTION

1. INTRODUCTION AND BACKGROUND

1.1 Purpose of Paper

This plan is prepared in support of the Business Case (September 2016) for the Joondalup Performing Arts and Culture Facility (JPACF). This report will include a detailed evaluation of the financial implications of the JPACF and an evaluation of Scenarios. The contents include:

- Establishment costs;
- Operating Analysis;
- Scenario Evaluation;
- Value for Money; and
- Summary, including risks and sensitivity.

1.2 Out of Scope

The following are out of scope:

- Project Justification – included in business case;
- Procurement Plan;
- Risk Management Plan;
- Project Management Plan; and
- Asset Management Plan.

1.3 Whole of Life Approach

The City applies a whole-of-life approach to all projects, and prides itself on applying a wide number of tools to ensure it is financially sustainable both now and in the future. The ongoing operational impacts are assessed as much as the one-off costs. This ensures that the overall costs of a project over the long-term are evaluated and budgeted.

The funding for the Facility has been subject to constant review, with several supporting projects in place to set aside funding.

1.4 20 Year Strategic Financial Plan

The key tool to ensure that all of the financial impacts of the JPACF are identified and financially sustainable is the City's *20 Year Strategic Financial Plan which is updated* on an annual basis. The plan was last adopted by Council in June 2016 (*Adopted 20 Year Strategic Financial Plan*), and included all whole of life implications (Establishment costs, funding, interest expense, operating subsidy, depreciation and capital renewals). The Adopted *20 Year Strategic Financial Plan*) is based on the Concept Design costings from the December 2015 Business Case).

1.5 Disclaimer

This report does not contend that the financial projections will come to pass exactly as stated, but are merely a guide in support of the business case. The projections are best

estimates at this point in time, but there is a level of risk and uncertainty in all of the projections. The actual costs and income will vary, due to the following:

- Detailed Design and Specification;
- Tender;
- Program Model;
- Management Model;
- Demand / Catchment / Changes in taste / participation in cultural activities; and
- Economic Factors.

The financial projections will be reviewed annually, or at times deemed necessary by the project.

It should also be emphasised that the assumptions included in this document (e.g. the discount that may be provided to community groups) are not binding in any way, and are merely assumptions used for the purposes of financial evaluation.

Due to the size of the proposal, the Risks/Sensitivity of the assumption should be considered as much as the financial projections.

1.6 Data shown either in $, in Thousands ($k) or in Millions ($m)

There is a wide range of financial data referred to in this document. Data will either be shown in Dollars ($), thousands ('$k') or where necessary in millions ($m), depending on the size of the values being referred to.

1.7 Values initially shown in 2016 dollars

The report will initially review all of the assumptions in today's dollars as this is easier to review. However all values will then be escalated to take account of inflation so that the overall costs over a 40 year period can be assessed.

1.8 Previous Version of This Paper

This report was initially prepared in 2015 and was used to support the December 2015 Business Case presented to Council. The costings were based on CONCEPT DESIGN. This version of the report is now based on SCHEMATIC DESIGN. The projections from the December 2015 Business Case are included for comparison in all tables and commentary has been added to explain whether the assumptions differ.

2 RESEARCH & SUPPORTING INFORMATION

2.1 Research 2012 to 2016

The City has commissioned a variety of work during the past few years that forms the basis of the financial evaluation:

- 2012 Feasibility Study - The 2012 Feasibility Study included an initial evaluation of the project costs and operating impacts, and continues to be used as a reference point for the operating assumptions.
- 2013 Architectural Design Competition - The 2013 competition, as described in more detail with the business case, provided the basis of the capital costs used in the December 2015 Business Case.
- 2014 Financial Review - The City used internal resources to complete an internal review of the financial projections, this mostly focused on the operating results.
- 2015 Design Review – Consideration of alternative scenarios e.g. 1000 seat capacity in the Primary Theatre instead of 850 seats
- 2016 Schematic Design
- 2016 External review of operating assumptions. Three separate consultants have been engaged to assist with the review of the operating assumptions. The reviews will be explained in more detail later in this section.

2.2 Industry Consultation – General Manager of Other Performing Arts Centre

A General Manager of another WA Performing Arts Centre has been consulted on a regular basis during the past two years. The other centre is not an ideal benchmark for the JPACF because it is further away from Perth, the catchment is smaller and the demographics are very different. Nevertheless there are many aspects which are still useful to review, particularly as it is in WA. It has been useful to draw upon the live experience of the General Manager. Some of the key issues arising from the discussions are:

- Programming (i.e. the arrangement of events) has to be long-term i.e. 1 to 2 years before events are held.
- JPACF could tie into the WA 'circuit' with other centres such as Albany, Bunbury, Geraldton and Mandurah.
- Utilisation Maximum (i.e. number of days that the primary and secondary theatre) could be expected to be used per year is 200 days, but that would take a lot of effort and may be sub optimal (more events doesn't necessarily mean more attendees and could result in a higher loss than having the spaces used for less).
- Average Occupancy per performance may be approximately 50%, although will vary significantly depending on the type of performance.
- Commercial Hires are good earners; the Cost of Sales is approx 25% of Income.
- Ticketing is best to be controlled by the facility themselves, do not recommend the use of a third party.
- Marketing is crucial to the operation and programming and should be driven by the facility itself.
- Staffing for shows is flexible, volunteers are also used.

2.3 Industry Consultation – Department of Culture and Arts

Discussions were held with the Department review the operating model. There was limited specific financial data available from the DCA, but it was useful for the following:

- Programming and Audience Development is the most important issue for an Arts Centre.
- Agreed that it will take some years to build up to 'steady state'. For the first couple of years, the facility has to make concerted efforts to develop the demand, and it may even be useful (and better financially in the long run) for the City to allow a resident company to use the facility for a couple of years for free hire, particularly a company who are up and coming and who can both develop their own brand and the JPACF at the same time.
- Average Occupancy of 50% level is a reasonable assumption.
- Capacity of the Primary Theatre at 850 seats was raised as an issue and consideration should be given to higher capacity. This has been evaluated and the results summarised in this report.
- APACA (Australian Performing Arts Centre Association) - vital source of information for planning an Arts Facility, and the City should join APACA to allow continued access to this data.

2.4 Industry Consultation – APACA (Australian Performing Arts Centre Association)

APACA prepare bi-annual reports based on information from Arts Centres around the country. Reports have been used throughout the review, and will be referenced throughout the report. Care has to be taken in using the APACA data as there is so much of it, and some of it may be irrelevant e.g. much smaller facilities.

The previous version of the Business Case relied upon the 2013 APACA reports. The City recently obtained the 2015 APACA reports and updated assumptions where relevant to do so.

2.5 Schematic Design 2016

The Schematic Design for the project has now been completed. This now includes updated establishment costs and changes to specifications which impact on operational estimates. The revised costings form the basis of the revised Scenarios.

2.6 External Review of Operating Assumptions 2016

Three consultants have been engaged during the past couple of months to assist with specific elements of the review of the business case:

- Pracsys – have provided detailed utilisation and pricing assumptions for the Non-Theatre spaces in the JPACF. The non-theatre spaces are the Conferences, Foyer, Gallery, Dance Studios, Music Studios and Community studios. Their findings have been used as the basis of updated income and cost assumptions for these areas.
- Ex General Manager of Perth Theatre Trust – review the assumptions for the Primary & Secondary theatres, and the staffing model. Their views have been taken on board and incorporated into the updated financials.
- Paxon Consulting – were engaged to review Utilities, Building Maintenance, Capital Replacement and also the non-Theatre Spaces. Their findings have been taken on board where possible to do so, although there are some elements that the City has opted not to use – these will be explained later on.

3 SCENARIOS, ASSUMPTIONS AND RESEARCH

3.1 Scenarios Evaluated

There are four sets of financial projections shown in this report:

- Business Case December 2015, based on Concept Design is shown for comparison.

Three Scenarios which are all based on Schematic Design:

- Scenario 1 – Worse Case. This includes some of the worse-case estimates for staff costs, utilities and repair/maintenance as provided by Consultants.
- Scenario 2 – Idealistic. The other end of the range of possibilities with best-case estimates for staff costs, utilities and repair/maintenance.
- Scenario 3 – Realistic. Amended set of assumptions, which are mostly halfway between Scenario 1 and Scenario 2

Where a table displays all four sets of projections, a green box has been placed around Scenario 3 to clearly indicate this as the recommended Scenario for inclusion in the Business Case.

