

Final Business Case for the Renewal of the Powerhouse Museum

Museum of Applied Arts and Sciences
24 October 2014

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1. Executive summary

Key messages

- ▶ This Business Case presents the case for the renewal of the Powerhouse Museum which will achieve a range of objectives including:
 - ▶ High patronage and a direct and positive impact to the economy of NSW
 - ▶ Create an economically sustainable operating model for the Museum
 - ▶ Ensure fit-for-purpose facilities
 - ▶ Regain global standing as the leading Museum of Applied Arts and Sciences
 - ▶ Provide experiences and services that enrich the lives of customers and communities
 - ▶ Capitalise on the once-in-a-generation renewal of the surrounding cultural precinct
 - ▶ Support of existing Government and MAAS objectives

- ▶ The redevelopment of Darling Harbour/Ultimo provides an unprecedented opportunity for NSW. As Australia's only museum of Applied Arts and Sciences, it is essential that the Museum is renewed and integrated into the precinct. Renewal will provide connectivity to the city and re-establish the Museum as an important cultural, social and educational facility.

- ▶ The Museum is operating unsustainably. Over the last five years, patronage has declined 33% and reliance on NSW Government grants for operational funding has increased to 80% of total income – net position before Government grants has declined 15%.

- ▶ Lack of significant upgrade or capital reinvestment since opening in 1988 has resulted in compromised core functions and sub-standard facilities, plaguing Museum performance. Without fundamental change, the Museum's ongoing viability will be drawn into question and increased government funding will be required to keep it safe and operating.

- ▶ From a long list of seven project options, four were evaluated as part of the Final Business Case (including the Base Case). Economic and financial analysis determined that Project Option 6D was the preferred project option.

- ▶ Project Option 6D is expected to generate the highest uplift in Museum patronage over the 20 year evaluation period. By FY34, it is anticipated that up to 1.7 million people could be attracted to the Museum. In FY13, only 381,415 people attended the Museum.

- ▶ Project Option 6D is expected to deliver the highest quantitative and qualitative economic benefits to the community relative to the Base Case. Project Option 6D can **deliver approximately \$232.7 million in economic returns over 20 years** (discounted at 7%), and a benefit-cost ratio of above 1. These benefits do not include any allowance for the incremental benefits the renewed Museum might provide to the regeneration of the precinct more broadly as well as significant qualitative benefits.

- ▶ Project Option 1 (Base Case) is the least cost project option with a Net Present Cost of \$250.6 million. However, Project Option 6D is the only project option which offers **MAAS the opportunity to establish a sustainable operating model** in the long term.

- ▶ MAAS requires \$350.4m (undiscounted) in capital over 7 years to deliver Project Option 6D:
 - ▶ \$280.4 million in capital funding over 7 years from the NSW Government.
 - ▶ The remaining \$70 million will be sourced from the divestment of the Harwood site and the adjoining car-park.

- ▶ To deliver Project Option 6D, MAAS will be responsible for overall project governance. Project management services will be provided by an external third party with an internal project director from MAAS representing MAAS interests.

1.1 Background

The Museum of Applied Arts and Sciences ("MAAS") includes the Powerhouse Museum ("Museum"), Sydney Observatory and Discovery Centre at Castle Hill. This Final Business Case relates to renewal of the Powerhouse Museum (the "Project").

1.1.1 An unprecedented opportunity

With renewed leadership and a dynamic and internationally credentialed new Executive team, MAAS has released its 2020 Vision.

Delivering on its 2020 Vision will ensure MAAS takes its place on the global stage, providing positive economic and social returns to NSW and a vital facility in Sydney's most exciting new precinct.

By 2020 MAAS will:

- ▶ Be the leading museum of applied arts and sciences
- ▶ Deliver a significant contribution to the NSW knowledge economy
- ▶ Achieve high patronage, economic and social returns to NSW.

The redevelopment of Darling Harbour/Ultimo provides an unprecedented opportunity for NSW. As Australia's only museum of Applied Arts and Sciences, it is essential that the Museum is renewed and integrated into the precinct. Renewal will provide connectivity to the city and re-establish the Museum as an important cultural, social and educational facility.

1.1.2 Priority for a renewed Powerhouse Museum

The proposed Project seeks strategic and capital investment to leverage from unprecedented precinct change to renew the Museum's site to ensure its long term economic sustainability and restore its reputation as a leading global museum brand.

The urgency of the Project is driven by the Darling Harbour development. The Museum's facilities are currently sub-standard. Not only is the Museum unable to add value to the Darling Harbour and Goods Line precinct, it stands as a detractor to the significant State infrastructure investment and presents a compromised connection point to adjoining communities.

This business case presents an economically sustainable operating model. It demonstrates how MAAS will leverage its assets to diversify its income base, revert a declining audience trend and deliver a global asset that reflects an internationally renowned collection, while contributing to the priorities, goals and targets of NSW 2021.

1.1.3 MAAS 2020 Vision

To be the leading Museum of arts and sciences; inspiring communities and transforming our world.

The MAAS Strategic Plan (2014) sets a clear direction for the Museum. The Museum is uniquely placed to demonstrate how technology, engineering, science and design impact Australia and the world. Central to renewal is a commitment to ensure more of the Museum's vast and invaluable collection is on display. This will enliven spaces, stimulate curiosity, and increase access to the State's extraordinary collection through programs and exhibitions, and by providing a more sophisticated and integrated online presence.

MAAS carries a significant responsibility. It must balance its collection with a public responsibility to build knowledge and connect to the community. To achieve this, the Museum needs to be responsive and adaptive.

The following themes underpin MAAS' activities:

- ▶ Our place in time – our past, present and future
- ▶ Our place in our state and our region, a focus on Asia
- ▶ Innovation, education and technological change
- ▶ Economic and environmental sustainability.

While awareness of MAAS' venues is high (86% of NSW residents have heard of at least one of the three venues), market penetration is low. The MAAS Strategic Plan aims to reverse a declining audience trend to significantly increase engagement with customers at a local, national and international level:

- ▶ Students: schools patronage to double over five years
- ▶ Adults: a strategic program of exhibitions and events will build contemporary and social experiences for adults at all life stages
- ▶ Tourism: unique experiences and iconic venues will significantly increase tourism patronage
- ▶ Families: will continue to be engaged
- ▶ Members: will increase including conversion from members to donors
- ▶ Online: significantly build online audiences
- ▶ Community: the development of the Darling Harbour and Barangaroo precincts will deliver a new community.

1.1.4 Structural reform

In 2014, MAAS commenced a significant restructure to align staffing levels with the objectives of the Strategic Plan, achieve sustainable independent funding streams and strengthen its operating ratios. The restructure resulted in more than 80 redundancies and reduced staff as a percentage of total operating costs from 72% to 50% .

With its operating model in alignment with industry benchmarks, MAAS now requires a sustained and strategic approach to long-term investment. A renewal of permanent galleries and buildings, collections and exhibitions, and a focus on building audiences is required to regain the Museum's reputation and global standing. Without capital investment to generate commercial growth, the operating model will not be sustained in the long term.

1.1.5 World renowned collection

Established in 1880 as part of a prestigious international cohort of museums, the MAAS collection has its origins in the Sydney International Exhibition of 1879, held in the purpose built Garden Palace.

The Museum of Applied Arts and Sciences Act (the "Act"), states that MAAS 'holds in trust', for the people of NSW, one of the finest and most diverse collections in Australia, representing over a century of industry, innovation and social progress. Over the past 134 years, the collections have developed into a unique and extraordinary record of human creativity ranging from a 4000 year old clay tablet with cuneiform inscription to contemporary space and biotechnologies.

MAAS is custodian to over half a million objects of national and international significance spanning cultures and millennia. While the collection has a strong focus on material made or used in Australia, it is international in scope and includes irreplaceable iconic artifacts including the 'Difference Engine No 1' calculating engine (1822-1879) designed by English polymath Charles Babbage, credited with inventing the first mechanical computer; Gothic style chair owned by Governor Lachlan Macquarie and attributed to makers John Webster and William Temple, NSW 1820-1821; the Boulton and Watt

steam engine used at Whitbread's Brewery, London 1785-1887; and a half sovereign minting error gold coin, Queen Victoria, made by Sydney Mint, 1858.

Each year over 450 loans are facilitated to museums across NSW as well as nationally and internationally. While the collection is in high demand nationally and internationally, only an extremely small portion is on display. The GLAM (Galleries, Libraries, Archives and Museums) sector estimates that approximately 5% of collections are on-display at any one time. With only 1.5% of its collection on display, MAAS is falling significantly behind this benchmark.

1.1.6 Education and learning

Education in the arts at early childhood, primary and secondary levels have been shown to promote literacy, numeracy and creativity, and build teamwork skills and respect for cultural diversity.

MAAS plays a critical role in education and learning – particularly in the areas of Science, Technology, Engineering and Mathematics (STEM). Australia's overall participation in STEM skills at secondary school is in decline. The number of female students opting out of mathematics and science is also rising - only 13.8% of female students in NSW studied mathematics and science for their Higher School Certificate in 2011. The total number of students in year 12 increased by around 16% from 1992 to 2012 while the participation rates for most Science and Mathematics subjects, as a proportion of the total Year 12 cohort, fell (Chemistry (-5%), Physics (-7%), Multidisciplinary Science (-5%), Intermediate Mathematics (-11%) and Advanced Mathematics (-7%)) in the same period.¹ Australian enrolments in mathematical degrees (both undergraduate and higher degrees) by men is about half of the OECD average, and by women as low as third of the OECD average. Only 1.4% of all entrants into an advanced research degree choose to enroll in a mathematical sciences research degree – again half of the OECD average.²

Australia has found itself in a vicious cycle whereby there are too few specialist mathematics and science teachers, which means there are teachers trying to convey material that is beyond their depth of knowledge. It has been estimated that 75% of the fastest growing occupations require STEM skills and knowledge.

MAAS has a responsibility to improve this situation. It currently provides an important learning environment for more than 50,000 NSW school students with labs, tours and workshops providing targeted programs for design, technology and science. However, limited ongoing investment in the Museum's learning spaces and exhibitions, combined with programs that have not adapted to changing curriculum, have constrained education patronage - education patronage has plateaued over the past 5 years, with relatively low market penetration rates of 7.4% of Sydney schools and 4.3% of all schools in NSW, when compared to like institutions.

1.1.7 Site significance

MAAS maintains a strong and important historical connection to the Ultimo and Pyrmont precincts as well as the City of Sydney. The Museum first opened in 1893 in a purpose-built Technological Museum in Harris Street, moving to its current location in 1988. The Museum's relationship with university, digital and technological partners in Ultimo has strengthened over this time, and is central to the Museum's core functions as a Museum of technology and learning.

The Museum provides important connectivity for the Cultural Ribbon through Darling Harbour and the Goods Line while consolidating cultural heritage within the Ultimo precinct.

1.1.8 Infrastructure

The Powerhouse Museum opened in 1988 as the flagship of the MAAS. At the time of opening, it was considered to be a world leader in museum practice, notwithstanding some limitations with the facilities.

¹ Kennedy, J, Lyons, T & Quinn, F, 'The continuing decline of science and mathematics enrolments in Australian High Schools', Teaching Science, Volume 60; Number2; June 2014, page 34

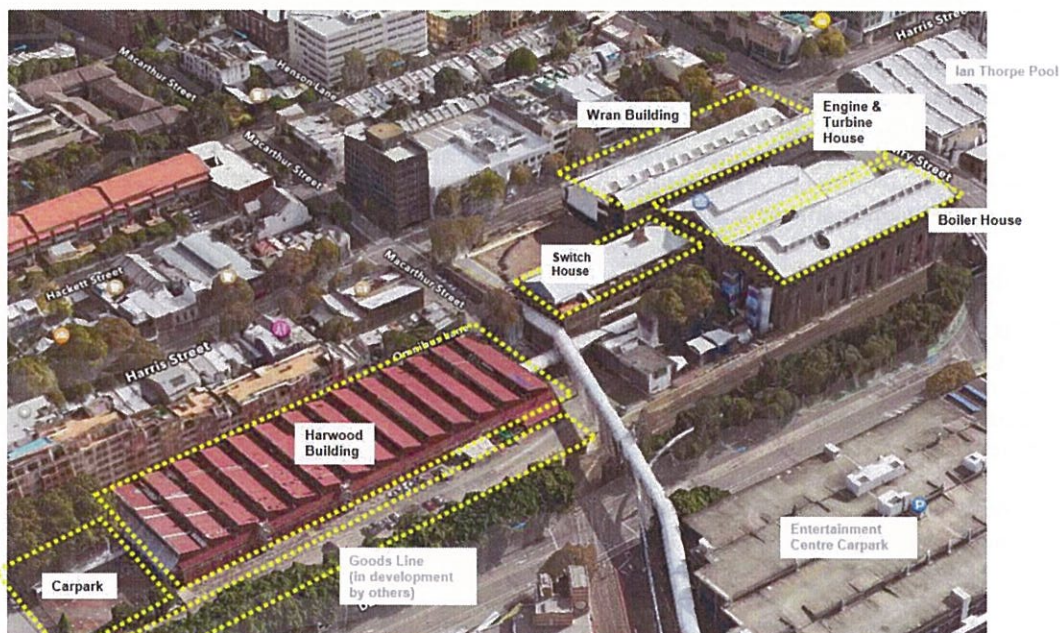
² Australian Mathematical Sciences Institute, Discipline profile of the Mathematical Sciences 2013, page 18

Located in the old Ultimo Power Station on the edge of Sydney's central business district and adjacent to Darling Harbour, the Museum comprises approximately 20,000 m² including an exhibition space of 1,800m². The adjacent Harwood building is the Museum's main collection store as well as housing its operational functions including conservation and production spaces, staff accommodation and reference and photo libraries (see Figure 1). From December 2014, the Harwood building will form the Western boundary of the newly created Goods Line.

Since opening in 1988, the Museum has not had significant upgrade or capital reinvestment. The capital asset and associated customer offer is significantly lower than other cultural attractions in Australia and internationally. This is inhibiting the Museum's potential to be a driver of economic and social benefits to NSW. The current site was developed from a disused heritage listed Power Station and has never met Museum environment and collection management standards due to the unique challenges the original building presents. Subsequent changes have further compromised the Museum's capacity to achieve collection exhibition standards.

While international counterparts have thrived to become global brands and drivers of significant economic and social benefit, the lack of investment and vision in the Museum has resulted in declining patronage and degraded and compromised facilities.

Figure 1: Current Museum site: View from the South-East / Haymarket



1.2 The case for change

Renewal is required to turn negative performance into a net contribution model.

1.2.1 Financial unsustainability

- ▶ Current Museum operations are unsustainable. Patronage has deteriorated over time, In the last five years, the Museum has experienced a 33% decline in patronage (from 565,409 to 381,415 customers) to both the permanent and temporary exhibitions.
- ▶ Deteriorating patronage has driven deteriorating financial performance and over the last five years, the Museum's reliance on NSW Government grants has increased to 80% of total income, while its net position before these grants has deteriorated by 15%.
- ▶ Combined with limited capital injections, the Museum has been unable to update its permanent exhibitions and overall customer offering since its inception, 25 years ago. This compares poorly with the industry benchmark of six to seven years for most 'permanent' exhibitions.

- ▶ Revenues from commercial and sponsorship operations and patronage have declined by 27% and 33% respectively over the last five years, placing increasing reliance on government funding to continue operations. The Museum's inability to generate its own income and subsequent lack of investment in facilities, permanent exhibitions and customer experience has perpetuated a downward trend.
- ▶ The Museum has limited access to alternative funding sources such as user charges (15% of revenue in 2012/13), sponsorships and donations (approximately 5% of revenue in 2012/13) as well as rental streams from surrounding developments i.e. commercial and residential space (less than 1% of revenue in 2012/13).
- ▶ The Museum does not have the financial capacity to fund capital renewal and refurbishment through existing income levels, is not providing a competitive cultural experience, and ranks poorly amongst its peers.
- ▶ Despite the recent organisational restructure, modeling confirms that the Museum's exhibition programming capacity will decline in the next five years as fixed costs grow and consume a greater proportion the limited revenues generated. Such constrained programming capacity will not support an ongoing permanent and semi-permanent gallery renewal program of the likes required to maintain and/or grown audience levels.
- ▶ Without fundamental change, this position is expected to deteriorate further as patronage numbers continue to decline due to the lack of renewal in the Museum's service offering. Assuming the 'status quo', in the medium to long term, the Museum will not have sufficient cash flow to fund the growing repairs and maintenance required to keep it 'safe and operating' as well as deliver an exhibition program worthy of increasing patronage. The NSW Government will therefore be required to make significant incremental investments in the future to maintain the 'status quo'.

1.2.2 Compromised core functions

- ▶ The Museum's existing infrastructure has either reached the end of its useful life, or is no longer fit for purpose. This is compromising its ability to meet its obligations under the MAAS Act to display, conserve, maintain, secure and operationally manage its collections in terms of environmental management, security, and the campus becoming a pedestrian thoroughfare as part of the precinct development.
- ▶ Sub-optimal onsite storage facilities and OH&S issues are resulting in additional costs being incurred, such cleaning, advanced air conditioning requirements for storage purposes, and increased workers compensation premium payouts.
- ▶ Substandard facilities have impacted on MAAS' ability to effectively collaborate with domestic and international institutions, including securing international loans and 'block buster' or exclusive exhibitions.
- ▶ The Museum is unable to fulfill its requirement to provide a comprehensive and appropriate education program in support of state and national curriculum in STEM and the arts. Issues include the lack of facilities such as teaching environments and modern technologies, exhibitions linked to the curriculum are outdated and functional facilities such as arrival and cloaking are convoluted and do not meet accessibility needs for teachers and students.

1.2.3 Substandard facilities

The original purpose of the Museum, its subsequent reconfiguration and age of its existing facilities has resulted in a museum which lacks presence, is uninviting and does not deliver a contemporary cultural experience:

- ▶ Current public access to the Museum is on a primary thoroughfare with no retail presence or foot traffic, and isolates the Museum from the surrounding cultural precinct and the city

- ▶ Existing infrastructure/facilities are not fit-for-purpose, and instead comprise a mix of heritage sites and adjoining structures constructed at various dates, resulting in a series of operating inefficiencies
- ▶ Current building orientation does not engage with high profile precinct developments parallel to the Museum's eastern facade and linking to the immediate Haymarket and tertiary neighbours
- ▶ Existing infrastructure is reaching the end of its useful life or is no longer fit for purpose
- ▶ Inefficient and non-secure back-of-house facilities are resulting in compromised international loans and risk to collection objects.

1.3 Project Objectives

The overarching objective of the Project is to renew the Museum's site to ensure its long term economic sustainability and restore its reputation as a leading global museum brand.

A renewed Museum will deliver an internationally significant cultural attraction that will:

- ▶ Achieve high patronage and a direct and positive impact to the economy of NSW
- ▶ Ensure appropriate storage and display for one of the world's most significant collections
- ▶ Attract high profile exhibitions and events
- ▶ Re-establish MAAS' role as a key partner to deliver educational outcomes of Australian students
- ▶ Regain global standing as the leading Museum of Applied Arts and Sciences
- ▶ Provide experiences and services that enrich the lives of our customers and their communities
- ▶ Create an economically sustainable operating model for the Museum
- ▶ Capitalise on the once-in-a-generation renewal of the surrounding cultural precinct
- ▶ Ensure fit-for-purpose facilities

1.3.1 Project scope and timing

A Commercial Real Estate Strategy has been developed to address the Museum's operational and facility issues, and to identify a viable masterplan for the renewal of the Museum site.

The Commercial Strategy identified the following key requirements for a renewed Museum:

- ▶ Improved connectivity of the Museum to the surrounding cultural precinct, The Goods Line and the city
- ▶ Internal remodeling of the Museum to provide an exemplary customer experience, learning environments, additional gallery space and commercial outlets
- ▶ Remodeling collections space to provide storage conditions that meet OH&S standards and the strict requirements under the MAAS Act
- ▶ Unlocking commercial potential and access to diverse funding streams.
- ▶ Assuming that the required level of funding is provided in May 2015, the project team will commence detailed planning and design in June 2015.

Table 1 identifies the timing of key project stages:

Table 1: Timing of the Project

Stage	Timeline
Business Case complete and Gateway approval	November 2014
Funding decision	May 2014
Commence design and planning	July 2015
Apply for Development Approval ("DA")	July 2015
Move staff and the collection	Financial Year 2015/16
Construction commences	January 2017
Construction complete	January 2022
Move staff and the collection into new facility	First half of 2022
Renewed Museum is fully operational	July 2022

1.4 Contribution to Government and MAAS objectives and priorities

Governments recognise the importance of fostering participation in the creative economy (arts, culture and sciences) and the significant contribution it makes to economic, social and education outcomes:

- ▶ The 'creative economy' in NSW contributed over \$31 billion to the State economy³
- ▶ Tourism in NSW contributes approximately \$13.3 billion to the State economy⁴
- ▶ Education.

The proposed Project will significantly improve the functionality, amenity and long term sustainability of the Museum leading to improvements in staff and patronage experience, and contribute to the following Federal and State Government targets:

- ▶ **The Commonwealth Government** - To enhance the learning and development of STEM skills, important to the development of national productivity
- ▶ **The NSW Government in its State Plan, NSW 2021: A Plan to make NSW Number One – Goal 27:** 'To increase tourism and cultural participation'
- ▶ **The NSW Government in its Arts and Cultural Policy** – Establish and maintain world class arts and cultural facilities to support creative practice and facilitate engagement.

The Project also aligns with key MAAS priorities and objectives identified in the MAAS 2020 Vision. Specifically, the Project will strongly contribute to each of the MAAS success factors determined as part of the MAAS 2020 Vision:

- ▶ Audience growth across all categories
- ▶ A vibrant program of exhibitions, events and public engagements
- ▶ Significant economic and social returns to the state of NSW
- ▶ Significant stakeholder support
- ▶ A sustainable organisation for future generations
- ▶ Sustainable collections management
- ▶ Permanent gallery renewal
- ▶ A confident brand and visual identity

³ Sweet Reason Pty Ltd, Planning Sydney's Cultural Facilities, Arts NSW, March 29, 2011

⁴ Tourism Research Australia, State Tourism Satellite Accounts, 2012-13

- ▶ International acclaim
- ▶ Regional accessibility
- ▶ Government priority alignment.

1.5 Options considered

The short-listed options include a Base Case – Do Minimum option and three project options to either refurbish or redevelop (Project Options 4, 5 and 6D) the current Museum site. Table 2 outlines the four project options:

Table 2: Short-listed options

Option	Description
Project Option 1: Base Case – Do Minimum	Basic compliance works to make Museum and Harwood building safer for staff and customers
Project Option 4: Refurbish and re-orientate	Refurbish the Turbine / Boiler / Engine Houses, re-orientate the entry of the Museum to front Hay Street and leave the balance of the site 'As Is'
Project Option 5: Refurbish, re-orientate and sell Harwood	Refurbish the Turbine / Boiler / Engine Houses, re-orientate the entry of the Museum to front Hay Street, demolish the Wran Building and sell the Harwood Building
Project Option 6: Refurbish, re-orientate and renew Harwood	Refurbish the Turbine / Boiler / Engine Houses, re-orientate the entry of the Museum to front Hay Street, demolish and rebuild the Wran Building and renew the Harwood Building. Option 6 aligns with the functional requirements of the Museum, as described in Section 3.3.

1.6 Options assessment

To assess each of these project options, an economic and financial assessment has been undertaken in line with NSW Treasury Guidelines.

The difference between the results of each project option is primarily driven by expected patronage:

- ▶ Under **Project Option 6D**, it is expected that patronage will grow to approximately 1.7 million by FY34. The Museum will have a 'state of the art' facility, a new Temporary Exhibition Gallery (meeting existing gallery needs) and sustainable funding streams to ensure continual renewal of the Museum and its exhibitions, attracting growing patronage
- ▶ Under **Project Options 1, 4 and 5**, the Museum will not have a 'state of the art' facility, a new Temporary Exhibition Gallery or diverse funding streams to renew temporary and permanent exhibitions and keep them 'fresh' and 'exciting', consistent with industry best practice. Patronage is not expected to increase to above 1 million over the next 20 years, under any of these project options.

1.6.1 Economic assessment of project options

The results of the economic analysis (i.e. cost benefit analysis) indicate that Project Option 6D produces the highest BCR result (1.01), followed by Project Option 4 (0.51) and Project Option 5 (0.47).

Table 3 below shows the results of the cost benefit analysis. All results are also shown incremental to the Base Case Option 1.

Table 3: Cost-benefit analysis results (PV \$'m @ 7% discount rate)

Economic costs and benefits	Project Option 4	Project Option 5	Project Option 6D
Economic benefits (\$'m, PV)			
Venue operator's net profit	10.3	17.9	47.6
Induced tourism expenditure	10.3	9.6	34.1
Operating efficiencies	***	***	***
Consumer surplus	7.5	12.5	47.9
Civic pride	17.3	15.5	46.4
Divestment of land	6.9	47.7	56.7
Total quantifiable benefits	52.2	103.2	232.7
Economic costs (\$'m, PV)			
Capital costs	118.2	235.7	233.3
LCCM costs	-17.5	-27.2	-14.5
Permanent exhibition renewal	1.1	9.2	11.6
Total costs	101.8	217.7	230.4
NPV	-49.6	-114.5	2.3
Benefit Cost Ratio	0.51	0.47	1.01 ⁵

The quantifiable benefits of Project Option 6D are above the costs that the renewal will incur to the wider community. These benefits do not include any allowance for the incremental benefits the renewed Museum might provide to the regeneration of the precinct more broadly. Museums as cultural assets, also deliver significant cultural and social benefits to the wider community which have not been quantified:

- ▶ Creative society
- ▶ Quality of life and improved liveability
- ▶ Integration and co-location benefits
- ▶ Social inclusion benefits
- ▶ Improved learning outcomes.

These benefits can be significant, and demonstrates that the Government has the potential to gain a significant economic and social return on investment, from investing in the renewal of the Museum according to Project Option 6D.

1.6.2 Financial assessment of project options

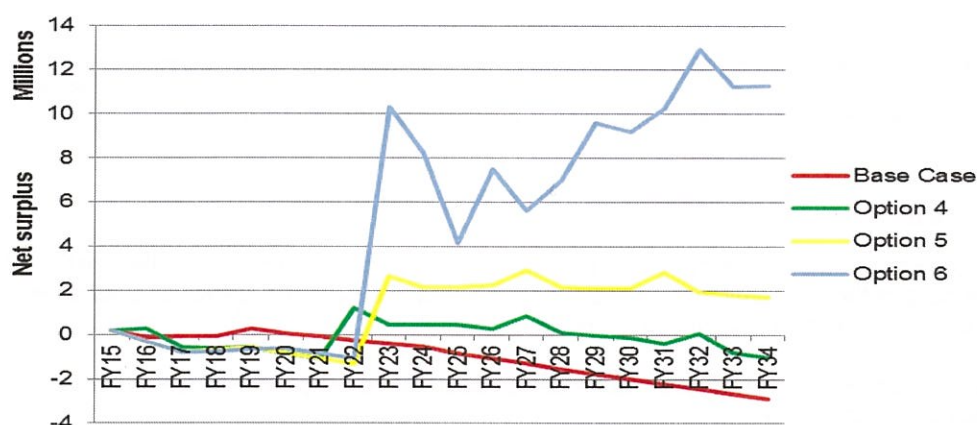
The financial assessment of each project option indicates that Project Option 6D delivers an operating model which is financially sustainable into the long term. Table 4 and Figure 2 presents the net profit in 2015 dollars (pre-tax) expected under each project option over the evaluation period.

Table 4: Unescalated net costs under each project option (FY15 \$'m)

Period	Base Case	Project Option 4	Project Option 5	Project Option 6D
FY15 – Year 1	0.2	0.2	0.2	0.2
FY19 – Year 5	-0.1	-0.6	-0.6	-0.7
FY24 – Year 10	-1.5	0.5	2.3	8.3
FY29 – Year 15	-2.5	0.0	2.1	9.6
FY34 – Year 20	-3.6	-1.0	1.7	11.3

⁵ The BCR for Project Option 6D has decreased since the Preliminary Business Case (1.12). This is because a 7 year staging approach to construction has been developed (in the Preliminary Business Case a 4 year staging program was proposed). A 7 year staging approach is expected to minimise risk to government and enable continuing operations, with minimal disruptions. However, a 7 year staging program (when compared to a 4 year staging program) also means that 3 fewer years of benefits are accrued over the 20 year evaluation period.

Figure 2: Unescalated net costs under each project option (FY15 \$'m)



Under the Base Case, Project Option 4 and Project Option 5, the Museum will continue to be unsustainable. Each project option can provide sufficient revenue to maintain the 'status quo' at first. However, without fundamental change, the net result declines into a deficit.

Under Project Option 6D; the Museum will establish a sustainable and efficient operating model. The development of diversified funding streams, as well as the attraction of increased patronage, sponsorships and donations, will deliver sufficient funding streams to reinvest in the permanent and temporary exhibitions and improve performance.

1.7 Financial impact on MAAS

Table 5 below outlines the financial impacts on MAAS of each project option.

Table 5: Financial impact on MAAS (PV \$'m @ 2.9% discount rate)

Financial costs and benefits	Base Case	Project Option 4	Project Option 5	Project Option 6D
Costs (\$'m, PV)				
Capital costs	5.1	168.0	354.4	348.4
LCCM costs	189.1	146.1	119.5	152.1
Permanent exhibition	0.0	2.2	23.1	29.6
Operating & maintenance costs	725.7	723.7	725.8	764.3
Total cash outflows	920.0	1,040.0	1,222.8	1,294.4
Revenue (\$'m, PV)				
Admission fees	103.3	120.4	121.7	199.6
Memberships	7.9	8.6	8.7	14.1
Sponsorships	7.6	10.2	10.0	13.0
Donations	9.4	10.6	10.6	19.2
Venue hire	10.5	11.5	11.5	16.1
Leased operations	9.1	11.1	40.4	60.7
Government grants	493.8	494.8	495.3	496.1
Other revenues	27.9	27.9	27.9	27.9
Divestments	0.0	9.0	58.8	69.8
Total cash inflows	669.4	704.0	785.0	916.4
Net Present Cost (NPC \$'m)	250.6	335.9	437.8	378.0

The results of the financial impact analysis indicate that Project Option 1 (Base Case) is the least cost option with a NPC of \$250.6 million. However, Option 1 only provides compliance with statutory

requirements and does not provide any of the functionality benefits and improvements that the other options provide.

With the exception of the Base Case, Project Option 4 is the least cost option, with a net present cost (NPC) of \$335.9 million, followed by Project Option 6D, with a NPC of approximately \$378.0 million. With the funding strategy identified the Museum will be able to finance its operations through the Project period.

1.8 Preferred option

The selection of the preferred option is based on the results of a quantitative analysis of the costs and benefits of the options in the economic and financial analysis, together with the results of qualitative assessment of the costs and benefits that could not be quantified.

It is therefore recommended that the Museum is renewed according to the proposed Commercial Strategy (i.e. Project Option 6D). It:

- ▶ Generates the largest economic contribution to the state
- ▶ Generates significant qualitative benefits, including:
 - ▶ Growing Museum audiences to 1.7 million customers annually by FY34
 - ▶ Providing an iconic 'state of the art' facility which will deliver significant social returns
 - ▶ Enabling the State to further capitalise on the redevelopment of the cultural precinct
- ▶ Contributes to the State meeting its NSW 2021 goals, particularly in respect of increasing participation in the creative economy and increasing tourism
- ▶ Provides the Museum with a **sustainable business model** to reinvest in its permanent exhibitions and retain a competitive customer experience, without ongoing additional Government assistance.

1.8.1 Funding requirements for the preferred option

Table 6 presents the capital budgetary impact in unescalated dollars for the preferred project option, Project Option 6D. Approval of \$280.4 million in funding is sought from the NSW Government in the 2015/16 NSW Government State Budget.

The remaining \$70 million of funding for the Project will be met through the divestment of the Harwood site and adjoining car-park.

