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# Kaizen: Culture 01

Kaizen: a Japanese philosophy which focuses on continual improvement



Melbourne Recital Centre  
Designed by ARM Architecture  
Photo by Slattery



# Evolving culture, chasing dreams:

## Cost considerations for new cultural infrastructure

Culture underwrites the appeal of any community. What are the costs and the benefits of investment in cultural infrastructure?

Governments are recognising the value of culture and cultural diversity, not just in cities but in regional and rural communities across Australia. Impacting wellbeing and local economies, its effect is transformative. Australian governments combined now spend somewhere between \$0.75-1 billion on capital works annually (ABS, 2017).

These are places where culture can flourish – the expansion and renewal of key cultural assets – such as Sydney Opera House, the State Library of Victoria, ACMI, and construction of new libraries, public artworks to enliven streetscapes, performing arts venues as well as galleries and museums.

Provision of open spaces for communities as gathering spaces for expression and celebration is equally important.

Culture is what differentiates cities and communities: contributing to place-making; cultivating community well-being, connectivity and self-development through engagement with arts and culture; activating neighbourhoods; driving cultural tourism and the economy. Arts and culture paves the way for renewal and regeneration in both city and country areas, benefiting communities and developers alike.

### Geelong Library and Heritage Centre

The new **Geelong Library and Heritage Centre** is a diverse facility incorporating a library, function centre, heritage repository and café over a six level building in the midst of the Geelong Cultural Precinct. Within weeks of opening, the centre provided clear evidence of the impact redevelopment can have on the precinct. In the first 12 weeks after opening the library tripled its patronage prior to demolition, experiencing 130,000 visitors. During this period its neighbour, the Geelong Gallery also experienced increased visitation in the order of 35% which reflects flow-on from increased pedestrian traffic in the precinct. Now, over three years on, over four million visitors have passed through its doors.

It is projected that government investment will be repaid in five years, and combined with a redeveloped Arts Centre and Gallery, will contribute over \$30 million to Geelong's Gross Regional Product every year.





Australian Centre for Contemporary Art  
Designed by Wood Marsh Architecture  
Photo courtesy John Gollings

## Signposts to life

Dynamic, sculptural and iconic, new cultural facilities quickly become part of the lexicon of local culture. Investment benefits the immediate community and is a strategic proposition, improving liveability, triggering new connections. It is also a reason to visit a city, generating significant economic bounce, to experience how we live. Australian cultural industries now contribute over \$50 billion a year in economic activity with cultural tourism an important part of this contribution.

Cultural visitors stay 25% longer and spend 20% more, growing state economies. In Australia, international visitation is only set to grow, particularly as fast growing economies in China and other Asia-Pacific countries develop, enabling greater mobility. By 2030, 1 billion people from Asia will have disposable income to travel. All Australian governments are investing in infrastructure, domestic and international campaigns to grow market share.

The Boston Consulting Group determined international cultural visitors spend \$1 billion per year in Melbourne alone, with arts and culture the biggest driver for visitation outside of people visiting family and friends. This is projected to increase to \$2.5 billion by 2025, with the combined domestic and international to grow by 8%, to an overall \$5.7 billion.

In 2015, NSW received over 11.4 million cultural and heritage visitors, generating \$11.2 billion for the state's economy. Almost 60% visited museums or galleries.

Tasmania's Museum of Old and New Art (MONA), is an extraordinary design by Fender Katsalidis, created with an investment of over \$100 million of private money. MONA now attracts over 330,000 interstate and international visitors who contribute over \$760 million to the state's economy annually. In addition to art, MONA promotes Tasmania's hospitality, food and wine through annual events including the Dark MoFo festival which brings over 420,000 people to events staged across Hobart.

Partnering with MONA, the Tasmanian Government will now present MoFo (MONA Festival of Music and Art) in Launceston from 2019, spreading the love to the state's northern capital, generating \$50 million per year for the local economy.