3.2 Assumptions

The table below lists some of the general assumptions within the financial model:

	Assumption	Value	Comments
1	Ready for Service	July 2019	o The analysis assumes that the facility is ready by July 2019. o This assumes that construction commences by 2017 and is completed over 2 years, 2017-18 and 2018-19 o These timescales are the same as used in the previous Business Case (December 2015) o These timescales are highly unlikely taking account of the further steps that would be required before construction could commence (e.g. Detailed Design, Tender, and Contract Award). o Whilst these timescales are highly unlikely they have been retained to facilitate clear comparison to the December 2015 Business Case. o The project will need to develop a detailed program, including tender/procurement plan, as part of the next phase and once this is done the scheduling and financial estimates can be revised.
2	Financial Evaluation Period	45 Years	o The analysis evaluates the cash flows over a 45 year period, from 2014-15 to 2058-59. o 2014-15 and 2015-16 are past (Sunk Costs), but for the purposes of comparing clearly to the previous business case the costs for 2014-15 and 2015-16 are included in the overall evaluation o The evaluation includes 40 years of operation from 2019-20 to 2058-59 o The long timeframe is necessary to ensure that the long-term implications are fully considered, and also ensures that capital renewal expenditure can be included in the evaluation
3	Escalation–Assumptions	Same as Previous	o For purposes of clear comparison to the previous business case, the escalation assumptions for all items have

		Business Case	remained the same as the December 2015 Business Case. A minor change in escalation assumptions can cause a large change in a 40 year evaluation and would distort the comparison to the December 2015 Business Case. A copy of the escalation rates in the financial projections is included in Appendix 2 of this paper. All cash flows use CPI for escalation except where otherwise stated.
4	Borrowing Terms	15 Year Repayment Loans	The costs of borrowing have reduced since the previous business case, and WATC (West Australia Treasury Corporation) have recently provided updated forecasts. The assumptions used are: o 2017-18 borrowings at a Fixed Rate of 3.61% (previously 4.25%), repaid over a 15 year basis o 2018-19 borrowings at a Fixed Rate of 4.01% (previously 4.75%), repaid over a 15 year basis Additionally, there is a cost of 0.7% per year on the outstanding principal for the Govt Guarantee. The City has begun a detailed evaluation of alternative forms of financing, including variable rate loans and interest only loans. The findings are subject to a separate report that is attached. The findings are subject to external validation. Until the review is complete the JPACF business case will continue to assume the traditional method of financing, which is a Fixed Rate Fixed Term (15 years).

ESTABLISHMENT PHASE

4 PROJECT COSTS

4.1 Capital Costs EXCLUDING escalation

The tables below summarise the total one-off costs to establish the facility and compare to the previous estimate. The Capital cost is same for Scenarios 1, 2 and 3 because the differences in those Scenarios relate to operational costs, not capital costs.

The Schematic Design costs are now estimated to be approx $2.1m (2.1%) more than the Concept Design estimate. The estimate includes contingency costs of $5.3m, it is standard practice and prudent for the City to have contingency at this stage in the project because there are likely to be other changes that could arise through the other stages (Detailed Design, Tender).

Capital & Other One-Off Costs Excluding escalation		Concept Design Business Case (Dec 2015)	Scenario1	Scenario2	Scenario3
			Schematic Design		
			Worse	Idealistic	Realistic
1 Project Costs, excluding Contingencies	*$000s*	($91,031)	($94,478)	($94,478)	($94,478)
2 Design & Construct Contingency	*$000s*	($6,600)	($5,260)	($5,260)	($5,260)
Total Capital & Other One-Off Costs	***$000s***	**($97,631)**	**($99,738)**	**($99,738)**	**($99,738)**

4.2 Schematic Design Costings & Value Engineering

The Capital Costs for each Scenario is based on data from ARM. ARM has used a range of sub-contractors (QS, Theatre Specialists) to prepare their estimates. ARM has intimated that Schematic Design costings can often result in costs being 5% to 7% higher than Concept Design and the first version of the Schematic Design costings were 12% higher. The initial increase of 12% arose for a number of reasons:

- Greater consideration given to finishes e.g. more toilets than just the basic number included in Australian Standards.
- Design improvements (e.g. walkways and foyer improvement as presented to Major Project Committee in April 2016)
- Some rates used at Concept Design were understated

ARM initiated an independent QS review of the costings, which confirmed that the level of rigour applied in the costings and the source of data was robust. Whilst the increased costs of 12% were legitimate it was acknowledged that the overall increase was too high and detailed reviews (value-engineering) were undertaken to reduce the costs. This culminated in a reduction to the final result of $99.7m which is a 2% increase versus Concept Design. There are numerous changes which ARM have separately provided and out with the scope of this report but it should be emphasised that the key features of the facility remain intact i.e. the Primary Theatre is still 850 seats.

In summary the costings of the Schematic Design are now based on more up-to-date information and it can be expected that there would be differences to the Concept Design. Whilst the $2.1m increase is far from ideal there has been a great deal of rigour applied to the latest costings and design.

4.3 Jinan Gardens & Planning Costs

The ARM Project Costs above now include all costs for the City, including Jinan Gardens and City Project Costs. The same assumptions as used in the previous Business Case:

- Jinan Gardens: Estimated cost for this is $2.1m. This is based on indicative costs provided by QS, provided in 2013 and then escalated to 2016 dollars. The QS evaluation in 2013 is deemed sufficient at this point in time.

- Planning and Other Project Cost $1.1m: Costs incurred within the City to manage the project and develop the business case. Additionally, the costs include an estimate of project management costs required to oversee the facility. These costs will be subject to further evaluation when the detailed implementation program is prepared

4.4 Contingency

The Contingency assumptions are based on standard practice for projects of this nature, with 2.5% Construction Contingency and 4% Design Contingency. It is possible that the contingency is not fully required and the overall establishment costs are less than estimated. The contingencies are helpful to mitigate issues that may still arise or are only known after Detailed Design is completed. It may be worth considering a reduction of the contingency and capping the overall costs for Scenario 2 at $97,631 – this will be explored in more detail in the Risks/Opportunities section.

Now that Schematic Design has been completed though, there is a lot more certainty on the VOLUME assumptions included in the costings than were included in the Concept Design. However there continues to be uncertainty with the RATE PER SQUARE METRE assumptions, because they will be uncertain until Detailed Design is complete and the project goes to tender.

The key issue that must be emphasised is that the Capital Costs above are still only ESTIMATES; the final cost would be either lower or higher than the sums stated. The Risk analysis towards the end of this report will provide more commentary on the sensitivity of the forecasts and probabilities.

4.5 Exclusions

During project planning it is standard practice for there to be exclusions in the costings due to the lack of information or because it is too early to evaluate. As the plans become more detailed though, the exclusions should eventually dissipate. At the point of the Concept Design there were exclusions for Traffic Treatment and External works which have now been included into the costings.

At this point in the process there are still some exclusions which would only be considered as part of detailed design, however these are minimal. There are three additional costs which could enhance the facility at a total cost of $1.63m, these are:

- Electronic Enhancement system $1.0m
- PV Cells $0.45m
- Gallery Climate control $0.18m

These items can be considered at a later point in time including a review of the operational impacts (e.g. reduced electricity costs with PV cells). However Paxon carried out an evaluation of PV cells and there was not a compelling financial case to use them.

4.6 Phasing

The estimated timing of capital expenditure for Scenarios 1/2/3 is summarised in the table below. This indicates that the majority (54%) of the expenditure may arise in 2017-18, which would relate to the bulk of the construction costs. As mentioned earlier the phasing is deemed unrealistic but is retained for comparison to the previous business case.

Phasing of Project Costs	2014-15	2015-16	2016-17	2017-18	2018-19	**Total**
Scheduling	-$0.2	-$1.7	-$11.3	-$53.6	-$32.9	**-$99.7**
% of Total	0%	2%	11%	54%	33%	100%

$11.3m has been included in the Adopted Budget 2016-17. This assumed that some of the construction would commence in 2016-17, which is no longer expected to be the case. The scheduling of the project will be subject to further review in a few months time.

4.7 Sunk Costs $1.9m

The Schedule above of the $99.7m includes $1.9m costs for 2014-15 and 2015-16 which are classed as Sunk Costs. There is no decision to make with the $1.9m costs, they are sunk. The future project cost where a decision needs to be made is the remaining $97.8m (2016-17 to 2018-19).

4.8 Capital Costs INCLUDING escalation

The final capital costs that will have to spent will be higher due to escalation from 2016. The table below summarises the Capital Costs for each Scenario excluding escalation and including escalation.

Capital Costs Excluding and Including Escalation		Concept Design Business Case (Dec 2015)	Scenario01 Worse Case	Scenario02 Idealistic	Scenario03 Realistic
Excluding Escalation	*$000s*	($97,631)	($99,738)	($99,738)	($99,738)
Including Escalation	***$000s***	**($102,992)**	**($105,268)**	**($105,268)**	**($105,268)**

5 FUNDING

5.1 Funding Estimates

The City proposes to fund the project using three sources: City Reserves, Grant from National Stronger Regions Fund and the remainder from borrowings. Each of these three sources will be explained further in the next sections. The table below summarises the estimated funding sources for each Scenario. The funding for Grants and Reserves is the same for each Scenario, with borrowings being the final source of funding.