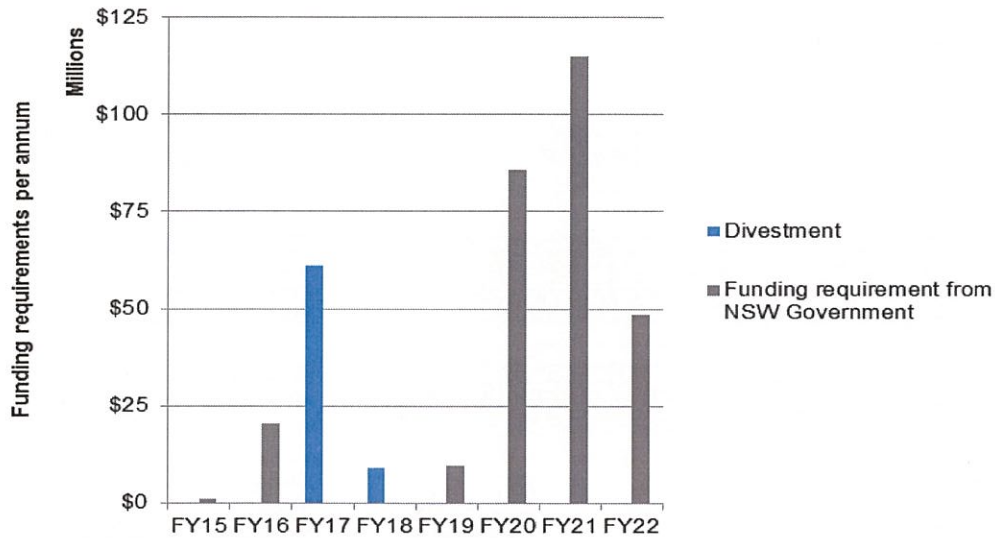
Table 6: Capital cost budgetary impacts (undiscounted, FY15 \$'m)

Year	Capital cost	Divestment	Funding requirement
FY15	1.0	0.0	1.0
FY16	20.3	0.0	20.3
FY17	40.6	61.0	0.0
FY18	20.3	9.0	0.0
FY19	18.8	0.0	9.7
FY20	85.8	0.0	85.8
FY21	115.1	0.0	115.1
FY22	48.6	0.0	48.6
Total	350.4	70.0	280.4

The budgetary impact indicates a total estimated investment of \$20.3 million is required from the State Government in 2015/16 and \$31.0 million over the next 5 years.

Figure 3 below illustrates the undiscounted funding requirements of the Museum from the NSW Government along with funding obtained from divestments over the construction period to cover the expected capital costs:

Figure 3: Funding from divestments and funding requirements from NSW Government (undiscounted, FY15 \$'m)



It is important to note that with this funding the Museum will have sufficient cash flows to both complete the renewal of the Museum (including contingency funding) and continue operations during the staging process.

1.9 Key risks

The key risks of implementing the preferred project option, Project Option 6D, (over and above the risks of the other options) and high level risk mitigation strategies have been identified as part of a risk assessment undertaken for all the feasible options. Table 7 below outlines the key risks and risk mitigation strategies:

Table 7: Key risks and risk mitigation

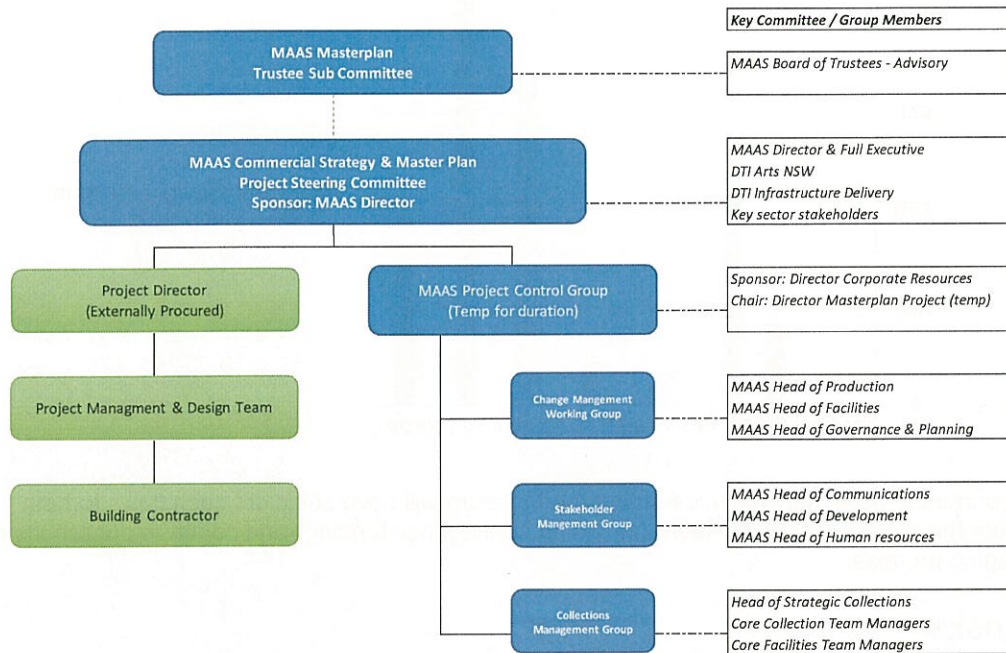
Key risks	High level risk mitigation strategies
<ul style="list-style-type: none"> ▶ NSW Treasury does not allow the ownership and control of retail and commercial property by MAAS ▶ Expected returns from the sale of the Harwood site are not realised and / or an inappropriate procurement strategy is implemented ▶ The design of the Harwood site is incompatible and unsatisfactory to the Museum ▶ Staging plan is incompatible with the operations of the Museum ▶ Commercial and retail revenue streams do not deliver the expected cash inflows and the permanent exhibition cannot be renewed ▶ Higher than anticipated operating costs and lower than anticipated patronage ▶ Lack of support for the new facility from internal stakeholders, Government and the community. 	<ul style="list-style-type: none"> ▶ Implementation of a risk management system ▶ Awareness of risk ▶ Internal communication ▶ External stakeholder consultation ▶ Hiring appropriate expertise ▶ Maintaining tight control over design of the facility ▶ Detailed project implementation plan ▶ Monitoring of outputs and outcomes ▶ Reporting and controlling ▶ Risk management review plan

1.10 Project planning and governance

Assuming sufficient funding is provided in May 2015, project planning for the preferred project option, Option 6D, will commence in June 2015.

MAAS will be responsible for the planning and delivery of the project using the NSW procurement system for Major Capital Works. Figure 4 shows that MAAS will be responsible for overall project governance.

Figure 4: Project governance



2. Introduction

Key messages

- ▶ Established in 1879, the Museum of Applied Arts and Sciences (“MAAS”) is Australia’s contemporary museum for excellence and innovation in applied arts and sciences. One of the sites for which MAAS is responsible is the Powerhouse Museum (the “Museum”).
- ▶ Since opening in 1988, the Museum has not had significant upgrade or capital reinvestment. The capital asset and associated customer offer is significantly lower than other cultural attractions in Australia and internationally. This is inhibiting the Museum’s potential to be a driver of economic and social benefits to NSW.
- ▶ In June 2014, MAAS appointed EY and sub-consultants FJMT (the architects) and Rider Level Bucknall (the Quantity Surveyor) to assist with the preparation of a Business Case for the renewal of the Museum.
- ▶ A Preliminary Business Case was submitted to NSW Treasury in August 2014. This Final Business Case addresses the feedback provided through the Strategic Gateway Review process. It considers a range of project options to meet the project objective and identifies the preferred project option. The preferred project option best meets government priorities and delivers the highest overall net benefit to the community.

2.1 Project background

2.1.1 The Museum of Applied Arts and Sciences

Established in 1879, the Museum of Applied Arts and Sciences (“MAAS”) is Australia’s contemporary museum for excellence and innovation in applied arts and sciences.

The Museum of Applied Arts and Sciences Act, 1945 (the “MAAS Act”), established the MAAS as a statutory authority. MAAS is an Executive Agency within the Trade and Investment Cluster of the Department of Trade and Investment, Regional Infrastructure and Services. Under the MAAS Act, the Museum is governed by a Board of nine Trustees who are appointed by the Governor, on the recommendation of the NSW Minister for the Arts.

MAAS ‘holds in Trust’ for the people of New South Wales an invaluable collection, representing over a century of industry, innovation and social progress. MAAS is also responsible for collaborating with other State cultural institutions and liaising with various Government departments.

MAAS is responsible for the management and operation of the Powerhouse Museum (the “Museum”), the Sydney Observatory and the Powerhouse Discovery Centre.

This Final Business Case (FBC) relates to the renewal of the Museum.

2.1.2 The Powerhouse Museum

The Museum opened in 1988 as the flagship of MAAS. At the time of opening, it was considered to be a world leader in museum practice, notwithstanding some limitations with the facilities.

Located in the old Ultimo Power Station on the edge of Sydney’s central business district and adjacent to Darling Harbour, the Museum has a unique and diverse collection covering history, science, technology, design, industry, decorative arts, music, transport and space exploration.

The Museum comprises approximately 20,000m² (including 1,800m² of exhibition space) and has:

- ▶ An evolving program of temporary displays which complement a range of permanent exhibitions
- ▶ A strong focus on learning and creativity, having a range of education services from pre-school to tertiary level
- ▶ Regular tours and demonstrations, performance, workshops, forums and other special events.

The Powerhouse building spans five levels, with a large open forecourt fronting Harris Street, which forms the main public entry into the Museum. Figure 5 shows that the Museum comprises distinct structures which are internally connected, including the Boiler House, Engine House and Turbine House which are heritage listed.

Adjacent to the Powerhouse building, and located on the south side of Macarthur Street, is the Harwood building. The Harwood building houses operational units such as curatorial, registration, conservation, exhibitions, digital records, ICT, and staff facilities. It also contains the main collection store, and conservation and production workshop spaces. Harwood comprises three levels, with access between the floors available via stairs or a goods lift (operating between two levels only). The ground level provides a large workshop together with laboratories extending along the eastern perimeter. 60% of the Museum's collection is located in the basement, comprising a Federal quarantine area, a high security vault and a specialised textile storage area.

The Museum site also includes the Ultimo Post Office now used as a volunteering centre and the three level Northern Annex (behind the Turbine House), which is used as staff accommodation. Both these buildings are also Heritage listed.

Figure 5: Current Museum site: View from the North-West / Ultimo

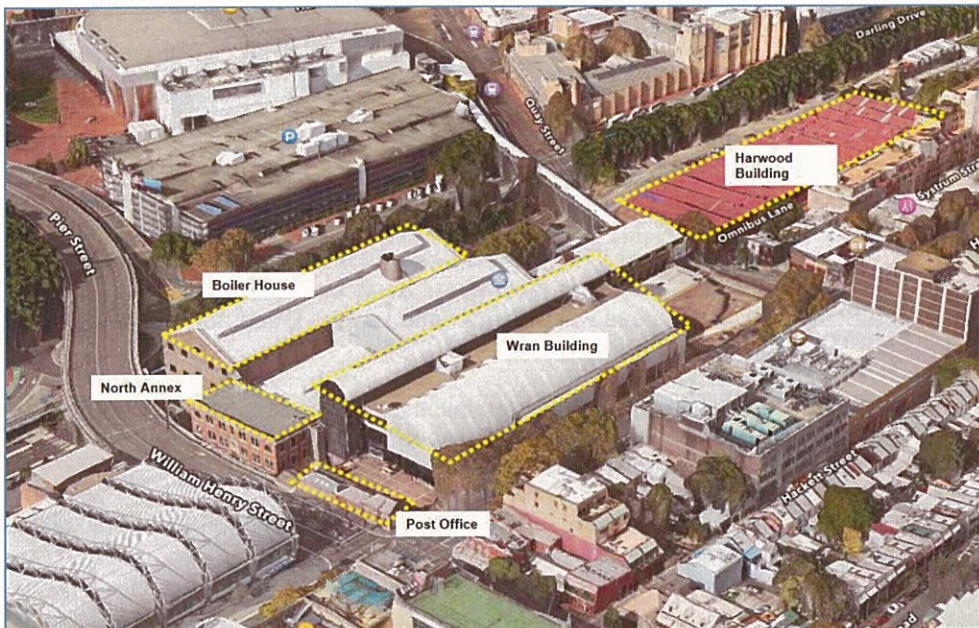
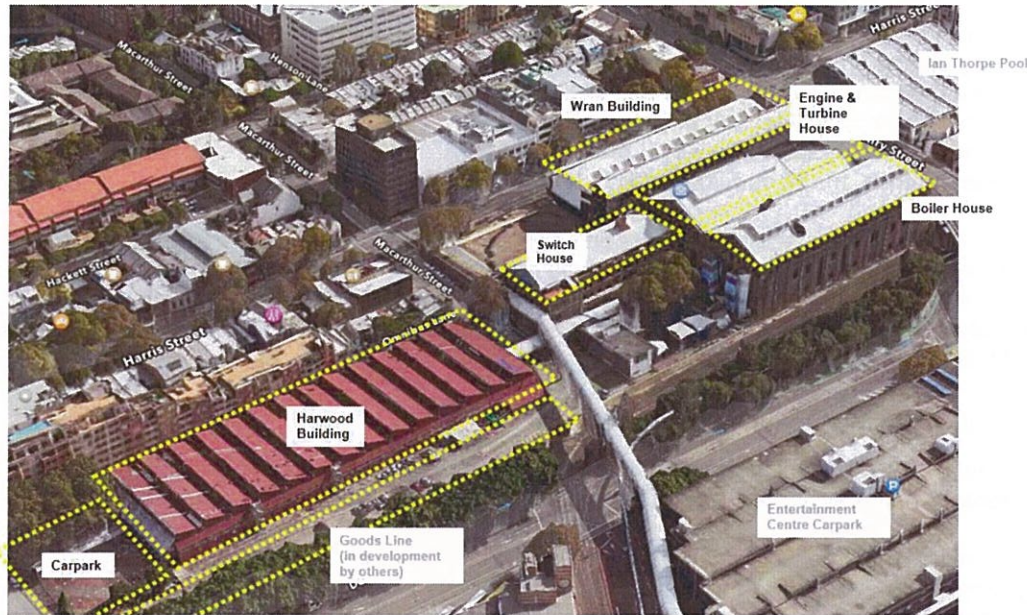


Figure 6: Current Museum site: View from the South-East / Haymarket



Since opening in 1988, the Museum has not had significant upgrade or capital reinvestment. The capital asset and associated customer offer is significantly lower than other cultural attractions in Australia and internationally. This is inhibiting the Museum's potential to be a driver of economic and social benefits to NSW.

The current site was developed from a disused heritage listed Power Station and has never met Museum environment and collection management standards due to the unique challenges the original building presents. Subsequent changes have further compromised the Museum's capacity to achieve collection exhibition standards.

While international counterparts have thrived to become global brands and drivers of significant economic and social benefit, the lack of investment and vision in the Museum has resulted in declining patronage and degraded and compromised facilities.

Site significance

MAAS maintains a strong and important historical connection to the Ultimo and Pyrmont precincts as well as the City of Sydney. The Museum first opened in 1893 in a purpose-built Technological Museum in Harris Street, moving to its current location in 1988. The Museum's relationship with university, digital and technological partners in Ultimo has strengthened over this time, and is central to the Museum's core functions as a Museum of technology and learning.

The Museum provides important connectivity for the Cultural Ribbon through Darling Harbour and the Goods Line while consolidating cultural heritage within the Ultimo precinct.

World renowned collection

Established in 1880 as part of a prestigious international cohort of museums, the MAAS collection has its origins in the Sydney International Exhibition of 1879 held in the purpose built Garden Palace.

The MAAS Act states that MAAS 'holds in trust', for the people of NSW, one of the finest and most diverse collections in Australia, representing over a century of industry, innovation and social progress. Over the past 134 years, the collections have developed into a unique and extraordinary record of human creativity ranging from a 4000 year old clay tablet with cuneiform inscription to contemporary space and biotechnologies.

MAAS is custodian to over half a million objects of national and international significance spanning cultures and millennia. While the collection has a strong focus on material made or used in Australia, it is international in scope and includes irreplaceable iconic artifacts including the 'Difference Engine No 1' calculating engine (1822-1879) designed by English polymath Charles Babbage, credited with inventing the first mechanical computer; Gothic style chair owned by Governor Lachlan Macquarie and attributed to makers John Webster and William Temple, NSW 1820-1821; the Boulton and Watt steam engine used at Whitbread's Brewery, London 1785-1887; and a half sovereign minting error gold coin, Queen Victoria, made by Sydney Mint, 1858.

Each year over 450 loans are facilitated to museums across NSW as well as nationally and internationally. While the collection is in high demand nationally and internationally, only an extremely small portion is on display. The GLAM (Galleries, Libraries, Archives and Museums) sector estimates that approximately 5% of collections are on-display at any one time. With only 1.5% of its collection on display, MAAS is falling significantly behind this benchmark.

Education and learning

Education in the arts at early childhood, primary and secondary levels have been shown to promote literacy, numeracy and creativity, and build teamwork skills and respect for cultural diversity.

MAAS plays a critical role in education and learning – particularly in the areas of Science, Technology, Engineering and Mathematics (STEM). Australia's overall participation in STEM skills at secondary school is in decline. The number of female students opting out of mathematics and science is also rising - only 13.8% of female students in NSW studied mathematics and science for their Higher School Certificate in 2011. The total number of students in year 12 increased by around 16% from 1992 to 2012 while the participation rates for most Science and Mathematics subjects, as a proportion of the total Year 12 cohort, fell (Chemistry (-5%), Physics (-7%), Multidisciplinary Science (-5%), Intermediate Mathematics (-11%) and Advanced Mathematics (-7%)) in the same period.⁶ Australian enrolments in mathematical degrees (both undergraduate and higher degrees) by men is about half of the OECD average, and by women as low as third of the OECD average. Only 1.4% of all entrants into an advanced research degree choose to enroll in a mathematical sciences research degree – again half of the OECD average.⁷

Australia has found itself in a vicious cycle whereby there are too few specialist mathematics and science teachers, which means there are teachers trying to convey material that is beyond their depth of knowledge. It has been estimated that 75% of the fastest growing occupations require STEM skills and knowledge.

MAAS has a responsibility to improve this situation. It currently provides an important learning environment for more than 50,000 NSW school students with labs, tours and workshops providing targeted programs for design, technology and science. However, limited ongoing investment in the Museum's learning spaces and exhibitions, combined with programs that have not adapted to changing curriculum, have constrained education patronage - education patronage has plateaued over the past 5 years, with relatively low market penetration rates of 7.4% of Sydney schools and 4.3% of all schools in NSW, when compared to like institutions.

2.1.3 MAAS 2020 Vision

With renewed leadership and a dynamic and internationally credentialed new Executive team, MAAS released its Strategic Plan in 2014, MAAS 2020 Vision:

To be the leading Museum of arts and sciences; inspiring communities and transforming our world.

MAAS 2020 Vision sets a clear direction for the Museum. The Museum is uniquely placed to demonstrate how technology, engineering, science and design impact Australia and the world.

⁶ Kennedy, J, Lyons, T & Quinn, F, 'The continuing decline of science and mathematics enrolments in Australian High Schools', Teaching Science, Volume 60; Number2; June 2014, page 34

⁷ Australian Mathematical Sciences Institute, Discipline profile of the Mathematical Sciences 2013, page 18

Delivering on its 2020 Vision will ensure MAAS takes its place on the global stage, delivering positive economic and social returns to NSW and a vital facility in Sydney's most exciting new precinct. By 2020, MAAS will:

- ▶ Be the leading museum of applied arts and sciences
- ▶ Deliver a significant contribution to the NSW knowledge economy
- ▶ Achieve high patronage, economic and social returns to NSW.

Table 8 outlines key components of MAAS 2020 Vision.

Table 8: MAAS 2020 Vision

Item	Description
Mission	MAAS is a catalyst for creative expression and curious minds.
Values	Integrity. Courage. Passion.
Themes	<p>MAAS carries a significant responsibility. It must balance its collection with a public responsibility to build knowledge and connect to the community. To achieve this, the Museum needs to be responsive and adaptive. The following themes underpin MAAS' activities:</p> <ul style="list-style-type: none"> ▶ Our place in time – our past, present and future ▶ Our place in our state and our region, a focus on Asia ▶ Innovation, education and technological change ▶ Economic and environmental sustainability.
Goals	<p>To deliver on its 2020 Vision, MAAS will achieve the following:</p> <ul style="list-style-type: none"> ▶ Audience growth across all categories ▶ A vibrant program of exhibitions, events and public engagements ▶ Significant economic and social returns to the state of NSW ▶ Significant stakeholder support ▶ A sustainable organisation for future generations ▶ Sustainable collections management ▶ Permanent gallery renewal ▶ A confident brand and visual identity ▶ International acclaim ▶ Regional accessibility ▶ Government priority alignment.
Audiences	<p>While awareness of the Museum's venues is high (86% of NSW residents have heard of at least one of the three venues), market penetration is low. 2020 Vision aims to reverse declining audience trends and significantly increase engagement with patronage at a local, national and international level:</p> <ul style="list-style-type: none"> ▶ Students: schools patronage to double over five years ▶ Adults: a strategic program of exhibitions and events will build contemporary and social experiences for adults at all life stages ▶ Tourism: unique experiences and iconic venues will significantly increase tourism patronage ▶ Families: will continue to be engaged ▶ Members: will increase including conversion from members to donors ▶ Online: significantly build online audiences ▶ Community: the development of the Darling Harbour and Barangaroo precincts will deliver a new community.

2.1.4 Structural reform

Since the establishment of its 2020 Vision, MAAS has undertaken significant work to deliver to NSW a service which better aligns with the objectives of the MAAS Strategic Plan, achieve sustainable independent funding streams and strengthen its operating ratios, including:

- ▶ Undertaking a significant staffing restructure, resulting in 80 redundancies and reduced staff costs as a percentage of total operating costs from 72% to 50% (aligned to industry benchmarks)
- ▶ Developing an exhibition plan that spans the next five years that will allow the Museum to secure partners to deliver
- ▶ Strengthening relationships with the NSW Department of Education, and a realignment of the Museums learning outcomes with the state's curriculum
- ▶ Re-establishing international relationships in key markets including the UK, China, Korea, France and Germany and North America.

While these improvements provide a foundation for the improved efficiency and financial sustainability of the Museum, fundamental investment is required to achieve renewal of the Museum and its associated facilities. This is required to ensure the long term sustainability of the Museum and the restoration of its reputation as a leading global museum brand.

2.2 About this Business Case

2.2.1 Purpose and approach

In June 2014, MAAS appointed EY and sub-consultants FJMT (the architects) and Rider Level Bucknall (the Quantity Surveyor) to assist with the preparation of a business case for the renewal of the Museum.

A Preliminary Business Case (PBC) was submitted to NSW Treasury in August 2014. The PBC demonstrated the need for a renewed Museum, detailed how the proposed project aligns with Government and MAAS priorities and plans, and outlined and assessed (at a high level) a range of options to renew the Museum.

A Strategic Gateway Review was carried out over three key dates: planning day (22 August); interviews (29 August); and reporting (30 August), and Strategic Gateway Review Report provided (see Appendix D).

Table 9 details the Strategic Gateway Review team's findings and recommendations in relation to the seven Gateway Review assessment criteria, and how they have been addressed them in the FBC.

Table 9: Strategic Gateway Review outcomes

Assessment criteria	Rating	Findings and recommendations	How they have been addressed in the FBC
Service delivery	GREEN	<ul style="list-style-type: none"> ▶ Case for Change is well articulated, however business case would benefit from clearer links required between the Project and the <i>MAAS 2020 Vision</i> ▶ Greater emphasis on the collections held by the Museum and the opportunities enabling their display 	<ul style="list-style-type: none"> ▶ The links between the proposed Project and the MAAS 2020 Vision have been addressed in Section 2 ▶ Greater emphasis on the value and scope of the collection has been provided Section 2

Assessment criteria	Rating	Findings and recommendations	How they have been addressed in the FBC
Affordability and value for money	RED	<ul style="list-style-type: none"> ▶ Consider staging options for the preferred project option (Option 6) ▶ Undertake a Value Management Study ▶ Clarity needed on the proposed commercial strategy underpinning the preferred option ▶ Greater assessment and testing of the opportunities for maximising revenue streams is required ▶ Clarity needed on the inputs and outputs of how the investment in the financial assessment have been brought together ▶ Further clarity needed on the funding streams identified ▶ Greater articulation of the risks associated with not undertaking the proposal. 	<ul style="list-style-type: none"> ▶ A range of staging options for the preferred project option have been considered and assessed in the FBC see Section 5.4 and Appendix F ▶ A Value Management Workshop has been conducted and Study Report prepared (see Appendix E) ▶ The Commercial Strategy has been finalised attached at Appendix A ▶ Commercial revenue streams have been tested further, with findings at Section 5.4 ▶ Greater clarity on inputs and outputs of the investment has been provided in Section 5.4 ▶ A greater articulation of the risks associated with not undertaking the project is provided as part of the Case for Change (Section 3). This was also considered in a Risk Workshop (findings at Appendix L)
Sustainability	GREEN	<ul style="list-style-type: none"> ▶ Social, economic and environmental impacts associated with the project have been identified, align with sustainability policies and are manageable. ▶ Further articulate the long term sustainability of the Museum, particularly the financial sustainability resulting from the preferred option. 	<ul style="list-style-type: none"> ▶ Greater clarity on the financial sustainability of both the Base Case and the proposed project has been provided through the financial assessment (see Section 6.3).
Governance	AMBER	<ul style="list-style-type: none"> ▶ The Project Team to consider early recruitment of project management expertise. ▶ Consideration should be given to inviting Infrastructure NSW onto the steering committee and establishing a trustee sub-committee to oversee the project. 	<ul style="list-style-type: none"> ▶ Project management expertise is expected to be engaged in the event that the renewal receives the required Government funding ▶ Discussions with Infrastructure NSW and its involvement with the renewal of the Museum are ongoing. ▶ Trustee sub-committee will be established as part of the project governance structure
Risk management	GREEN	<ul style="list-style-type: none"> ▶ The major risks of the proposed project have been identified, however a framework for dealing with and managing these risks requires further development 	<ul style="list-style-type: none"> ▶ A Risk Management Workshop was held on 3 October 2014 to assess the risks associated with each option and to develop a framework to manage them (see Section 6.6 and Appendix L).
Stakeholder management	GREEN	<ul style="list-style-type: none"> ▶ Stakeholders affected by the project have been identified and consulted ▶ There is value in further stakeholder consultation within the Department of Trade and Investment, including Arts NSW, to support and progress the Final Business Case 	<ul style="list-style-type: none"> ▶ A stakeholder management plan has been established as part of the Final Business Case (see Section 7.7). ▶ Arts NSW have been further consulting throughout the preparation of the FBC.

Assessment criteria	Rating	Findings and recommendations	How they have been addressed in the FBC
Change Management	AMBER	<ul style="list-style-type: none"> ▶ Recommended that a review to understand the full extent of the change effect before, during and after the proposed construction project, needs to be completed. ▶ A change management plan should be developed in the FBC. 	<ul style="list-style-type: none"> ▶ A change management plan has been developed and contained in Section 7.4. Change management strategies have been developed with a full understanding of the extent of the change effect before, during and after the proposed construction project.

This FBC addresses the feedback provided through the Strategic Gateway Review process. It provides a case for change by examining business need, project costs, benefits, risks and implementation requirements. The business case identifies a range of alternative options to meet the project objective, identifies a preferred project option which best meets Government priorities and provides the highest overall net benefit to the community, and details MAAS's capability to implement the proposed project.

Our approach to evaluating the alternative options is based on the methodology for capital business case preparation outlined by the NSW Treasury Guidelines for Capital Business Cases (2008). An economic assessment using a cost-benefit analysis framework has been conducted in line with the NSW Treasury Guidelines for Economic Appraisal (2007). A financial assessment and financial impact statement have been conducted in line with the NSW Treasury Guidelines for Financial Appraisal (2007).

2.2.2 Process used to develop the Business Case

Preparation of this Business Case has involved the following steps:

- ▶ Definition of the project objective and assessment of the key issues affecting the effectiveness and efficiency of the current Museum through desk-top analysis of previous documentation and discussions with key stakeholders
- ▶ Identification of a range of alternative project options to achieve the project objective informed by input from stakeholders and research
- ▶ Assessment of the alternative project options according to agreed criteria to develop a short-list of options for detailed evaluation
- ▶ Identification and assessment of a range of alternative staging options for the preferred project option (Project Option 6) through a Value Management Workshop with key stakeholders to determine the preferred staging option
- ▶ Planning and architectural analysis of the short-listed options and development of capital cost estimates
- ▶ Identification and assessment of the key financial and economic costs and benefits for each short-listed option
- ▶ Identification and assessment of the key risks for each of the short-listed options through a Risk Workshop
- ▶ Development of a project implementation plan for the preferred project option.

2.2.3 Structure of the business case

Table 10 provides an outline of Gateway Review assessment criteria and a guide to the relevant sections of the report.

Table 10: Gateway assessment criteria and business case references

Gateway assessment criteria	Refer to (report section / appendix)
Service Delivery – This project will achieve its service objectives and fulfil the needs, consistent with Government policy and the MAAS 2020 Vision	▶ Overview of the service need [3.1]
	▶ Drivers of service need [3.1]
	▶ Government intervention rationale [3.2]
	▶ Contribution to Government objectives [3.4]
	▶ Contribution to agency direction [3.5]
	▶ Priority of the service need [3.6]
	▶ Service delivery implementation [7.0 – 7.8]
Affordability and Value for Money – There are sufficient resources to deliver the project and the expenditure of these resources will provide value for money	▶ Project objective [5]
	▶ Options considered [5.1]
	▶ Economic assessment [6.2]
	▶ Financial impact statement [6.5.3]
	▶ Financial assessment [6.3]
	▶ Funding requirements [6.5.2]
	▶ Quantity Surveyor Report [App H]
Sustainability – The social, economic and environmental impacts of the project have been identified and plans are in place to deal with matters raised.	▶ Conformity with policies and strategies [3.4-3.5]
	▶ Benefits of addressing the service need [3.7]
	▶ Economic assessment [6.2]
	▶ Economic sensitivity tests [App I]
	▶ Sustainability [6.7]
	▶ Planning Report [App B]
	▶ Commercial strategy [App A]
▶ Benefits Realisation Register [App N]	
Governance – The project has addressed the matters of resource allocation, time management and process management to ensure a successful project.	▶ Project implementation [7.0 – 7.8]
	▶ Planning report [App B]
	▶ Detailed project plan [App M]
Risk Management – The project has identified major project and procurement risks and a risk management plan has been developed.	▶ Risk identification and assessment [6.6]
	▶ Risk management [7.5]
	▶ Risk register [App L]
Stakeholder Management – The project has identified key stakeholders and their views have been considered in the development of the project.	▶ Stakeholder engagement [3.8]
	▶ Value Management Workshop and Study [App E]
	▶ Stakeholder consultation strategy [7.7]
Change Management – The project has identified the changes that are necessary to achieve the project's services outcomes and a plan is outlined to ensure their realisation.	▶ Procurement [7.3]
	▶ Change management [7.4]

3. The case for change

Key messages

- ▶ There are three key issues driving the need for a renewed Museum:
 - ▶ Deteriorating financial and patronage performance
 - ▶ Compromised ability to deliver on core functions
 - ▶ Sub-optimal facilities and a physical disconnection from surrounding developments
- ▶ A renewed Museum will:
 - ▶ Achieve high patronage and a direct and positive impact to the economy of NSW
 - ▶ Create an economically sustainable operating model for the Museum
 - ▶ Ensure fit-for-purpose facilities
 - ▶ Regain global standing as the leading Museum of Applied Arts and Sciences
 - ▶ Provide experiences and services that enrich the lives of customers and communities
 - ▶ Capitalise on the once-in-a-generation renewal of the surrounding cultural precinct
 - ▶ Support of existing Government and MAAS objectives
- ▶ The redevelopment of Darling Harbour/Ultimo provides an unprecedented opportunity for NSW. As Australia's only museum of Applied Arts and Sciences, it is essential that the Museum is renewed and integrated into the precinct. Renewal will provide connectivity to the city and re-establish the Museum as an important cultural, social and educational facility.

3.1 The need for a renewed Powerhouse Museum

The key issues driving the urgent for a renewed Museum are as follows:

- ▶ The Museum's **financial performance and patronage has been deteriorating** over time, compromising its long term sustainability:
 - ▶ Without fundamental change, the Museum's ongoing viability will be drawn into question and increased government funding will be required to keep it safe and operating
 - ▶ A **lack of independent and diversified revenue streams** is limiting the Museum's ability to continually reinvest and improve its offering - no significant investment has occurred in 25 years, when typically such investment would be required every 6-7 years - perpetuating a downward cycle
- ▶ In its current form, the Museum's **ability to deliver on its core functions is compromised**, including its obligation under the Act to display, conserve, maintain, secure and operationally manage its world renowned collection, and its core requirement to provide a comprehensive and appropriate education program
- ▶ **Sub-optimal facilities and the physical disconnection** from surrounding developments have driven operational inefficiency and poor external presentation, offering an uninviting prospect to potential customers and partners.