Many communities are seeking the MONA effect in their town, to capture experiential spending through a model that can clearly allow regional cities and towns to thrive if done well, and continue to draw bigger attendees to our major cities. Cultural tourism is clearly lucrative and important to Australia's future economy.



## Costing culture

So how is an arts and culture project different to another kind of civic facility or one for commercial or residential purposes?

Slattery's portfolio spreads across the gamut of construction projects with many years' experience in the cultural sector; working with state governments, local councils as well as many universities and private investors to develop new facilities, repurpose heritage buildings, and renew existing and well-cherished spaces that need upgrading.

Compared to commercial and residential projects, arts and cultural projects will often require maximum flexibility within spatial design to future-proof and ensure relevance to the final changing users of the facility. Achieving this can be a challenge when working with numerous stakeholder groups; from the council or government project team, design teams as well as councillors, user groups and other members of the community who may be involved. Compromise is critical to negotiate and value manage both feature and functionality. Sometimes the architect and design team's vision can be totally lost if design decisions are not thoroughly worked through and fully understood from the outset.

## Melbourne Conservatorium of Music, The University of Melbourne

Slattery has been working with The University of Melbourne on the forthcoming **Melbourne Conservatorium of Music**, a major project designed by John Wardle Architects and under construction on Sturt Street, Southbank adjacent to the Melbourne Recital Centre. It will offer superior music performance and education facilities; a lively, unique and specifically arts-focused environment that will be an important forum for community engagement with music and the arts.

As is usually the case with complex projects, the project experienced budget pressures from the outset. Slattery oversaw a collaborative value management process for all key stakeholders including design team and end-users of the facility. To enable informed decision making, Slattery collated all the costs and comments from architects, acoustic specialists and related design team as part of the workshop preparations.

When MCM opens in 2019, the community will truly understand and take ownership of the exciting new building, its leading-edge design and functionality.



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Melbourne Conservatorium of Music  
Designed by John Wardle Architects

## Design right: Whole of Life Costs

Usually a new building is proposed following assessment of community or institutional needs or when there is a demand for such facilities which is not being met by current infrastructure. Diligence in planning is an absolute must, including contingency allowances within the budget. It's very hard to get 'make-good' capital funding in addition to investment that has already been a significant outlay for governments and communities to construct cultural facilities. With the recurrent costs compared to capital roughly 6:1, the operating model and life-cycle costs for any new building must be considered and factored into the design.

With arts and cultural funding always being questioned by many, minimising operational and life-cycle cost and maximising revenue opportunities through building design is a necessity.

The initial feasibility phase of a project will involve the development of a needs assessment and demand analysis, leading to a description of the functional requirements of assets and services. This is often undertaken by a range of consultants. Once appointed, the architect leading the design team should be actively involved by working closely with each user group to understand their needs, visiting existing facilities to understand the shortcomings and know what works and what doesn't. It is important to aim to support best practice in the art-form or specialised area of activity the building will house.

Environmentally sustainable design features—energy use/electricity through solar or geo-thermal exchange; rainwater and recycled water use for watering gardens and toilet flushing—are also important considerations to plan for from the outset. This can then be translated into concepts and options, to generate a full financial and economic assessment of the project, including operating and life-cycle costs as part of its cost-benefit analysis (CBA). How the project will be implemented including where the investment will be sourced from, is a vital part of the discussion. And in the long term, fees for programming for the artists that perform and present, and marketing costs to develop audiences—in addition to running costs—is a perennial concern. These ongoing costs to run and maintain buildings must be considered at the design phase.

Regardless of the scale of development, uniqueness is a priority in most cultural facilities. Leveraging the knowledge of local and industry stakeholders is paramount for success and to avoid short-comings in buildings discovered too late.

## Post Occupancy

When handing over the keys to a facility, no one can really anticipate how the buildings are going to perform and if the operational assumptions made during the design and user group consultations are going to hold true once open. Especially given construction durations, it may be two to three years since they were made.