The table shows that the contribution from reserves is approx $7.7m less than the previous assumption due to reduced Tamala Park proceeds. The borrowings have increased by $10m due to the reduced Tamala Proceeds and the increased capital costs of $2.3m.

Funding Sources (including escalation)		Concept Design Business Case (Dec 2015)	Scenario01 Worse Case	Scenario02 Idealistic	Scenario03 Realistic
1 Grants (NSRF)	*$000s*	$10,000	$10,000	$10,000	$10,000
2 City Reserves	*$000s*	$45,220	$37,498	$37,498	$37,498
3 Borrowings	*$000s*	$47,772	$57,769	$57,769	$57,769
Total Funding	***$000s***	**$102,992**	**$105,268**	**$105,268**	**$105,268**

5.2 Grants (NSRF) - National Stronger Regions Fund

The National Stronger Regions Fund was set up by the Commonwealth in 2014 with $1 billion to assist with projects that can demonstrate improvement against specific criteria. The criteria are not subject to comment in this report; a separate response to the criteria is available. For the purposes of the financial evaluation it is assumed that the application for $10m is successful. It is recognised that there is a high risk of the City being unsuccessful with the $10m application and this is subject to further review in the Risk Analysis.

5.3 City Reserves

The City has been planning for the JPACF for a number of years, and has implemented programs to partially fund the project, including:

1. Asset rationalisation strategy: Surplus land/property evaluated with Scenarios considered for sale or alternative use. Where the assets are sold, the proceeds are set aside into the JPACF reserve, which can then be used by the project. This reserve was used to fund $1.9m project costs for 2014-15 and 2015-16. There is currently (June 2016) $11.8m in the JPACF reserve, which is intended tol be used to fund the $11.3m costs in 2016-17. The reserve is expected to provide a further $8.0m funding in 2017-18. In total the JPACF reserve is estimated to contribute $21.2m to the project costs.

2. Tamala Park Proceeds: The City owns 1/6 of land in the north of the region, together with other Councils. The land is being developed, subdivided and sold, with the net proceeds allocated to each of the Councils. The City has determined within the *Adopted 20 Year Strategic Financial Plan* that the Tamala Park proceeds will be set aside for the JPACF. The reserve currently (June 2016) has $8.9m. It is projected that there will be further

proceeds of $5.4m in the next couple of years, allowing this reserve to contribute $14.3m in total towards the construction costs in 2017-18 and 2018-19. After the JPACF is constructed there will continue to be proceeds from Tamala Park, a further $46m is expected to be available from the Tamala Park Reserve to contribute towards the repayment of the borrowings.

The values for Tamala Park proceeds described above are based on the most recent forecast from TPRC (Tamala Park Regional Council), as at June 2016. The previous Business Case, and also the Adopted SFP (June 2016) were based on forecasts from 2015. The 2016 Forecasts are a lot more pessimistic, with approx $7.7m less in the next few years to contribute to the construction. The reduced proceeds of $7.7m are not caught up in later years either. As a result of the reduced proceeds from Tamala Park the estimated borrowings have increased.

5.4 Borrowings from West Australian Treasury Corporation (WATC)

The WATC is the state body in WA to assist Local Government and other State bodies with funding. The City can borrow from 3rd parties; however the terms offered by the WATC have tended to be much better than other parties.

- Loan 1 2017-18 – 15 year repayment term, Fixed Rate of 3.61%
- Loan 2 2018-19 – 15 year repayment term, Fixed Rate of 4.01%

The interest costs at present are very low in comparison to previous years. It is expected that the low costs of borrowing will continue for a couple of years.

In addition to the standard terms above, the WATC also levy an additional cost of borrowings, known as the 'Government Guarantee'. This is calculated as 0.7% of the average balance outstanding and has been included in the financial evaluation.

The table below summarises the total cost of borrowings for each Scenario. Line 2, 'Interest', includes interest expense on the borrowings and also the government guarantee.

	Borrowings Costs		Concept Design Business Case (Dec 2015)	Scenario1 Worse Case	Scenario2 Idealistic	Scenario3 Realistic
1	Borrowings	*$000s*	($47,772)	($57,770)	($57,770)	($57,770)
2	Interest	*$000s*	($21,743)	($22,597)	($22,597)	($22,597)
	Total Cost of Borrowings	***$000s***	**($69,515)**	**($80,367)**	**($80,367)**	**($80,367)**
	Repayment of Borrowings					
3	Future Tamala Park Reserve	*$000s*	$46,524	$46,681	$46,681	$46,681
4	Shortfall funded by General Municipa	*$000s*	$22,991	$33,686	$33,686	$33,686

The City is currently reviewing other alternatives to the financing of the facility which may result in a different set of cashflows to above. A separate report is provided and is still subject to independent review. In the meantime it is prudent to continue to assume a Fixed Interest Fixed 15 year term as indicated above.

5.5 Repayment of Borrowings

As indicated earlier the City will use future proceeds from sale of land at Tamala Park to repay the borrowings. It is estimated that there will be a further $46.5m proceeds from sale of land at Tamala Park after the JPACF is built. This would leave a shortfall of $33.8m which would have to be funded municipal funds (unless there were other external sources which become available). Lines 3 and 4 of the table above summarise the repayment of the borrowings.

5.6 Impact if $10m Grant not Received

The table below summarises the impacts if the City is unsuccessful in it's application to the National Stronger Regions Fund. This shows that total repayments would be over $94m.

	Borrowings Costs if $10m grant Unsuccessful		Scenario 1,2 & 3	$10m Grant not Received	Difference
1	Borrowings	*$000s*	($57,770)	($67,770)	($10,000)
2	Interest	*$000s*	($22,597)	($26,509)	($3,912)
	Total Cost of Borrowings	***$000s***	**($80,367)**	**($94,278)**	**($13,912)**
	Repayment of Borrowings				
3	Future Tamala Park Reserve	*$000s*	$46,681	$46,681	
4	Shortfall funded by General Municipa	*$000s*	$33,686	$47,597	$13,912

OPERATING ANALYSIS

6 KEY FEATURES & DEFINITIONS

6.1 Definitions

The table below summaries some of the definitions that are relevant for the Operating analysis:

	Item	Definition
1	Program Model	The Program Model for the JPACF is the term used to describe all of the different activities that are run in all of the different spaces throughout the facility. The Program Model comprises of: o Events set up and run by the JPACF themselves; o Hire of a space (Primary Theatre, Secondary, Conference, etc.) by a Commercial hirer o Hires by Community groups, charged at a lower rate than commercial o Hires by City of Joondalup
2	Subsidy	o The 'subsidy' is the difference between operating cash expenses compared to the income that the JPACF earns. o Interest expense associated with the costs of borrowings is excluded from the subsidy analysis because the interest costs are for 15 years whilst the subsidy is a longer term commitment (40 years). The interest expense is included in the overall whole of life evaluation.
3	Presented Event	o This term relates to those performances that are organised by Arts Centres at their own risk. o Arts Centres would take direct receipt (and risk) of the proceeds from ticket sales and would have responsibility for all the direct costs of the event (e.g. performance fee to the artists).
4	Hire	o The hire of the various spaces to promoters, community groups or to the City itself. The hires could be professional touring companies, local community groups or indeed the overall owner (i.e. Local Government). o The hirer has responsibility for organising the performance/event, and the collection (risk) of ticket proceeds. o A one-off fee is paid by the Hirer to the JPACF for the use of the space. This fee would reserve the space for a period of time to allow an event to be staged. o The fee would include the utility costs and use of the equipment. o The JPACF may provide support staff for the event (e.g. ushers), which would have to be separately paid by the hirer.
5	Performances	o General term relates to either a "Presented Event" or a "Hire"
6	Primary Space	o Main theatre o 850 Seat Capacity.
7	Secondary Space	o Proposal is for 200 Seats o Also referred to as the 'Black Box' which is an industry term intended to describe the flexibility of the space
8	Utilisation	o Number of days that a space is used per year. o The Utilisation % is calculated by comparing the number of days that the facility is used to the number of AVAILABLE days per year o The available days may be approximately 330 days per year as it would exclude the days that the spaces are unavailable due to holidays or maintenance.
9	Occupancy	o Number of Seats used per performance when compared to capacity. o For example if there were - 425 attendees at the 850-capacity theatre, then the occupancy are 50%. - 650 attendees would be 76% of 850 seat capacity.
10	Cost of Sales	o Costs that can be directly associated with income raising activities

		o Includes Operational Staff whose time can be directly associated with specific activities, whereas the costs/activities of Administration/Management staff cannot be directly associated with specific income raising events.
11	Full Time Equivalent	o This term is used to equate jobs into a full time basis. o For example if there were two part-time positions that spent 19 hours per week each, these two positions would equate to one full-time equivalent
12	Depreciation	o The Financial Model used to evaluate a project will initially only consider the CASH implications. Depreciation is a non-cash expense and is therefore excluded from the cash flow model. o Although Depreciation is not included in the project cash flows, the cash implications of capital renewals are included. o Depreciation is an important consideration as it forms part of several key ratios, most notably the Operating Surplus Ratio – this is explored in more detail later in the report.
13	Operating Grants	o It is not assumed at this stage that there are any operating grants from State/Federal to help reduce the cost of the annual subsidy to City of Joondalup ratepayers. o This was subject to research by Paxon.