The Museum is therefore not able to provide a competitive contemporary and innovative cultural experience and ranks poorly amongst its peers. The existing operating model is unsustainable and without fundamental change, the Museum's **performance will decline further** becoming increasingly unsustainable with further reductions in revenues from operations.

3.1.1 Financial unsustainability

Deteriorating financial performance

The Museum's financial performance is relatively poor when compared to Australian benchmarks, and it is deteriorating.

Table 11 shows that over the last five years, annual income (excluding government grants) has declined by 27% in nominal terms (from \$12.6 million to \$9.2 million), while expenses have grown by 3.2%, resulting in a 15% reduction in the Museum's net position before Government grants.

Table 11: Financial performance is deteriorating (\$'m, nominal)

Item	2009	2013	% change over period
Income from operations ⁸	12.6	9.2	-27.0%
Expenses	43.9	45.3	3.2%
Net position	-31.3	-36.1	-15.4%
Government grants	36.8	38.8	5.5%

Source: MAAS annual reports

Note that the above includes any capital appropriation, and the Sydney Observatory and Powerhouse Discovery Centre

Table 11 demonstrates that government funding is increasingly required to fund operations. Approximately 80% of current funding for continued operations comes from NSW Government grants.

Inadequate facilities and an unsatisfactory consumer experience mean that the Museum cannot rely on user charging to generate income and reduce its reliance on government funding. Coupled with declining income from other sources such as donations and sponsorships further exacerbates the Museum's reliance on government funding, now and in the future. Since 2009:

- ▶ Sponsorships have fallen by approximately 58%
- ▶ Donations and bequests have fallen by approximately 35%.⁹

When compared to its peers, the Museum performs poorly in generating income from alternative revenue streams (e.g. commercial, fund raising, etc), and is thus more reliant on government funding. Table 12 shows comparable facilities generate more income from alternative streams and are rely less on Government to fund continued operations.

Table 12: Distribution of income streams in 2013

Museum	Commercial	Fund raising	Non-commercial	Govt funding
Australian Centre for the Moving Image	20.0%	0.3%	8.6%	71.2%
History SA (History Trust of South Australia)	16.4%	1.6%	11.0%	71.0%
Museum of Applied Arts and Sciences	15.0%	0.5%	5.1%	79.4%
Melbourne Museum	22.7%	0.0%	7.1%	70.1%
Queensland Museum	25.1%	1.1%	9.8%	64.0%
South Australian Museum	26.1%	3.0%	3.7%	67.2%
Western Australian Museum	12.4%	7.5%	9.1%	70.9%

Source: Council of Australia Museum Directors, Final Survey Report 2012/13

Note: non-commercial includes sponsorship revenues

⁸ This includes sponsorships and donations, which makes up approximately 30%

⁹ MAAS Annual Report 2012/13

Limited access to sustainable and diversified funding streams

Museums operate in a highly competitive environment, competing against other leisure, sporting and entertainment industries for their share of consumer spending as well as government grants and funding. In this environment, Museums have been required to invest significant funds to re-invent and re-position themselves to attract interest and draw in patronage.

The combination of poor customer experiences and facilities significantly impacts the income mix possible for the Museum. As previously discussed, the Museum is particularly reliant on Government funding (approximately 80% of total income in 2012/13) for continued operations. The Museum has limited access to income from sources such as user charges (15% of revenue in 2012/13), sponsorships and donations (approximately 5% of revenue in 2012/13) as well as rental streams from surrounding developments i.e. commercial and residential space (less than 1% of revenue in FY13).

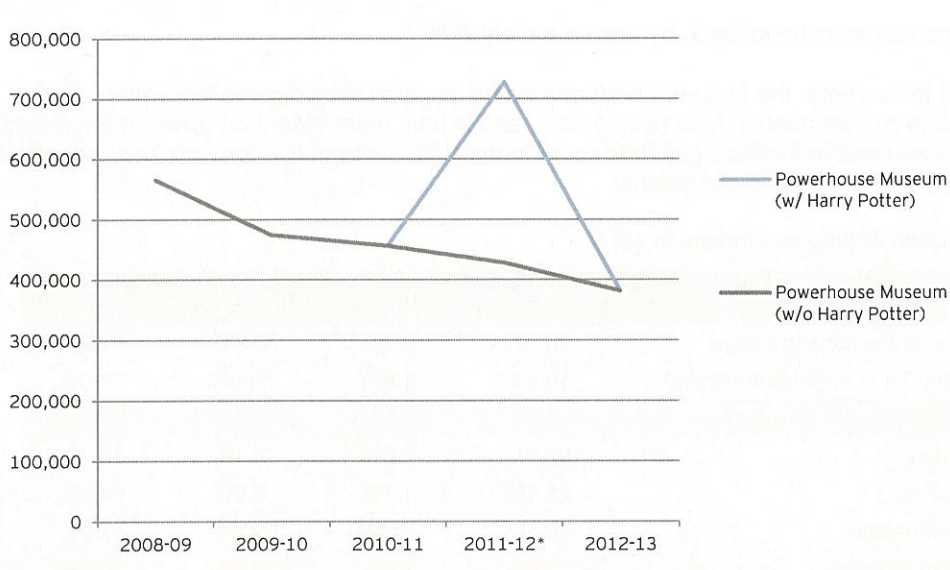
Current income levels are only sufficient to cover operating costs and maintenance of existing capital and have not offered the Museum the opportunity to renew its service offering and remain competitive.

The Museum has not had any significant capital investment since its inception 25 years ago. Many of its core (permanent) exhibitions have not been updated during this time. This compares poorly with what is considered the industry benchmark of 6 to 7 years for most 'permanent' exhibitions.¹⁰ This lack of (re) investment in its permanent exhibition is resulting in an increasingly uncompetitive Museum and an adverse cycle where the inability of the Museum to reinvest in its permanent exhibitions further reduces patronage and revenue opportunities.

Deteriorating patronage

Deteriorating financial performance has been driven by deteriorating patronage. Figure 7 shows that in the last five years, the Museum has experienced a 33% decline in patronage (from 565,409 to 381,415 customers) to both the permanent and temporary exhibitions.

Figure 7: Museum patronage - FY09 to FY13



Source: MAAS

Note: The one-off spike in FY12 is attributable to the record-breaking Harry Potter exhibition¹¹

¹⁰ The planned life of the recent exhibition at the Melbourne Museum is 7 years. ACMI planned for 10 years in its most recent upgrade, with a significant refresh / turnover after 5 years.

¹¹ The market for such 'blockbusters' is oligopolistic in nature, with few available, and a plethora of international, 'state of the art' cultural facilities all competing to attract them, and the potential significant improvements in patronage and financial performance that they can provide.

This decline in patronage is inconsistent with industry trends. Table 13 below shows patronage experienced by comparable Australian and New Zealand museums increased by an average 40% over the same period, with increases ranging from 27% (Melbourne Museum) to 72% (Queensland Museum).

It is important to note that each of the comparators outlined in Table 13 has recently had significant Government capital investment in their exhibits and spaces.

Table 13: Total on-site patrons from FY09 to FY13

Customer access	FY09	FY13	% change
Australian Museum	321,954	481,319	49%
Melbourne Museum	752,268	955,838	27%
National Museum of Australia	461,958	612,448	32%
Powerhouse Museum	565,409	381,415	-33%
Queensland Museum	629,447	1,085,363	72%
Australian War Memorial	807,000	1,029,230	28%
Total	3,538,036	4,545,613	28%
Total, excluding the Powerhouse	2,972,627	4,164,198	40%

Source: MAAS annual report 2013

Customer satisfaction & key markets

Customers are relatively dissatisfied with the offering of exhibitions, programs and events at the Museum, with only 65% of attendees in 2013/14 expressing satisfaction. This compares unfavourably against comparable facilities such as Museum Victoria (93%), Australian Museum (90%), The Louvre (97%), Australian Centre for the Moving Image (98%), West Australian Museum (97%) and the recently redeveloped Auckland Art Gallery (96%).¹²

Beyond the museums' own customer satisfaction measures, customers are expressing their dissatisfaction with the Museum publically and without prompt. Table 14 outlines quotations taken from the tourist recommendation site *TripAdvisor.com*.

Table 14: Customer quotes from Trip Advisor.

"The whole museum felt half finished with vast areas with no exhibits"

"The lower levels smelt really badly and that put me off"

"An extremely large space that is not utilised well"

"Not enjoyable...the museum seemed below par"

"We come back to the museum every few years, and each time it looks more run down"

"Don't think we'll be going back unless there are some major upgrades made"

"What a pity, such a building, such a location...time to revamp the place"

"Ready to leave after an hour...majority of the museum was very outdated"

"I felt like everything I touched was broken in one way or another"

¹² From respective annual reports

Declining patronage and customer dissatisfaction has particularly affected the student and tourism markets:

Students – Table 15 shows the Museum only attracted around 50,000 students or 4.3% of students in NSW in 2012/13. Over the same period, comparable museums such as Melbourne Museum attracted over 30% of the student population in their State.

Table 15: Student patronage in 2012/13

Museum	Local students in 2012/13	
	Total no.	% of State
Australian Centre for the Moving Image	49,200	5.6%
History SA (History Trust of South Australia)	35,605	13.5%
Museums and Art Galleries of the Northern Territory	7,693	19.0%
Melbourne Museum	276,111	31.2%
Powerhouse Museum	50,000	4.3%
Queensland Museum	57,250	7.5%
South Australian Museum	33,963	12.9%
Tasmanian Museum and Art Gallery	8,911	11.0%
Western Australian Museum	54,341	14.0%

Source: Council of Australia Museum Directors, Final Survey Report 2012/13

Tourists – Table 16 shows that in 2012/13, the Museum only attracted around 90,000 international tourists, or 2.6% of total tourists to NSW. Comparable facilities such as Melbourne Museum (Victoria) and the South Australian Museum each attracted over 6% and 25% of state international tourism, respectively.

Table 16: Tourist patronage in 2012/13

Museum	International tourism in 2012/13	
	Total no.	% of State
Australian Centre for the Moving Image	115,648	6.4%
History SA (History Trust of South Australia)	120,825	34.1%
Museum of Applied Arts and Sciences	89,928	2.6%
Melbourne Museum	134,895	7.4%
Museums and Art Galleries of the Northern Territory	27,184	10.5%
Queensland Museum	94,159	4.6%
Sydney Opera House*	210,000	6.1%
Western Australian Museum	210,995	28.4%

Source: Council of Australia Museum Directors, Final Survey Report 2012/13

*Source: Deloitte Access Economics, How do you value an icon – note that this only includes customers to performances at the Opera House

3.1.2 Compromised core functions

The Museum's existing infrastructure has either reached the end of its useful life or is no longer fit for purpose, compromising its ability to:

- ▶ Manage its world-renowned collection and meet its obligations under the MAAS Act to display, conserve, maintain, secure and operationally manage its collections in terms of environmental management, and security.
- ▶ Deliver a comprehensive and appropriate education program

- ▶ Effectively collaborate with domestic and international institutions, including securing international loans and ‘block buster’ or exclusive exhibitions.

Collection management

The MAAS Act states that MAAS ‘holds in trust’, for the people of NSW, an invaluable collection representing over a century of industry, innovation and social progress. The Museum’s *Collection Management Policy* outlines the core principles to display, conserve, maintain, secure and operationally manage its collections. These core principles include:

- ▶ The preservation and management of the collection as primary heritage assets for the people of NSW
- ▶ The provision of physical and intellectual access to the collection while maintaining highest standards of collection management
- ▶ The meeting of national and international standards to develop best practice in museum collection management
- ▶ Compliance with all relevant legislation, conventions and statutory obligations
- ▶ The provision of high level of service to internal and external customers.

Table 17 shows that in its current form, the Museum is compromised in relation to these core responsibilities.

Table 17: Issues faced in complying with the MAAS Act

Requirement	Issues
Display	<ul style="list-style-type: none"> ▶ A low proportion of the collection is on display. The GLAM sector estimates that approximately 5% of collections are on-display at any one time. MAAS only displays approximately 1.5% of its collection.
Conserve and maintain	<ul style="list-style-type: none"> ▶ Within the collection store space there are obvious temperature changes, with continuing issues surrounding air conditioning and high humidity levels. In 2010 and 2012 mould was discovered on around 200 organic items within the collection.
Collection movement	<ul style="list-style-type: none"> ▶ Existing approaches to moving collection objects between the collection store and the Museum present a security and public safety risk
Display environment	<ul style="list-style-type: none"> ▶ Display space within the Museum has been restricted and reduced as some circulation spaces are now unavailable for display due to breaches in fire egress regulations ▶ Ongoing water leaks have been logged in both heritage and Wran buildings ▶ Gallery spaces are highly compromised by structural pillars and beams. Oversized object presentation is not possible in many spaces, and highly compromised in others.
Display security	<ul style="list-style-type: none"> ▶ Public access to the Museum’s operational thoroughfares from public streets is relatively high, and will grow with work related to the Goods Line, presenting a security and public safety risk.

These issues are resulting in increased costs to the Museum such as, costs of cleaning, advanced air conditioning requirements for storage purposes, and increased workers compensation premium payouts (see Appendix C). If the Museum fails to renew its collection as well as its facilities, it is possible that these costs will continue to grow over time.

Delivery of a comprehensive and appropriate education program

The Museum is unable to fulfill its requirement to provide a comprehensive and appropriate education program in support of state and national curriculum in STEM and the arts. Issues include:

- ▶ A lack of facilities such as teaching environments and modern technologies

- ▶ Exhibitions that are linked to the curriculum are outdated
- ▶ Functional facilities such as arrival and cloakings are convoluted and do not meet accessibility needs for all teachers and students.

The result of this is reflected in the relatively low student attendance rate at the Museum, as discussed above. Without fundamental change, the ability of the Museum to carry out its core functions will continue to be compromised.

Collaboration with domestic and international institutions

The Museum's sub-standard facilities are impacting on MAAS' ability to effectively collaborate with domestic and international institutions, including securing international loans and 'blockbuster' or exclusive exhibitions. Such collaboration opportunities have the potential to deliver increased patronage, innovation and knowledge transfer – ultimately improving MAAS' long term sustainability.

3.1.3 Substandard facilities

The original purpose of the Museum, its subsequent reconfiguration and age of its existing facilities has resulted in a museum which lacks presence, is uninviting and does not deliver a contemporary cultural experience:

- ▶ Current public access to the Museum is on a primary thoroughfare (Harris St) with no retail presence or foot traffic, and isolates the Museum from the surrounding cultural precinct and city
- ▶ Existing infrastructure/facilities are not fit-for-purpose, and instead comprise a mix of heritage sites and adjoining structures constructed at various dates, resulting in a series of operating inefficiencies. The Museum is afflicted by noise sharing issues (reducing the ability to host multiple events at once) and an inability to fully utilise the space that is available (i.e. some exhibits cannot fit within the unique, 'pokey' structures)
- ▶ Current building orientation does not engage with high profile precinct developments parallel to the Museum's eastern facade and linking to the immediate Haymarket and tertiary neighbours:
 - ▶ Externally, the building façade is aged, with wall sections acidified from vehicular pollution
 - ▶ Internally, regular customer complaints have raised concerns about dilapidated seating, worn carpet as well as 'unacceptable' odours from the sewerage system and repeated building leaks
 - ▶ Regular and persistent customer feedback identifies the lack of any coherent path of travel through the building
 - ▶ Internal compliance issues. The Wran Building public access ramps, Essential Services¹³ and Disability access does not meet current building code¹⁴
- ▶ Existing infrastructure is reaching the end of its useful life and will need urgent replacement in the short to medium term. For example, the main roof is corroding and will reach perforation in approximately 10 years, forcing a major refurbishment and or replacement
- ▶ Inefficient and non-secure back-of-house facilities are resulting in compromised international loans and risk to collection objects. Commercial hirers have stated that they will no longer book with the Museum as a result of the poor condition of the facility.

¹³ Fire Engineering Professionals, Fire Engineering Report for the Powerhouse Museum Revitalisation Works, November 2012

¹⁴ Accessibility Solutions, Disability Access Audit, Powerhouse Museum, 2009

3.2 Rationale for Government intervention

Governments recognise that participation in the arts, culture and sciences (i.e. the creative economy) provides a number of positive externalities to the community:

- ▶ **Economic outcomes** – the creative economy fosters innovation and creativity, and ‘good practice’ cultural facilities can attract significant tourism volumes (as indicated in Table 16). Both the creative economy and tourism generate significant economic activity for NSW:
 - ▶ The ‘creative economy’ in NSW contributed over \$31 billion to the State economy¹⁵
 - ▶ Tourism in NSW contributes approximately \$13.3 billion to the State economy¹⁶
- ▶ **Social outcomes** – arts and culture contribute to the community's quality of life, liveability, sense of social inclusion, cultural expression and diversity
- ▶ **Education outcomes** – increased participation in the creative economy fosters the development of skills which are critical to national productivity. Education in the arts at early childhood, primary and secondary levels have been shown to promote literacy, numeracy and creativity, and build teamwork skills and respect for cultural diversity.

While philanthropic sources to support the needs of museums are possible, no cultural asset in Australia is able to fulfil their strategic objectives without significant Government support.

Governments support arts, culture and sciences to maximise potential economic, social and educational returns and efficiently allocate resources. Museums, as a hub of creativity and learning, typically receive significant government support (see Table 12).

3.3 A renewed Powerhouse Museum

A renewed Museum will deliver an internationally significant cultural attraction that will:

- ▶ Achieve high patronage and a direct and positive impact to the economy of NSW
- ▶ Ensure appropriate storage and display for one of the world's most significant collections
- ▶ Attract high profile exhibitions and events
- ▶ Re-establish MAAS' role as a key partner to deliver educational outcomes of Australian students
- ▶ Regain global standing as the leading Museum of Applied Arts and Sciences
- ▶ Provide experiences and services that enrich the lives of our customers and their communities and increase the accessibility of vibrant cultural experiences to Western Sydney and regional NSW
- ▶ Create an economically sustainable operating model for the Museum
- ▶ Capitalise on the once-in-a-generation renewal of the surrounding cultural precinct
- ▶ Ensure fit-for-purpose facilities

3.3.1 Project scope and timing

A Commercial Real Estate Strategy has been developed to address the Museums operational and facility issues, and to identify a viable masterplan for the renewal of the Museum site.

¹⁵ Sweet Reason Pty Ltd, Planning Sydney's Cultural Facilities, Arts NSW, March 29, 2011

¹⁶ Tourism Research Australia, State Tourism Satellite Accounts, 2012-13

The key requirements for a renewed Museum, as identified in the Commercial Strategy (see Appendix A), are as follows:

- ▶ Improved connectivity of the Museum to the surrounding cultural precinct, Goods Line and the city
- ▶ Internal remodeling of the Museum to provide an exemplary customer experience, learning environments, additional gallery space and commercial outlets
- ▶ Remodeling collections space to provide storage conditions that meet OH&S standards and the strict requirements under the MAAS Act
- ▶ Unlocking commercial potential and access to diverse funding streams.

Assuming that the required level of funding is provided in May 2015, the project team will commence detailed planning and design in June 2015. Table 18 shows the timing of key project stages:

Table 18: Timing of the Project

Stage	Timeline
Business Case complete and Gateway approval	November 2014
Funding decision	May 2014
Commence design and planning	July 2015
Apply for Development Approval ("DA")	July 2015
Move staff and the collection	Financial Year 2015/16
Construction commences	January 2017
Construction complete	January 2022
Move staff and the collection into new facility	First half of 2022
Renewed Museum is fully operational	July 2022

3.4 Contribution to Government objectives and priorities

The NSW Government and the City of Sydney recognise the importance of this cultural aspect of Sydney, and its contribution to broader economic, social and education objectives and provide support to cultural facilities such as the Museum for a number of reasons:

- ▶ To continue to grow and position Sydney as a leading cultural city that is competitive on the international cultural landscape
- ▶ To attract cultural-related tourism and provide increasing economic and social benefits
- ▶ To foster Sydney's creative economy, innovation and positive learning outcomes.

Renewal of the Museum will assist the delivery of these objectives. Specifically, it aligns with the following State and Federal Government targets:

- ▶ **NSW Government in its State Plan, NSW 2021** - To increase tourism and cultural participation, including participation by Western Sydney residents and rural and regional NSW
- ▶ **NSW Government in its Arts and Cultural Policy** – Establish and maintain world class arts and cultural facilities to support creative practice and facilitate engagement
- ▶ **Commonwealth Government** - To enhance the learning and development of STEM skills, important to the development of national productivity.

Table 19 below provides a detailed assessment of how the proposed Project aligns with existing Government policies and priorities.

Table 19: Alignment with Government objectives

Policy	Objectives / Outcomes	Evidence of alignment
State Government policies and plans		
NSW 2021: A Plan to make NSW Number One	<p>Released in September 2011, NSW 2021 is the NSW Government's plan to guide policy and budget decision making over a ten year period.</p> <ul style="list-style-type: none"> ▶ Increase patronage and participation in arts and cultural activity by 10% by 2016 ▶ Improve the performance of the NSW economy ▶ Increase tourism in NSW to 160.6 million visitor nights and increase expenditure to \$19.2 billion, by 2015-16 ▶ Increase participation in cultural activity for Western Sydney and regional NSW residents 	<p>A renewed Museum will:</p> <ul style="list-style-type: none"> ▶ Establish a new location for tourists to attend in a renewed Darling Harbour ▶ Generate increased business activity with the development of added retail and commercial space ▶ Deliver a 'state of the art' facility to the Inner West of Sydney and to the west of George St in the CBD. Comparable cultural facilities, such as the Art Gallery are on the eastern side of George St.
Creative Industries: Industry Action Plan	<p>The NSW Government appointed the Creative Industries Taskforce to lead the development of the vision, long-term strategy and actions to drive the growth of the creative industries over the next 10 years.</p>	<p>Renewal of the Museum aligns with the Industry Action Plan, contributing to the following priority action areas:</p> <ul style="list-style-type: none"> ▶ Recognition and promotion of the industries importance ▶ Raising our global profile ▶ Improving market access ▶ Maximising benefits of high speed broadband, emerging technology and equipment ▶ Improving access to suitable accommodation and venues ▶ Encouraging and developing creative careers and encouraging creativity.
NSW Arts and Cultural Policy	<p>The NSW Arts and Cultural Policy will set a vision and 10-year strategy for Government engagement with the arts and cultural sector.</p> <p>As a key step in the process to develop the Policy, a discussion paper was released in October 2013.</p>	<p>The following proposed goals for the policy are relevant to the Project:</p> <ul style="list-style-type: none"> ▶ NSW establishes and maintains world class arts and cultural facilities to support creative practice and facilitate engagement ▶ NSW State Cultural Institutions and major organisations are pre-eminent Australian cultural destinations, renowned for their programming, collections and educational role.
Arts NSW: Business Plan 2013-2015	<p>The Strategic Plan identified a series of priorities:</p> <ul style="list-style-type: none"> ▶ Priority 1: Leading and contributing to dialogue about the role of arts, culture and creativity to our identity, community and economy ▶ Priority 2: Working collaboratively with artists and arts workers, the arts and cultural sector ▶ Priority 3: An innovative arts and cultural sector, and growing creative industries ▶ Priority 4: Supporting more opportunities for more people to experience and shape the arts, particularly in regional NSW ▶ Priority 5: Embracing the diversity of arts and culture in NSW and fostering more opportunities for Aboriginal artists and arts workers ▶ Priority 6: Being client focused 	<p>The renewal of the Museum will facilitate:</p> <ul style="list-style-type: none"> ▶ Increasing opportunities for creative learning and creative expression ▶ Facilitate the development of productive collaborations between the Museum and the surrounding cultural, innovation and education industries ▶ An update of the Museum's customer offering.

Policy	Objectives / Outcomes	Evidence of alignment
NSW State Infrastructure Strategy	<p>The State Infrastructure Strategy, released in December 2012, sets out infrastructure projects and initiatives that the Government will prioritise over the coming 20 years.</p>	<p>The Strategy outlines the following priorities that are relevant to the project:</p> <ul style="list-style-type: none"> ▶ Investigate options to expand the Museum of Applied Arts and Sciences within ten years and deliver improvements in 20 years. ▶ Revitalise and expand the State's existing cluster of world-class cultural institutions and attractions through the development of an 'Arts and Cultural Ribbon', which will link the cultural venues around Sydney Harbour and the CBD.
Visitor Economy Industry Action Plan	<p>In December 2012 the NSW Government released its response to the final report of the Visitor Economy Taskforce, which was developed by government to provide a strategy for growing the tourism industry in NSW.</p> <p>In this response the government supported the audit of arts, cultural and entertainment venues and assets in Sydney's arts and cultural precincts. The Review of Sydney's Cultural Facilities, commissioned in 2011 by a number of organisations including Arts NSW, is highlighted in the Action Plan.</p> <p>Of particular relevance, the review notes the importance of upgrading a number of key cultural institutions such as the Museum to ensure a more efficient use of existing infrastructure.</p>	<p>The renewal of the Museum will:</p> <ul style="list-style-type: none"> ▶ Upgrade existing facilities and attract patronage and exhibitions. ▶ Enable more efficient operations.
Towards 2020: NSW Tourism Masterplan	<p>A series of goals were identified in this Master Plan:</p> <ul style="list-style-type: none"> ▶ Develop, promote and support arts and cultural tourism programs and events. ▶ Sydney Harbour Foreshore Authority, Tourism Sydney and Sydney City Council (and other agencies as required) to collaborate and work towards initiatives designed to establish a business environment to promote the development of Sydney as a "24-hour" city for shopping, dining and entertainment. 	<p>The renewal of the Museum will:</p> <ul style="list-style-type: none"> ▶ Attract increasing temporary exhibitions and tourists ▶ Establish new retail areas along the Goods Line and encourage increased shopping, dining and entertainment activity.
NSW Government Statement on Innovation	<p>This statement identifies five innovation policy goals:</p> <ul style="list-style-type: none"> ▶ Improve human capital ▶ Upgrade knowledge and information infrastructure ▶ Reduce the cost to business of utilising science and technology ▶ Encourage capital allocation to invest in innovation ▶ Reduce regulatory barriers to innovative NSW companies 	<p>The renewal of the Museum will facilitate:</p> <ul style="list-style-type: none"> ▶ Increasing opportunities for creative learning and creative expression ▶ Facilitate the development of productive collaborations between the Museum and the surrounding cultural, innovation and education industries ▶ An upgrade of knowledge and information infrastructure and the improvement of human capital in the region.

Policy	Objectives / Outcomes	Evidence of alignment
Federal Government policies		
STEM in the National Approach: A Strategic Approach	<ul style="list-style-type: none"> ▶ Education in STEM must provide Australia with both expert practitioners and a knowledgeable and receptive community ▶ Research in STEM must ensure a steady flow of new ideas and knowledge ▶ Promote more “citizen scientists” to engage more of the community with STEM on an avocational basis ▶ Museums, libraries, and the learned academies should be supported to offer systematic outreach activities 	<p>Renewal of the Museum will enable:</p> <ul style="list-style-type: none"> ▶ Greater participation in outreach activities. Therefore, engaging a larger percentage of society in STEM fields ▶ Increasing alignment with the learning requirements of schools in NSW (STEM is now a large part of the curriculum) ▶ Modernising existing learning facilities and fostering the learning of STEM skills.
City of Sydney policies and plans		
City of Cities: A Plan for Sydney's Future	<p>The City of Cities plan identified a series of goals for Sydney including:</p> <ul style="list-style-type: none"> ▶ Improve Sydney's major sporting and cultural event facilities 	<p>A renewed and expanded Museum would improve another cultural facility in Sydney and would increase Sydney's cultural footprint</p>
Creative City: Draft Cultural Policy and Action Plan: 2014-2024	<p>This policy recognises the value the City attaches to culture and creativity in Sydney and has six key priority areas:</p> <ul style="list-style-type: none"> ▶ Precinct distinctiveness and creativity in the public domain ▶ New avenues for creative participation ▶ Sector sustainability: surviving and thriving ▶ Improving access, creating markets ▶ Sharing knowledge ▶ Global engagement 	<p>Renewal of the Museum can contribute to each of the six priority areas:</p> <ul style="list-style-type: none"> ▶ By renewing the external façade of the facility, the Museum can add to the distinctiveness of the cultural precinct ▶ A renewed Museum, which is unique in its focus on the combined arts and sciences, can inspire new creative thinking and new avenues for participation ▶ Provide MAAS with diversified and sustainable funding streams ▶ Improve accessibility to the Museum ▶ Enable the Museum to invest greater funds into existing student and education offerings ▶ Attract new partners globally and hence attract new, and inviting temporary exhibitions
City of Sydney: Sustainable Sydney 2030	<p>A series of objectives were identified in this strategy to push Sydney into a sustainable future:</p> <ul style="list-style-type: none"> ▶ To develop a ‘cultural ribbon’ - This project is for a ‘cultural trail’ linking iconic and culturally significant landmarks along the foreshore. The City will work with arts organisations to develop the trail. ▶ Supporting our artistic and creative community 	<p>Renewal of the Museum will add to the developing cultural precinct in Sydney:</p> <ul style="list-style-type: none"> ▶ The Museum is on the ‘cultural trail’ linking iconic and culturally significant landmarks along the foreshore ▶ Encourage and foster creative participation, expression and learning.

3.5 Contribution to agency direction

The proposed Project seeks to renew the Museum’s site to ensure its long term economic sustainability and restore its reputation as a leading global museum brand. The Project will help MAAS deliver on its Strategic Plan: *2020 Vision*, which sets a clear direction for the Museum:

*“...our museum requires a sustained and strategic approach to long-term investment. **Renewal of permanent galleries, collections, and buildings;** and a focus on building audiences is required to regain the Museum’s reputation and global standing.”*

Table 20 outlines the high level success factors contained in the Strategic Plan and how the proposed Project contributes to each success factor,

Table 20: Alignment with MAAS strategic objectives

Success factor	Performance indicator	How a renewed museum will contribute to this success factor
Audience growth across all categories:	<ul style="list-style-type: none"> ▶ Education/Local/State – 100% growth in each category ▶ Tourism – Tenfold growth achieved ▶ Online & digital engagement – 300% growth 	The Museum will significantly increase patronage to the Museum. Economic modelling (see Section 6.2) has found that with the renewal of the Museum, it is possible that by FY34, approximately 1.7 million people will attend the Museum. This is a significant increase on the results in FY13 where only 380,000 people attended.
A vibrant program of exhibitions, events and public engagement:	<ul style="list-style-type: none"> ▶ Satisfaction rating increased to 95% 	The renewal of the Museum will facilitate an improvement in the customer offering. It is expected that a renewed Museum will, improve existing issues with customer safety, attract increasingly exclusive 'blockbusters' and temporary exhibitions, as well as enable the frequent renewal of the permanent exhibition.
Significant economic and social return to NSW	<ul style="list-style-type: none"> ▶ Economic contribution to tourism documented 	It is expected that a renewed Museum will attract additional tourism to NSW. This is particularly the case where the Museum is able to attract 'blockbuster' temporary exhibitions. A renewed Museum also offers the opportunity to foster creative learning and innovation, as well as the development of STEM skills, which are critical to national productivity.
Significant stakeholder support:	<ul style="list-style-type: none"> ▶ \$5m target for permanent gallery renewal set ▶ Capital target via Master Plan established 	Stakeholders have indicated their full support for a renewal of the Museum. A renewed Museum will facilitate the development of long term, sustainable and diversified cash flow streams to fund permanent exhibition and facility renewal.
A sustainable organization for future generations:	<ul style="list-style-type: none"> ▶ Commercial Plan and Master Plan completed ▶ Total Asset Management plan in place 	A renewed Museum will deliver a series of operational efficiencies and establish new and diverse funding streams (commercial and retail rental revenue), which will facilitate the development of a sustainable operating model into the future.
Sustainable collections management	<ul style="list-style-type: none"> ▶ Strategic collections policy in place 	The proposed renewal will enable collections to be stored in the Harwood Building under superior storage conditions. Additionally, the renewal will facilitate compliance with the MAAS Act, and improve the storage, movement, display and security of all collection items.
Permanent gallery renewal	<ul style="list-style-type: none"> ▶ 10 year rolling stock plan for permanent gallery renewal in place ▶ 5 galleries completed in 5 years 	The proposed renewal of the Museum will facilitate a diversified and sustainable funding stream which can enable the renewal of the permanent gallery on a more frequent basis.
A confident brand and visual identity	<ul style="list-style-type: none"> ▶ Brand strategy in place 	A renewed facility will enable an increasingly confident promotion of the Museum and MAAS brand internationally.
International acclaim	<ul style="list-style-type: none"> ▶ Formal partnerships with significant international institutions in place ▶ International media profile developed ▶ Active program in international conferences and journal in place 	The proposed renewal will enable MAAS and the Museum to transform the existing facilities. Modern facilities: <ul style="list-style-type: none"> ▶ Will improve the international reputation of the Museum and attract greater interest from potential collaborators ▶ Will place the Museum on 'level pegging' with other international facilities as they compete for significant collaboration and partnership opportunities ▶ Will provide the Museum with the capacity to efficiently accommodate temporary exhibitions that were not possible before.