Due to this passage of time and the emerging technologies of the current "disruptor" times we live in, Slattery recommend that a post-occupancy contingency be included in any project budget to address the inevitable shortfalls once a building has opened. As members of a community stakeholder group change over the journey of a building, so too do expectations and there is no one-size-fits-all when it comes to arts and culture!







Penguin Parade Visitor Centre  
Designed by Terroir Architecture

## Creating presence

The external perspective of a building and how it is situated within the landscape is important in generating a connection to its communities, local, artist, audience and visitors. The unique interplay between the indoor and the outdoor, the extension of space, the façade—these are critical factors to be considered and often the defining motif of a building. Consider the smooth tiled surface of the Sydney Opera House or the rusty steel skin of the Australian Centre for Contemporary Art in Melbourne. Capturing the imagination and a manifestation of the architect's response to the brief, combined with the location which also needs to be responded to, how a design unfolds is also strongly linked to the level of investment and ultimately its cost.

## Penguin Parade Visitor Centre

Phillip Island Nature Parks is a not-for-profit organisation dedicated to international excellence in nature conservation and eco-tourism, and manages over 1,805 hectares that offers access to unique wildlife and spectacular coastal scenery including the Summerland Peninsula. The peninsula is home to Australia's most popular natural wild-life attraction, the Penguin Parade which attracts approximately 700,000 paying visitors per year, of which 57% are international. It generates significant economic benefits including overnight visitation to Victoria (valued at over \$400M annually), with Nature Parks the largest employer on Phillip Island.

The new **Penguin Parade Visitor Centre**, designed by Terroir Architecture, is due to open in late 2019. It has been relocated to an adjacent site on the peninsula, removing the current building (from 1988) and carpark site from land that was originally prime Penguin habitat and coastal wet-lands. A state of the art eco-tourism offer, the new centre features full integration into the landscape with trail options, cultural interpretation, retail and hospitality offers. Star-shaped, the new building is an exemplary design that minimises impact on ecological systems yet meets contemporary functional and capacity requirements and allows engagement with the unique coastal landscape, fauna and access to experience the penguins.

The façade is made from zinc cladding that adds to the abstraction of the building and unification with the landscape, also mimicking tiny penguin feathers; with internal ceilings featuring a triangular motif in exposed timber and plywood panels reflecting the natural context.

For projects such as The National Museum in Canberra and Frank Bartlett Library and Service Centre in Moe, the extensive landscaping and design around each facility is equally important to the success of the whole project. Often it can be an entry point for visitors, providing a resource and access even for those who don't come inside i.e. youth precinct and skate-board ramps, running tracks. At a minimum, \$800 per square metre should be allowed for civil landscaping.

The façade of a building shouldn't be thought of as only decorative however. Façades also play a part in acoustic and thermal control. Similarly windows, which may use thicker glass and double or triple-glazing. Where a lot of natural light is sought, blinds may also be required to block glare at certain times of the day. Specialist façades costs will vary considerably (refer Table 1) and need to be discussed thoroughly with the design team to fully consider all ramifications, both aesthetic and functional.

## In awe – the internal experience

Arts and culture mean many different things to people; a broad spectrum—of prestige, stimulation, innovation as well as the opportunity to be creative and participate in alternative ways of creating meaning in lives, with a collateral benefit on people's well-being. The arts often stimulate fervour and passion akin to a religious experience, and it's often the building in which we have arts encounters that contributes to this. Spectacular voids in cultural facilities are almost mandated in order to generate reverence and instigate the kind of pivotal memories formed by the suspended time effect that the arts can deliver. The internal scale, the finish, the design and quality of amenities, the ease of circulation and way-finding – digital and physical; it all plays an important role in conveying an invitation into the experience.