6.2 Year 5 (2023-24) is assumed to be Steady State

Based on discussions with industry, it is assumed that it will take a number of years to build up the program into a steady state. The financial assumptions for Operating Income and Expenses therefore assume that from Years 1 (2019-20) to Year 5 (2023-24) the use of the facility will steadily increase, and that Year 5 becomes the 'steady state'. From Years 6 (2024-25) to Year 40 (2058-59) it is assumed that the operating income and expenses are the same as Year 5. Year 5 of the Operating Income and Expenses is therefore analysed in detail within the Operating Analysis as it is used for Year 5 to Year 40.

The only exception to this principle is the Parking Income which is assumed to be lower in Years 5 to 14 and then increases from Year 15 onwards.

7 PRIMARY & SECONDARY SPACES

7.1 Assumptions for Primary and Secondary Spaces

The Primary and Secondary spaces are the main parts of the facility. It is therefore important to evaluate the usage, income and costs separately. There are some changes to the assumptions based on review of 2015 APACA data and review by ex General Manager of Perth Theatre Trust.

7.2 Program Model

A potential program model was initially prepared as part of the 2012 Feasibility Study, and has since been reviewed with reference to APACA data and consultation with other facilities. The table below provides an outline of the potential program model assumed for the Primary Theatre and Secondary Theatre by Year 5 (2023-24). This indicates that Primary Theatre may be used for 186 days per year, and the Secondary Theatre used for 163 days a year.

Potential Program Model - Year 5	Primary	Secondary	Total	% of Total
Comedy	12	10	22	6%
Theatre	38	39	77	22%
Dance & Ballet	24	11	35	10%
Music	39	23	62	18%
Festivals	16	15	31	9%
Schools	16	11	27	8%
Film	6	19	25	7%
Joondalup Eisteddfod	12	11	23	7%
Special Events	23	24	47	13%
Total	**186**	**163**	**349**	**100%**

The assumptions above are assumed to be the same for all Scenarios.

The utilisation of 186 days and 163 days is comparable with data from APACA. Utilisation of 186 days per year is a reasonable use of the space when consideration is given to weekends and use of the space during the week. For example if the spaces were used for the vast majority of Friday and Saturday evenings, as this would be the days that most patrons prefer to go out, this could account for over half (e.g. 100 days) usage per year, with the other 86 days used on other days of the week. The usage of 86 days would equate approximately to an average 2 days per week that the Theatre is used on a Sunday, Monday, Tuesday, Wednesday or Thursday.

7.3 Usage per Year

The events held would either be presented/organised fully by the JPACF themselves, or the events would relate to the hire of a space to either a Commercial body, Community or to the City of Joondalup. The table below summarises the assumptions included in the financial evaluation. It is assumed that 42 events in the Primary Theatre would be organised fully by the JPACF themselves ('presented' events) and the other 144 events would involve hiring the space to Commercial bodies or to Community/City.

The total events for the revised Scenarios are now lower than the previous business case as a result of the changes in the APACA data.

Usage Assumptions (Year 5 onwards)		**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
Primary Theatre					
Presented	*Events & Hires Per Year*	43	42	42	42
Commercial Hires		77	77	77	77
Community & City		68	67	67	67
Total		188	186	186	186
Secondary					
Presented	*Events & Hires Per Year*	21	19	19	19
Commercial Hires		54	51	51	51
Community & City		100	93	93	93
Total		175	163	163	163
Utilisation (as % of 330 days)	Primary	57%	56%	56%	56%
	Secondary	53%	49%	49%	49%

7.4 Attendees per Year

It is assumed that the spaces would be 50% occupied on average for all Scenarios. The occupancy % would vary depending on the type/popularity of performance; some events may have 100% occupancy but others less than 50%. An average occupancy of 50% is comparable with data from APACA. The 50% occupancy would mean on average 425 attendees at the 850 capacity primary theatre.

The table below summarises the annual estimated attendees per year at the Primary and Secondary theatres based on the 50% occupancy assumption and based on the number of events per year. It is estimated that there would be annual attendees of 95,350 per year for Scenario 1, 2 and 3 which is slightly less than the previous business case estimate due to the lower assumption for events.

Capacity, Occupancy & Attendees (Year 5 onwards)		**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
Capacity:	Primary	850	850	850	850
	Secondary	200	200	200	200
Occupancy % (Average per Event/Hire)		50%	50%	50%	50%
Attendees Per Year	Primary	79,900	79,050	79,050	79,050
	Secondary	17,500	16,300	16,300	16,300
	Total	**97,400**	**95,350**	**95,350**	**95,350**

7.5 Pricing per Event/Hire

The table below summarises the pricing assumptions for the theatres. The assumptions for pricing and hires were initially based on the 2012 Feasibility Study, refreshed by the City in 2014 and have now been updated in 2016 with more recent assumptions.

- Presented Events: The pricing for presented events is based on price per ticket, where the tickets are sold directly by the JPACF to the general public. The prices are average prices per event and would vary according to the popularity of the event, or the costs of booking performers.
- Commercial Hire: The price of hiring comprises of a base hire costs (e.g. $2,890 for Primary Theatre for Scenario 1, 2 and, 3), and then charges for the staff costs. The details of the staff costs are explained further on.
- Community Hire: It is now assumed that there should be a 30% discount provided to Community hires - This is based on industry standards but is now a lower discount than the previous business case. Note that the discount only relates to the Hire of the venue and not the staffing costs.
- COJ Hire: Fees are based on same assumptions as Community Hire.

Income Assumptions (Year 5 onwards)		**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
Presented Events					
Price per Ticket	Primary	$40	$45	$45	$45
	Secondary	$23	$23	$23	$23
Hire of Space: Commercial					
Primary	Base Price	$2,700	$2,890	$2,890	$2,890
	Staff Costs	$1,156	$1,260	$1,260	$1,260
	Total	$3,856	$4,150	$4,150	$4,150
Secondary	Base Price	$990	$990	$990	$990
	Staff Costs	$544	$620	$620	$620
	Total	$1,534	$1,610	$1,610	$1,610
Discount to	Primary	35%	30%	30%	30%
Community / City	Secondary	35%	30%	30%	30%

The reality of the actual pricing model would be more detailed than the assumptions above as there would be issues such as group pricing, concessions, etc. For the purposes of this financial evaluation and the Business Case the above assumptions are deemed satisfactory at this stage in the project.

7.6 Annual Income Projections

The income estimates in the table below are based on the usage assumptions in the table above multiplied with the pricing assumptions. For example the Income estimate for Presented Events at the Primary Theatre of $803,250 has been calculated as follows:

- 42 Presented Events at the Primary Theatre (Section 7.3) multiplied with;
- 425 Attendees per event (this is based on 50% Occupancy of the 850 Capacity (Section 7.4) multiplied with;
- $45 Price per Ticket (Section 7.5)

The calculations for the Hire Income are also based on the tables above. For example the Income estimate for Commercial Hires of the Primary Theatre of $319,550 is based on

- 77 commercial hires (Section 7.3) multiplied with
- $4,150 Income per Hire (Section 7.5)

All Scenarios have the same income projections.

Income Projections (Year 5 onwards)		**Concept Design**	**Scenario 1**	**Scenario 2**	**Scenario 3**
		Business Case (Dec 2015)	Schematic Design		
			Worse Case	Idealistic	Realistic
Primary Theatre					
Presented		$731,000	$803,250	$803,250	$803,250
Commercial Hires	*$ per year*	$296,912	$319,550	$319,550	$319,550
Community & City		$190,332	$205,489	$205,489	$205,489
Total		**$1,218,244**	**$1,328,289**	**$1,328,289**	**$1,328,289**
Secondary					
Presented		$48,300	$43,700	$43,700	$43,700
Commercial Hires	*$ per year*	$82,836	$82,110	$82,110	$82,110
Community & City		$107,550	$104,625	$104,625	$104,625
Total		**$238,686**	**$230,435**	**$230,435**	**$230,435**

7.7 Cost of Sales Assumptions

The table below provides the details of the cost of sales assumptions for each Scenario. The assumptions for Cost of Sales were initially based on the 2012 Feasibility Study, refreshed by the City in 2014 and have now been updated in 2016 with more recent assumptions. Key issues to note:

- Presented Events - the costing for presented events has previously been assumed to be 110% i.e. for each $1 of income there would $1.10 of costs. This assumption is retained for Scenario 1. Scenario 2 though considers the impacts of limiting the Program Budget to equal the income and therefore a 100% is applied in the Idealistic Scenario. Scenario 3 assumes 105% so that it is a bit more prudent than Scenario 2.