Success factor	Performance Indicator	How a renewed museum will contribute to this success factor
Government priorities alignment	<ul style="list-style-type: none"> ▶ 100% increase in education audiences ▶ Vibrant tertiary sector membership ▶ Local and tourism patronage driven by events and exhibitions program 	<ul style="list-style-type: none"> ▶ The proposed renewal will assist the Government in achieving several objectives by: ▶ Providing the Museum with the ability to renew its permanent exhibit, attract temporary exhibits and increase the accessibility and attractiveness of the facility as a whole, resulting in increased patronage. ▶ Providing the Museum with the ability to capitalise on the wider precinct developments. Sustainable and diverse funding streams will enable the investment in interactive and modern learning infrastructure, attracting additional students to the Museum.

3.6 Priority for a renewed Powerhouse Museum

The proposed Project seeks strategic and capital investment to leverage unprecedented precinct change in order to renew the Museum's site to ensure its long term economic sustainability and restore its reputation as a leading global museum brand.

The Museum's current sub-standard facilities and configuration not only impact on its ability to add value to this major precinct development, they stand as a detractor to the significant State infrastructure investment and compromise connection to adjoining communities.

The urgency of the Project is driven by:

- ▶ An unprecedented, once in a lifetime, opportunity to capitalise on the biggest change to the Museum's immediate precinct in the last 25 years - the Darling Harbour development (as discussed in Sections 3.6.2 to 3.6.3)
- ▶ The continuing deterioration of the financial performance of the Museum. Without fundamental change, this performance will continue to deteriorate and place the Museum in a position where it cannot even fund continuing capital maintenance requirements and maintain the 'status quo' (as discussed in Section 3.1.1).

3.6.2 Sydney's revitalised cultural precinct – an unprecedented opportunity

Sydney, as a global city, recognises the value of cultural facilities and the development of a cultural precinct. Its aspiration to be a cultural and creative city was affirmed as one of the 10 strategic directions of Sustainable Sydney 2030.¹⁷

Arts NSW identified that the development of a cultural precinct in Sydney was vital for a number of reasons:

- ▶ **Cultural precincts are catalysts for social and economic benefits to communities** – analysis has found that for every 10 jobs created within the cultural sector, 8.5 jobs are created outside the industry; while millions of dollars are added to both the local economy and household income¹⁸
- ▶ **Incubator of innovation, dynamism and human capital** - Arts NSW identified that the 'creative economy' in NSW contributed over \$31 billion to the State economy in 2013
- ▶ **Fostering an urban vivacity and dynamism** - when interspersed with mixed commercial, retail and residential space, cultural facilities can create a mixed, vibrant and active community, accessible and energized by day and night with a distinct identity.

In recognition of this, the NSW Government and City of Sydney have established a series of strategies to support Sydney's cultural activities and has committed significant resources to the

¹⁷ City of Sydney Cultural Policy, 2014

¹⁸ Arts NSW

revitalisation of Sydney's cultural scene. Currently, there is significant development underway in Sydney's cultural precinct within proximity to the Museum: **Darling Harbour Live, The Goods Line, the University of Technology Sydney City Campus Masterplan, and the Creative Digital Innovation Precinct** in Ultimo.

These major precinct developments present the Museum with a unique opportunity to integrate itself with Darling Harbour and the city, making it more accessible and attractive to the significant tourist and patronage traffic that is expected to pass through the newly developed precinct.

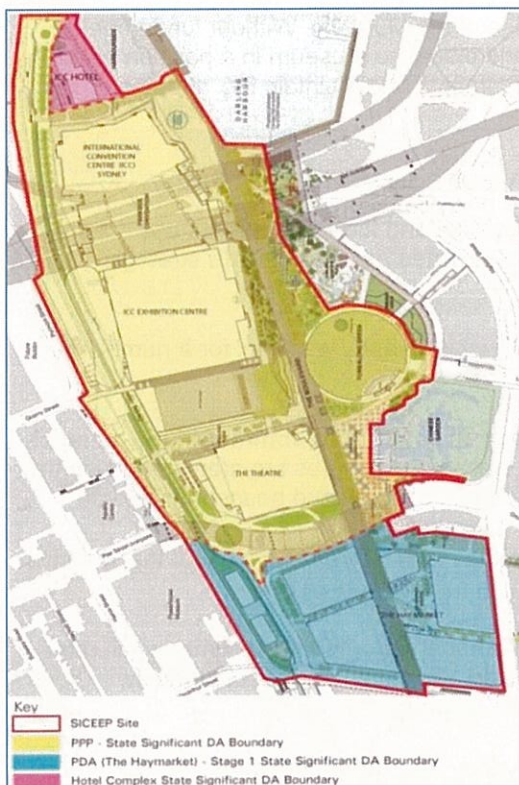
However, the precinct redevelopment also presents a risk to both the Museum and the State. In its current form and orientation, the Museum is not positioned to capitalise and substantially contribute to the development of a vibrant and renewed cultural precinct. Without fundamental renewal, the Museum is physically and economically disconnected from the foot traffic of Darling Harbour and the city.

Darling Harbour Live

Darling Harbour Live will deliver a new urban neighbourhood, right at the Museum's doorstep - with new streets, buildings, gathering places, shops, restaurants and bars. Over 1,400 apartments will be built as well as premium accommodation for 1,000 students. It will add 20,000 sqm of commercial space and 7,000 sqm of new retail space. The project as a whole will inject \$200 million annually into the NSW economy, create new employment opportunities for some 4,000 people when the facilities open and increase the current 25 million visits per annum to Darling Harbour.

Darling Quarter also contains the new "IQ Hub" to align with the existing start-up, and high technology market and the Haymarket Silicon Strip. As a museum with a remit of technology and innovation the proposed renewal has been designed with a view to aligning with, enhancing and providing creative spaces for start-ups, IT ventures and for creative industries to develop

Figure 8: Darling Harbour Live Master Plan



Source: Darling Harbour Live 2014

Figure 9: Artists Impression of the completed Darling Harbour Live Project



Source: Darling Harbour Live 2014

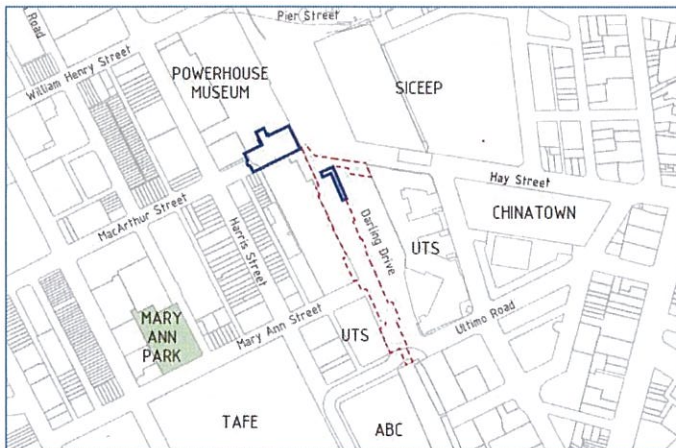
The Goods Line Redevelopment

The Goods Line Redevelopment will open up a pedestrian and cycle network connecting Central Station to Darling Harbour, and is anticipated to be utilised by more than 80,000 tertiary students, locals and visitors.

The public open space will feature a series of elevated spaces or platforms which can be used for entertainment, recreation, study and other activities. The development will be completed across two stages: The Goods Line North and the Goods Line South. The Goods Line North will adjoin the eastern boundary of the Harwood Building and will continue to its north, leading in to MacArthur Street and through to Harris Street, Ultimo.

Figure 10 provides the Goods Line North interface plan with the Museum:

Figure 10: The Goods Line North



Source: SHFA 2014

University of Technology, Sydney ('UTS') Masterplan

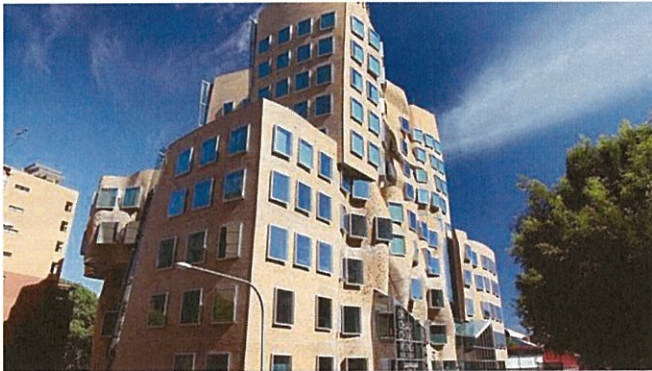
The UTS City Campus Master Plan outlines a vision for the rollout of major new buildings, facilities and significant upgrades with an estimated total cost of \$1 billion. Work on the Master Plan began in 2008 and will be completed by the end of 2019.

It is estimated that the \$1 billion redevelopment of the UTS City Campus will generate an estimated \$3.2 billion for the NSW economy. Once complete, the Master Plan will generate demand for 670

permanent jobs, including direct jobs located on the UTS Campus and indirect jobs throughout all industries – delivering \$44 million in income to workers annually.

An example of the direct impact that the UTS Master Plan has on MAAS is the Frank Gehry designed 'Dr Chau Chak Wing Building' that is currently under development to the immediate south of the MAAS owned Harwood Building. It is envisioned that the building will become a key destination in the cultural precinct.

Figure 11: 'Dr Chau Chak Wing Building'



Source: Google Search

Creative Digital Innovation Precinct, Ultimo

The southern CBD area has been flagged as being suitable for the 'Creative Digital Innovation ('CDI') Partnership'. The partnership is a new federal government initiative to drive growth and jobs in creative digital industries and will be led by UTS and the Commonwealth Bank of Australia.

Creative Digital Industries arise from the synergy between the creative and information and communications technology industries. This development is expected to add \$1 billion in value to this industry.

Chinatown

Key findings from Tourism NSW in 2011 identified the top three Sydney tourism precincts in terms of levels of interest are Darling Harbour (61%), The Rocks (58%) and Chinatown / Haymarket (52%).

Above all cultural institutions, MAAS is uniquely placed, to capitalise on domestic and international visitors. With its proximity to Chinatown, the Museum is uniquely placed to harness the potential of the China source market and dynamically contribute to Destination NSW's China Tourism Strategy 2012-2020.

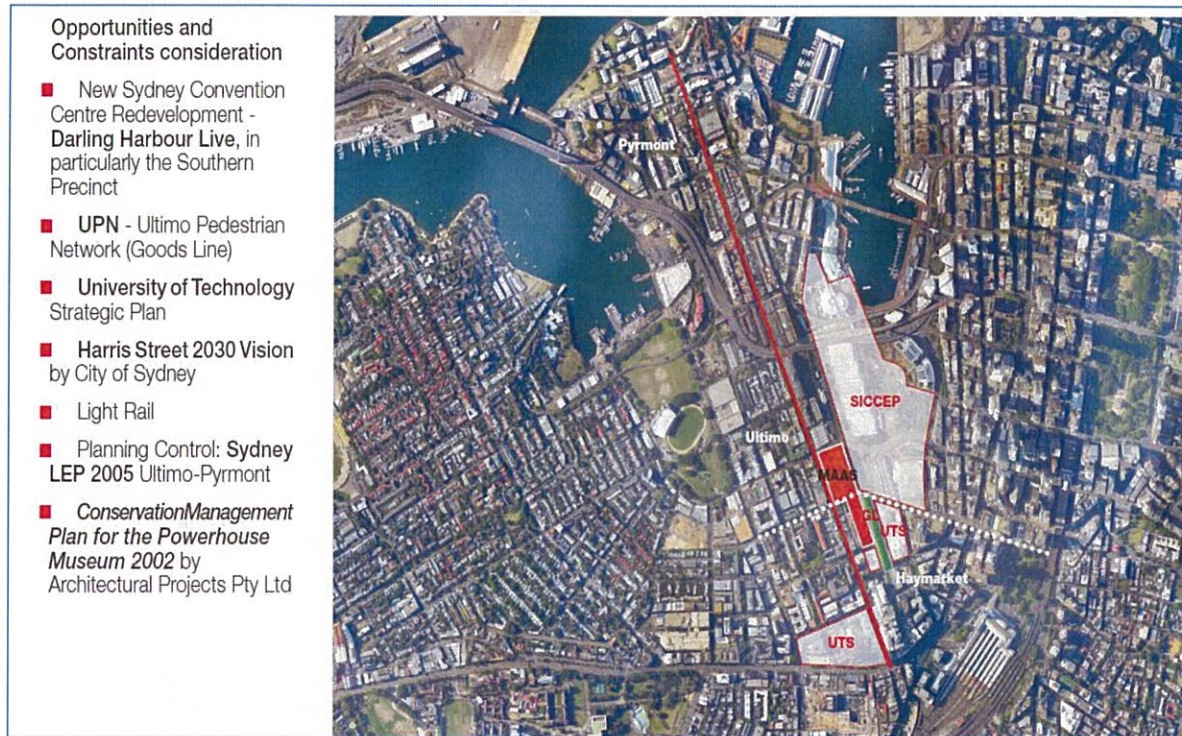
3.6.3 Capitalising on this unprecedented opportunity

The developments that have been discussed above present a series of opportunities for the Museum:

- ▶ Increased foot traffic and economic activity in the precinct, provide opportunities for the Museum to increase total patronage
- ▶ The renewal can facilitate synergies with learning communities and improve learning outcomes
- ▶ Provide the Museum with the opportunity to confirm itself as a significant part of Sydney's cultural offering from both a tourist and local perspective.

This, and Figure 12, demonstrates the extent to which the Museum could benefit from surrounding developments if a significant investment is made to renew the site:

Figure 12: Precinct developments



- Opportunities and Constraints consideration**
- New Sydney Convention Centre Redevelopment - Darling Harbour Live, in particular the Southern Precinct
 - UPN - Ultimo Pedestrian Network (Goods Line)
 - University of Technology Strategic Plan
 - Harris Street 2030 Vision by City of Sydney
 - Light Rail
 - Planning Control: Sydney LEP 2005 Ultimo-Pyrmont
 - Conservation Management Plan for the Powerhouse Museum 2002 by Architectural Projects Pty Ltd

3.7 Benefits from a renewed Powerhouse Museum

Addressing the urgent need for a renewed Museum offers the Government the opportunity to enhance the contribution of the creative and tourist economy while minimising costs – effectively maximising its return on investment.

Table 21 outlines the key anticipated social, economic and environmental benefits of the proposed Project have been identified and outlined in. Additionally, the expected beneficiary, anticipated timing, and the extent to each benefit has been quantified in the economic assessment has also been outlined below.

Table 21: Anticipated economic, social and environmental benefits

Item	Benefit	Expected beneficiary	Timing	Quantified (Yes/ No)
Economic	▶ Avoided future costs to Government to renew and maintain ageing facilities	Government	Long term	YES
	▶ Increase in the economic contribution of the creative economy to NSW as a result of: <ul style="list-style-type: none"> ▶ Increased tourism and tourism expenditure ▶ Fostering of creativity and innovation 	Wider community	Long term	YES
	▶ Improved financial performance of the Museum from: <ul style="list-style-type: none"> ▶ Increased patronage ▶ Improved customer service offering ▶ Establishment of diversified funding streams 	MAAS	Medium to Long term	YES

Item	Benefit	Expected beneficiary	Timing	Quantified (Yes/ No)
	<ul style="list-style-type: none"> ▶ Operational efficiencies as a result of: <ul style="list-style-type: none"> ▶ Increased staff morale ▶ More efficient internal orientation of the facility ▶ Reduced maintenance costs of ageing infrastructure and OH&S costs ▶ Efficient back of house areas and systems 	MAAS	Medium term	YES
	<ul style="list-style-type: none"> ▶ Increase in consumer surplus as a result of: <ul style="list-style-type: none"> ▶ Increased patronage ▶ Improved customer service offering 	Users	Medium term	YES
	<ul style="list-style-type: none"> ▶ Improved accessibility. This is particularly the case for the Inner West of Sydney and the city. 	Users	Medium term	NO
	<ul style="list-style-type: none"> ▶ Improved commercial opportunities for the surrounding precinct as a result of increased patronage and amenity improvements. 	Other stakeholders	Medium term	NO
	<ul style="list-style-type: none"> ▶ Facilitation of more productive partnerships and collaboration with the arts, cultural and science industries, education facilities and community groups 	MAAS	Medium term	NO
	<ul style="list-style-type: none"> ▶ Opportunity for creative communities to aggregate, collaborate and share knowledge; create pathways for creative entrepreneurs and practitioners by providing collaborative networks and spaces; digital technologies to form partnerships with communities online; development of innovative Australian creative content 	Wider community	Long term	NO
Social	<ul style="list-style-type: none"> ▶ Increased quality of life and liveability of local areas¹⁹ as a result of increased accessibility to the arts and cultural industry and support of artists 	Wider community	Long term	NO
	<ul style="list-style-type: none"> ▶ The promotion of social inclusion through increasing accessibility to facilities which promote wider community understanding of cultural difference and inspire cultural expression 	Wider community	Long term	NO
	<ul style="list-style-type: none"> ▶ Increase in the civic pride and engagement that the residents of NSW incur from the existence of the Museum as a result of improved tourism attraction, global reputation and global positioning of Sydney 	Wider community	Medium term	YES
	<ul style="list-style-type: none"> ▶ A more creative society from increased accessibility to arts and cultural services, particularly for Sydney's inner west 	Wider community	Long term	NO
	<ul style="list-style-type: none"> ▶ Improved learning outcomes through the modernization of learning facilities at the Museum 	Wider community	Medium term	NO
	<ul style="list-style-type: none"> ▶ Improved building security and safety for the collection, staff and customers 	MAAS	Medium term	NO
	<ul style="list-style-type: none"> ▶ Improved ability to achieve NSW Government objectives 	Government	Medium term	NO
Environment	<ul style="list-style-type: none"> ▶ Improved environmental outcomes due to the development of a more efficient building which incorporates environmentally sustainable design initiatives 	Wider Community	Short term	NO

Each of these benefits is explored in greater detail in Section 6 and Appendix N.

¹⁹ Note that due to the proximity of the Museum to the Inner West, as well as transport hubs which connect it to Western Sydney and regional NSW, increased liveability will not only be experienced by areas in close proximity, but also by Western Sydney and regional NSW residents, aligning with Government priorities in this area.

3.8 Stakeholder engagement

As part of the process of developing the business case, MAAS undertook both internal and external stakeholder consultation and engagement with relevant parties to ensure relevant views were considered, parties were informed of potential changes and impacts, and that relevant advice and feedback on the business case development was received.

3.8.1 Masterplan Steering Committee

Key stakeholders have been involved from the commencement of the project through the creation of and subsequent modification of the Masterplan Steering Committee ("MSC"). This group has met regularly to review scope, approach and direction. The MSC reports through to the MAAS Trustees. Table 22 outlines the members of the Committee:

Table 22: Masterplan Steering Committee

Member	Position
Rose Hiscock	CEO, MAAS Chair of the Masterplan Steering Committee
Elizabeth Stratford	Director, Corporate Resources, MAAS
Dolla Merrillees	Director, Curatorial, Collections & Exhibitions, MAAS
Michael Parry	Director, Programs & Engagement, MAAS
Lisa Chung	Trustee, MAAS & Partner, Maddocks
Angus Armour	Deputy Secretary, Industry, Innovation, Hospitality & the Arts, NSW Trade & Investment
Peter Poulet	NSW State Architect
Monica Barone	CEO, City of Sydney
Patrick Woods*	Deputy Vice Chancellor, Resources, University of Technology Sydney

Source: MAAS. Note* Initial Steering Committee, subsequently stood down due to growing conflict of interest with respect to University of Technology Sydney precinct development opportunities

The MSC was initially established to deliver the MAAS Commercial Strategy & Concept Master-plan. Early, during concept and project option development phase, the MSC voted to broaden the scope of the project and extend the deliverables of the project to include a business case. The MSC noted that MAAS needed to have completed all Central Government Gateway Review protocols to be considered in the next NSW State budget cycle. Upon submission and acceptance of the business case, the MSC will continue shifting its focus to the implementation of the Masterplan required to deliver the Commercial Strategy for the Museum.

Membership and sub-committees of the Steering Committee will be extended to key stakeholders such as INSW upon success of the FBC Gateway. Advice to date from INSW is that membership at this time would raise a conflict of interest for INSW officers. The MAAS Trustees will similarly formalise a Masterplan sub-committee at this time focusing on advocacy to engage stakeholders and champion the project broadly.

3.8.2 Internal stakeholder management

Internally, broad engagement in the development of the Masterplan and business case for the Museum has been garnered from all parts of the organisation including Finance, Executive, Operations, Events, Exhibitions & Festivals, and Facilities, Security, Collections and Program teams. They have been instrumental in developing the options and their assessment.

Table 23 provides a summary of the internal stakeholders involved in the early process of the renewal project, and whose feedback was considered through the options development process.

Table 23: Internal stakeholder management

Internal Stakeholder	Title
Prof. Shirley Alexander	MAAS Trustee
Fiona Bennett	Manager - Events
John Barbouttis	MAAS Trustee

Internal Stakeholder	Title
Elizabeth Bryan	MAAS Trustee
Rebecca Bushby	Acting Manager, Exhibitions and Festivals, Project Management and Planning
Robert Cameron	MAAS Trustee
Lisa Chung	MAAS Trustee
Judith Coombes	Manager, Registration
Tim Ebbeck	MAAS Trustee
Danny Grant	Manager, Facilities Management
Rose Hiscock	Director MAAS
Bede Langley	Security Manager, Operations
James Longley	MAAS Trustee
Dolla Merrillees	MAAS Executive Team
Judith O'Callaghan	MAAS Trustee
Michael Parry	MAAS Executive Team
Prof. John Shine	President MAAS Board of Trustees
Elizabeth Stratford	MAAS Executive Team
Christopher Snelling	Manager, Powerhouse Discovery Centre

3.8.3 External stakeholder engagement

Key external stakeholders were identified, and briefings with the following organisations and individuals have been conducted throughout the development of the Masterplan and business case.

Table 24 outlines the feedback from each of the stakeholders that has been recorded, as well as strategies for mitigating each of the concerns raised.

Table 24: External stakeholder engagement

External stakeholder	Outcomes / feedback	MAAS response to mitigate any concerns
NSW Government		
<ul style="list-style-type: none"> ▶ George Souris MP ▶ Hon Troy Grant MP ▶ Hon Andrew Stoner, Deputy premier ▶ Mark Paterson Secretary, DTI ▶ Craig Regan, Chief of Staff ▶ Fiona Dewar, Deputy Chief of Staff ▶ Lis Davis, Senior Adviser, Office of the Deputy Premier, Trade and Investment, Tourism and Major Events, Small Business ▶ Michele Bruniges, Secretary Education and Communities ▶ Hon Gladys Berijiklian MP ▶ Hon Pru Goward ▶ Michael Coutts-Trotter, Secretary NSW Department of Family and Community Services ▶ Jill Reich, Deputy Director General People, Culture and Business NSW Department of Planning and Infrastructure 	<ul style="list-style-type: none"> ▶ Strong support for the need for infrastructure renewal and precinct integration ▶ Noted all Cultural Institutions have similar needs. ▶ Broad discussion regarding opportunity to reorient Museum to Darling Harbour 	<ul style="list-style-type: none"> ▶ MAAS will be providing visibility of all documentation & including relevant stakeholders in Gateway review interviews. ▶ Ongoing briefings and updates
Federal Government		
<ul style="list-style-type: none"> ▶ Sally Basser, First Assistant Secretary Minister for the Arts ▶ Tony Grybowski, CEO Australia Council for the Arts 		

External stakeholder	Outcomes / feedback	MAAS response to mitigate any concerns
<p>City of Sydney</p> <ul style="list-style-type: none"> ▶ Monica Barone, Chief Executive Officer ▶ Ann Hoban, Director, City Life ▶ Rachel Healy, Executive Manager Culture ▶ Alex Bowen, Manager Culture and Creativity ▶ Graham Jahn, Director Planning, Development & Transport 	<ul style="list-style-type: none"> ▶ Strong support for the need for infrastructure renewal and precinct integration and connectivity ▶ Noted the synergies between the MAAS Commercial Strategy and Master-plan to the precinct's innovation and renewal characteristics 	<ul style="list-style-type: none"> ▶ COS unable to participate in Gateway interviews (potential conflict of interest) however note their support for integration with Darling harbour ▶ MAAS providing ongoing updates on plans
<p>Sydney Harbour Foreshore Authority</p> <ul style="list-style-type: none"> ▶ Debra Dawson, Executive Director, Darling Harbour Transition 	<ul style="list-style-type: none"> ▶ Strong support for the need for infrastructure renewal and precinct integration ▶ Noted synergies to the work being undertaken by SHFA to develop The Goods Line and how the plan would compliment 	<ul style="list-style-type: none"> ▶ Representatives of City of Sydney will be invited to participate in the Business Case Gateway review. ▶ Continued regular meetings with MAAS and SHFA representatives
<p>Infrastructure NSW</p> <ul style="list-style-type: none"> ▶ David Riches, Project Director ▶ Tom Kennedy, Planning and Design Manager ▶ Erin Flaherty 	<ul style="list-style-type: none"> ▶ Strong support for the need for infrastructure renewal and precinct integration ▶ Noted all Cultural Institutions have similar needs and the limited quota of funds set aside for Arts Infrastructure renewal 	<ul style="list-style-type: none"> ▶ A fortnightly operational working group meets to work through immediate operational impacts of The Goods Line renewal on MAAS
<p>Opinion Leaders</p> <ul style="list-style-type: none"> ▶ Paul Keating ▶ Leo Schoefeld 	<ul style="list-style-type: none"> ▶ Supporter of the broad concept and need for significant investment 	<ul style="list-style-type: none"> ▶ MAAS to provide ongoing updates
<p>TAFE NSW: Sydney Institute, Ultimo College</p> <ul style="list-style-type: none"> ▶ Rob Cousins, Institute Director, Madelinka Sulic, Associate Director ▶ Dr Lizzie Muller and Honor Harger UNSW ▶ Peter McNeil, Associate Dean (Research), Faculty of Design, UTS - to discuss over lunch the Fashion Institute. ▶ Prof Ross Harley UNSW/COFA ▶ Prof Shirley Alexander, UTS ▶ Patrick Woods, UTS 	<ul style="list-style-type: none"> ▶ Strong support for the synergies between TAFE and MAAS and the Powerhouse role as an informal learning provider 	<ul style="list-style-type: none"> ▶ Ongoing meetings and integration of programs
<p>Committee for Sydney</p> <ul style="list-style-type: none"> ▶ Michelle Washington, Tim Williams 	<ul style="list-style-type: none"> ▶ Strong support for the need for infrastructure renewal and precinct integration ▶ Noted the synergies between the MAAS Commercial Strategy and Master-plan and city connectivity 	<ul style="list-style-type: none"> ▶ MAAS is an active participant in the CFS Livability and Lovability taskforce

External stakeholder	Outcomes / feedback	MAAS response to mitigate any concerns
<p>Barangaroo Delivery Authority</p> <ul style="list-style-type: none"> ▶ Terry Moran AO, Chair ▶ David McCracken, Director, Property Development 	<ul style="list-style-type: none"> ▶ Discussion regarding connectivity of MAAS sites (Powerhouse and Observatory) with Barangaroo redevelopment 	<ul style="list-style-type: none"> ▶ Ongoing meetings
<p>Media/events</p> <ul style="list-style-type: none"> ▶ Katrina Sedgwick, Head of Arts ▶ Deborah Leavitt, Manager Radio National ▶ Katrina Strickland, Editor, Australian Financial Review Magazine ▶ Robyn Williams, Science journalist and broadcaster, ABC ▶ Geoff Jones, Nine Live ▶ Andrew McEvoy, Managing Director Fairfax Events ▶ Heath Gilmore, Editor SMH 	<ul style="list-style-type: none"> ▶ Discussion regarding connectivity and opportunity to reorient the Powerhouse to Darling Harbour 	<ul style="list-style-type: none"> ▶ Extremely positive reception ▶ MAAS to provide ongoing updates
<p>Community Relations Commission</p> <ul style="list-style-type: none"> ▶ Hakan Harman, CEO 	<ul style="list-style-type: none"> ▶ Strong support for the role MAAS plays in Cultural relations 	<ul style="list-style-type: none"> ▶ Ongoing updates
<p>Blockbuster exhibitions</p> <ul style="list-style-type: none"> ▶ James Thane, Vice President & Managing Director, Disney Theatrical Productions Australia & New Zealand ▶ Martin Roth, Director V&A ▶ Ian Blatchford Director London Science Museum ▶ Ken Arnold Wellcome Collection ▶ Olivier Gambet, Director Lest Arts Decoratifs, ▶ Herve Micaloff, Dior Foundation ▶ Sharon Ament Museum of London ▶ Micahel Govan, Director LACMA ▶ Paloa Antonelli, Senior Curator MOMA ▶ Carol Henry, Director Art Exhibitions Australia 	<ul style="list-style-type: none"> ▶ Discussion of potential exhibitions (5-7 year program) to maximize new Touring Hall and develop Blockbuster program 	<ul style="list-style-type: none"> ▶ Ongoing discussions and exhibitions contracts
<p>Lend Lease</p> <ul style="list-style-type: none"> ▶ Dan Labbard COO ▶ Rob Deck, Executive Director, Lend Lease ▶ Amanda Shaw, Community Development 	<ul style="list-style-type: none"> ▶ Extremely positive relationship. Opportunities for integration are well regarded 	<ul style="list-style-type: none"> ▶ Quarterly meetings
<p>Cultural Institutions</p> <ul style="list-style-type: none"> ▶ Craig Hassall, CEO, Opera Australia ▶ Michael Loebenstein, CEO Nina Frykberg, Senior Manager, Communications and Peter White, Senior Manager, Programs and Indigenous Connections NFSA ▶ Paul Dyer, Artistic Director, Bruce Applebaum, General Manager - Australian Brandenburg Orchestra ▶ Prof. Graham Durant, Director, Queston, Simon France, Inspiring Australia Program Manager, and Jackie Randles, Manager NSW Inspiring Australia and Emmanuelle Denavit ▶ Caroline Collier, Director, Tate National, Peter Wilson, Tate National Anna Jobson, Tate National 	<ul style="list-style-type: none"> ▶ Discussion regarding co-location, program partnerships and precinct opportunities 	<ul style="list-style-type: none"> ▶ MAAS to provide ongoing updates

External stakeholder	Outcomes / feedback	MAAS response to mitigate any concerns
<p>Individual supporters/potential donors and sponsors</p> <ul style="list-style-type: none"> ▶ Julia King ▶ Simon Philby - Samsung ▶ Collette Dinnigan ▶ Liz Attia and Heather Murphy - Spec Savers Pty Ltd ▶ John Schaeffer ▶ Catriona Mordant ▶ Mark Carnegie ▶ Dr Gene Sherman, Chairman & Executive Director, Sherman Contemporary Art Foundation ▶ Collette Dinnigan, and Nikki Andrews, CEO, NAC Media Group ▶ Dino and Patricia Calvisi ▶ Jon Comino, Fund Manager, AMP Capital Investors ▶ Philip Corne, Chief Executive Officer, Louis Vuitton Australia ▶ Alison Coutts, Chief Executive Officer, NuSep Holdings Ltd. ▶ Mark Danta, Associate Professor and Clinical Academic gastroenterologist, St Vincents Hospital. ▶ Rob Deck, Executive Project Director at Darling Harbour Live, Lend Lease ▶ James Emmett, Barrister ▶ Steve Finlay, General Manager, Engineers Australia Sydney Division ▶ Lachlan Harris, Founder, One Big Switch ▶ Phillip Keir, Founder, Keir Foundation ▶ Hugo Llorens, U.S. Consul General, Sydney ▶ Kate Meyrick, CEO, The Hornery Institute ▶ Roslyn and Tony Oxley ▶ Jack Ritch, President, Powerhouse Foundation. Managing Director, AMP Henderson Global Investors Ltd ▶ Julia Ritchie ▶ Louise Walsh, Chief Executive Officer, Philanthropy Australia ▶ Peter Wilson, Managing Director, Greenhill & Co. ▶ Kevin Young, Managing Director, Sydney Water ▶ Ruwan Peiris Area General Manager, Accor's Darling Harbour Hotels 	<ul style="list-style-type: none"> ▶ Briefings with key stakeholders and potential donors to: ▶ Build relationships for future support ▶ Discuss long term exhibition renewal plans ▶ Share broad masterplan objectives to reorient Powerhouse to Darling Harbour 	<ul style="list-style-type: none"> ▶ Extremely positive reception ▶ MAAS to provide ongoing updates and supporters events

3.8.4 Community engagement

The immediate community for MAAS includes the ABC, local business such as FishBurners, tertiary institutions including UTS and TAFE Sydney and commercial operations including Lend Lease and Sydney Harbour Foreshore Authority (SHFA), all of whom MAAS has met with directly to gauge and garner support.