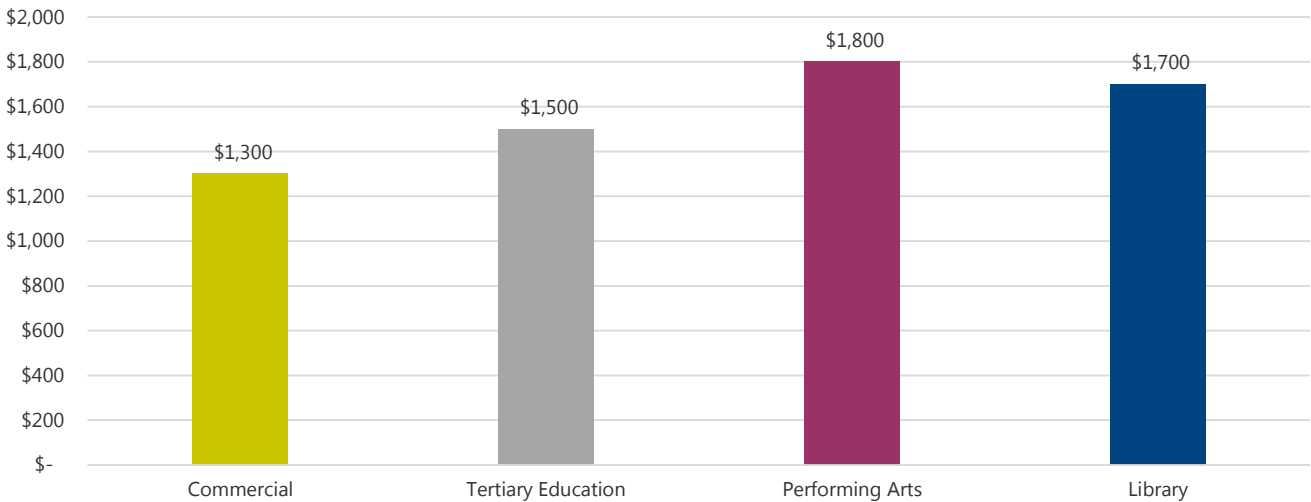
The costs for each and the exaggerated ratios of usable space to circulation and back-of-house all need to be carefully factored into the design and construction of cultural facilities. The costs will be quite different to other kinds of new builds and refurbishment projects, not the least because of the specialised space requirements.

## Acoustics

The acoustics of a space might be one of the most critical factors to get right internally. Many galleries and especially performing arts venues want to block off the sounds of the external world and internal services so that no white noise may impact on the final user experience. Such materials need to be factored in to cost considerations. New buildings versus retrofit to older as part of a redevelopment also require different approaches.

For example, Monash University's redevelopment of Alexander Theatre included the installation of a highly sophisticated electronic 'Active Architecture' audio system so that its spaces can be controlled acoustically for a range of performances styles—from live music/jazz/rock/classical to spoken word and musical theatre. It was fully tailored and programmable to expand the kind and quality of performance and teaching opportunities in the reimagined and revitalised theatre and the new Sound Gallery and Jazz Club built adjacent.