- Hires – assumptions are prepared for the number of staff, number of hours and pay rates per hour required. A further table is provided underneath to illustrate how the staff cost estimates are prepared.

- Margins – a new item that has been added, based on APACA data and ex-General Manager of Perth Theatre Trust, is the profit margin for staff cost. An allocation for overheads is applied to the charge-out rate for the staff rates used to assists with events; the previous assumption (based on the 2012 Feasibility Study) simply assumed that the income related to the costs.

Cost of Sales Assumptions (Year 5 onwards)		**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
Presented Events					
Cost of Sales as	Primary	110%	110%	100%	105%
% of Income	Secondary	110%	110%	100%	105%
Primary Theatre:					
Commercial Hires	Staff	8	8	8	8
	Hours	32	32	32	32
	Income	$1,156	$1,260	$1,260	$1,260
	% Margin		20%	20%	20%
Community & City	Staff	7	7	7	7
	Hours	28	28	28	28
	Income	$1,044	$1,044	$1,044	$1,044
	% Margin		20%	20%	20%
Secondary Theatre					
Commercial Hires	Staff	4	4	4	4
	Hours	16	16	16	16
	Income	$544	$620	$620	$620
	% Margin		20%	20%	20%
Community & City	Staff	3	3	3	3
	Hours	12	12	12	12
	Income	$432	$432	$432	$432
	% Margin		20%	20%	20%

Commercial Hire Staff Costs Primary Theatre	Cost per Hour	Staff	Hours	Cost
1 Head Technician	$45	1	4	$180
2 Duty Technician	$45	1	4	$180
3 General Operators	$35	1	4	$140
4 Front of House Man	$45	1	4	$180
5 House Assistant	$40	1	4	$160
6 Ushers	$35	3	12	$420
Total Operational Staff		**8**	**32**	**$1,260**

Commercial Hire Staff Costs Secondary Theatre	Cost per Hour	Staff	Hours	Cost
2 Duty Technician	$45	1	4	$180
5 House Assistant	$40	1	4	$160
6 Ushers	$35	2	8	$280
Total Operational Staff		**8**	**32**	**$620**

7.8 Annual Costs of Sales Projections

The Cost of Sales estimates are summarised in the table below. These are based on the usage and assumptions above. The calculations are explained with some examples relating to the previous business case as follows:

- Presented Events at Primary Theatre of $804,100 are based on 110% (Section 7.7) of the Income Estimate of $731,000 (Table 7.6)
- Commercial Hires Cost of Sales at Primary Theatre of $89,012 are based on 77 Commercial Hires (Section 7.3) x $1,260 Staff Costs less 20% margin (Section 7.7)

The Scenarios vary between each other due to the Cost of Sales assumption with Presented Events.

Cost of Sales Projections (Year 5 onwards)		**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
Primary Theatre					
Presented		$804,100	$883,575	$803,250	$843,413
Commercial Hires	*$ per year*	$89,012	$77,616	$77,616	$77,616
Community & City		$70,992	$55,958	$55,958	$55,958
Total		**$964,104**	**$1,017,149**	**$936,824**	**$976,987**
Secondary					
Presented		$53,130	$48,070	$43,700	$45,885
Commercial Hires	*$ per year*	$29,376	$25,296	$25,296	$25,296
Community & City		$43,200	$32,141	$32,141	$32,141
Total		**$125,706**	**$105,507**	**$101,137**	**$103,322**
Primary & Secondary Cost of Sales		$1,089,810	$1,122,656	$1,037,961	$1,080,309

7.9 Annual Surplus/(Deficit) for Primary/Secondary Spaces

The table below summarises the surplus/(Deficit) assumed for each space, type of event and Scenario per year. This table is based on the Income estimates (Section 7.6) above less the Cost of Sales (Section 7.8).

Surplus / (Deficit) Primary & Secondary spaces - Year 5 onwards		**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
Primary Theatre					
Presented	*$ per year*	($73,100)	($80,325)	$0	($40,163)
Commercial Hires		$207,900	$241,934	$241,934	$241,934
Community & City		$119,340	$149,531	$149,531	$149,531
Total		**$254,140**	**$311,140**	**$391,465**	**$351,302**
Secondary					
Presented	*$ per year*	($4,830)	($4,370)	$0	($2,185)
Commercial Hires		$53,460	$56,814	$56,814	$56,814
Community & City		$64,350	$72,484	$72,484	$72,484
Total		**$112,980**	**$124,928**	**$129,298**	**$127,113**
Total		$367,120	$436,068	$520,763	$478,415

8 CONFERENCES, EVENTS, GALLERY & STUDIOS

8.1 Assumptions for Conferences, Events, Gallery and Studio

All of the assumptions in this section are extracted from the separate Pracsys Consultancy report who completed a detailed review of the potential utilisation and pricing based on the Schematic Design. These assumptions now replace the previous assumptions from the 2012 Feasibility Study which were regarded as weak as they did not have a robust audit trail for utilisation.

The design of the facility has considered in great detail the unique nature of these other spaces and how they may be individually used with flexibility a key consideration. For example, the Community Arts Hub at the North East which is spread over 3 floors has its own access point – this may be useful to allow access just to that area without having the whole facility open. Conferences/Exhibitions can be held at 6 different locations in the facility with numerous layouts e.g. banquet, lecture.

8.2 Area Schedule

The table below summarises the Area Schedule.

Area	Number	Approximate Size (m^2)	Operating assumptions	Other Assumptions
Conference and Function Rooms	2	250 m^2 and 300 m^2	Hired out for corporate functions/events and general community use.	-
Drawing & Painting Studios and Craft Studio	3	190 m^2 each	Hired out under a residency arrangement to community or commercial users. Hirers charged a monthly rate. Hire periods of 6 months to 1 year.	As per the Schematic Design, the 378m^2 Drawing and Painting studio can be separated into two rooms. It has been assumed that this separation will be in place for everyday use.
Dance Studios	2	190 m^2 each	Hired out to community and commercial users under existing City of Joondalup facility hire model.	As per the Schematic Design, the 378m^2 Dance studio can be separated into two rooms. It has been assumed that this separation will be in place for everyday use.
Music Studio	1	90m^2	Hired out to community and commercial users under existing City of	-

			Joondalup facility hire model.	
Practice Rooms	4	25 m^2 each	Hired out to community and commercial users under existing City of Joondalup facility hire model.	As per information provided by CoJ, total floors space across practice rooms is approx. 100m^2.
Rehearsal Rooms	2	200 m^2 each	Hired out to community and commercial users under existing City of Joondalup facility hire model.	Total area not defined in Schematic Design, however drawings indicate that the two rooms are equal in size to the gallery (400 m^2)
Art Gallery	1	400 m^2	See Section 3 for more detail on the art gallery and the foyer/exhibition spaces.	
Foyer/ Exhibition Area	1	2,000 m^2		

8.3 Utilisation Assumptions

The table below summarises the utilisation assumptions.

Space	Total Capacity p.a. (all rooms)	Utilisation	Total Events
Conference/Function Room (x2)	610	0.35%	304
Practice Room (x4)	4,200	25%	1,050
Craft Studio, and Painting and Art Studios (x2)	6 uses per year (based on 6 month residency arrangements)	80%	5
Dance Studios (x2)/Rehearsal Rooms (x2)	4,200	20%	840
Music Studio	1,050	50%	525
Art Gallery	12 (3 week exhibitions)	100%	12
Foyer/Exhibition Space	12 (3 week exhibitions)	100%	12
Art Gallery and Foyer/Exhibition Functions	n/a	n/a	30

8.4 Financial Projections

The table below summarises the financial projections which are now built in to all 3 Scenarios. The income projection is almost 3 times as much as the previous business case. The net surplus of $392,000 is $175,000 higher than the previous surplus $217,000.

The income per year of $817,500 is approximately the same amount of income that the City currently receives for hire of it's facilities for ALL BUILDINGs in the City. Paxon also reviewed these areas and were more pessimistic in their views compared to Pracsys, for example the JPACF's ability to hold conferences may be restricted somewhat in that it cannot offer overnight accommodation.

Further details can be reviewed in the separate Pracsys report.