The synergies that the Museum renewal presents to these entities, has resulted in strong support from all groups. The integration of the MacArthur Street, Goods Line and Hay Street hub presents a junction point for joint programming enlivening the whole precinct and providing an economic uplift to adjacent commercial operations.

More broadly MAAS' community includes its members, general audience and immediate residential neighbours. The significance of the proposed changes requires a considered approach to these communities particularly given the commercial sensitivity of the proposal. A comprehensive engagement process will be developed post the acceptance of the FBC and as part of an intensive advocacy campaign to have the project funded by government.

The Museum has a significant body of audience research demonstrating a negative visitor response to the Museum's facility and desire for upgrade.

4. Project objectives

The overarching objective for the proposed project is to renew the Museum's site to ensure its long term sustainability and restore its reputation as a leading global museum brand.

Specifically, the objectives of the Project are to:

Create a sustainable operating model for the Museum

- ▶ Deliver economic and social returns to the state of NSW
- ▶ Increase commercial opportunities within the Museum and increase the diversity and sustainability of the existing funding model
- ▶ Improve the Museum's financial performance in order to reduce its ongoing reliance on Government funding for its operations.

Capitalise on the once-in-a-generation renewal of the surrounding cultural precinct

- ▶ Improve access to the Museum and connectivity to Sydney's cultural precinct
- ▶ Improve the integration of the Museum with the surrounding cultural redevelopment.

Ensure fit-for-purpose facilities

- ▶ Improve facilities and amenities to accommodate a wider range of permanent and temporary exhibitions
- ▶ Address back-office operational inefficiencies to improve staff productivity and deliver cost savings
- ▶ Facilitate compliance with Occupational Health & Safety requirements
- ▶ Facilitate compliance with the Museum's statutory obligations under the *Museum of Applied Arts and Sciences Act 1945* as referenced in Section 2.1.1
- ▶ Effectively manage the collections assets, ensuring they are stored in 'good practice' conditions, as described in Section 2.1.2 **Error! Reference source not found..**

Regain global standing

- ▶ Establish a world-class, iconic and modern facility which represents the significance of the Museum domestically and internationally as a part of Sydney's cultural offering
- ▶ Facilitate the development of productive partnerships and collaborations with cultural institutions and educational and community groups
- ▶ Improve the overall customer experience
- ▶ Facilitate the implementation of a permanent exhibition renewal program and the attraction of exciting and innovative temporary exhibitions that align with the core values of the Museum
- ▶ Improve knowledge of and accessibility to the collection
- ▶ Fosters creativity and improved learning outcomes
- ▶ Meet the needs and demands of the community in applied science and arts and the development of industry.

5. Options for meeting the service need

Key messages

- ▶ In determining a viable strategy for renewing the existing Museum site (i.e. the Masterplan), MAAS and the engaged consultants identified seven project options (including the Base Case). These options were assessed against evaluation criteria. This process determined that:
 - ▶ Relocation from the current Ultimo site was not a viable option for the Museum
 - ▶ Keeping the Harwood site is critical for the Museum’s collection
 - ▶ Four shortlist options will be assessed in detail as part of the Final Business Case
- ▶ The Base Case involves refurbishing the Museum to ‘keep safe and operating’
- ▶ Project Option 4 will involve the refurbishment of the Museum plus a re-orientation of the site, relocating the entrance foyer to Macarthur Street
- ▶ Project Option 5 will have the same features of Project Option 4 plus a remodeled Wran building and the sale of the Harwood site
- ▶ Project Option 6 will involve major renovations to address the key concerns highlighted in Section 3 and will redevelop the Harwood building to provide additional ‘state of the art’ gallery space for the Museum with the remainder of the site redeveloped to provide renewed storage space plus commercial, retail and residential space to diversify potential revenue streams

5.1 Range of potential project options identified

In March 2014, MAAS engaged EY and FJMT Architects to prepare its Commercial Real Estate Strategy and Masterplan Concept Drawings for the Museum (“Commercial Strategy”). The Commercial Strategy sought to identify a proposed solution to address the operational and facility issues impacting on the long term sustainability of the Museum and its ability to provide a competitive offering.

In determining a viable strategy for renewing the existing Museum site (i.e. the Masterplan), MAAS and the engaged consultants identified a wide range of project options. Table 25 outlines the key elements associated with the project options identified through the development of the Masterplan.

Table 25: Key elements associated with the options identified

Option	Comply with BCA requirements	Refurbish the Turbine / Boiler / Engine Houses	Divest Harwood site	Re-orientate Museum entrance to front Hay Street	Demolish and rebuild Wran Building	Renew Harwood site	Divest entire Ultimo site and relocate
Option 1 (Base Case)	✓						
Option 2	✓	✓		✓			
Option 3	✓	✓	✓	✓			
Option 4	✓	✓		✓			
Option 5	✓	✓	✓	✓	✓		
Option 6	✓	✓		✓	✓	✓	
Option 7	✓		✓				✓

Table 26 outlines the evaluation criteria against which the identified options were then assessed. The evaluation criteria were developed based on MAAS strategic objectives, and the Project’s objectives.

Table 26: Evaluation and ranking criteria

Evaluation criteria	Ranking/assessment criteria
1. Significant economic and social returns to the state of NSW	
2. Improved customer experience	
3. Audience growth across all categories	
4. 'State of the Art', iconic and modern facility representing the significance of the Museum	
5. A vibrant program of exhibitions, events and public engagements	✓✓✓✓ = Significantly provides
6. Accessibility and integration with Sydney's cultural precinct	✓✓✓ = Provides
7. Significant stakeholder support and Government priority alignment	✓✓ = Somewhat provides
8. Financial sustainability	✓ = Minimally provides
9. Facilitates operational efficiencies and sustainable collections management	x = Does not provide
10. Fosters creativity, collaborative partnerships and improved learning outcomes	
11. Maintenance of the Museum location	
12. Return on investment	

Table 27 presents the results of the assessment of the long-list of identified project options against the evaluation criteria. Each project option was assessed relative to the Base Case.

Table 27: Evaluation of identified options, relative to the Base Case

Evaluation criteria	Project Option 2	Project Option 3	Project Option 4	Project Option 5	Project Option 6	Project Option 7
Improved customer experience	✓	✓	✓✓✓	✓✓✓	✓✓✓✓	✓✓
Achieves growth in patronage	✓	✓	✓✓✓	✓✓✓	✓✓✓✓	✓✓
State of the Art, iconic and modern facility	✓	✓	✓✓✓	✓✓✓	✓✓✓✓	✓✓✓
Vibrant program of exhibitions, events and public engagement	✓	✓	✓✓	✓✓✓	✓✓✓✓	✓✓
Accessibility and integration with Sydney's cultural precinct	✓✓	✓✓	✓✓✓	✓✓✓✓	✓✓✓✓	x
Creates significant economic and social return to NSW	✓	✓	✓✓	✓✓✓	✓✓✓✓	✓✓
Gains significant stakeholder support and Govt priority alignment	✓	✓	✓✓	✓	✓✓✓✓	x
Financial sustainability	✓	✓	✓	✓✓✓	✓✓✓✓	✓✓
Operational efficiencies and sustainable collections management	✓✓	✓✓	✓✓	✓✓	✓✓✓✓	x
Fosters creativity, partnerships and improved learning outcomes	✓	✓	✓✓	✓✓✓	✓✓✓✓	✓
Maintenance of site significant location	✓✓✓✓	✓✓✓✓	✓✓✓✓	✓✓✓✓	✓✓✓✓	x
Return on investment	✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓✓	x
Total (ticks)	18	19	29	35	48	14

When considering the table above, it is important to note that:

► **Relocation of the Museum is not a viable project option:**

Divestment of the Ultimo site and relocation of the Museum is explored in Project Option 7. It is possible to re-locate the Museum(s), indeed the current location of MAAS is a result of early site loss due to fire.

The Museum of Applied Arts and Sciences, like the Art Gallery of New South Wales, is an integral part of the City of Sydney's heritage. The origins of both institutions are very closely linked to the Sydney International Exhibition of 1879. With an ongoing remit to exhibit the latest industrial, construction and design innovations, the Museum's location historically on the south-west end of the CBD was to provide material inspiration to the students of the adjacent Sydney Technical College. This proximity has even more relevance today with a large student population and connection to the technological and learning precinct.

MAAS is also a part of a cohort of museums with strong international collections - such museums, notably the V&A and London Science Museum, have demonstrated the extraordinary potential to deliver tourist audiences. With its amalgamation into Sydney's top three tourism precincts - Chinatown and Haymarket - the Museum is uniquely placed to capitalise on domestic and international visitors. This combined with the redevelopment of Darling Harbour, and a strong Tertiary education audience provides a market driven demand for a renewed iconic cultural facility at the existing site. Renewal of the Museum precinct in Ultimo will ensure not only a sustainable operating model for the Museum but will ensure that the collection is appropriately leveraged to deliver a signature outcome to the State of NSW.

It is worth noting that satellite facilities in Sydney's West are already integrated into the MAAS vision. MAAS's engagement with the NSW Government's Western Sydney Strategy will see it deliver a public access shared storage and display facility in Castle Hill (2015). A second satellite facility in a precinct such as Parramatta is worth due consideration as a separate project. Such a facility would require a tailored approach, and must be a satellite from a central and revitalised Museum. For example an interactive science centre rather than a collection based approach would be more appropriate to the market. Museum Victoria offers a good case study for this approach, with the interactive science centre 'Scienceworks' in Melbourne's West and two collection based venues, Melbourne Museum and Immigration Museum in the City Centre to capture the tourist market. The combined result is 2.5m visitation to Museum Victoria venues per annum, plus significant patronage to the other Victorian Cultural Agencies.

Departing from the current Museum location is therefore likely to have a series of adverse effects, which do not make it a viable option for further consideration such as;

- Adverse effects on international, national and local patronage and resulting revenue loss
- Community backlash stemming from MAAS's strong and important historical connection to the Ultimo and Pyrmont precincts as well as the City of Sydney
- The loss of synergies that the Museum's relationship with educational (i.e. University), digital and technological partners in Ultimo that have strengthened and are central to the Museums core functions as a Museum of technology and learning being diminished
- The loss of significance and difficulty in repurposing the Museum's cultural and heritage assets that capture and interpret its relationship to the neighbourhood and local community
- Without a greenfield site option moving away from the Ultimo site is unlikely to be any more cost-effective than Options 4 or 5 without extensive investment
- It will likely be difficult to identify property which provides enough space for both the Museum and the storage of its collection (otherwise it would be required to incur additional costs of transportation to move the collection to and from the Museum)

- ▶ The extensive precinct development and significant Tourism centre that becomes easily accessible to the Museum underpins the commercial strategy for the Museum to become financial more independent, moving away from the existing site will eliminate the Museum's opportunity to improve its performance financially
- ▶ The Museum is currently the only cultural infrastructure on the inner western Sydney side of George Street.

▶ **Keeping the Harwood site is critical for the Museum's collection:**

Divestment of the Harwood building is explored in Project Options 3, 5 and 7. There are significant disadvantages related to its divestment. The Harwood site is required to provide the Museum with timely and cost-effective access to the collection. Without the Harwood Building, the Museum would need to store a large amount of the collection on another site (the existing Castle Hill storage facility). Significant transportation costs would be incurred when moving the collection to and from the Museum site.

Divestment of the Harwood site is also likely to incur additional capital costs. MAAS representatives have estimated that in the event of a Harwood building divestment, the Castle Hill storage facility would reach capacity within 3 years. MAAS would then be required to approach the NSW Government for funding assistance to establish added storage space.

5.2 Short-listed project options

The scoring process resulted in a short-list of four project options (including the Base Case for comparative purposes) for detailed evaluation in the FBC. Table 28 outlines the four short-listed project options.

Table 28: Short-listed options

Option	Description
Project Option 1: Base Case – Do Minimum	Basic compliance works to make the Museum and Harwood building safer for staff and customers
Project Option 4: Refurbish and re-orientate	Refurbish the Turbine / Boiler / Engine Houses, re-orientate the entry of the Museum to front Hay Street and leave the balance of the site 'As Is'
Project Option 5: Refurbish, re-orientate and sell Harwood	Refurbish the Turbine / Boiler / Engine Houses, re-orientate the entry of the Museum to front Hay Street, demolish and remodel the Wran Building and sell the Harwood Building
Project Option 6: Refurbish, re-orientate and renew Harwood	Refurbish the Turbine / Boiler / Engine Houses, re-orientate the entry of the Museum to front Hay Street, demolish and remodel the Wran Building and renew the Harwood Building. Project Option 6 aligns with the functional requirements of the Museum, as described in Section 3.3.

Figure 13 provides a reference map of the Museum site:

Figure 13: Museum map



Based on a qualitative and quantitative assessment of the short-listed options, covering key qualities, costs, benefits, advantages and disadvantages, the Preliminary Business Case process identified Option 6 as the preferred project option.

5.3 Value Management Workshop

As recommended by the Strategic Gateway Review Team, a Value Management Workshop (VMW) for key stakeholders was held on 24 September 2014. The purpose of the workshop was to provide stakeholders with the opportunity to:

- ▶ Discuss the short-listed project options from the PBC and confirm the options to be considered in the FBC
- ▶ Discuss and assess the relative merits of the draft staging options presented for the preferred project option (Project Option 6) and determine a preferred staging option for Project Option 6 for consideration in the FBC.

During the VMW, the Value Management Group:

- ▶ Confirmed that all four options considered in the PBC be reconsidered in the FBC
- ▶ Were presented with three draft staging options for Option 6 (A detailed description of each of the staging options is contained in Appendix F). Each of the staging options was then considered and assessed. Table 29 presents the outcome of this assessment.

Table 29: Draft staging options for Option 6

Project Option	Staging description	Est timeframe	Notes from the Workshop
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Project Option	Staging description	Est timeframe	Notes from the Workshop
Staging Option A	<ul style="list-style-type: none"> ▶ Stage 1a – <ul style="list-style-type: none"> ▶ Construct new foyer fronting Macarthur Park ▶ Demolish North Harwood, build a temporary exhibition space, and a bridge to connect to the foyer ▶ Minor refresh of the exhibition space ▶ Installation of lift to Northern Annex and reconfiguration of existing staff accommodation ▶ Stage 1b – Demolish South Harwood and commission residential / commercial development ▶ Stage 2 – <ul style="list-style-type: none"> ▶ Refurbish the heritage buildings, with significant refit of the permanent galleries ▶ Address OH&S issues ▶ Refurbish the switch-house ▶ Stage 3 – <ul style="list-style-type: none"> ▶ Demolish Wran building ▶ Construction new group foyer, learning spaces and theatres fronting Harris Street and the new working museum 	<p>2 year planning and DA process</p> <p>5 year construction process</p> <p>Museum is fully operational in July 2022</p>	<ul style="list-style-type: none"> ▶ Refurbishment of the Switch-house comes too late (i.e. Stage 2) and should be conducted sooner ▶ There are critical OH&S concerns within the Heritage buildings which need to be addressed immediately. However these concerns are not addressed until Stage 2 ▶ This staging option was considered inappropriate for the Museum.
Staging Option B	<ul style="list-style-type: none"> ▶ Stage 1a – <ul style="list-style-type: none"> ▶ Refurbish the heritage buildings, with significant refit of the permanent galleries ▶ Address all OH&S issues ▶ Installation of lift to Northern Annex and reconfiguration of existing staff accommodation ▶ Refurbish the switch-house ▶ Stage 1b – Demolish South Harwood and commission residential / commercial development ▶ Stage 2 – Construct new foyer fronting Macarthur Street and minor refresh of the exhibition space ▶ Stage 3 – Demolish North Harwood, build a temporary exhibition space, and a bridge to connect to the foyer ▶ Stage 4 – Construct new group visitor foyer, learning spaces and theatres fronting Harris Street ▶ Stage 5 – Demolish Wran building and construct new working museum 	<p>2 year planning and DA process</p> <p>6 year construction process</p> <p>Museum is fully operational in July 2023</p>	<ul style="list-style-type: none"> ▶ This Staging Option proposes to complete the construction of the new entrance (i.e. the new foyer facing Macarthur Street) in Stage 2. Having an entrance facing Macarthur Street is critical to ensuring that the Museum takes advantage of the redevelopment of Darling Harbour and the completion of The Goods Line. ▶ Therefore, MAAS considers that leaving the relocation of the entrance to Stage 2 is too late, and is likely to have adverse effects on patronage and revenue ▶ This staging option was considered inappropriate for the Museum.

Project Option	Staging description	Est timeframe	Notes from the Workshop
Staging Option C	▶ Stage 1 – Undertake total development concurrently	2 year planning and DA process 3 year construction process Museum is fully operational in July 2020	▶ This staging option would require the Museum to close for three years. This is considered unviable ▶ This staging option was considered inappropriate for the Museum.

Having considered the advantages and disadvantages of each of the three draft staging options outlined above, the Value Management Group determined that none were appropriate. Consequently, a fourth staging option (Staging Option D) was developed for Option 6 for consideration in the FBC. Staging Option D is similar to Staging Option A, with the exception that critical OH&S concerns in the Heritage Buildings be addressed and the Switch-house refurbished in Stage 1a. Staging Option D is discussed in greater detail in Section 0.

The VMW report is attached at Appendix E.

5.4 Short-listed options considered in the Final Business Case

Based on the outcomes of the VMW, the four short-listed options considered in the PBC are reconsidered in the FBC, with the exception of the revised Option 6D, which now includes the preferred staging option (Option D). Thus, the preferred project option is referred to as Project Option 6D.

Assessment of the short-listed options in the FBC involved:

- ▶ **A technical assessment** – considers the advantages and disadvantages of each option from the perspective of MAAS, the Government and the wider community. This assessment has been incorporated into the description of each option (i.e. Section 5.4.1 to 0)
- ▶ **An economic assessment** - assesses the economic costs and benefits of the proposed project options from the community's perspective. In other words, the economic assessment determines whether the proposed project options under consideration provide a net economic benefit to the community. This assessment is carried out over a 20 year evaluation period (Section 6.2)
- ▶ **A financial assessment** - assesses the financial costs and benefits from the perspective of the Museum. This assessment is carried out over a 20 year evaluation period (Section 6.3)
- ▶ **A risk assessment** – identifies each of the risks associated with the project options, and assesses the degree of risk exposure both before and after the implementation of proposed risk mitigation strategies (Section 6.6).

5.4.1 Project Option 1 - Base Case ('Do Minimum')

The Museum site is currently not compliant with fire and life safety requirements, Building Code of Australia (BCA) standards, and disability access code requirements. Therefore, a "Do Nothing" option is not a feasible option. Rather, a "Do Minimum" option is required which involves works to bring the existing building up to modern building code standards. A key element of this involves rectifying the current areas of non-compliance within the site:

- ▶ The West Building public access ramps do not meet BCA code
- ▶ The Essential Services do not meet BCA 2012

- ▶ The disability access around the building does not meet code.

Other areas within the site which require imminent attention include:

- ▶ The main colour bond roof is corroding and will reach perforation in approximately 10 years forcing a major refurbishment and or replacement
- ▶ The roof smoke vent louvers are corroding and will need a major overhaul or replacement within 10 years
- ▶ Heating, ventilation and air conditioning are not conducive to an appropriate environment for the storing of the collection
- ▶ Pedestrian access, particularly once the Darling Harbour redevelopment and The Goods Line are complete, compromises collection and site security and safety
- ▶ The perimeter glazed wall fronting Harris St is badly acidified from vehicular pollution and needs to be replaced.

The Base Case therefore improves building compliance with BCA standards and rectifies other existing building issues. However, it will not improve the overall functionality, financial sustainability, capacity, amenity, security and efficiency of the Museum or have any real impact on patronage and performance.

Staging

As there is limited capital spend in the Base Case (approximately \$5 million), no staging plan has been established.

Advantages and disadvantages

Table 30 details the key advantages and disadvantages associated with the Base Case.

Table 30: Project Option 1: Base Case – Do Minimum – advantages and disadvantages

Advantages	Disadvantages
<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Facility becomes BCA compliant. ▶ Refurbishments will facilitate additional compliance with core requirements under the MAAS Act, as collections will now be stored in conditions which are relatively protected from the elements. ▶ No change to staffing profile. ▶ No change management requirements. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ Significant cost of new capital infrastructure is delayed. ▶ No additional recurrent cost for expanded services is incorrect. ▶ Existing organisational restructuring has put MAAS in a position to generate successive net surpluses in the short term. <p><u>Patronage</u></p> <ul style="list-style-type: none"> ▶ Current organisational changes, including the introduction of a new exhibition program are likely to increase the attractiveness of the facility from the perspective of potential customer, teachers, touring exhibitions and partners. <p><u>Delivery risks / efficiencies</u></p> <ul style="list-style-type: none"> ▶ A planned program of works for the renewal is not required. 	<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Improvements will not facilitate full compliance with the MAAS Act. The expansive nature of the facility will result in continuing temperature change issues, while issues with collection movement and display security will remain. ▶ Facilities will still not be fit-for-purpose or integrated with the Darling Harbour Redevelopment, Goods Line Redevelopment and city. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ Significant costs of capital renewal and maintenance will be required in the future. Lifecycle and capital maintenance costs are expected to grow to over \$9 million per annum. Costs such as the replacement of the existing color bond roof will be postponed ▶ Capital costs of renewal will be delayed to a later date. Due to the continuing deterioration of the existing facility, the required capital costs to renew the facility will grow (in real terms) over time ▶ The Base Case will not improve the overall functionality, capacity, amenity, security and efficiency of the Museum ▶ The Base Case does not enable long term improvements. MAAS will not have access to diverse funding streams and will not witness a large increase in patronage and collaboration to restore revenues. This will result in either: <ul style="list-style-type: none"> ▶ Net deficits in the long term (and an increased reliance on the NSW Government for funding) ▶ A reduced ability to reinvest in facility and exhibition maintenance and renewal, and a continuing decline in performance from a financial and customer experience perspective. <p><u>Patronage</u></p> <ul style="list-style-type: none"> ▶ Base Case will not change the service offering that is available to customers, and therefore there will be no long term increase in total patronage ▶ The Base Case will not change the existing exhibition space that is available to the Museum. Therefore it is unlikely that the Museum will be able to productively collaborate with significant international partners and attract or efficiently accommodate any 'blockbuster' events.

5.4.2 Project Option 4 - Refurbish and Re-orientate

Project Option 4 involves refurbishing the interior of the Museum to:²⁰

- ▶ Comply with BCA and other compliance requirements
- ▶ Address the existing OH&S concerns
- ▶ Refurbish the switch-house and refit and restore existing gallery space within the Museum
- ▶ Install a lift and reconfigure the Northern Annex to provide functional office accommodation.

Project Option 4 also involves re-orientating the entrance of the Museum to front Hay Street, which will link it with the city, optimise its exposure to the Goods Line and the light rail, and connect it with Darling Harbour and Central Station.

Under Project Option 4, there will be a small increase in patronage and collaboration opportunities from a refurbished site and a relocated entrance foyer. This will result in a slightly improved ability to attract temporary exhibitions, as well as improved financial performance in the short term. However, this project option will not result in long term improvements to performance as:

- ▶ Even with the refurbishment of the site and reconfiguration of office accommodation, some of the existing inefficiencies will continue to exist.
- ▶ The refurbished site is unlikely to be considered a 'state of the art' or 'iconic' facility. Issues with the current Touring Hall will continue to preclude attracting major exhibitions. Potential increases in patronage, collaboration opportunities, and 'blockbuster' returns will be limited
- ▶ The Museum will not generate sustainable and diverse funding sources. Increases in patronage, will not be sufficient for the Museum to continuously renew its permanent exhibition and facilities. After the original influx of patronage post-construction it is likely that customers will again grow tired of the existing permanent gallery and customer experience.

Staging

Table 31 outlines that Project Option 4 will be a two stage development, requiring two DA's.

Table 31: Staging Project Option 4

Stage	DA process	Steps	Construction timeline
1	The first step to undertake Project Option 4 will be to achieve a DA for 'stage one' proposed works. We estimate that DA will be achieved in the first 18 months, (i.e. July 2015-January 2017).	Stage one will include: <ul style="list-style-type: none"> ▶ Construction of the new foyer to front Macarthur Park ▶ Addressing the critical OH&S concerns in the Heritage buildings ▶ Refurbishment of the Switch House. ▶ Installation of a lift and reconfiguring the Northern Annex to provide functional office accommodation. 	Stage One will be undertaken over a 2 year period, concluding in January 2019
2	Concurrent to Stage One works being undertaken, the second DA will be secured. We envisage planning, design and achieving this DA will take 12 months, commencing in January 2018, with receipt of DA by January 2019	Stage two will include: <ul style="list-style-type: none"> ▶ Significant refit of the Permanent Galleries ▶ Addressing remaining OH&S issues. 	Stage 2 works are expected to be completed in January 2021.

²⁰ It should be noted that Project Option 4 will not involve any changes to the Harwood site, which will continue to be used as the storage site for the Museum. The adjoining car-park will be sold – this is valued at \$9 million

Therefore, it is expected that under this staging approach:

- ▶ The Museum will not be required to completely stop operations during construction
- ▶ The Museum will be fully operational again in July 2021.

Works which need to be undertaken by the Museum while awaiting Stage One DA include:

- ▶ Relocation of collection items within the Museum, which will be impacted by stage one development (these can be consolidated elsewhere on site or relocated to the Castle Hill facility).
- ▶ Relocation of employees that are currently housed in areas which are to be redeveloped to Castle Hill or elsewhere within the Museum premises.
- ▶ Planning of future exhibitions to be housed at the Museum, in preparation for project completion.

More details on the staging of Project Option 4 can be found in Appendix F.

Procurement

Procurement of Project Option 4 would be best achieved through a traditional construction tender process. Given the Museum design will require particular specifications, the design and construct (D&C) model which allows for some flexibility in design, is considered unsuitable.

MAAS will fully develop the design and specifications for the new buildings and then tender the building works, with a building contractor appointed on the basis of price and quality among other attributes.

Advantages and disadvantages

Table 32 details the key advantages and disadvantages associated with Project Option 4.

Table 32: Project Option 4: Refurbish and re-orientate – advantages and disadvantages

Advantages	Disadvantages
<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Refurbishments will facilitate compliance with core requirements under the MAAS Act, as collections will now be stored in conditions which are relatively protected from the elements. ▶ No change to staffing profile. ▶ Facilities will now be integrated with the existing Darling Harbour redevelopment, Goods Line Redevelopment and city, increasing the attractiveness of the site to potential users. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ A refit of the exhibition space will facilitate improvements in the financial performance of the Museum in the short to medium term. Patronage will increase and operating costs will decline with a re-orientation of the facility internally and increasing compliance with required standards. ▶ Expected uplift in events management revenue as a result of renewed spaces. ▶ Car park is sold to provide added funding – valued at \$9 million ▶ 'Blockbusters' can potentially be attracted, though not full accommodated 	<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Facilities will still not be fit-for-purpose and the Museum will continue to be plagued by existing temperature and humidity issues. ▶ While global standing is likely to improve, this refurbishment and re-orientation is unlikely to greatly facilitate the definition of the Museum as a significant facility within Sydney's cultural precinct. ▶ Issues associated with major touring exhibition hall will not be addressed limiting the ability to attract international loans and blockbuster exhibitions. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ Cost of capital infrastructure is incurred ▶ Project Option 4 does not enable long term financial sustainability. MAAS does not have access to diverse funding streams and will not witness a large increase in patronage and collaboration to restore revenues. This will result in: <ul style="list-style-type: none"> ▶ Net deficits in the long term (and an increased reliance on the NSW Government) ▶ A reduced ability to reinvest in facility and exhibition renewal, and a decline in performance from a financial and customer experience perspective in the long term.

5.4.3 Project Option 5 - Refurbish, re-orientate and sell Harwood

In addition to the works described in Project Option 4, Project Option 5 will involve demolishing and remodeling the Wran Building which runs along Harris Street. This renewal will provide a glass frontage to Harris Street, and accommodate offices, the public library (currently within the Harwood Building) a new working shared storage facility and commercially charged office space. The shared storage will be visible to Harris Street, attracting pedestrian and vehicular traffic to the Museum.

Under this project option, the renewal works proposed will be partly funded by the divestment of the Harwood Building site to the private sector - the Harwood site is valued at \$50 million²¹ - as well as the car park – valued at \$9 million.

Project Option 5 is expected to generate increases in short-term patronage and collaboration opportunities (relative to the Base Case), improving short-term financial performance. However, this project option will result in limited long-term improvements to the Museum’s performance as:

- ▶ Retaining the Harwood site is considered essential for the ongoing operations of MAAS. In the event that the Harwood building is sold, the Museum will be required to store the collection in both the existing Castle Hill Storage facility and the newly developed Wran building, incurring additional operating and capital costs, while affecting the ‘flow’ and customer experience of the Wran building. Moving the collection to Castle Hill will use all current storage availability. The Museum will incur significant storage costs for all future collection requirements
- ▶ Existing issues with the major Touring Exhibition Hall will continue to exist and the Museum will have a limited ability to attract blockbuster exhibitions
- ▶ Increases in patronage, and returns on exhibitions will not be sufficient for the Museum to continuously renew its permanent exhibition and facilities at international benchmark rates. After the original influx of patronage post-construction, it is likely that customers will again grow tired of the existing permanent gallery and customer experience
- ▶ Apart from the development of some commercial space on the top of the Wran building, Project Option 5 provides limited opportunities to the Museum to diversify its funding base.

Staging

Table 33 shows that Project Option 5 will be a three stage development, requiring three DA’s.

Table 33: Staging Project Option 5

Stage	DA process	Steps	Construction timeline
1	<p>The first step to undertake Project Option 5 will be to gain DA for ‘stage one’ proposed works.</p> <p>We estimate that DA will be achieved in the first 18 months, (i.e. July 2015-January 2017).</p>	<p>Stage one will involve:</p> <ul style="list-style-type: none"> ▶ Construction of the new foyer to front Macarthur Park ▶ Addressing the critical OH&S concerns in the Heritage buildings ▶ Refurbishment of the Switch House. ▶ Installation of a lift and reconfiguration of the Northern Annex to provide functional office accommodation. 	<p>Stage one will be undertaken over a two year period, concluding in January 2019.</p>

²¹ This reflects the value of the site as at August 2014. If the site were to sell with the existing planning controls which allow a maximum building height of 28 metres. This value has been assessed by adopting the direct comparison approach on a rate per square metre of land, utilising sales evidence of comparable properties.

Stage	DA process	Steps	Construction timeline
2	Concurrent to stage one works being undertaken, the second DA will be secured. We envisage planning, design and achieving this DA will take 12 months, commencing in January 2018 and receipt of DA by January 2019.	Stage two will involve: <ul style="list-style-type: none"> ▶ Significant refit of the Permanent Galleries ▶ Addressing remaining OH& S issues. 	Stage two will be completed in January 2021.
3	A third DA will be procured whilst stage two works are being completed. This DA is expected to be secured by January 2020.	Stage three will involve: <ul style="list-style-type: none"> ▶ Demolition of the Wran building ▶ Construction of a new facility along Harris Street which will house the working Museum, office accommodation for the Museum staff and surplus office accommodation for leasing to a third party. 	All construction will be completed by January 2022 upon which time staff and the collection can be relocated back into the Museum.

As in Project Option 4:

- ▶ This staging approach will enable the Museum to remain operational during the construction period
- ▶ The Museum will be required to relocate the collection and staff, and plan future exhibitions, while waiting for stage one DA.