Table 1: Façade rates \$/m<sup>2</sup>





## Lighting

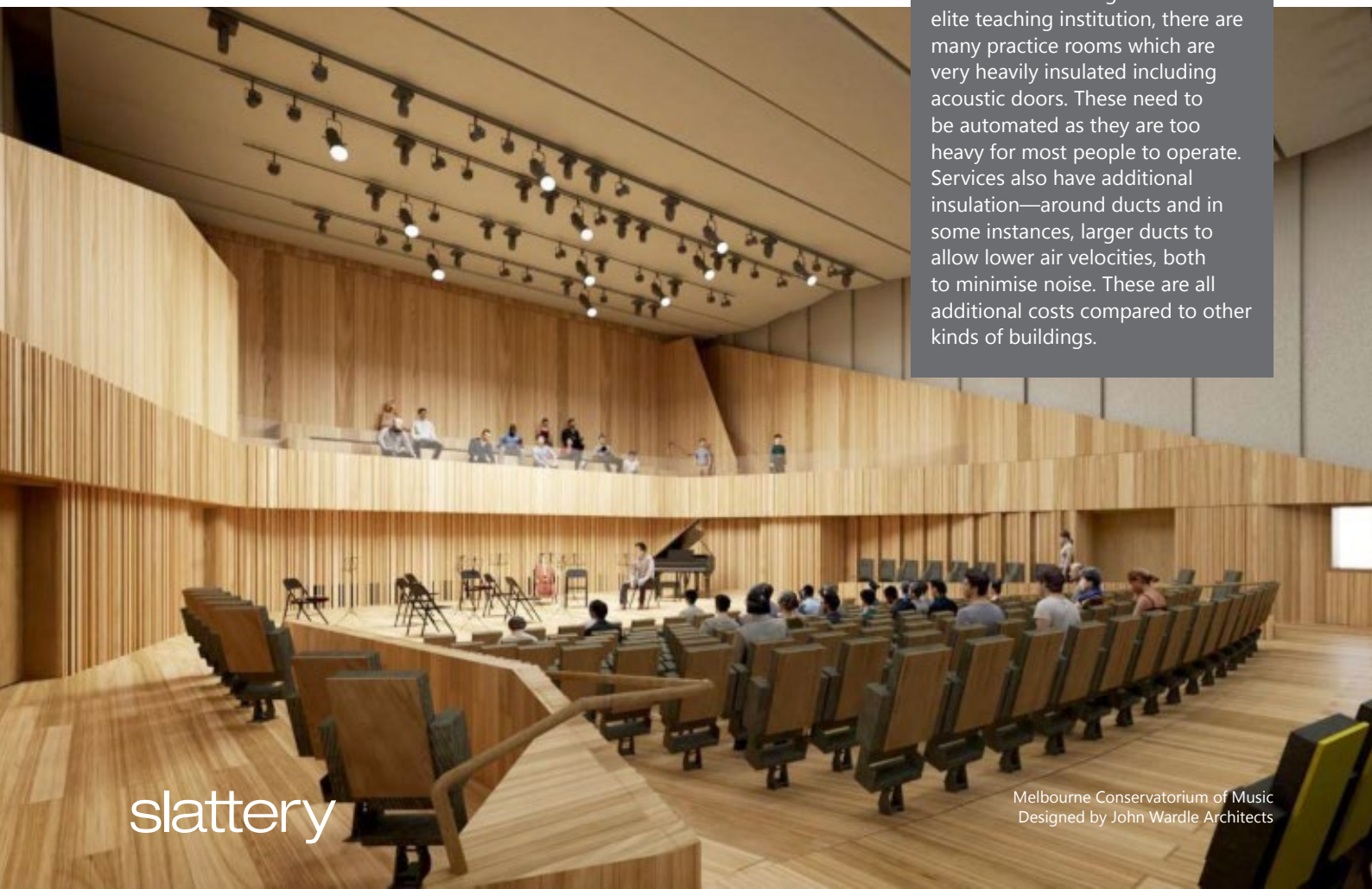
Each space will have its own requirements for lighting. Some will require extensive built-in-lighting and others a lighting grid in the ceiling that is flexible to the requirements of the end users, especially where spaces are used for multiple purposes. The needs of a gallery or museum, to light objects and artworks will be very different to a performing arts centre with multiple auditoriums. Façade lighting is often required with some facilities using projection across surfaces for both artistic and signage purposes. Lighting design can also be used for way-finding, to direct people through a building as much as it can be about adding drama to the overall experience by highlighting internal architectural features.

## Services

Building services can also be different in an arts and cultural facility and add costs. Sufficient supply capacity needs to be catered to as does WiFi and wireless technologies for various technical systems, administration, staff and visiting artists; a population which can swell the user numbers depending on a facility's program. Audio-visual and IT will be structured to suit function. Humidity control is also important, with many galleries and museums requiring exact temperature maintenance to assist the presentation and preservation of delicate objects. Usually 25-30% of the budget, services can be higher depending on purpose of the building.