	Revenue ($/p.a.)
Music Studio	99,000
Practice Rooms (x4)	37,000
Dance Studios (x2)/ Rehearsal Rooms (x2)	150,000
Corporate/Function Rooms General Hire (x2)	62,500
Gallery hire	32,000
Foyer hire	5,000
Craft Studio, and Painting and Art Studios (x2)	42,000
Corporate Functions Revenue	292,500
Gallery Functions Revenue	97,500
Total Revenue	**817,500**
	Costs ($/p.a.)
Corporate Functions Costs	(243,000)
Gallery Functions Cost	(37,500)
Curator	(75,000)
Sound Engineer	(70,000)
Total Costs	**(425,500)**
Gross Position	**392,000**

9 STAFF COSTS

9.1 Previous Business Case

The governance and management model have not yet been determined. However for the purposes of preparing initial financial projections, assumptions had been made regarding the positions required. It had previously been estimated that 20 FTE in total would be required to manage, operate and clean the facility on a permanent basis. The assumptions have been made with reference to the *2012 Feasibility Study,* the APACA Benchmark Data 2013 and Other Consultation with Industry. The 20 FTE comprise of:

- 8 Operational Staff (Head Technician, Front of House Manager, 2 Duty Technicians, 1 House Assistant, 2 Ushers and 1 General Operative);
- 9 Management & Administration Staff; and
- 3 Cleaners.

The average FTE (Full Time Equivalents) used by Performing Arts Centres in Australia (that generate income of between $2m and $5m) is 19 FTEs (2013 APACA report). Therefore the estimated 20 FTE for the JPACF appeared reasonable by comparison.

From the review in 2014, several changes were made to the analysis with some salary details updated in line with the APACA averages. Additionally, one more Administration officer has been added which is for a Finance Officer in the JPACF (approximately half of all Arts Centres have at least one dedicated Finance Officer rather than having Finance services supported by the Local Government/State).

9.2 Revised Assumptions

The table below summarises the Indirect Staff Costs assumptions for Scenarios. The assumptions in the previous business case have been used as the starting point for each Scenario with the following differences/changes:

- Salary Costs have been updated for all Scenarios with reference to the APACA 2015 data
- Scenario 1 includes an additional FTE for a Facilities Manager. This is recommended by the ex-General Manager of Perth Theatre Trust, taking account of the size of the facility and the many different rooms in the facility. Scenario 2 though takes this back out as does Scenario 3. Whilst the recommendation is acknowledged this should be subject to further consideration when the management model is being finalised.
- Scenario 2 removes the Finance Officer so that the impacts can be assessed. There is no easy answer with regards the inclusion of a Finance Officer in the staffing model. On one hand an on-site Finance Officer would improve the autonomy of the facility and assist the control and ability to develop programming. However the other potential is for Finance services to be provided by the City using existing staff. Scenario 3 has included the Finance Officer.

Staff Costs (not included within Cost of Sales)	FTEs				Salary Costs per Annum				Loading	Total Costs incl Loading			
	Dec 2015 Bus Case	(1) Worse Case	(2) Ideal	(3) Realistic	Dec 2015 Bus Case	(1) Worse Case	(2) Ideal	(3) Realistic		Dec 2015 Bus Case	(1) Worse Case	(2) Ideal	(3) Realistic
1 General Manager	1	1	1	1	$100,000	$108,130	$108,130	$108,130	23%	$123,000	$133,000	$133,000	$133,000
2 Technical Manager	1	1	1	1	$70,000	$80,000	$80,000	$80,000	23%	$86,100	$98,400	$98,400	$98,400
3 Program Manager	1	1	1	1	$80,927	$100,927	$100,927	$100,927	23%	$99,540	$124,140	$124,140	$124,140
4 Marketing Co-ordinator	1	1	1	1	$70,000	$80,000	$80,000	$80,000	23%	$86,100	$98,400	$98,400	$98,400
5 Operations Manager	1	1	1	1	$80,927	$80,927	$80,927	$80,927	23%	$99,540	$99,540	$99,540	$99,540
6 Facility Manager		1				$80,927	$80,927	$80,927	23%		$99,540		
6 Administration Officer	2	2	1	2	$56,865	$60,000	$60,000	$60,000	23%	$139,888	$147,600	$73,800	$147,600
7 Box Office Co-ordinator	1	1	1	1	$56,865	$61,865	$61,865	$61,865	23%	$69,944	$76,094	$76,094	$76,094
8 Customer Service Co-ordinator	1	1	1	1	$56,865	$60,000	$60,000	$60,000	23%	$69,944	$73,800	$73,800	$73,800
Total Management & Admin Costs	**9.0**	**10**	**8**	**9**						**$774,056**	**$950,515**	**$777,174**	**$850,974**
Unallocted Direct Staff	1	0.5	0.5	0.5						$109,716	$49,716	$49,716	$49,716
Staff Costs Total	**10**	**10**	**8**	**9**						**$883,772**	**$1,000,231**	**$826,890**	**$900,690**

The positions and salaries listed are in no way intended to be the final profile, and are only the assumptions used for the purposes of the financials at this stage. The staffing profile, and indeed the overall governance/management model will be reviewed at a later stage.

10 BUILDING MAINTENANCE & UTILITIES

10.1 Repair, Maintenance, Cleaning & Security

The table below compares the annual Expenses projections for each Scenario at Year 5. The analysis is initially based on the *2012 Feasibility Study*, and has since been subject to internal review within the City. More recently Paxon Consultancy has provided estimates, which have been used for Scenario 1. The City believes that the assumptions are still on the high side and therefore Scenarios 2 and 3 consider lower values. These estimates are an area for improvement, but building up a detailed estimate of jobs and costs.

	Repair, Maintenance, Cleaning, Security	**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
A)	Insurance	$50,000	$100,000	$100,000	$100,000
	Cleaning, Security, Rubbish				
	Cleaning	$18.00	$16.00	$16.00	$16.00
	Security	$1.50	$1.50	$1.50	$1.50
	Rubbish	$1.00	$1.00	$1.00	$1.00
	Cost per m2 per Year	$20.50	$18.50	$18.50	$18.50
	m2	11,000	13,000	13,000	13,000
B)	Cleaning, Security, Rubbish - Cost per Year	$225,500	$240,500	$240,500	$240,500
	Repair & Maintenance				
	Capital Costs, excl Prof Fees & Contingencies	$74,198,094	$76,500,000	$76,500,000	$76,500,000
	% Allowance per Year for R&M	0.4%	0.5%	0.3%	0.4%
C)	Annual Budget for Repair & Maintenance	$292,700	$400,000	$250,000	$335,000
D)	**Total Repair, Maintenance, Cleaning, Security**	**$568,200**	**$740,500**	**$590,500**	**$675,500**

10.2 Utilities

The table below compares the annual utility costs for each Scenario. The Energy estimates are bason the Paxon report but the other Scenarios consider lower figures.

	Utilities	**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
	Energy				
	Kilowats per Hour / sqm p.a.	39.59	78.19	43.20	66.93
	Tariff per Kilowat	$0.303104	$0.303104	$0.303104	$0.303104
	Cost per m2	$12.00	$23.70	$13.09	$20.29
	m2	11,000	13,000	13,000	13,000
A)	Energy Annual Cost	$132,000	$308,096	$170,230	$263,730
B)	Water Charges #1	$13,200	$29,605	$29,770	$29,770
C)	**Utilities Total**	**$145,200**	**$337,701**	**$200,000**	**$293,500**

#1 Includes Water Rates & Service Charges

There is a wide disparity between Scenario 1, 2 and 3 and it is worthy of further comment:

- All estimates, including the Paxon estimate, are still high level based on the overall facility. It would be useful at some stage for the projection to be built up space by space, this analysis could consider the power consumption when the space is used and not used and then cash up accordingly. This analysis should be completed as part of the next review of the financials.
- The low estimate of $200,000 is still higher than the estimate in the 2012 Feasibility Study of $167,000.
- Mandurah Performing Arts Centre incur approximately approximately $120,000 per year, but that is not an ideal comparison either because it is a smaller facility and it is much older.
- There are no other comparable buildings in the City. However it is worth listing the top 5 Buildings for Utility Costs for 2015/16, see below. This demonstrates that Utility costs for buildings can be over $200,000 and potentially gives support to the estimate in Scenario 1 for the JPACF of $337,701. However the JPACF would have the most up-to-date technology (e.g. LED lighting in most areas) whereas the buildings below would not have the same features as the JPACF.

Utility Costs 2015/16 #1 **Top 5**	**M2**	**Utility Costs per Year**	
		Total	Cost per m2
Craigie Leisure Centre	9,834	$477,269	$48.53
Joondalup Administration Centre	7,336	$272,369	$37.13
Joondalup Civic Chambers	4,858	$189,798	$39.07
Joondalup Library	4,855	$129,739	$26.73
Works Operations Centre	1,845	$51,060	$27.67

#1 Excludes Water Rates

- PV Cells are not yet assumed in the financials. Paxon have completed analysis of this and indicated that the financial case is not compelling. Nevertheless it may be worth adding in the PV cells into the next review of the financials as there are environmental benefits to consider.