Under Project Option 5, it is expected that the Museum will be fully operational by July 2022.

More details on the staging of Project Option 5 can be found in Appendix F.

Procurement

Procurement of Project Option 5 would be best achieved through a traditional construction tender process, as in Project Option 4.

Advantages and disadvantages

Table 34 details the advantages and disadvantages of Project Option 5.

Table 34: Project Option 5: Refurbish, re-orientate and sell Harwood – advantages and disadvantages

Advantages	Disadvantages
<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Refurbishments will facilitate compliance with core requirements under the MAAS Act ▶ Expected small increase in global recognition and significance. ▶ Facilities will now be integrated with the existing Darling Harbour redevelopment, Goods Line Redevelopment and city, increasing the attractiveness of the site to potential users. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ A refit of the exhibition space will facilitate improvements in the financial performance of the Museum. Patronage will increase and operating costs will decline with a re-orientation of the facility internally and increasing compliance with required standards. ▶ Expected uplift in events management revenue as a result of renewed spaces. ▶ Development is funded through sales proceeds of both the Harwood site and the adjoining car park. <p><u>Patronage</u></p> <ul style="list-style-type: none"> ▶ A renewal in the exhibition space, combined with a re-orientation of the facility is likely to assist in the development of more productive collaborations with international partners. ▶ 'Blockbusters' can potentially be attracted, though not full accommodated 	<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Harwood building site is sold and the collection space that is currently available to the Museum is lost. MAAS will be required to store its collection between the renewed Wran building and the existing Castle Hill facility (MAAS representatives have indicated that half of the collection would go to each site). ▶ In 2013/14, 36,000 items were moved between the Harwood building and the Museum. Potentially half of these items will be held at Castle Hill under Project Option 5. MAAS will incur higher transportation and employment costs to facilitate this ▶ Added collection transportation implies added risk of damage to the collection ▶ Collection being held at the Wran building requires a movement away from the optimal layout of the Wran building according to the Commercial Strategy that has been developed. It is likely that the 'flow' and accordingly customer experience within the Wran building will be compromised as a result. ▶ Significant change management strategies are required. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ Cost of capital infrastructure is incurred ▶ The scope of the collection being moved to Castle Hill will necessitate the development of a new / expanded storage facility within 3 years (i.e. 2017/18). This is expected to cost approximately \$14 million to construct²² ▶ The Museum will not witness a large increase in patronage and collaboration to restore revenues. ▶ The diversity and sustainability of MAAS funding streams only increases slightly. MAAS will continue to have a reduced ability to reinvest in facility and exhibition maintenance and renewal, and a decline in performance from a financial and customer experience perspective in the long term.

²² This estimate is based on the current storage facility being built in Castle Hill, and does not include land acquisition costs.

5.4.4 Project Option 6D - Refurbish, re-orientate and renew Harwood

According to the MAAS Commercial Strategy, to best meet the functional requirements of the Museum, the following is required:

- ▶ The existing Museum remains the main site with major renovations undertaken to address the key concerns highlighted in Section 0.0.0.0
- ▶ The Harwood Building needs to be redeveloped to provide additional 'state of the art' gallery space for the Museum with the remainder of the site redeveloped to provide renewed storage space as well as commercial, retail and residential space to diversify potential revenue streams. The new development needs to integrate with the adjoining Museum and be sensitive to surrounding development whilst maximising the commercial and subsequent revenue opportunities.

Remaining cognisant of this 'highest and best use', the proposed development and construction that needs to be undertaken to renew both land holdings is as follows:

The Museum

The major renovations recommended within the Commercial Real Estate Strategy and Masterplan Concept Drawings include:

- ▶ Re-orientation of the entry of the Museum to front Hay Street which will link the Museum with the city, optimise exposure to the Goods Line and the light rail which will connect the Museum with Darling Harbour and Central Station
- ▶ The existing building which runs along Harris Street is remodelled to provide a glass frontage and to house offices, the public library and a new working shared storage facility. The shared storage will be visible to Harris Street, attracting pedestrian and vehicular traffic to the Museum
- ▶ Internally, the museum will be remodelled to provide:
 - ▶ Designated areas for the eight key disciplines and logical circulation for customers
 - ▶ Co-located office areas to drive greater synergies between teams
 - ▶ Designated areas for school groups with separate access / exit options, meeting area, workshop spaces and bathrooms
 - ▶ Appropriate theatre / function / foyer space to accommodate the needs of the events component of the business and to cater for a multitude of clients including school groups, corporates, government and not-for-profits.

The Harwood site

The rights to the redevelopment of the Harwood site will be sold to the private sector that will build:

- ▶ Maximum frontage to the patronage from the Goods Line and UTS student traffic
- ▶ New '**state of the art**' gallery space on the corner of Hay and Macarthur Streets to meet existing gallery space needs. The 'state of the art' exhibition and gallery space is expected to provide a significant increase in the capacity to host temporary exhibitions – particularly 'blockbusters'
- ▶ A footbridge over Macarthur Street to integrate the two Museum buildings.
- ▶ The ground level of the site fronting the Goods Line will be redeveloped to provide retail accommodation, maximising the increased pedestrian patronage anticipated as a result of the operating Goods Line and additional precinct UTS student traffic. This retail space will be owned and leased by the Museum

- ▶ A mixed use commercial development will be developed to front Mary-Ann Street.²³ The commercial space will be owned and leased by the Museum
- ▶ Above the podium, a 30 level residential tower will be constructed (STCA). This residential space will be owned by the private developer
- ▶ The existing workshop in the Harwood building will be partially relocated into the Powerhouse building, with the remainder of the workshop (which does not need to be located on the Museum site), relocated out to the Powerhouse Discovery Centre at Castle Hill
- ▶ The car park that is currently held by the facility is sold. Its market value is approximately \$9 million.

For more details on this redevelopment, refer to the Commercial Strategy in Appendix F.

Under Project Option 6D, the existing collection items which are stored in the Harwood site will now be stored between both the redeveloped Harwood site (which will have some storage space) and the renewed Museum space. Having a much larger amount of the collection within the actual Museum space will drive increasing efficiencies and enable increased display of the collection items to customers, increasing the attractiveness of the site.

The redeveloped Harwood Building will have the capacity to accommodate other arts organisations seeking location, for example, Opera Australia and Brandenburg Orchestra. Considering this, Project Option 6D offers the NSW Government with the best opportunity to capitalise on the redevelopment of the surrounding precinct and continue to develop the cultural precinct in Sydney, delivering a range of benefits, which were outlined in Section 3.7.

Retail and commercial space opportunities

The strategic gateway review team recommended that MAAS investigate all potential retail and commercial space opportunities as part of the Final Business Case process. This would ensure that the Museum would maximise the diversification and sustainability of its funding streams.

The Commercial Strategy, prepared by EY and FJMT, was revisited, and it was found that:

- ▶ The commercial and retail space opportunities that have been identified (as part of Option 6) will enable the Museum to continually set aside significant funding each year for the renewal of the permanent exhibit as well as lifecycle renewal and maintenance requirements
- ▶ The building envelope adopted is relatively conservative to ensure DA is achieved and the Museum is not faced with ongoing vacancies of the space as a result of developing too much space for the market to absorb.

Therefore, for the purposes of the FBC, the proposed retail and commercial space development is considered appropriate. However, if MAAS were able to secure a pre-commitment from a tenant seeking more space than that proposed, further review and variation of the DA is recommended.

Private sector development

It is envisaged that the redevelopment of the Harwood site will be undertaken by the private sector. This is based on advice provided by EY's Real Estate Advisory Services, as presented in their MAAS Commercial Strategy.

Preliminary market sounding has identified that it would be possible for MAAS to negotiate the following with a private developer:

²³ It is important to note that the Museum will not own either the commercial or the residential space. This will be owned by the private developer, as is explained in the next sub-section.

- ▶ The Harwood site could be redeveloped by a private developer into a shared commercial, residential and retail space. There would also be space within the redeveloped facility to store the Museum's collection as well as the new 'state of the art' exhibition / gallery space
- ▶ The private developer would be willing to pay approximately \$61 million (as opposed to the property's current market value of \$50 million) for the ownership of the residential property. Note that private developers are willing to pay an extra \$11 million than market value because under Project Option 6D, the Museum will undertake added works to secure permits for increased building heights and densities on the site, increasing the value of the space from the perspective of the private developer.²⁴
- ▶ The retail space that is built as a part of this development would be owned and leased by the Museum, providing a sustainable and diversified funding stream.

Staging

Table 35 outlines that Project Option 6D will be a three stage development, requiring four separate DA's.

Table 35: Staging Option 6D

Stage	DA process	Steps	Construction timeline
1a	The first step to undertake Project Option 6D will be to achieve a DA for 'stage one' proposed works. We estimate that DA will be achieved in the first 18 months, (i.e. July 2015-January 2017).	Stage one (A) will include: <ul style="list-style-type: none"> ▶ Construction of the new foyer to front Macarthur Park ▶ Demolition of the Northern part of the Harwood building to build the Temporary Galleries and bridge connection to foyer. ▶ All critical OH&S issues in the heritage spaces to be addressed. ▶ The Northern Annex to be reconfigured to provide functional office accommodation and a lift installed. ▶ A minor refurbishment of the exhibition space. 	Stage one (A) will be undertaken over a two year period, concluding by January 2019.
1b	Concurrent to stage one (A) works being undertaken, Harwood South will be sold and a second DA Application will be lodged. Planning and design for this DA will commence in January 2017 with approval expected by January 2018.	Stage one (B) will include: <ul style="list-style-type: none"> ▶ Demolition of the Harwood South site ▶ Commission for the development of the proposed commercial/residential development extending along the Goods Line. 	Stage One (B) will be undertaken over a two year period, concluding by January 2020.
2	Concurrent to stage one (A) & (B) works being undertaken, a third DA application will be secured. We envisage planning, design and achieving this DA will take 12 months, commencing in January 2018 and receipt of DA by January 2019.	Stage two will include: <ul style="list-style-type: none"> ▶ Refurbishment of the heritage buildings ▶ Significant refit of the permanent galleries ▶ Addressing any remaining OH&S issues. 	Stage two will be undertaken over a two year period, concluding in January 2021.

²⁴ The value of the site adopting the Commercial Real Estate Strategy has been assessed adopting the residual analysis method. This method reflects the 'project related site value' of the proposed Commercial Real Estate Strategy, after a permit has been secured to achieve the increased building heights and density.

Stage	DA process	Steps	Construction timeline
3	A fourth DA will be procured whilst stage two works are being completed. This DA is expected to be secured by January 2020, allowing commencement of Stage Three works in February 2020.	Stage three will include: <ul style="list-style-type: none"> ▶ Demolition of the Wran building ▶ Construction of a new facility along Harris Street which will house the new group entry foyer, working Museum, office accommodation for the Museum staff and surplus office accommodation for leasing to a third party. 	All construction will be completed by January 2022 upon which time staff and the collection can be relocated back into the Museum.

As in Project Options 4 and 5:

- ▶ This staging approach will enable the Museum to remain operational during the construction period
- ▶ The Museum will be required to relocate the collection and staff, and plan future exhibitions, while waiting for stage one (A) DA.

Under Project Option 6D, it is expected that the Museum will be fully operational by July 2022.

More details on the staging approach for Option 6D can be found in Appendix F.

Procurement

We have separated the procurement approach for Project Option 6D into two components:

- ▶ **Component A** - Procurement for the delivery of the Museum development: delivery of Component A would be best achieved through a traditional construction tender process as recommended for Project Options 4 and 5
- ▶ **Component B** - The Harwood South redevelopment: based on our review of potential development arrangements, a Project Development Agreement (PDA) is considered the most suitable potential procurement option for Component B. Under a PDA, MAAS maintains a certain degree of control over the project while maintaining a modest risk profile. The private sector takes all of the development risk under a PDA.

Procurement will be considered in greater detail in Section 7.3.

Advantages and disadvantages

Table 36 details the key advantages and disadvantages associated with Project Option 6D.

Table 36: Project Option 6D: Refurbish, re-orientate and renew Harwood – advantages and disadvantages

Advantages	Disadvantages
<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Refurbishments will facilitate compliance with core requirements under the MAAS Act, as collections will now be stored in conditions which are relatively protected from the elements. ▶ Development of an iconic and purpose built facility which will result in international acclaim and recognition. ▶ Harwood Building will now host state of the art exhibition spaces. ▶ Facilities will now be integrated with the existing Darling Harbour redevelopment, Goods Line Redevelopment and city, increasing the attractiveness of the site to customers ▶ The existing collection items which are stored in the Harwood site will now be stored between both the redeveloped Harwood site (which will have some storage space) and the renewed Museum space. Having a much larger amount of the collection within the actual Museum space will drive increasing efficiencies and enable increased display of the collection items to customers, increasing the attractiveness of the site. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ Museum will secure access to funding from the private developer in return for the rights to the renewal of the Harwood site ▶ The Museum will secure access to sustainable and diversified funding streams by having access to rental revenues from the redeveloped Harwood site. ▶ The development of an iconic, purpose built facility will facilitate large increases in visitation numbers, as well as the attraction of blockbuster events to the facility on a more frequent basis. In turn this will generate increased revenues from donations, sponsorships and grants from Destination NSW. <p><u>Patronage</u></p> <ul style="list-style-type: none"> ▶ The development of a purpose built facility which is integrated with the redeveloped Cultural Precinct will attract increasing patronage. ▶ The development of an iconic, purpose-built facility, as part of Sydney's redeveloped cultural precinct is likely to significantly assist in the development of more productive collaborations with international partners. ▶ The Museum will be able to attract and host 'blockbuster' events more frequently ▶ Financial sustainability will facilitate the development of sufficient funding for a permanent exhibition renewal cycle which is consistent with international benchmarks (i.e. renewal of the permanent exhibition every 6 to 7 years). This will generate long term interest from customers, and maintain growing patronage over the long term. 	<p><u>Operational</u></p> <ul style="list-style-type: none"> ▶ Change management strategies are required. ▶ MAAS will be required to go through a rigorous tender process in order to identify the appropriate private developer that will undertake the renewal of the Harwood Building site. <p><u>Financial sustainability</u></p> <ul style="list-style-type: none"> ▶ Cost of capital infrastructure is incurred. <p><u>Risks</u></p> <ul style="list-style-type: none"> ▶ Project development risk – particularly, there is a risk that the DA is denied ▶ Private developers may not be interested in an arrangement whereby the Museum gets to hold the retail component of the redeveloped Harwood site. ▶ Demand risk <ul style="list-style-type: none"> ▶ Patronage ▶ Retail rent ▶ Blockbusters and temporary exhibitions ▶ Private development ▶ Changes in service delivery (i.e. property ownerships), affecting the operations of the Museum ▶ Higher than expected development costs ▶ Lack of support for the expanded facility from stakeholders, education, community and arts and cultural groups

6. Assessment of options

Key messages

- ▶ Project Option 6D is expected to generate the highest uplift in Museum patronage over the 20 year evaluation period. By FY34, it is anticipated that up to 1.7 million people could be attracted to the Museum
- ▶ Project Option 6D is expected to deliver the highest quantitative and qualitative economic benefits to the community relative to the Base Case. Project Option 6D can **deliver approximately \$232.7 million in economic returns over 20 years** (discounted at 7%), and a benefit-cost ratio of above 1. These benefits do not include any allowance for the incremental benefits the renewed Museum might provide to the regeneration of the precinct more broadly as well as significant qualitative benefits.
- ▶ Project Option 1 (Base Case) is the least cost project option with a Net Present Cost of \$250.6 million. However, Project Option 6D is the only project option which offers **MAAS the opportunity to establish a sustainable operating model** in the long term.
- ▶ MAAS will require \$350.4 million (undiscounted) in capital investment over 7 years to deliver Project Option 6D:
 - ▶ \$280.4 million in capital funding over 7 years from the NSW Government.
 - ▶ The remaining \$70 million will be sourced from the divestment of the Harwood site and the adjoining car-park.

6.1 Background

As discussed in Section 5, an economic and financial assessment has been undertaken in line with NSW Treasury Guidelines. The detailed economic and financial assessments are provided in Section 6.2 and Section 6.3 respectively.

The essential differences between each of the project options, which drive the differences results:

- ▶ **Under Project Option 4 (refurbish and re-orientate):** it is expected that patronage, membership, donations, sponsorships and venue hire revenues will increase by a small amount relative to the Base Case.
- ▶ **Under Project Option 5 (refurbish, re-orientate and sell Harwood):** higher capital costs will be incurred to demolish and remodel the Wran building. Part of this will be recovered through the sale of the Harwood site. Patronage, membership, sponsorships, donation and venue hire revenues are likely to be slightly higher than under Project Option 4. However, the sale of the Harwood site will necessitate:
 - ▶ **An increase in capital costs** – The scope of the collection being moved to Castle Hill will necessitate the development of a new / expanded storage facility within 3 years (i.e. 2017/18). This is expected to cost approximately \$14 million to construct²⁵
 - ▶ **An increase in operating costs** – higher transportation costs will be incurred to move the collection (approximately 36,000 items were moved in FY13 alone) between the Museum and storage space (most likely in Castle Hill)

²⁵ This estimate is based on the current storage facility being built in Castle Hill, and does not include land acquisition costs.

- ▶ **Under Project Option 6D (Refurbish, re-orientate and renew Harwood):** the capital costs incurred are slightly lower than the costs under Project Option 5 – assuming that the private sector undertakes the redevelopment of the Harwood site for a fee of \$61 million. Including the features of Project Option 5, plus a new collection space and 'state of the art' exhibition hall in the Harwood site, it is likely that patronage, membership, donations, sponsorships and venue hire revenues will increase significantly. The ownership (and subsequent lease) of retail and commercial space from the redeveloped Harwood site will also add to annual revenues of MAAS.

6.1.1 Patronage trends

Patronage is the key driver of the results for the financial and economic assessment.²⁶ Table 37 outlines how patronage has been disaggregated for the purposes of the FBC:

Table 37: Patronage types

Item	Type	Description
General admissions	Paying admissions	▶ Customers that pay to attend the permanent exhibition
	Non-paying admissions	▶ Customers that do not pay to attend the permanent exhibition (i.e. members and children under 4)
Temporary exhibitions	Paying admissions	▶ Customers that pay to attend a temporary exhibition (some temporary exhibitions are charged)
	Non-paying admissions	▶ Customers that do not pay to attend a temporary exhibition (some temporary exhibitions are free)
Blockbuster attendances	Paying admissions	▶ Customers who pay to attend a 'blockbuster' event

It is expected that:

- ▶ All project options will experience a relatively small decrease in patronage during construction (approximately 5% in FY17). Further reductions in patronage are unlikely as patronage is already relatively low and a staging approach to construction has been prepared to mitigate against any larger reductions
- ▶ **Project Options 4 and 5** are expected to experience a relatively small increase in patronage (not including blockbuster patronage) post-construction. Growth is likely to fall in line with population growth (approximately 2% per annum) in the longer term, as the Museum struggles to continue reinvesting in its exhibitions
- ▶ **Project Option 6D** is expected to deliver patronage which aligns with the patronage rates being experienced at Melbourne Museum and Queensland Museum. Both the Melbourne and Queensland Museums have been recently (re)developed. Table 38 outlines the market penetration rates that each museum is currently delivering. The average market penetration rate has been used to estimate the patronage expected for the Museum once Project Option 6D is completed.

Table 38: Rates of penetration

Penetration rates	Melbourne Museum	Queensland Museum	Average
Local (state) population	8.2%	18.4%	13.3%
State student market	31.2%	7.5%	19.3%
Interstate tourists	0.1%	0.1%	0.1%
International tourists	7.4%	4.6%	6.0%

Table 39 outlines the total patronage expected under each of the project options in Year 1 (pre-construction), Year 5 (during construction) and Year's 10 and 20 (post-construction) of the evaluation.

²⁶ Detailed patronage numbers under each project option is provided in Appendix G
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Table 39: Expected patronage

Year	Base Case	Project Option 4	Project Option 5	Project Option 6D
FY15 – Year 1	490,091	490,091	490,091	490,091
FY19 – Year 5	535,385	488,866	488,866	488,866
FY24 – Year 10	546,093	592,872	591,528	1,212,813
FY19 – Year 15	546,093	673,831	692,077	1,458,444
FY34 – Year 20	546,093	687,307	720,036	1,701,629

Table 39 demonstrates that:

- ▶ During construction of Project Options 4, 5 and 6D, patronage is expected to decrease slightly and then remain relatively flat
- ▶ Once construction is complete, there is expected to be uplift in patronage across all project options, particularly in the first year of operations, and particularly under Project Option 6D. After the first year of operations patronage is expected to fall²⁷ to a normalised year of operations
- ▶ Across all project options (and particularly Project Option 6D) patronage will experience continued growth, with peaks being experienced in years where the Museum is able to attract 'blockbusters'.

6.2 Economic assessment of project options

In line with the *NSW Government Guidelines for Economic Appraisal (2007)*, our economic assessment of the short-listed project options for meeting the key objectives has involved an analysis of the key direct and indirect costs and benefits of the project options. The key assumptions underpinning the economic assessment include:

- ▶ A 20 year assessment period, beginning 1 July 2014
- ▶ The evaluation has been undertaken in real FY15 dollar terms (i.e. no escalation)
- ▶ A real discount rate of 7% per annum has been applied to all cash flows.

6.2.1 Economic costs

There are four main costs associated with the project:

- ▶ Capital costs provided by the quantity surveyor
- ▶ Lifecycle capital maintenance (LCCM) costs provided by the quantity surveyor RLB
- ▶ Permanent exhibition renewal costs prepared by MAAS
- ▶ Operating and maintenance costs prepared by MAAS.

Capital costs

The capital costs have been developed based on the agreed scope of works and staging under each project option.

²⁷

A slight fall in patronage after the first year of operations post redevelopment has been seen across museums such as Melbourne Museum and Queensland Museum

The capital costs include full construction and refurbishment costs: site preparation costs, construction costs, staging costs, planning and DA costs, authority fees, contaminated materials, consultant fees, relocation costs, allowances, and contingencies (for design, Construction and other).

The capital cost inputs (excluding escalation) for construction and refurbishment for all project options were supplied by RLB and are attached at Appendix H. Table 40 presents the un-escalated, un-discounted capital costs for each option.

Table 40: Capital cost schedule by option (\$'m, 2015 dollars)

Year	Base Case	Project Option 4	Project Option 5	Project Option 6D
FY15	0.0	1.0	1.0	1.0
FY16	5.1	16.3	16.1	20.3
FY17	0.0	32.7	34.1	40.6
FY18	0.0	16.3	30.1	20.3
FY19	0.0	25.5	16.2	18.8
FY20	0.0	50.9	85.0	85.8
FY21	0.0	26.0	121.3	115.1
FY22	0.0	0.0	52.6	48.6
Total	5.1	168.8	356.5	350.4

Table 40 indicates that:

- ▶ The Base Case requires minimal capital investment. However, required capital renewal and maintenance have been captured within the LCCM costs (see below)
- ▶ Project Option 4 is expected to be completed one year earlier than Project Options 5 and 6
- ▶ Project Option 5 requires a \$356.5 million capital investment. This investment includes the delivery of an expanded / new storage facility at Castle Hill
- ▶ Project Option 6D has slightly smaller capital requirements (\$350.4 million) than Project Option 5:
 - ▶ It is expected that the private sector will undertake the development of the Harwood site in return for development rights to the site
 - ▶ Project Option 6D will not require an expanded / new storage facility at Castle Hill, as the redevelopment of the Harwood site contains new storage space.

Table 41 presents the Present Value (PV) of the discounted capital costs (over the 20 year evaluation period) for each option:

Table 41: Capital costs (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
Incremental capital costs	4.5	122.6	240.2	237.7

Lifecycle capital maintenance costs

RLB estimated LCCM costs for each project option on the following basis:

- ▶ Replacement costs are based on RLB Benchmarks and standard trade rates and hours worked
- ▶ Reactive and regular maintenance allowances are based on *Communities NSW – MAAS Backlog & Capitalised Maintenance Report* 9 September 2010.

Table 42 presents the estimated annual (unescalated) LCCM costs under each project option.

Table 42: LCCM per annum (real, unescalated terms – FY15 dollars)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
LCCM	9.6	6.2	3.7	6.4

The above demonstrates that without reinvestment in the Museum's ageing facilities (i.e. under the Base Case), larger investments in capital renewal and maintenance will be required in the future. The level of LCCM required under the Base Case will require MAAS to approach the NSW Government for additional funding assistance.

Note that Project Option 5 has lower LCCM as a result of the sale of the Harwood site. Table 43 presents the PV of LCCM (over the 20 year evaluation period) under each project option:

Table 43: LCCM costs (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
LCCM costs	101.2	83.7	74.0	86.8

Permanent exhibition renewal costs

As previously indicated, the Museum has been unable to substantially renew its permanent exhibition in 25 years. With the renewal, it is expected that the Museum will earn in excess of its net surplus target of \$250,000 (FY15 terms) per annum. This annual excess is expected to be reinvested into the establishment of a permanent exhibition renewal cycle, which will place the Museum in line with international benchmarks (i.e. the renewal of the permanent exhibition every 5 to 7 years).

MAAS assumes that approximately \$2.5 million will need to be reinvested in the permanent exhibition each year to reach international benchmarks.

Table 44 outlines the funds (unescalated) each project option could generate (based on expected patronage etc.) for the renewal of the exhibition facility at different stages of the evaluation period.

Table 44: Permanent exhibition renewal (real, unescalated terms – FY15 dollars)

Year	Base Case	Project Option 4	Project Option 5	Project Option 6D
FY15 – Year 1	0.0	0.0	0.0	0.0
FY19 – Year 5	0.0	0.0	0.0	0.0
FY24 – Year 10	0.0	0.2	1.9	2.5
FY19 – Year 15	0.0	0.0	1.9	2.5
FY34 – Year 20	0.0	0.0	1.4	2.5

Table 44 demonstrates the following:

- ▶ Under the Base Case as well as Project Options 4 and 5, the Museum does not make sufficient revenue to cover its operating costs and renew its permanent exhibition in line with 'good practice' (i.e. up to \$2.5 million per annum). In the event where the Museum cannot generate sustainable funding sources, it is unlikely to continue attracting customers in the long run without some added form of Government investment.
- ▶ Under Project Option 6D, the Museum is expected to make sufficient revenues to be able to invest \$2.5 million per annum in the renewal of its permanent exhibition. The development of sustainable and diverse funding sources ensures that the Museum can continue to attract increasing patronage and achieve its (and the NSW Government's) objectives.

Table 45 presents the PV of the costs associated with reinvestment in the Museum’s permanent exhibition (over the 20 year evaluation period) under each project option.

Table 45: Permanent exhibition capital costs (PV @ 7% discount rate, 20 years, FY15, \$’m)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
Permanent exhibition costs	0.0	1.1	9.2	11.6

Operating and maintenance costs

Operating costs have not been included in the assessment of economic costs. It is assumed that the Museum will make incremental net surpluses as a result of its renewal (particularly under Project Option 6D). This has been captured as a benefit. Operating costs are discussed in the Financial Assessment, in Section 6.3.

Summary of economic costs

Table 46 provides a summary of estimated absolute (i.e. not incremental to the Base Case) economic costs for a renewed Museum.

Table 46: Construction, ongoing capital & operating costs (PV @ 7% discount rate, 20 years, FY15, \$’m)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
Capital costs	4.5	122.6	240.2	237.7
LCCM costs	101.2	83.7	74.0	86.8
Permanent exhibition renewal	0.0	1.1	9.2	11.6
Total Costs	105.7	207.5	323.4	336.1

Source: Analysis of MAAS inputs

6.2.2 Economic benefits

In addition to the strategic issues and drivers of the project identified in Section 3, a number of additional benefits will be realised through the renewal of the Museum. Where possible, these benefits have been quantified and included in the cost-benefit analysis. Where it was not possible to quantify the benefits, they have been discussed qualitatively. Figure 14 presents the quantitative and qualitative benefits which have been assessed.

Figure 14: Quantitative and qualitative benefits

Quantitative benefits	Qualitative benefits
<ul style="list-style-type: none"> ▶ Net benefits to the NSW economy from induced tourism and tourism related expenditure ▶ Net surplus generated from operations (i.e. profit) ▶ Operational efficiencies ▶ Consumer surplus of attendees ▶ Non-use value / civic pride ▶ Divestment of land 	<ul style="list-style-type: none"> ▶ Creative society ▶ Quality of life and improved liveability ▶ Integration and co-location benefits ▶ Social inclusion benefits ▶ Improved learning outcomes ▶ Increased staff retention and morale

The remainder of the economic analysis will consider each of the quantitative and qualitative benefits, identified above, in turn.

Quantitative benefits

See Appendix I for greater details on how each of the quantitative benefits has been calculated.

Net surplus generated from the operations of the Museum

A renewed Museum is expected to generate net surpluses. This surplus is realised in the form of incremental net profit to MAAS. This is discussed in greater detail in the financial analysis in Section 6.3.²⁸

Table 47 provides the discounted incremental net profit realised by MAAS under each project option, over the 20 year evaluation period.

Table 47: Incremental net surplus from operations (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Project Option 4	Project Option 5	Project Option 6D
Incremental operating surplus	10.3	17.9	47.6

Source: Analysis of MAAS results
This is before LCCM and permanent exhibition renewal costs

With the introduction of diversified revenue streams, as well as the attraction of increased patronage, Project Option 6D is expected to deliver the largest net surpluses to the economy, worth approximately \$47.6 million in discounted terms over the evaluation period.²⁹

Net benefits to the NSW economy from induced tourism and tourism-related expenditure

When a Museum attracts interstate and international tourist to NSW, the tourist expenditure within the state, is an economic benefit to NSW businesses. The net benefit to NSW businesses can be calculated by considering the net profit (value add) from this tourist expenditure.

Table 48 shows the discounted incremental net benefit to the NSW economy from induced tourism and tourism-related expenditure, in FY15 dollars over the 20 year evaluation period.

Table 48: Incremental net benefit to the NSW economy (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Project Option 4	Project Option 5	Project Option 6D
Net tourism benefit	10.3	9.6	34.1

Project Option 6D is expected to attract a significantly higher number of tourists relative to the Base Case, as well as the remaining project options, generating approximately \$34.1 million in discounted economic benefits.

Operating efficiencies

The reconfiguration of the Museum's operations and layout is expected to achieve operational efficiencies relative to the Base Case arising from:

- ▶ Increased synergies due to reconfiguration, and increased staff morale, improving performance
- ▶ Reduction in maintenance costs of ageing infrastructure
- ▶ Reduction in OH&S costs
- ▶ Reduction in other temporary costs (for example, hiring special air conditioning equipment to maintain a stable humidity and temperature level for specific exhibitions).

²⁸ Note that net surpluses for the Museum include continuing NSW Government funding for operations. In FY15 this is expected to be approximately \$27.3 million. Note that this is expected to decrease by approximately 1% per annum going forward

²⁹ It should be noted that while there may be some element of this benefit which represents a transfer of expenditure rather than the generation of new spend for NSW, this element is not considered material on a net basis. For the purposes of this Business Case, the consideration of the full extent of this element was out of scope.

For the purposes of this evaluation, the operational efficiencies associated with each of the project options have been captured within the operating costs (see Section 6.3).

Consumer Surplus of attendees

Consumer surplus is a net benefit that can be defined as the difference between what people are 'willing to pay' ("WTP") to attend the Museum versus what they actually paid.

While the value of what individuals actually paid to attend the Museum is relatively straight forward (the ticket expenditures), measuring the amount that consumers are willing-to-pay is less so. Consumer surplus is likely to differ between each person as they would value their attendance differently depending on their tastes, income levels, and the 'price elasticity' of their demand (i.e. whether their demand is sensitive to price). The value of the consumer surplus has been estimated using benchmark data from other comparable facilities.

Table 49 shows the discounted incremental consumer surplus (for both paid and non-paid admissions), in FY15 dollars over the 20 year evaluation period.

Table 49: Incremental consumer surplus (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Project Option 4	Project Option 5	Project Option 6D
Consumer surplus	7.5	12.5	47.9

As Project Option 6D is expected to deliver the greatest increase in WTP relative to the Base Case (per user), and the largest increase in patronage; it delivers the greatest consumer surplus benefits, worth approximately \$47.9 million in discounted terms.

Civic pride

NSW residents who do not attend the Museum still obtain existence (non-use) value or civic pride from the presence of such a venue within their state and the exhibits and functions that it attracts.

A renewed Museum is likely to increase the civic pride the Museum generates. Modern and diverse facilities, relatively inviting permanent and temporary exhibits and increasingly significant functions and events will increase non-use value and represents a benefit relative to the Base Case.