## Managing acoustics: Melbourne Conservatorium of Music

MCM will have three performance auditoriums for live music performance, one with 250-300 seats and two 80-100 seat salons, each with high ceilings. Sound vibrations need to be prevented from travelling inside or outside, conflicting with other activities that may be concurrent. A box-in box construction has been used, and double framing of the whole structure. Windows are double or triple glazed for maximum thermal and acoustic performance, to manage light, heat and traffic sounds from local trams and other vehicles. There are acoustic panels throughout on walls and ceilings to bounce and absorb noise. The balance between reverberation and vibration is aided by the selection of materials and a specialist sound consultant was consulted to measure and manage this. As an elite teaching institution, there are many practice rooms which are very heavily insulated including acoustic doors. These need to be automated as they are too heavy for most people to operate. Services also have additional insulation—around ducts and in some instances, larger ducts to allow lower air velocities, both to minimise noise. These are all additional costs compared to other kinds of buildings.







Frank Bartlett Memorial Library and Moe Service Centre  
Designed by fjmt studio  
Photo courtesy fjmt studio and John Gollings

## Finishes

Beyond the statement of promise of an experience, entrances and foyers need to be inviting, accommodating and easily identified, able to manage large crowds safely. Traffic flow is a design and cost consideration and to anticipate all possible uses. Ceiling heights are always higher than standard buildings to achieve the room space and dynamics that suit the function. The cost of wall to floor ratio is therefore higher, including cost of external walls and facades as the building will stack far higher. Often making use of natural light, atriums, stairwells and mezzanines are finished with quality design elements that become the backdrop to part of the experience – looking at other people in the space!

## Conference and Entertainment Spaces

Every facility will likely require an income stream from venue hire, requiring spaces either for self-initiated events (programming, fundraising and philanthropy etc) or for external hirers (conferences, weddings or cocktail parties). Designers should work closely with clients to fully understand their future operating scenarios and source of revenue to ensure the right fit-out for all purposes. The prestige and glamour of the arts combined with an extraordinary venue can be a siren for event planners. With such ambition, the right catering kitchens, bars and other front-of-house logistics need to be factored into the total construction budget.

## Administration, Delivery and Logistics

The logistics that support the range of programs and projects on offer must also be factored. Loading docks will be needed for large trucks. Some shows require a semi-trailer, so turning circles, entry and exit points away from the public need to be factored in. Storage of large crates and artworks or objects will need to be considered. Docks may need to be under cover. There may be packing, quarantine and holding area requirements.

A museum may require workshop space for care and conservation, digital facilities to document or reproduce collections for digital engagement, or to construct exhibition display items. Visitor and staff car-parking must also be factored in. In brownfield sites, perhaps underground car-parks may be the only option. Last but also most importantly, there will be offices, libraries and meeting spaces for the staff that work there.

Table 2 on the following page provides an elemental cost comparison against building type to demonstrate the different requirements of cultural facilities.

## Making anew: Retrofit and refurbish

Councils and state governments are working closely with communities to regenerate buildings and land as new cultural precincts that will foster creative opportunities and economic development in their area. In Melbourne, Abbotsford Convent, the forthcoming Contemporary Arts Precinct (CAP) in the old Collingwood TAFE, The Substation, Arts House, Brisbane's Powerhouse are all repurposed buildings that support a diverse community of practitioners and audiences.

Carriageworks, a contemporary multi-arts centre in the old Everleigh Rail Yards has had an enormous impact on the Redfern Waterloo precinct as well as Sydney's contemporary art scene.

The Juanita Nielson Community Centre, opened late 2016, provides fitness, recreational, social and creative learning programs and co-working spaces in an award-winning refurbishment in Woolloomooloo.

In March 2018, the Victorian Government has announced new planning laws designed to protect and enhance the Melbourne Arts Precinct in Southbank whereby all new developments have to include arts and cultural uses as part of their first four floors. Working with City of Melbourne, the amendment is seen as an important step to evolve the area into a major creative industries hub and cultural destination.