The Water Charges of $29,605 for Scenario 1, 2 and 3 are made with reference to the Paxon report. However the estimates from Paxon have not been used in their entirety because the City would be eligible for a discount on Water Rates which needs to be evaluated.

In summary the Utilities projections are an area that would benefit from more detail in future iterations of the financials.

11 PARKING

11.1 Parking Review

An internal review of the assumptions for parking income and expenses has been completed by the City. This involved the following:

- Utilisation trends in the area now, and in the immediate future.
- Utilisation trends in the long-term, with consideration of the expansion of the Education precinct.
- Review with the City Planning Team who are updating the City Centre Structure Plan
- Review of the expenses of the existing Reid Promenade Multi Storey Car Park and consideration of the operating model for the JPACF Car Park.

The outcomes from the review will be covered in this section.

11.2 Parking Income

The Concept Design for the Arts Box Model assumed space for 400 car parking bays but the Schematic Design has now had to reduce this to 374 bays. (Above ground). The key assumptions regarding Parking Income and Utilisation are:

- Evening performances: The utilisation of 186 days per year of the Primary Theatre has been used as the basis of the income assumptions for evening. It is then assumed that for those evenings the parking bays would enjoy 85% utilisation. 85% utilisation is deemed to be full capacity.
- Daytime use: It is not anticipated that in the short term there would be high demand during the day for parking. Therefore 40% Utilisation has been assumed. However from Year 15 onwards there is a higher level of optimism and the utilisation is increased to 50%. Therefore the parking income is the only assumption in the operating model which has a different assumption after year 5.

The tables below summarise the usage assumptions for each Scenario.

Car Park Usage		Previous Financials		Sept 2016 Bus Case	
		Dec 2016 (Concept Design)	Jul 2016 (Schematic Design)	Year 5 to Year 14	Year 15 to Year 40
Bays Available		400	374	374	374
Utilisation					
Daytime	%	50%	50%	40%	50%
Evening	%	85%	85%	85%	85%
Bays Occupied					
Daytime	Short-Stay	50	50	30	30
Daytime	All Day	150	137	120	157
Evening (during events)		340	318	318	318
Chargeable Days					
Daytime		250	250	250	250
Evening (during events)		188	188	186	186

The table below summarises the income assumptions per bay and the overall income per year. The income per bay assumptions is as follows:

- Charges are shown in today's dollars
- $1.20 per hour is based on current charges at some of the City Centre parking
- Short-Stay income of $4.80 per day is based on 4 hours usage which is based on 2 users x 2 hours
- Daytime income of $6.00 per day is based on the same multiple used in current facilities of five hours x hourly rate.
- Evening Rate of $1.80 is based on 1.5 hours usage.

The income per year is based on the usage assumptions above multiplied with the income per bay assumptions. For example the income for Evenings of $106,433 is calculated as 186 events x 374 bays x 85% occupancy x $1.80 per bay.

Note that the income currently earned at P8 (Central Park) would be lost when the facility is built and the loss of this income has been included in the model. The income at P8 is very small, average of just $4,000 for the past 3 years (which also typifies the current low demand for all day parking in the location of the JPACF.

Car Park Income (Year 6 onwards)		**Previous Financials**		**Sept 2016 Bus Case**	
		Dec 2016 (Concept Design)	Jul 2016 (Schematic Design)	Year 5 to Year 14	Year 15 to Year 40
Income per Bay per Chargeable Day					
Current Hourly Rate #1		$1.20	$1.20	$1.20	$1.20
Daytime	Short-Stay	$4.80	$4.80	$4.80	$4.80
Daytime	All Day	$6.00	$6.00	$6.00	$6.00
Evening (during events)		$1.80	$1.80	$1.80	$1.80
Income per Year					
Daytime	Short-Stay	$60,000	$60,000	$36,000	$36,000
Daytime	All Day	$225,000	$205,500	$179,400	$235,500
Evening (during events)		$115,056	$107,577	$106,433	$106,433
Total Income #1		**$400,056**	**$373,077**	**$321,833**	**$377,933**

#1 Income estimates are based on today's dollars (2016). The model will take account of expected fee increases from 2016 onwards

11.3 Parking Cost of Sales

An estimated cost of $127,000 per year for operating the Parking was previously included in the business case. The City now has experience of operating a Multi Storey Car Park which it did not have during the previous business case. The costs of the Reid Promenade Multi Storey are estimated to be over $300,000 for 2016-17, and therefore much higher than the $127,000 estimated for the JPACF Multi Storey. However care has to be taken with this comparison because the Reid Promenade Multi Storey is a standalone building with its own building maintenance, utilities, operation whereas the JPACF Multi Storey is part of a larger facility. The estimated expenses have been increased to $137,000 per year; this is based on the following key assumptions:

- Existing Parking Operations team should be used to assist with the operation of the facility. The control room at the Reid Prom facility can be enhanced to monitor the JPACF facility.

- Casual Parking staff will still be required during evening performances and an allowance of $60,000 has been included within the annual expenses for that
- The other $77,000 is various materials and contracts costs.

11.4 Parking Surplus Summary

The table below summaries the key assumptions explained above and shows the overall parking surpluses. This shows that the previous Business Case estimated surpluses of $273,065 per year. This is now reduced to $184,842 but only up to Year 14. From Year 15 onwards the utilisation is expected to improve and rise to $240,942. In reality utilisation would steadily increase rather than one large increase from Year 14 to year 15, but for the purposes of a 40 year long-term model it is reasonable just to build in one step increase.

In summary the key issue with regards Parking, and one that sets JPACF apart from other known facilities, is that the Parking Operation should generate operating surpluses which can help to mitigate the operating subsidy for the rest of the facility.

Summary	**Previous JPACF BC** Dec 2016 (Concept Design)	**Sept 2016 Bus Case** Year 5 to Year 14	Year 15 to Year 40
Key Assumptions			
Number of Bays	400	374	374
Daytime Utilisation	50%	40%	50%
Evening Utilisation	85%	85%	85%
Staff required to operate	1	Casual	Casual
Income			
Daytime	$285,000	$215,400	$271,500
Evening	$115,056	$106,433	$106,433
Income Total	**$400,056**	**$321,833**	**$377,933**
Expenses			
Employment Costs	($60,000)	($60,000)	($60,000)
Materials & Contracts	($66,991)	($76,991)	($76,991)
Utilities			
Expenses Total	**($126,991)**	**($136,991)**	**($136,991)**
Surplus/(Deficit)	**$273,065**	**$184,842**	**$240,942**
Difference to Dec 2015 Bus Case		**($88,223)**	**($32,123)**

12 OTHER INCOME & EXPENSE ASSUMPTIONS

12.1 Food & Beverage / Restaurant Lease

The table below summarises the key assumptions for the Food and Beverage and the Restaurant Lease. The Food and Beverage would be expected to generate an operating surplus with costs being 66% of income. There are no changes to the assumptions for any of the Scenarios compared to the December 2015 Business Case but as these %ages are based on the program revenue, which is different for each Scenario, then the final impact will vary for each Scenario.

Paxon suggested that the restaurant may not be as active and therefore suggested a reduction to $3,500 Turnover per Square Metre which has been reflected in Scenario 1. However the City has a more optimistic view of the activation of the Restaurant area, particularly in the longer term, so Scenario 2 and 3 have different estimates.

Food, Beverage & Restaurant	**Concept Design** Business Case (Dec 2015)	**Scenario 1** Schematic Design Worse Case	**Scenario 2** Schematic Design Idealistic	**Scenario 3** Schematic Design Realistic
Food & Beverage				
Income: % of Program Revenue	8%	8%	8%	8%
Costs of Sales as % of Income	66%	66%	66%	66%
Restuarant Lease				
Square Metres	180	180	180	180
Turnover per square metre	$5,000	$3,500	$5,000	$4,250
Rent as % of Income	10%	10%	10%	10%
Lease p.a.	**$90,000**	**$63,000**	**$90,000**	**$76,500**

12.2 Marketing and Admin

The table below summarise the operating assumptions for Marketing and other Admin expenses, derived from the 2012 Feasibility Study and with consultation with General Manager of other facility. There are no changes to the assumptions since the previous business case.

Although the % assumptions are the same for each Scenario, the impacts will be different because the expenses and revenue are different for each Scenario.

Additional Cost Assumptions	**Concept Design** Business Case (Dec	**Option 1** Schematic Design Worse Case	**Option 2** Schematic Design Idealistic	**Option 3** Schematic Design Realistic
Marketing Costs as % of Expenses	8%	8%	8%	8%
Admin as % of Program Revenue	5%	5%	5%	5%

12.3 Sponsorship

A nominal estimate of $150,000 per year for sponsorship is included in the projections, however there is no more details of how/who that revenue will be earned.