Table 50 shows the discounted incremental civic pride obtained by NSW residents, in FY15 dollars over the 20 year evaluation period.

Table 50: Civic pride relative to the Base Case (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Project Option 4	Project Option 5	Project Option 6D
Incremental civic pride	17.3	15.5	46.4

Project Option 6D is expected to deliver the greatest increase in civic pride relative to the Base Case (per household), worth approximately \$46.4 million in discounted terms over the evaluation period.

Divestment of assets

The divestment of the existing car park and the Harwood building site represents a benefit to the project by freeing up resources for alternative use.

- ▶ The car park is worth approximately \$9 million in FY15 terms and is expected to be divested under Project Options 4, 5 and 6 in FY19³⁰
- ▶ The Harwood site has a market value of \$50 million³¹ and:

³⁰ Based on an independent valuation prepared by EY Real Estate Advisory
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- ▶ Is expected to be divested for \$50 million under Project Option 5 in FY18
- ▶ Is expected to be developed by the private sector under Project Option 6D. The private sector is expected to pay up to \$61 million (in FY18) for the right to develop the Harwood site and keep the residential space.³²

Table 51 shows the discounted value of the divestments proposed for each project option, in FY15 dollars over the 20 year evaluation period.

Table 51: Divestment value (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Project Option 4	Project Option 5	Project Option 6D
Divestments	6.9	47.7	56.7

Project Option 6D is expected to deliver the largest divestment benefit, worth approximately \$56.7 million in discounted terms over the evaluation period.

Summary of economic benefits

Table 52 provides the Net Present Value (NPV) of the quantifiable benefits.

Table 52: Benefit analysis results (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Project Option 4	Project Option 5	Project Option 6D
Venue operator's net profit	10.3	17.9	47.6
Induced tourism expenditure	10.3	9.6	34.1
Operating efficiencies			
Consumer surplus	7.5	12.5	47.9
Civic pride	17.3	15.5	46.4
Divestment of land	6.9	47.7	56.7
PV of quantifiable benefits	52.2	103.2	232.7

Source: Analysis of MAAS results

*** these results will be captured as part of the operating costs under each option.

Table 52 demonstrates that Project Option 6D is expected to deliver significantly larger economic benefits over the 20 year evaluation period (approximately \$232.7 million in discounted terms) relative to the Base Case, as well as the other project options.

6.2.3 Cost-benefit analysis results

Table 53 provides the results of the quantitative incremental costs and benefits relative to the Base Case.

Table 53: Cost-benefit analysis results (PV @ 7% discount rate, 20 years, FY15, \$'m)

Item	Project Option 4	Project Option 5	Project Option 6D
PV of total costs	101.8	217.7	230.4
PV of quantitative benefits	52.2	103.2	232.7
NPV	-49.6	-114.5	2.3
Benefit-Cost Ratio (BCR)	0.51	0.47	1.01

³¹ Based on an independent valuation prepared by EY Real Estate Advisory

³² EY Real Estate Advisory Team

Based on analysis of the identified costs and benefits, it can be seen that Project Option 6D produces the largest BCR (1.01)³³ followed by Project Option 4 (0.51) and Project Option 5 (0.47). The drivers of this result are outlined at the beginning of Section 6.

Table 53 indicates that the quantifiable benefits of the proposed renewal (i.e. Project Option 6D) are above the costs that the renewal will incur to the wider community. It is worth noting that these benefits do not include any allowance for the incremental benefits the renewed Museum might provide to the regeneration of the precinct more broadly.

Museums are cultural assets and also deliver significant cultural and social benefits to the wider community (including social inclusion, innovation, a creative society and improved learning outcomes) which have not been quantified as a part of this analysis (due to the generally difficult nature of quantifying such benefits). This demonstrates that the Government has the potential to gain a significant economic and social return on investment, from investing in the renewal of the Museum according to the Commercial Real Estate Strategy (i.e. according to Project Option 6D).

Sensitivity analysis

Sensitivities on these results have been conducted, and the full results are provided in Appendix I. Sensitivity analysis that has been conducted includes:

- ▶ Discount rate – Increase to 10% / Decrease to 4%
- ▶ Capital costs – Increase by 20% / Decrease by 20%
- ▶ Operating costs - Increase by 20% / Decrease by 20%
- ▶ Patronage - Increase by 20% / Decrease by 20%.

The sensitivity analysis indicates that the BCR of the Project Option 6D will fall below one in the event where:

- ▶ Discount rate increases to 10%
- ▶ Capital costs increase by 20%
- ▶ Patronage decreases by 20%

6.2.4 Qualitative benefits

In addition to the quantifiable benefits assessed in Section 6.2.2, a number of other benefits were identified which were not above to be quantified, including:

- ▶ Creative society
- ▶ Quality of life and improved liveability
- ▶ Integration and co-location benefits
- ▶ Social inclusion benefits
- ▶ Improved learning outcomes
- ▶ Increased staff retention and morale.

These benefits have been assessed qualitatively assessed. Table 54 describes each of the qualitative benefits identified, and the extent to which each project option is likely to deliver on these benefits – each project option has been rated with a number of stars (a maximum of 4 stars can be allocated), the greater the number of stars, the more likely that the project option will deliver on that qualitative benefit.

³³ The BCR for Project Option 6D has decreased since the Preliminary Business Case (1.12). This is because a 7 year staging approach to construction has been developed (in the Preliminary Business Case a 4 year staging program was proposed). A 7 year staging approach is expected to minimise risk to government and enable continuing operations, with minimal disruptions. However, a 7 year staging program (when compared to a 4 year staging program) also means that 3 fewer years of benefits are accrued over the 20 year evaluation period.

Table 54: Qualitative benefits

Qualitative benefit	Description	Project Option			Rationale
		4	5	6D	
Creative society	<p>Through its role in collecting and presenting art and science, the Museum can be regarded as a hub of creativity, the effects of which flow to other parts of society.</p> <p>Specifically, the impressions and ideas found within the Museum may inspire the works of designers, architects and educators, which in turn stimulate and help to transform the thinking and dialogues in the broader community not directly involved in the process of creation. The Museum can contribute to a 'creative society' by:</p> <ul style="list-style-type: none"> ▶ Supporting and inspiring artists ▶ Developing partnerships with other arts and community organisations. <p>Given the location of the Museum (western side of George St in the CBD and accessible from major transport hubs), it is possible that, Western Sydney and regional NSW could gain benefits in this capacity.</p>				<p>▶ All options increase the connectivity of the Museum to the surrounding cultural precinct as well as the Goods Line redevelopment and the city, providing increased accessibility to the Museum as a cultural vicinity</p> <p>▶ Project Option 6D will facilitate the rejuvenation of temporary and permanent exhibitions, attracting patronage and fostering creativity</p> <p>▶ Each project option (and particularly Project Option 6D) is likely to generate significant increases in patronage and participation in the arts and cultural sector</p> <p>▶ Each project option (particularly Project Option 6D) is likely to generate an increase in student participation in the arts and cultural sector</p>
Quality of life and improved liveability	<p>Arts and cultural activities are seen to contribute to an enhanced quality of life and making a region more liveable. A liveable city delivers more than just social benefits. Liveability is also a driver of economic growth.</p> <p>Renewing the Museum would allow an increase in the volume of cultural productions and activities which could be undertaken, which would hence provide an increase in the liveability of Sydney. The Museum's location could mean that Western Sydney (particularly the Inner West) residents experience the greatest increase in liveability. This aligns with existing Government priorities.</p> <p>Accessibility to major transport hubs also ensures that regional NSW can share in this benefit to some capacity.</p>				<p>▶ All options are likely to increase the availability and accessibility of cultural facilities with a re-orientation of the entrance</p> <p>▶ The Wran Building (in Project Options 5 and 6D) offers increased access to cultural facilities as a result of a glass exterior enabling passers-by to look within</p> <p>▶ Project Option 6D will facilitate the renewal of the permanent exhibition and the attraction of additional temporary exhibitions. This will foster increased patronage, and resulting creativity and innovation.</p>
Integration and co-location benefits	<p>The re-orientation and renewal of the Museum, and adjoining Harwood Building site, in parallel with the surrounding precinct's developments, offers certain integration and co-location opportunities:</p> <ul style="list-style-type: none"> ▶ <i>Partnerships with cultural facilities</i> – A modern facility which is integrated with the surrounding redevelopment at Darling harbour can facilitate stronger partnerships with iconic cultural facilities, expanding knowledge and attracting unique exhibitions. ▶ <i>Partnerships with educational facilities</i> – Improved learning facilities and integration with the redeveloped UTS site will drive an improvement in links and partnerships with educational facilities. ▶ <i>Amenity benefits for surrounding businesses</i> – A renewed Museum will drive added patronage and value to the area, benefiting surrounding businesses. 				<p>▶ All project options will be increasingly integrated with surrounding cultural facilities as a result of the re-orientation of the entrance</p> <p>▶ All project options will renew function venues and theatres, facilitating expanded collaboration with cultural and educational facilities</p> <p>▶ Project Option 6D will expand the capacity of the Museum to renew its service offering, facilitating increased collaboration with cultural and educational facilities</p> <p>▶ Project Option 6D will deliver increased retail, residential and commercial space to the area, resulting in economic benefits for businesses in the surrounding area.</p>

Qualitative benefit	Description	Project Option			Rationale
		4	5	6D	
Social Inclusion benefits	<p>There is recognition that arts and culture contribute to improved social inclusion, and the wide array economic and social benefits that come with this. Arts and culture:</p> <ul style="list-style-type: none"> ▶ Enable society to take part in shaping the culture around them and interpret the expression of others ▶ Promote wider community understanding of cultural difference ▶ Lowers barriers to cultural expression ▶ Facilitates and encourages social connections. 	****	****	****	<ul style="list-style-type: none"> ▶ All project options are likely to attract increased patronage to the Museum ▶ All project options will enable the Museum to provide a more equitable distribution of the capabilities by which individuals can take part in shaping the culture around them and interpret the expression of others ▶ Improved collaborations and partnerships could enable the Museum to promote wider community understanding of cultural difference, lower barriers to cultural expression and encourage social connections.
Improved learning outcomes	<p>Arts, culture and science contribute to teaching and learning. This might span curriculum and self-directed learning amongst children, and lifelong learning for the wider community. As previously discussed, in Australia, national productivity increases are limited by Australian student's relatively low learning of STEM skills. The NSW Government has responded to this trend by increasingly focusing on STEM skills within the state's school's curriculum.</p> <p>The Museum is uniquely placed to respond to this focus as well as the transition to a more learner centred environment. A redeveloped Museum will improve learning outcomes by:</p> <ul style="list-style-type: none"> ▶ Increasing the accessibility and attractiveness of the facilities to children, parents and teachers ▶ Teaching / establishing exhibitions and learning modules according to the curriculum ▶ Modernising existing learning facilities and fostering the learning of STEM skills ▶ Developing collaborative partnerships with education and community groups. 	**	**	****	<ul style="list-style-type: none"> ▶ All project options will modernise existing learning facilities ▶ All project options are likely to increase the attractiveness of the museum to parents, teachers and children ▶ All project options may increase the collaborations and partnerships that MAAS takes part in. However, Project Option 6D is likely to facilitate this most as it is likely to increase student participation ▶ Project Option 6D is more likely to be able to deliver the funding streams required to continually re-invest in interactive learning facilities
Increased staff retention and morale	<p>A renewed Museum is expected to deliver the following:</p> <ul style="list-style-type: none"> ▶ Customised new buildings and modern facilities ▶ A relatively efficient organisational layout ▶ Improved safety and security for staff ▶ Improved staff amenities and training capabilities. <p>This will contribute to greater overall workforce morale and sustainability.</p>	****	****	****	<ul style="list-style-type: none"> ▶ All project options are likely to facilitate the investment in modern facilities and a more efficient organisational layout ▶ All project options are likely to increase safety and security for staff by alleviating any OH&S concerns which remain in the Base Case ▶ All project options are likely to deliver improved staff amenities and training capabilities.

6.3 Financial assessment of project options

In line with NSW Treasury Guidelines, a net financial assessment (which considers the financial costs and revenues of each project option from the Museum's perspective) of the project options was undertaken, pre-tax, for the operational phase of the Museum post renewal. The key assumptions used in the financial assessment include:

- ▶ A 20-year assessment period, beginning 1 July 2014
- ▶ A discount rate of 2.9% per annum, the NSW Treasury 3-year bond rate, has been applied to all cash flows
- ▶ Table 55 outlines the rate at which cash flows have been escalated:

Table 55: Escalation rates

Cash flow	Escalation factor applied
Capital / LCCM costs	10 year CAGR of Sydney Construction Price Index, equal to 2.8% per annum
Operating costs	10 year CAGR of Sydney Consumer Price Index (CPI), equal to 2.7% per annum
Employee salaries	5-year CAGR of Average Weekly Ordinary Time Earnings, equal to 3.3% per annum
Revenues (excl rent)	10 year CAGR of Sydney Consumer Price Index (CPI), equal to 2.7% per annum
Rental revenues	10-year CAGR of the Sydney Rental Price Index, equal to 4.5% per annum

More detail on the assumptions that have driven this financial assessment is in Appendix J.

6.3.1 Financial costs

The un-escalated capital, lifecycle and permanent exhibition renewal costs of each project option were outlined in the economic assessment in Section 6.2.

Operating costs

Table 56 presents annual operating costs for the Museum in FY24, by which time the construction of each project option is complete.

Table 56: Assumed annual costs for the proposed redeveloped Museum FY24 (undiscounted, FY15 \$'m)

Cost category	Cost value – Year 10			
	Base Case	Project Option 4	Project Option 5	Project Option 6D
Core				
Salary Expenditure (Baseline)	21.8	21.9	21.8	22.4
Fixed Core Expenditure	6.2	5.3	5.3	6.5
Variable Core Expenditure	1.2	1.2	1.2	1.2
Sponsorship Related Expenditure	0.1	0.2	0.2	0.3
Exhibition				
Exhibition related direct expenditure	4.4	4.4	4.4	4.4
Exhibition Blockbuster costs (incl Salaries)	0.0	0.0	0.0	0.0
Exhibition related Salary costs	0.8	0.8	0.8	1.6
Programming				
Program Expenditure	1.0	1.0	1.0	1.0
Total costs	35.6	34.8	34.7	37.5

Table 57 presents annual operating costs for the Museum in FY29.

Table 57: Assumed annual costs for the proposed redeveloped Museum FY29 (undiscounted, FY15 \$'m)

Cost category	Cost value – Year 15			
	Base Case	Project Option 4	Project Option 5	Project Option 6D
Core				
Salary Expenditure (Baseline)	21.8	22.0	22.0	22.4
Fixed Core Expenditure	6.2	5.3	5.3	6.5
Variable Core Expenditure	1.2	1.2	1.2	1.2
Sponsorship Related Expenditure	0.1	0.2	0.2	0.4
Exhibition				
Exhibition related direct expenditure	4.4	4.4	4.4	4.4
Exhibition Blockbuster costs (incl Salaries)	0.0	0.0	0.0	2.7
Exhibition related Salary costs	0.8	1.0	1.0	1.6
Programming				
Program Expenditure	1.0	1.0	1.0	1.0
Total costs	35.6	35.0	35.1	40.3

Table 58 presents annual operating costs for the Museum in FY34.

Table 58: Assumed annual costs for the proposed redeveloped Museum FY34 (undiscounted, FY15 \$'m)

Cost category	Cost value – Year 20			
	Base Case	Project Option 4	Project Option 5	Project Option 6D
Core				
Salary Expenditure (Baseline)	21.8	22.0	22.0	23.0
Fixed Core Expenditure	6.2	5.3	5.3	6.5
Variable Core Expenditure	1.2	1.2	1.2	1.2
Sponsorship Related Expenditure	0.1	0.2	0.2	0.3
Exhibition				
Exhibition related direct expenditure	4.4	4.4	4.4	4.4
Exhibition Blockbuster costs (incl Salaries)	0.0	0.0	0.0	0.0
Exhibition related Salary costs	0.8	1.0	1.1	2.5
Programming				
Program Expenditure	1.0	1.0	1.0	1.0
Total costs	35.6	35.1	35.2	38.9

As previously discussed, Project Option 6D is relatively more efficient and is expected to generate a series of operational efficiencies for the Museum, however, Table 58 demonstrates that Project Option 6D still has the highest operating costs per annum post-construction – growing from \$37.5 million in FY24 (5% higher than the Base Case) to \$38.9 million in FY34 (9% higher than the Base Case).

The variance in operating costs between Project Option 6D and the Base Case are driven by:

- ▶ **Project Option 6D presents a larger scope** - The scope of Project Option 6D involves a number of added works relative to the Base Case, including the operation and maintenance of increased floor space and engagement with commercial and retail property managers, increasing fixed recurrent costs per annum
- ▶ **Project Option 6D must accommodate increased patronage** – Under Project Option 6D, it is expected that approximately 1.7 million patrons will attend the Museum by FY34. To accommodate

this, it is expected that casual staff numbers at the Museum will increase at the same rate as patronage growth

- ▶ **Project Option 6D accommodates 'blockbusters'** – FY29 is a blockbuster year. In FY29, operating costs are \$40.3 million. Added operating costs are incurred to attract and market a 'blockbuster', and to accommodate the resulting increase in patronage.

Greater detail on expected operating costs and the assumptions driving these estimates are provided in Appendix K.

Operating costs and renewal of the temporary exhibition

Exhibition related direct expenditure (a line item in the preceding tables) encompasses all spending to renew temporary exhibitions (it is assumed that this investment is made before the investment in the permanent exhibition outlined in Section 6.2). MAAS has indicated that approximately \$4.4 million in funding is required per annum to continuously renew / attract temporary exhibitions and continue existing operations at 'status quo'. For this investment (\$4.4 million per annum) to be possible, a certain revenue target needs to be maintained (depending on operating expenditure for the year):

- ▶ **In the event where the revenue target is exceeded, MAAS' operating model is sustainable;** the Museum has funding to maintain existing operations at 'status quo', and extra cash flows which can be used to renew the permanent exhibition / maintain the facility
- ▶ **In the event where the revenue target is not met, MAAS' operating model is unsustainable;** the Museum will not have sufficient funds to maintain the 'status quo' (i.e. renewing the temporary exhibition) and its financial and patronage performance will continue to deteriorate.

6.3.2 Revenues

The renewal of the Museum will enable the generation of increasingly diverse revenue streams, which can be used to ensure continuing operations and renewal of the temporary exhibitions, permanent exhibitions and facilities.

Proposed revenue streams have been established by MAAS in consultation with the EY Real Estate Advisory team, as well as using benchmark data..

For ease of comparison, the revenues presented in this section are presented as unescalated FY15 dollars.

The revenue streams for the proposed renewed Museum are:

- ▶ Admission fees (including to temporary exhibitions and blockbusters)
- ▶ Memberships
- ▶ Sponsorships
- ▶ Donations
- ▶ Venue hire
- ▶ Leased operations
- ▶ Government grants (including Destination NSW grants)³⁴
- ▶ Other revenues

Table 59 outlines the expected revenues for the Museum in the first year post-construction (FY24).

³⁴

It is expected that NSW Government funding for continuing operations will decrease at 1% per annum over the evaluation period

Table 59: Museum revenue in FY24 (undiscounted, FY15 \$'m)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
Admission fees	5.4	5.9	5.9	12.1
Memberships	0.4	0.4	0.4	0.9
Sponsorships	0.4	0.6	0.6	0.8
Donations	0.5	0.6	0.6	1.1
Venue hire	0.5	0.6	0.6	0.9
Leased operations	0.4	0.5	2.1	3.2
Government grants	25.3	25.3	25.3	25.4
Other revenues	1.4	1.4	1.4	1.4
Total revenues	34.3	35.3	36.9	45.8

Table 60 outlines the expected revenues for the Museum in FY29.

Table 60: Museum revenue in FY29 (undiscounted, FY15 \$'m)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
Admission fees	5.4	6.7	6.9	15.6
Memberships	0.4	0.5	0.5	0.9
Sponsorships	0.4	0.6	0.6	0.9
Donations	0.5	0.6	0.6	1.6
Venue hire	0.5	0.6	0.6	1.1
Leased operations	0.4	0.5	2.5	3.8
Government grants	24.0	24.1	24.1	24.4
Other revenues	1.4	1.4	1.4	1.4
Total revenues	33.1	35.0	37.2	49.9

Table 61 outlines the expected revenues for the Museum in FY34.

Table 61: Museum revenue in FY34 (undiscounted, FY15 \$'m)

Item	Base Case	Project Option 4	Project Option 5	Project Option 6D
Admission fees	5.4	6.8	7.2	16.9
Memberships	0.4	0.5	0.5	1.3
Sponsorships	0.4	0.6	0.6	0.8
Donations	0.5	0.6	0.6	1.1
Venue hire	0.5	0.6	0.6	1.0
Leased operations	0.4	0.6	3.0	4.7
Government grants	22.8	22.9	22.9	22.9
Other revenues	1.5	1.5	1.5	1.5
Total revenues	32.0	34.1	36.9	50.2

The tables above demonstrate that the Museum, under Project Option 6D, is likely to deliver the greatest annual revenues, increasing from approximately \$45.8 million in FY24 (33% higher than the Base Case) to \$50.2 million in FY34 (57% higher than the Base Case). This is particularly driven by the following:

- ▶ **Increased ability to attract patronage and members** – The delivery of an iconic, 'state of the art' facility with modern and exciting temporary and permanent exhibitions is expected to attract

relatively more patronage and members, compared to the Base Case, as well as other Project Options, driving increased admission and membership revenue

- ▶ **Increased ability to attract sponsors and donors** – The development of a ‘state of the art’ facility with a global and confident brand will provide a greater incentive for corporations to sponsor the Museum, and will draw increasing attention to the Museum from potential donors
- ▶ **Increased ability to accommodate and attract functions** – Modern function areas and increased space will increase the likelihood of demand for function space
- ▶ **Diverse funding streams** – Project Option 6D will expand the scope of commercial and retail property within the Museum’s property portfolio, generating approximately \$4.7 million in revenue per annum by FY34
- ▶ **Increased government funding** – The Museum will have an increased ability to attract exclusive temporary exhibitions and ‘blockbusters’ to Sydney, potentially attracting Government funding (particularly Destination NSW). Destination NSW funding could reach up to \$400,000 per annum during ‘blockbuster’ years

Greater detail on expected operating revenues and the assumptions driving these estimates are provided in Appendix K.

6.3.3 Summary of financial assessment

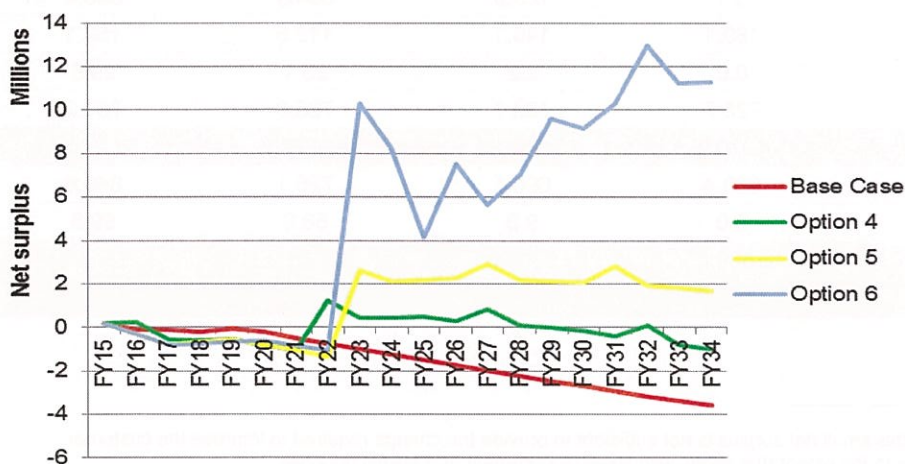
Table 62 presents the un-escalated net profit in 2015 dollars (pre-tax) based on the operating costs and revenues outlined above.

Table 62: Costs & revenues (undiscounted, FY15 \$’m)

Period	Base Case	Project Option 4	Project Option 5	Project Option 6D
FY15 – Year 1	0.2	0.2	0.2	0.2
FY19 – Year 5	-0.1	-0.6	-0.6	-0.7
FY24 – Year 10	-1.5	0.5	2.3	8.3
FY29 – Year 15	-2.5	0.0	2.1	9.6
FY34 – Year 20	-3.6	-1.0	1.7	11.3

Figure 15 illustrates the unescalated net profit of the Museum over the evaluation period.

Figure 15: Net surplus (undiscounted, FY15 \$’m)



The above demonstrates the following:

- ▶ **Under the Base Case, the Museum will continue to be unsustainable** - Without fundamental change, the net result declines into a deficit. Therefore, the Museum will be required to reduce its reinvestment in the temporary exhibition to remain afloat, while no funding can be set aside to renew the permanent exhibition. Financial performance and patronage will hence continue existing downward trends and the Museum will require added Government assistance in the future.
- ▶ **Under Project Option 4, the Museum will continue to be unsustainable** - Project Option 4 generates positive returns on investment through the majority of the evaluation period, however, in the long run; the limited reinvestment in the facility and the permanent exhibition (as seen in Section 6.2) and will see patronage and other revenue sources declining. Temporary exhibition reinvestment will be reduced, while permanent exhibition renewal will be put on hold. The Museums financial performance and patronage will continue to decline and the Museum will require added Government assistance in the future.
- ▶ **Under Project Option 5, the Museum will continue to be inefficient** - Project Option 5 provides small net surpluses each year. The Museum can maintain the 'status quo' (continued reinvestment in the temporary exhibition) and fund limited upgrades / replacements to its permanent exhibition and customer experience.³⁵ However, Project Option 5, by separating the Museum from the collection, will deliver an inefficient operating model with unnecessarily high transportation costs, which could be avoided with an alternative approach.
- ▶ **Under Project Option 6D; the Museum will establish a sustainable and efficient operating model³⁶** - Project Option 6D delivers significant positive returns relative to the other project options considered. The development of diversified funding streams, as well as the attraction of increased patronage, sponsorships and donations from the development of an iconic and 'state of the art' facility, ensures that the Museum will have sufficient funding streams to reinvest in the permanent and temporary exhibitions and improve performance. Project Option 6D offers MAAS the best opportunity to develop a sustainable operating model that will achieve Government objectives.

6.4 Financial impact on MAAS

Table 63 outlines the financial impact of the project options on MAAS. This has been estimated using a 2.9% discount rate (NSW Treasury Bond rate), as required under the *NSW Guidelines for Financial Appraisal*:

Table 63: Financial impact (PV @ 2.9% per annum, FY15 \$'m)

Financial costs and benefits	Base Case	Project Option 4	Project Option 5	Project Option 6D
Capital costs	5.1	168.0	354.4	348.4
LCCM costs	189.1	146.1	119.5	152.1
Permanent exhibition	0.0	2.2	23.1	29.6
OPEX	725.7	723.7	725.8	764.3
Cash outflows	\$920.0	\$1,040.0	\$1,222.8	\$1,294.4
Revenue	669.4	695.1	726.1	846.6
Divestments	0.0	9.0	58.8	69.8
Cash inflows	\$669.4	\$704.0	\$785.0	\$916.4
Net Present Cost (NPC)	\$250.6	\$335.9	\$437.8	\$378.0

³⁵ MAAS has indicated that this small net surplus is not sufficient to provide the change required to improve the customer experience and performance to the extent that aligns with NSW Government and MAAS priorities

³⁶ A sustainable operating model which assumes continual funding for continued operations from the NSW Government

The results of the financial impact analysis indicate that Project Option 1 (Base Case) is the least cost option with a NPC of \$250.6 million. However, Option 1 only provides compliance with statutory requirements and does not provide any of the functionality benefits and improvements that the other options provide.

With the exception of the Base Case, Project Option 4 is the least cost option, with a net present cost (NPC) of \$335.9 million, followed by Project Option 6D, with a NPC of approximately \$378.0 million.

In accordance with NSW Treasury Guidelines, a series of sensitivity tests have been conducted, on the financial impact of each option. Financial sensitivities that have been conducted include:

- ▶ Discount rate – Increase by 2% / Decrease by 2%
- ▶ Capital costs – Increase by 20% / Decrease by 20%
- ▶ Operating costs - Increase by 20% / Decrease by 20%.

The sensitivity tests have found that the NPC of the Museum:

- ▶ Under the Base Case could range between \$154.9 million and \$395.7 million
- ▶ Under Project Option 4 could range between \$238.5 million and \$478.5 million
- ▶ Under Project Option 5 could range between \$319.1 million and \$559.9 million
- ▶ Under Project Option 6D could range between \$245.1 million and 516.4 million.

The detailed results of these sensitivity tests are in Appendix K.

6.5 Preferred option

The selection of the preferred option is based on the results of a quantitative analysis of the costs and benefits of the options in the economic and financial analysis, together with the results of qualitative assessment of the costs and benefits that could not be quantified.

It is therefore recommended that the Museum is renewed according to the proposed Commercial Strategy (i.e. Project Option 6D) as it:

- ▶ Generates a positive economic contribution to the State. Project Option 6D is expected to generate up to \$232.7 million in economic benefits (not including qualitative benefits) to the state relative to the Base Case. This is relatively larger than the Project Options 4 and 5 are expected to generate:
 - ▶ Under **Project Option 4**, the Museum could generate up to \$52.2 million in economic benefits over 20 years
 - ▶ Under **Project Option 5**, the Museum could generate up to \$103.2 million in economic benefits over 20 years.
- ▶ Generates significant qualitative benefits, including:
 - ▶ Growing Museum audiences to 1.7 million customers annually by FY34
 - ▶ Providing an iconic 'state of the art' facility which will deliver significant social returns to the State
 - ▶ Improved learning outcomes, particularly the learning of STEM skills
 - ▶ Enabling the State to further capitalise on the redevelopment of the cultural precinct
- ▶ Contributes to the State meeting its NSW 2021 goals, particularly in respect of:

- ▶ Increasing patronage and participation in arts and cultural activity
 - ▶ Increasing tourism in NSW
 - ▶ Increasing the economic contribution of the creative economy
- ▶ Provides the Museum with a **sustainable business model** to reinvest in its permanent exhibitions, thus retaining a competitive customer experience, without ongoing additional Government assistance. This is unlike other Project Options where:
- ▶ Under the **Base Case**, the Museum will require additional Government assistance to continue to reinvest in temporary exhibitions (at a required benchmark rate) almost immediately
 - ▶ Under **Project Option 4**, the Museum will require additional Government assistance to continue to reinvest in temporary exhibitions (at a required benchmark rate) by FY29
 - ▶ Under **Project Option 5**, the Museum, the Museum will be able to renew its temporary exhibition, but unable to renew its permanent exhibition at the rate which MAAS representatives have indicated is required (i.e. \$2.5 million per annum), and will require additional Government support to be internationally competitive.

6.5.1 Costs if the Government fails to intervene

If the NSW Government fails to intervene, it will incur significant costs in the long run, including added capital renewal and maintenance costs for the existing ageing facility. Under the Base Case, the Museum will incur a \$250.6 million NPC to simply maintain the 'status quo' (i.e. while not delivering better outcomes for the community or providing the Museum with a sustainable business model). While Project Option 6D has a higher NPC (approximately \$378.0 million), it is expected to deliver significantly higher benefits.

6.5.2 Funding requirements for the preferred option

To deliver Project Option 6D, including expected economic and social returns, the Museum will require Government funding assistance.

Table 64 demonstrates that the funding requirements:

- ▶ Will be required in annual components over the duration of the staging approach (as described in Section 0), to 2021/22
- ▶ Will be reduced (compared to total capital investment required), due to the expected divestments of both the Harwood site and the adjoining car-park, which will be reinvested into the delivery of the renewed Museum.