## Summary

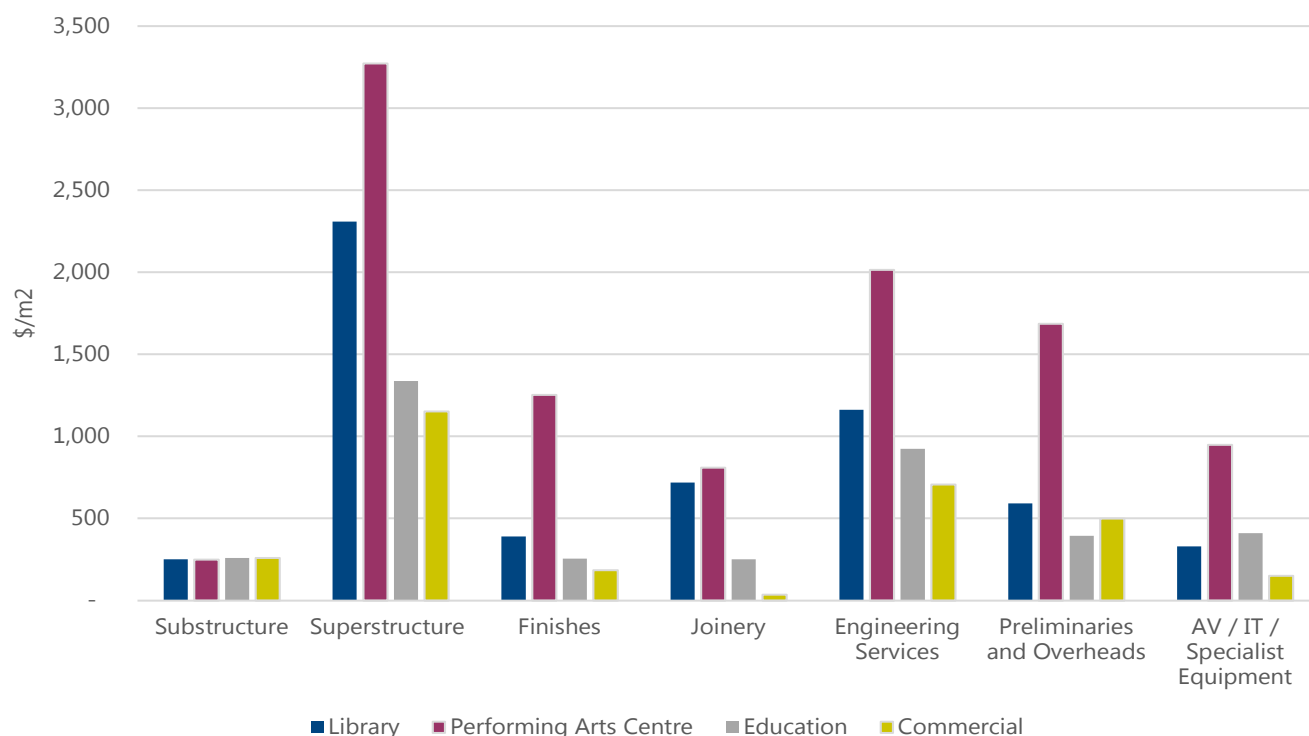
Whether regenerating existing buildings or developing new sites, cultural facilities unlock a raft of new activities, collaborations and innovation that feeds local and national culture, delivering many economic and social benefits.

The importance and intrinsic value of arts and culture is complex: allowing the arts to flourish, enriching lives, impacting a city's identity, its residents' perceptions of the place they live in as well as drawing in others to see and experience it as cultural tourists.

Comprehensive planning including stakeholder consultation is a priority, not only to configure the kind and scope of facilities required but also to fully assess the life-cycle costs to ensure facilities are fit for purpose and can be efficiently run.

All of these factors lead to the creation of unique buildings and spaces, so it is imperative that accurate costing and continuing cost management through the design and construction phases of the project is sought from industry professionals with extensive experience in this field.