12.4 Ticket Income

A new income stream has been added which is annual income of $128,000 per year for booking fees. This was added after review of advice from ex-General Manager of Perth Theatre Trust and review of APACA data. For each ticket sold the City can levy a charge for booking fee. The net income of $128,000 is based roughly on $1 per ticket x 128,000 attendances.

13 OPERATING ANALYSIS – SUMMARY

13.1 Operating Income Summary

The table below summaries the annual income projections at Year 5 for each Scenario. This indicates that Scenario 2 is slightly higher than Scenario 1 and 3. All Scenarios are now significantly higher than the previous business case predominately due to the Pracsys assumptions for Conferences, Exhibitions, Gallery and Studios.

Operating Income $000s (2023-24) excluding escalation	Concept Design Business Case (Dec 2015)	Scenario1 Schematic Design (July 2016) Worse Case	Scenario2 Schematic Design (July 2016) Idealistic	Scenario3 Schematic Design (July 2016) Realistic
1 Primary Theatre	$1,218	$1,328	$1,328	$1,328
2 Secondary Theatre	$239	$230	$230	$230
3 Conferences, Exhibitions, Gallery, Studios	$322	$818	$818	$818
4 Parking	$400	$318	$318	$318
5 Food & Beverage	$117	$125	$125	$125
6 Leases: Bar/Restaurant	$90	$63	$90	$77
7 Sponsorship	$150	$150	$150	$150
8 Ticketing Income		$128	$128	$128
Annual Operating Income	**$2,535**	**$3,160**	**$3,187**	**$3,173**

13.2 Operating Expenses Summary

The table below summaries the annual expenses projections at Year 5 for each Scenario. All Scenarios are higher than the previous business case due to Line 3 again. The other differences between the Scenarios are due to the different assumptions explained earlier regarding Staff Costs, Utilities, and Repair, Maintenance, Cleaning, Security.

Operating Expenses excl. Interest $000s (2023-24) excluding escalation	Concept Design Business Case (Dec 2015)	Scenario1 Schematic Design (July 2016) Worse Case	Scenario2 Schematic Design (July 2016) Idealistic	Scenario3 Schematic Design (July 2016) Realistic
1 Primary Theatre	($964)	($1,017)	($937)	($977)
2 Secondary Theatre	($126)	($106)	($101)	($103)
3 Conferences, Exhibitions, Gallery, Studios	($105)	($426)	($426)	($426)
4 Parking	($127)	($137)	($137)	($137)
5 Food & Beverage	($77)	($82)	($82)	($82)
6 Staff Costs	($884)	($1,000)	($827)	($901)
7 Marketing	($268)	($345)	($297)	($323)
8 Admin & General	($89)	($119)	($119)	($119)
9 Repair, Maintenance, Cleaning, Security	($568)	($741)	($591)	($676)
10 Utilities	($145)	($338)	($200)	($294)
Annual Operating Expenses excl. Interest	**($3,353)**	**($4,309)**	**($3,716)**	**($4,037)**

The expenses above exclude interest and depreciation, these will be subject to comment later on.

13.3 Operating Subsidy Summary

The table below summaries the Surplus/(Deficit) for each item in the Income/Expense analysis. This table is the difference between the income and expenses shown above. This shows the wide variation that can arise with the Scenarios, ranging from just over $0.5m per year to over $1.1m per year. Scenario 3 results in a subsidy similar to previously reported between the range of $800k to $900k per year.

Subsidy Analysis $000s Year 5 - 2023-24 excluding escalation)	Concept Design	Scenario1	Scenario2	Scenario3
	Business Case (Dec 2015)	Schematic Design (July 2016)		
		Worse Case	Idealistic	Realistic
1 Primary Theatre	$254	$311	$391	$351
2 Secondary Theatre	$113	$125	$129	$127
3 Conferences & Exhibitions	$217	$392	$392	$392
4 Parking	$273	$181	$181	$181
5 Food & Beverage	$40	$42	$42	$42
6 Leases: Restaurant	$90	$63	$90	$77
7 Sponsorship	$150	$150	$150	$150
8 Staffing, Marketing, Admin	($1,241)	($1,464)	($1,243)	($1,342)
9 Building Costs & Utilities	($713)	($1,078)	($791)	($969)
10 Ticketing Income		$128	$128	$128
Annual Subsidy (excluding Interest)	**($818)**	**($1,150)**	**($529)**	**($863)**
Subsidy as % of Expenses	**24%**	**27%**	**14%**	**21%**

The summary above excludes interest and depreciation which are covered separately later.

13.4 Management Model / How Would the Subsidy Be Paid?

Whilst the City accepts that it will have to fund the operating subsidy, the exact method of how the subsidy would be paid to the JPACF will be resolved later, as this will depend on the management model. For example, if there was an arms-length governance model, then a fixed contribution may be agreed in advance each year and then paid in equal instalments during the year. Alternatively if the facility was fully integrated within the City then the subsidy required would simply operate in the same way as other business units in the City, drawing down on the City's bank account in line with authorised budget. Irrespective of how the actual governance model will work in practice, from a financial perspective the annual impact will be similar in that general funds (i.e. Rates) would be required to pay for the facility on an annual basis.

COMMUNITY CONSULTATION – JOONDALUP PERFORMING ARTS AND CULTURAL FACILITY
Engagement Communication Plan

Purpose of Engagement	• To obtain community feedback on the Joondalup Performing Arts and Cultural Facility and to inform the community of the details of the Business Case.
Background	At its meeting held on 3 October 2016 the Major Projects Committee resolved in part to request details of a community consultation plan for public consultation on the Joondalup Performing Arts and Cultural Facility.
What is currently being proposed?	The Facility will feature: • An 850 seat main auditorium of international standard, including a fly tower, with lighting and acoustic specifications of a high standard • A 200 seat black box theatre to accommodate a variety of non-traditional theatre stagings and performances • A range of rehearsal spaces that could also serve as places for small performances and general community activities • Theatre support spaces such as a box office, green room, make up and change areas, backstage workshops and storage • A dedicated art gallery • Jinan Chinese Cultural Garden • Conferencing and exhibition spaces • Spaces for the practice of fine arts and crafts • Curatorial space • Bar and catering facilities • Office and managerial spaces • Multi-storey car parking to cater for staff and patrons of the facility and day-time public parking.
Who will be engaged?	The consultation will directly consult the following stakeholders: • Residents and ratepayers in the City of Joondalup • JPACF Stakeholders.
Date of Engagement Project	• It is proposed the consultation will be scheduled to run over a 21 day period commencing in February 2017. Commencement date to be confirmed.

Validity	To be a valid response, the respondent must: • Live in or own property within the City of Joondalup. • Include their suburb on the survey form. Non-ratepayers/residents will still be able to complete a modified survey and provide feedback. However, these results will not be directly reported, unless there are significant findings within the comments.
Consultation Budget:	TBC

Stakeholder Engagement	
How will stakeholders be engaged?	The City will undertake a 'consultation' approach, which is outlined below.

Key Stakeholders	**Timeline: February 2017 (Dates TBC)**

Approach:

The City will send personalised cover letter explaining the purpose of the consultation and advising them of the consultation period.

Personalised Cover Letter

- Applicants will be directed to the City's website to complete an Online Survey Form/be sent a survey form.
- Feedback will be used to inform Council of the community interest in the JPACF.

General Public	**Timeline: February 2017**

Approach:

Engage the whole City of Joondalup by allowing comment via the Community Engagement page. This will be achieved through the following measures:

Website

- All information will be made publicly available through the City's website.
- The wider City of Joondalup community will be able to view the content and the information.
- Hero Image will circulate on the City's home page, linking the general public to the landing page.

Email through Community Engagement Network (CEN)

- All CEN members will be notified of the engagement process by email.

Joondalup Voice Advertisement

- Advertise program through the Joondalup Voice, which will capture the wider Joondalup community and those interested in the project.
- The advert will direct those interested to the City's website for more information.
- Should they have any further queries about the project, they will be able to contact the City.

Social Media Posts

- Cover images will advertise and promote the opportunity to comment.
- Series of regular updates and posts will be compiled to supply ongoing activity on the City's Facebook and Twitter Pages

• Social media posts will link directly to the City's website.
City-Wide Mail Out
• Letter explaining the project and giving the opportunity to respond via the City's engagement website, link provided.
Joondalup Times
• Advertisement in the local newspaper explaining the consultation and how an individual can respond.

Anonymity
In order for a submission to be considered valid, the name and address of the respondent must be provided, which is to be stated within correspondence and advertisements. For this reason, a survey form has been developed with an open-ended question to ensure that valid details are collected.

Process Evaluation	
Participation targets	***Surveys* –** 30% response rate.
Complaints targets	Target of no complaints
Purpose target	Confirmation from Project Manager that engagement purpose was achieved.