**Table 2: Elemental Cost Comparison**







National Museum of Australia, Canberra  
ARM Architecture and Robert Peck von Hartel Trethowan Architects  
Photo courtesy NMA and John Gollings

## References

- ABS (2014), 4172.0 – Arts and Culture  
In Australia: A Statistical Overview, 2014  
(release 10 July, 2014)
- ABS (2014), Australian National  
Accounts: Cultural and Creative Activity  
Satellite Accounts, Experimental,  
2008–09 (cat. no. 5271.0),  
10 February
- ABS (2017), Cultural Funding by  
Government, Australia, 2015–16 (for  
Meeting of Cultural Ministers)
- Australia Council for the Arts 2015, Arts  
Nation: An Overview of Australian Arts,  
2015 Edition, Sydney, Australia.
- Bearup, G (2017) 'The Mona effect'.  
The Australian, 22 July, 2017
- Boston Consulting Group (2017),  
Melbourne as a Global Cultural  
Destination
- City of Melbourne (2016) Arts  
Infrastructure Framework
- Creative Victoria (2018), 'Protecting  
and Revitalising the Melbourne Arts  
Precinct', 7 March
- Ernst & Young (2016), Australian  
Infrastructure: some facts and figures  
(released 22 March, 2017)
- Fairly, G. (2018), "That is not the limit  
of my ambition': One-on-one with the  
Arts Minister", Arts Hub, 2 February  
2018
- G21 Geelong Regional Alliance (2015),  
Geelong Cultural Precinct
- Infrastructure Australia (2016)  
Australian Infrastructure Plan: Priorities  
and Reforms for our Nation's Future  
(released February 2016)
- Infrastructure NSW (2018), Cultural  
Infrastructure in NSW (NSW  
Government Cultural Infrastructure  
Action Plan 2018)
- New South Wales Parliament Legislative  
Council Portfolio Committee No. 4 –  
Legal Affairs (2017), Report No. 35,  
Museums and galleries: Interim Report,  
Sydney (released 18 December, 2017)
- SGS Economics and Planning (2017),  
Arts Infrastructure Survey (for Arts  
South Australia), (Released December  
2017)
- Victorian Government (2017), Victorian  
Infrastructure Plan
- Souter, P (2016), "Art Works: How Mona  
changed travel to Tasmania" [https://  
awoljunkee.com/how-mona-changed-  
travel-to-tasmania/5803](https://awoljunkee.com/how-mona-changed-travel-to-tasmania/5803)



Yagan Square, Perth  
Designed by Lyons Architecture and Iredale Pedersen Hook Architects  
with landscape architects, ASPECT Studios  
Photo courtesy ASPECT Studios

## About Slattery

Slattery is a property and construction advisory firm specialising in quantity surveying, cost management and early phase project advisory, with an outstanding history now spanning over 40 years.

We are passionate about arts, culture and the built environment, and commit specialised teams to appraise and support our clients to deliver remarkable, iconic buildings and community infrastructure across the country.

We work hand-in-hand with governments, institutions and organisations as well as planners, developers, architects and design teams on a broad range of property and construction projects.



## Arts, Culture, Leisure & Tourism

Slattery understands the value and benefit of great cultural and civic spaces to communities, to defining identity and place-making alongside stimulating and sustainable environments to learn, live and work in.

Through our work on projects across Australia including new builds, heritage refurbishment, master-planning of new precincts, diverse arts, culture, education and leisure projects, Slattery brings unique understanding of the importance of balancing the needs of state and local governments, key institutions with the cultural and functional requirements of the creative industries and local community.

Using our knowledge of design, procurement and construction challenges and opportunities, we are passionate about assisting our clients to achieve successful outcomes.

For more information about our Arts, Culture, Leisure & Tourism team, please contact National Sector Lead Michelle Lin at [michelle.lin@slattery.com.au](mailto:michelle.lin@slattery.com.au) or +61 408 369 502.