Table 64: Funding from divestments and funding requirements from NSW Government, and total capital investment per annum (undiscounted terms, FY15 \$'m)

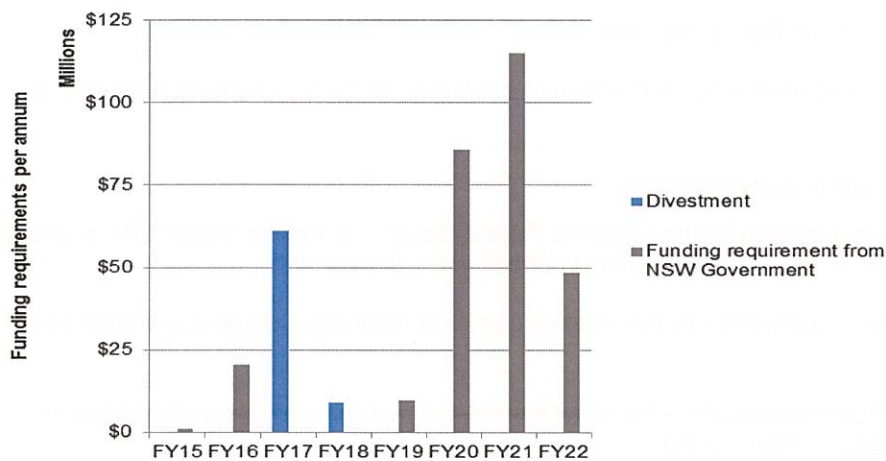
Year	Funding from divestments	Funding requirement from the NSW Government	Total capital investment per annum
FY15	0.0	1.0	1.0
FY16	0.0	20.3	20.3
FY17	61.0	0.0	40.6
FY18	9.0	0.0	20.3
FY19	0.0	9.7	18.8
FY20	0.0	85.8	85.8
FY21	0.0	115.1	115.1
FY22	0.0	48.6	48.6
Total	70.0	280.4	350.4

The above demonstrates that over planning and construction period (from FY15 to FY22), a \$350.4 million capital investment will be required to renew the Museum. Approximately \$70 million of this will be gained from the divestment of assets and the Museum will require an additional \$280.4 million in funding from the NSW Government.

- ▶ Funding requirements from the NSW Government do not surpass \$115.1 million in any year
- ▶ After FY15, funding requirements are \$30.0 million over the next four years, with the majority of that (\$20.3 million) required in FY16. This is due to the divestment revenues received during this period.

Figure 16 illustrates the funding requirements from the NSW Government, plus the funding obtained from divestments, to cover the expected capital costs over the construction period and deliver the preferred project option:

Figure 16: Funding from divestments and funding requirements from the NSW Government to reinvest in the Museum according to the preferred project option (undiscounted, FY15 \$'m)



It is important to note that with this funding the Museum will have sufficient cash flows to both complete the renewal of the Museum and continue operations during the staging process.

6.5.3 Financial impact on MAAS

Table 65 outlines the additional recurrent budget impacts under the preferred project option, for the following five years. All figures below are in FY15 (unescalated) terms. Greater detail is provided in the Financial Impact Statement in Appendix J.

Table 65: Financial impact of the preferred project option (undiscounted, FY15 \$'m)

Financial impact	FY15	FY16	FY17	FY18	FY19
Capital costs	1.0	20.3	40.6	20.3	18.8
LCCM costs	9.6	9.6	9.6	9.6	9.6
Permanent exhibition	0.0	0.0	0.0	0.0	0.0
OPEX	35.2	35.9	36.0	35.8	35.8
Cash outflows	45.7	65.7	86.1	65.6	64.2
Revenue	35.2	35.4	35.0	34.8	34.9
Divestments	0.0	0.0	61.0	9.0	0.0
Cash inflows	35.2	35.4	96.0	43.8	34.9
Net cash flows	-10.5	-30.3	9.9	-21.8	-29.2

Please note that the remainder of this FBC will only consider the preferred option.

6.6 Risk assessment of project options

A Risk Management Workshop involving key stakeholders including MAAS, EY, FJMT, RLB and JBA was conducted on 3 October 2014. In line with the *NSW Treasury Guidelines for Capital Business Cases*, we have identified and assessed the key risks associated with each of the options.

The steps involved in the risk identification and assessment process were as follows:

- ▶ Identification of key risk categories
- ▶ Identification and description of individual risks
- ▶ Assessment of the likelihood and consequence ratings for each risk
- ▶ Determination of risk management strategies
- ▶ Allocation of the responsibility for key risks.

The output from this process is attached in the form of a risk register for the short-listed options in Appendix L.

6.6.1 Risk identification and assessment

The key risks which were identified for the preferred Project Option (i.e. Project Option 6D), over and above the risks identified for the remaining project options are outlined below:

- ▶ NSW Treasury does not allow the ownership and control of retail and commercial property by MAAS
- ▶ Expected returns from the sale of the Harwood site are not realised and / or an inappropriate procurement strategy is implemented
- ▶ The design of the Harwood site is incompatible and unsatisfactory to the Museum
- ▶ Staging plan is incompatible with the operations of the Museum
- ▶ Commercial and retail revenue streams do not deliver the expected cash inflows and the permanent exhibition cannot be renewed
- ▶ Higher than anticipated operating costs and lower than anticipated patronage
- ▶ Lack of support for the new facility from internal stakeholders, other agencies, Government and the wider community.

6.6.2 Risk mitigation and management strategies

The risk register for the preferred project option will be incorporated into an overall risk management plan and framework that will articulate the methodology for monitoring and managing risks following approval of the FBC.

The following sub-sections describe the key elements of the proposed risk management framework.

Risk Management System

MAAS will establish a risk aware culture by adopting the risk register and the actions as a basis for ongoing risk management.

Awareness

- ▶ Distribute the risk register and regular updates to all project team members
- ▶ Establish a “no blame” environment where any project team member can raise a risk-related issue

Internal communication

- ▶ Establish a regular risk agenda item at project meetings
- ▶ Integrate the risk management plan with the operating plan
- ▶ Establish a two way mechanism for communicating real, perceived and potential risks associated with the project, and for providing feedback on decisions and actions taken.

External stakeholder consultation

To manage a potential lack of support, continuing stakeholder consultation and management is critical.

The stakeholder management strategy that has been prepared for this FBC is in Section 7.7.

Hiring appropriate expertise

To mitigate some of the key risks that were identified above, it will be appropriate for MAAS to engage with technical experts across a number of fields, including:

- ▶ Technical consultants to help deliver the Commercial Strategy and FBC
- ▶ Architectural and construction expertise, and existing project managers
- ▶ Existing commercial and retail property managers to manage the commercial and retail assets that will be established
- ▶ Communications strategy experts to lead a large part of the stakeholder management process during and post-construction.

Maintaining tight control over design of the facility

As identified in the risk register for Project Option 6D, MAAS is potentially exposed to the risk that the design of the proposed renew Museum or the South Harwood site is not delivered within MAAS' requirements. To mitigate this risk:

- ▶ MAAS will apply to the City of Sydney to ensure that a competition process is not used to select the final design of the facility. Instead, MAAS will conduct an EOI and Tendering process and will be part of the decision panel

- ▶ MAAS will develop and communicate a very tight design brief to ensure that the Museum design process is robust
- ▶ MAAS will develop robust commercial principles when contracting with the developer of the Harwood site.

Implementation

The steps to be carried out for project implementation are:

- ▶ Allocate responsibility for individual risk treatment/mitigation actions to the appropriate project team member
- ▶ Undertake the treatment actions contained in the risk register
- ▶ Report on actions taken, progress towards implementation, outcomes and completion
- ▶ Identify new risks as they arise, and decide whether they are of sufficient magnitude to warrant treatment.

Monitoring

The process proposed for project monitoring is:

- ▶ Identify risk events that have appeared imminent and interventions taken to prevent their occurrence
- ▶ Identify risk events that have occurred and action taken in response
- ▶ Review risks on a regular basis and identify any risks that no longer pose a threat to the achievement of project objectives and can be removed from the risk register
- ▶ Undertake surveillance of the preconditions for, or occurrence of, a risk event, or the emergence of new risks
- ▶ Report on surveillance outcomes, and initiate remedial action if warranted.

Reporting

Regular risk management reports will be prepared that describe:

- ▶ The status of risk treatment actions
- ▶ Any project risk-related correspondence or discussions
- ▶ Assurance activities, their status/progress and outcomes
- ▶ Actions undertaken as a result of surveillance detections.

Risk management plan review

A review of the risk management plan and risk register will be carried out every six months to ensure that the treatment plan, strategies and management system remain valid and relevant over time.

6.7 Sustainability

MAAS recognises the need for its resources to be managed in a way that is sustainable. The proposed project meets the environmental, economic and social goals of both MAAS and Government as a whole, by:

- ▶ Delivering a sustainable operating model
- ▶ Replacing inefficient, ageing facilities with modern sustainable alternatives incorporating best practice design initiatives
- ▶ Realising social benefits from providing modern facilities to support, inspire and teach artists
- ▶ Modernising facilities to enhance learning outcomes
- ▶ Potentially stimulating investment during financial instability
- ▶ Contributing to the revitalisation of Sydney's cultural precinct
- ▶ Collaborating with local cultural and educational facilities to encourage innovation
- ▶ Developing strategies and recommendations for re-use of existing land holdings.

6.7.1 Sustainable design

Renewing the Museum and Harwood site with modern sustainable alternatives incorporating best practice design initiatives, may offer a range of environmental benefits through decreasing the impact that the sites will have on the environment.

Several of the environmental benefits which are likely to be realized through the proposed renewal include:

- ▶ Emissions reduction
- ▶ Water conservation
- ▶ Temperature moderation & control: the use of specific materials in building construction that are able to better moderate temperature, will reduce the dependency on energy to fulfil this need. This will also benefit the storage of the collection through the reduction in temperature changes. Currently the viewing rooms (coin and stamp) and DRIM room all continue to have issues with high humidity levels. Mould has also been discovered on approximately 200 items within the collection. This is not consistent with the environmental conditions expected of a collection storage area
- ▶ Part of the renewal will include the provision of new and consolidated office accommodation. Sustainable office buildings have been shown to contain economic benefits, including:
 - ▶ **Increased employee productivity:** certain studies have shown that employee productivity is positively linked with indoor conditions in buildings that follow greater sustainable design.³⁷
 - ▶ **Cost savings:** Reduced demand for energy and water through sustainable design principles are likely to yield cost savings to MAAS. It will also serve to minimise the strain on local infrastructure.

³⁷ For instance, see Fisk, W.J. "Health and Productivity Gains from Better Indoor Environments and their Relationship to Building Energy Efficiency." *Annual Review of Energy and the Environment*, July-August 2002

Given the specialist nature of the Museum, it is not proposed to mandate or aim to achieve specified targets for the Australian Building and Greenhouse Rating Scheme (ABGR) or Greenstar building ratings. However, it is expected that the design brief will include a requirement to design buildings and building services which are highly efficient, incorporating the principles of both the ABGR and Greenstar rating system.

Specific areas in which best practice is expected to be applied include:

- ▶ Building fabric inclusive of glazing, insulation and building sealing
- ▶ Heating, ventilation and air conditioning systems
- ▶ Lighting and power systems
- ▶ Water storage, reuse and recycling.

The design and construction of the renewal will be driven to achieve the following sustainability needs:

- ▶ Flexibility to ensure the ongoing functional operation of the Museum without the need for costly work to accommodate changing technological, security or display needs
- ▶ The performance of the Museum buildings will be one of 'Best Industry Practice'.

6.7.2 Technical standards and legislative requirements

A multi-disciplinary team comprised of commercial property specialists, town planners, architects, quantity surveyors and economists was established to develop this FBC.

A Commercial Real Estate Strategy has been completed by the real estate team at EY in conjunction with FJMT Architects. FJMT Architects have also completed a spatial analysis which includes blocking and stacking plans detailing the proposed development. Quantity surveyors, RLB have provided estimated construction costs based on the blocking and stacking plans taking into account current relevant technical standards for buildings of this nature. Planning advice has also been provided by JBA Urban Planning Consultants to provide guidance around the process and timing required to achieve the proposed Commercial Real Estate Strategy.

7. Implementation of the proposal

Key messages

- ▶ MAAS will be responsible for overall project governance. Project management services will be provided by an external third party with an internal project director from MAAS representing MAAS interests.
- ▶ Delivery of the Museum development will be best achieved through a traditional construction tender, while a Project Development Agreement is the recommended approach for the delivery of the Harwood site redevelopment.
- ▶ The change management plan identifies sources of potential resistance and a strategy to manage that resistance to reduce the project's risks and increase the likelihood of successful implementation.
- ▶ The change management plan provides a framework for the delivery phase of the project to ensure that communication with stakeholders is relevant, accurate, consistent and timely. A diverse and large group of stakeholders are potentially affected by the renewal of the Museum. Communication with these groups needs to be a two-way mechanism and MAAS will actively solicit and respond to feedback from stakeholders.

7.1 Project plan

The project involves addressing the operational issues associated with the Museum:

- ▶ Improved connectivity to the surrounding cultural precinct, The Goods Line and the city
- ▶ Internal remodel of the Museum to provide:
 - ▶ Designated areas for the eight key disciplines and logical circulation for customers
 - ▶ Additional gallery space to accommodate an increasing array of temporary exhibitions as well as possible 'blockbuster' exhibitions
 - ▶ Office areas to be co-located to drive greater synergies between teams
 - ▶ Designated areas for school groups with separate access / exit options, meeting area, workshop spaces and bathrooms
 - ▶ Appropriate theatre / function / foyer space to accommodate the needs of the Events component of the business and to cater for a multitude of clients including school groups, corporates, government and not-for-profits.
- ▶ Remodel of the collections space to provide storage conditions that:
 - ▶ Provide a secure physical environment where access is strictly controlled
 - ▶ Is managed through an appropriate asset or inventory management system
 - ▶ Match collection storage against international museum standards for building environmental control, including humidity, temperature, lighting etc, to ensure the asset's condition (and value) is maintained and preserved
 - ▶ Ensure the assets are stored appropriately to minimise the risk of accidental damage
 - ▶ Meet OH&S standards and allow for careful handling of priceless objects
 - ▶ Permits regular inspection for collection management (collection audits and object condition inspections) and research purposes, i.e. maximises visible access with minimal handling.
- ▶ Facilitates access to diverse funding streams.

Assuming that the required level of Government assistance is provided in May 2015, the project team will commence detailed planning and design in June 2015. Table 66 outlines the timing of key project stages:

Table 66: Project timeline

Stage	Timeline
Business Case complete and Gateway approval	November 2014
Funding decision	May 2014
Commence design and planning	July 2015
Apply for Development Approval ("DA")	July 2015
Move staff and the collection	Financial Year 2015/16
Construction commences	January 2017
Construction complete	January 2022
Move staff and the collection into new facility	First half of 2022
Museum is fully operational	July 2022

A detailed Gantt chart, outlining the project plan for the delivery of the renewed Museum can be found in Appendix M.

7.2 Governance

MAAS will be responsible for overall project governance.

The Masterplan project will be the largest ever undertaken by the Museum and will require significant energy and focus, well beyond that of the existing MAAS Executive who will need to focus on delivering business as usual throughout. Recognizing that need for continuity a MAAS Masterplan Project Director role will be created and recruited for the duration of the project via a specialist recruitment firm to ensure the candidate has the commensurate experience and skills to see the project to fruition.

Project management services will be provided by an external third party with an internal project director from MAAS representing MAAS interests.

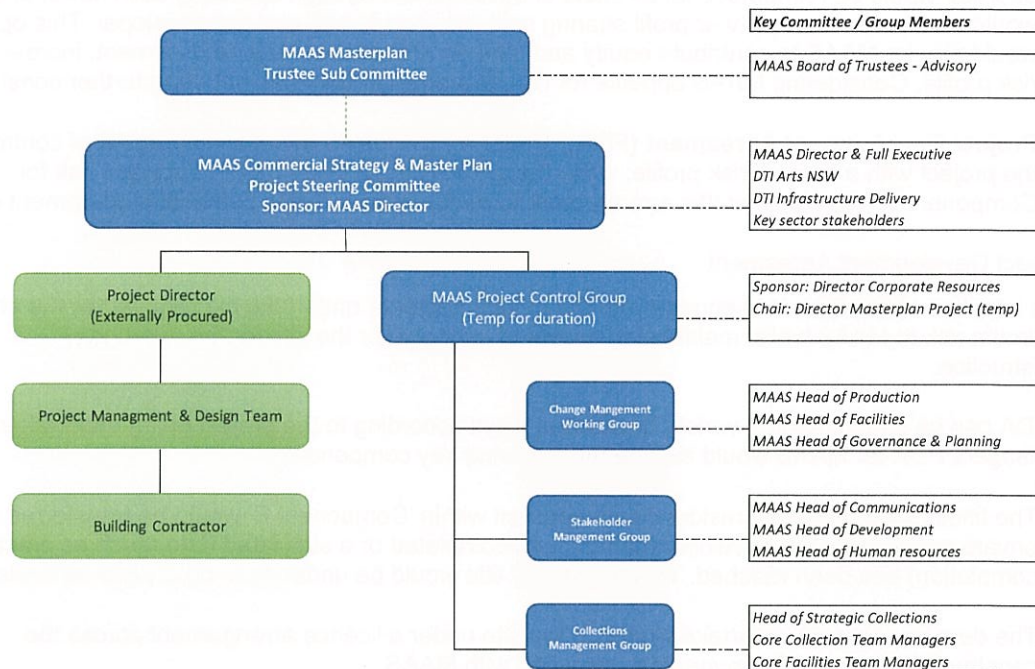
MAAS is managing the development of the Business Case, funding bid and appointment of the project manager and design team for the next phase of the project. The project manager and design team will be selected by tender. All tendering and procurement will follow guidelines set out in NSW Government Default Procurement System for Construction projects.

The Broader Project Governance structure will include:

- ▶ Project Steering Committee, sponsored and Chaired by the Director of MAAS
- ▶ Project Control Group, sponsored by the Director of Corporate Resources & CFO, Chaired by MAAS Masterplan and Commercial Strategy Project Director (internal)
- ▶ The MAAS Trust Masterplan and Commercial Strategy Sub Committee.

Figure 17 below depicts governance structure at high level.

Figure 17: Project Governance structure



7.3 Procurement

We have separated the procurement approach for the preferred option into two components:

- ▶ **Component A** - Procurement for the delivery of the Museum development
- ▶ **Component B** - The Harwood South redevelopment.

Component A

The delivery of Component A would be best achieved through a traditional construction tender process. Given the Museum design will require particular specifications, the design and construct (D&C) model which allows for some flexibility in design, is considered unsuitable.

Instead, MAAS will fully develop the design and specifications for the new buildings and then tender the building works, with a building contractor appointed on the basis of price and quality among other attributes.

Component B

Based on our review of potential development arrangements, as well as a review of the overall project objectives, we are of the opinion that delivery of Component B could be considered through one of the following arrangements:

- ▶ **Private Public Partnership (PPP):** PPP arrangements normally span a longer life-cycle than other arrangements, and usually involve a private consortium fully integrating the design, construction, financing, operational service delivery and maintenance of an asset. PPPs are typically most suited to larger scale projects. Therefore, this option is considered unsuitable for the Harwood site redevelopment, given the smaller scale of the project, and thus we have not considered it further in our analysis.

- ▶ **Joint Venture (JV):** Under a JV, a developer/operator would assume a project management role on the land and may fund all or part of the development on the property. In return, the developer or operator would be reimbursed for all costs of development through operating cash flows, and there would be a revenue, royalty or profit sharing split between MAAS and the developer. This option would require MAAS to contribute equity and take an active role in the development, increasing its risk profile. Considering MAAS appetite for risk, this arrangement has not been further considered.
- ▶ **Project Development Agreement (PDA):** Under a PDA MAAS maintains a degree of control over the project with a modest risk profile; while the private sector takes all development risk for Component B. We consider this arrangement to be the most suitable potential procurement option.

Project Development Agreement

The intention of the PDA is to engage with the private sector to undertake the required works at a minimum risk to MAAS whilst maintaining a level of control over the site for the duration of construction.

A PDA can be structured in a variety of different ways according to the project being undertaken. We envisage a PDA for MAAS would include the following key components:

- ▶ The titles of the proposed residential component within 'Component B' would be transferred to the private sector once the development has been completed or a stipulated date (such as practical completion) has been reached. This transfer of title would be undertaken on a freehold basis.
- ▶ The developer would undertake works on the site under a licence arrangement across the construction phase whilst ownership remained with MAAS.
- ▶ Once a preferred party (developer) has been selected for MAAS to engage with (typically through a tender process), an initial Heads of Agreement could be entered into with the more extensive negotiations associated with a Development Agreement to follow based on the initial agreed terms and conditions of the Heads of Agreement.
- ▶ The terms and conditions agreed between MAAS and the selected party may include provision for MAAS to provide input into the design of the development. This will ensure a preferred outcome is achieved for this space, particularly in terms of requirements around security and scale, with some flexibility allowed in the final design outcome.
- ▶ It is likely that the PDA will also outline the process for obtaining planning approvals and the role of both parties in gaining the required planning approvals. This is a particular risk in the context of Ultimo and accordingly may involve the private sector requesting MAAS to take responsibility for this. Technical consultant's EY have indicated that while MAAS may assist in progressing the approval of necessary planning applications, there is considerable risk around planning being stalled as a result of site sensitivities, particularly around heritage issues. Accordingly, the private sector will be reluctant to take on the sole responsibility of planning without a degree of support from MAAS. The level of support must be carefully considered by MAAS, to ensure they balance the level of risk against the goal of ultimate project completion.
- ▶ The external podium gallery proposed would also be written into the PDA as a requirement for the private sector to complete along with the retail accommodation on the ground floor. Specific design guidelines for this space would also form part of the agreement.

7.4 Change management

The MAAS Director, as sponsor of the Masterplan project will have ultimate responsibility to drive the stakeholder and related change management program to ensure the benefits of the proposal are well understood to maintain engagement and support of key stakeholders through planning, construction and delivery stages of the project. The MAAS Trustees will support the MAAS Director via a Masterplan Trustee Sub Advisory committee.

The Project Director will be responsible for designing a high level **change management plan** that identifies key stakeholders and their engagement. The Project Director will be assisted by specialist communications staff who will also be engaged for the projects duration.

Change management - Keeping stakeholders informed

As part of this change management process, the Project Director will be responsible for developing a **project reporting hierarchy** that can be utilised to inform all levels of identified stakeholders to fulfill their information needs.

Internal Stakeholders who will need to be kept informed include:

- ▶ MAAS Trustees who will need to have full visibility of all key and significant decision and milestone points during the duration of the project
- ▶ **The MAAS Executive** who will require full visibility and likely be the facilitators of required change activity and its delivery
- ▶ **The Minister for the Arts** who will require full visibility of all key and significant decision and milestone points during the duration of the project
- ▶ **NSW Government entities** such as NSW Treasury Premiers & Cabinet, INSW and Transport NSW who and will require transparent, timely reporting on all project major milestones and time frames
- ▶ **Key operational groups** who will be required to plan the transition of collection management and service delivery throughout the project
- ▶ **MAAS Members and general patrons** who will be impacted by disrupted or change service delivery throughout the period of construction.

The project itself is a major change to the site and immediately impacts various external stakeholder groups. The following external stakeholder groups will also need to be kept informed and listened to, as part of the change management process:

- ▶ Ultimo residential and Commercial neighbours on Harris Street and surrounding suburban street
- ▶ The Goods Line programming site owned by SHFA
- ▶ UTS campus and student accommodation residents
- ▶ Darling Harbour Live residents and businesses
- ▶ Haymarket existing and new residents and commercial operators.

In response to these external stakeholders, the communications team will:

- ▶ Develop and maintain a highly visible change communication strategy throughout the project which will include digital, social media forums, written communication, signage and local forum events to keep neighbours engaged, informed and ultimately supportive.
- ▶ Invite participation in planning events
- ▶ Detail anticipated working activity and likely impacts on immediate pedestrian or vehicular impacts
- ▶ Provide overall status reports of the project at points in time.

Change management - Responding to stakeholder needs

The change management plan will identify sources of potential resistance and a strategy to manage that resistance to reduce the project's risks and increase the likelihood of successful implementation. Formal mechanisms to monitor and measure the effectiveness of the Change Management process will be implemented and reported through a Steering Committee.

The Project Director will be ultimately responsible for filtering risks that are identified via these communication methods and forums, determining their rating and advising on mitigation steps to reduce likelihood and impact.

Activities and tasks relating to the change process will be integrated with the overall detailed project plan and Museum operating plan. This will ensure that any dependencies and resource conflicts are identified and resolved.

7.4.1 Project evaluation and post-implementation review

A project evaluation and post-implementation review will occur against a set of objectives which will be developed after processing the FBC. These objectives will be developed in line with the "SMART" Principles (ensuring objectives are *specific, measurable, achievable, relevant and timely*) so that the project's effectiveness can be evaluated against planned, measurable outcomes. These objectives will be updated continuously to reflect changing circumstances and environments.

The project evaluation will occur both during (at key milestones i.e. the ending of a stage of work) and after completion of the renewal to determine the efficiency and effectiveness of the build.

Post-implementation reviews would be likely to occur at regular intervals to ensure that the Museum is operating efficiently and effectively.

7.4.2 Post-project management

After the completion of the construction of the redeveloped Museum, it is envisaged that the Museum will have a more diverse range of business types and facilities to manage including; increased retail, venue both within and shared within the precinct, food and beverage offerings. The complexity of the commercial activities will require an individual with a strong understanding of and links to relevant industries with established contacts for networking and marketing.

The Museum will engage with expert retail and commercial property managers to minimize the risk to the NSW Government.

7.5 Risk management

The risk assessment process and results were identified and outlined in Section 6.6. A risk management strategy is the focus of this section. The implementation, monitoring and risk management planning steps have been included below.

7.5.1 Implementation

The steps to be carried out for project implementation are:

- ▶ Allocate responsibility for individual risk treatment/mitigation actions to the appropriate project team member
- ▶ Undertake the treatment actions contained in the risk register
- ▶ Report on actions taken, progress towards implementation, outcomes and completion

- ▶ Identify new risks as they arise, and decide whether they are of sufficient magnitude to warrant treatment.

7.5.2 Monitoring

The process proposed for project monitoring is:

- ▶ Identify risk events that have appeared imminent and interventions taken to prevent their occurrence
- ▶ Identify risk events that have occurred and action taken in response
- ▶ Review risks on a regular basis and identify any risks that no longer pose a threat to the achievement of project objectives and can be removed from the risk register
- ▶ Undertake surveillance of the preconditions for, or occurrence of, a risk event, or the emergence of new risks
- ▶ Report on surveillance outcomes, and initiate remedial action if warranted.

7.5.3 Reporting

Regular risk management reports will be prepared that describe:

- ▶ The status of risk treatment actions
- ▶ Any project risk-related correspondence or discussions
- ▶ Assurance activities, their status/progress and outcomes
- ▶ Actions undertaken as a result of surveillance detections.

7.5.4 Risk management plan review

A review of the risk management plan and risk register will be carried out every six months to ensure that the treatment plan, strategies and management system remain valid and relevant over time.

7.6 Benefits Realisation Register

A benefits realisation register has been developed in line with the NSW Department of Commerce Benefits Realisation Register Guideline (2004). While this guideline is primarily focused on information and communications technology (ICT) capital investment proposals, the framework can be applied to the current project proposal.

The purpose of the benefits realisation register is to identify realistic business benefits that are available from business change projects and to assist agencies in demonstrating the link between the benefits they intend to achieve by undertaking the proposed project and their strategic and corporate plans, Results and Services Plan ("RSP") outcomes and wider government policy priorities.

The benefits realisation register has been prepared in conjunction with the development of the cost benefit analysis. The register is attached at Appendix L.

7.7 Stakeholder consultation strategy

MAAS acknowledges that there will be some change that will result from the decision to proceed with the preferred option. In light of this, a change management plan (Section 7.4) will be prepared which ensures that key stakeholders are involved in the decision making and change process. This has

been a key theme of the planning phase of the project so far with MAAS engaging with local stakeholders in determining the preferred option to move forward.

Communication is a critical aspect of any major construction project. This plan aims to provide a framework for the delivery phase of the project to ensure that communication with stakeholders is relevant, accurate, consistent and timely. MAAS acknowledges that a diverse and large group of stakeholders are potentially affected by the renewal of the Museum. Communication with these groups needs to be a two-way mechanism and MAAS will actively solicit and respond to feedback from stakeholders.

This section sets out how we plan to effectively consult with stakeholders in the following sub-sections:

- ▶ Project Stakeholder Analysis
- ▶ Approach and Principles
- ▶ Plan and Schedule of Events

With the effective implementation of the plan, requirements, changes and impacts on a variety of stakeholder groups can be managed in a controlled environment where all requirements and concerns are addressed.

7.7.1 Project stakeholder analysis

Table 67 and Table 68 contain descriptions of the various stakeholders who are considered in this stakeholder consultation strategy and an analysis of their expectations as they relate to the project and to MAAS.

Table 67: External stakeholders

Stakeholders	Subsets	Stakeholder expectations	Potential impact of project on stakeholder
Public	MAAS Members	Exhibitions of high caliber within an atmosphere that encourages a lifelong sense of curiosity	Positive – project will improve all aspects of current Museum offerings
	General Audience	Exhibitions of high caliber within an atmosphere that; <ul style="list-style-type: none"> ▶ Provides a social opportunity; ▶ Encourages a lifelong sense of curiosity 	Positive – project will improve all aspects of current Museum offerings
	Education patrons	Exhibitions of high caliber within an atmosphere that; <ul style="list-style-type: none"> ▶ Aligns with the STEM curriculum; ▶ Provides spaces for interactive, self-led and teacher led learning; and ▶ Encourages a lifelong sense of curiosity 	Positive – project will improve all aspects of current Museum offerings
	Tourism patrons	Exhibitions of high caliber within an atmosphere that; <ul style="list-style-type: none"> ▶ Is uniquely Australian in its delivery; ▶ Is of a world industry standard; and ▶ Encourages a lifelong sense of curiosity 	Positive – project will improve all aspects of current Museum offerings
	Volunteers	Provide an opportunity for public participation in the delivery of programs that enhance social outcomes and increase inter-generational volunteer participation	Positive – project will improve all aspects of current Museum offerings

Stakeholders	Subsets	Stakeholder expectations	Potential impact of project on stakeholder
Immediate Community	Local Ultimo residents	<ul style="list-style-type: none"> ▶ An accessible thoroughfare ▶ Street ambience ▶ Safe entry and exit points ▶ Social facilities ▶ Free from charges social spaces 	Positive – project will improve all aspects of current Museum facilities and service delivery capacity
	Student community	<ul style="list-style-type: none"> ▶ Social facilities ▶ An extension of their academic research facilities ▶ Programing spaces that positively impact their residential spaces 	Positive – project will improve all aspects of current Museum facilities and service delivery capacity
	Industry Start Ups	<ul style="list-style-type: none"> ▶ Social facilities ▶ An extension of their academic research facilities ▶ Programing spaces that positively impact their residential spaces 	Positive – project will improve all aspects of current Museum facilities and service delivery capacity
	Tertiary neighbours	A philosophically aligned partner able to enhance the experience of its student body	Positive – project will improve all aspects of current Museum facilities and service delivery capacity
NSW Government	<ul style="list-style-type: none"> ▶ Arts Minister ▶ NSW Treasury ▶ Education ▶ Infrastructure ▶ Local Govt ▶ Transport ▶ Family & Community 	<p>Delivery on the State priorities for the DTI Cluster and broader portfolio areas including;</p> <ul style="list-style-type: none"> ▶ Improved cost of services ▶ Educational alignment and delivery on the STEM curriculum needs for teachers and students ▶ Infrastructure renewal ▶ Social cohesion ▶ Increased volunteer participation 	Positive – project will improve all aspects of current Museum facilities, and service delivery capacity, directly impacting the States' bottom line via sustainable revenue streams, social outcomes for intergenerational groups and creating a vibrant cultural asset amidst one of Sydney's most active and innovative precincts.

Source: MAAS

Table 68: Internal stakeholders

Stakeholders	Subsets	Stakeholder expectations	Potential impact of project on stakeholder
Trustees	All	Modern, secure facility that will allow the Museum to fulfill its obligations under the MAAS Act and enable the Trustees to advocate widely for support of the Museum.	Positive – project will improve all aspects of current Museum facilities and service delivery capacity
Staff	Curatorial, Collections & Exhibitions	Modern, secure facilities with exhibition, production and program development areas that are fit for purpose; will encourage and support creative thought and reduce risk of collection loss or damage whilst increasing the capacity to display a greater proportion of the total collection.	<p>Positive – project will improve all aspects of current Museum facilities and service delivery capacity</p> <p>Negative - potential disruption of services during construction</p>
Public	Public Engagement	Modern, secure facilities that support creative programming and commercial usage opportunities with improved capacity to manage movement of people and event equipment	<p>Positive – project will improve all aspects of current Museum facilities and service delivery capacity</p> <p>Negative - potential disruption of services during construction</p>

Stakeholders	Subsets	Stakeholder expectations	Potential impact of project on stakeholder
Trustees	All	Modern, secure facility that will allow the Museum to fulfill its obligations under the MAAS Act and enable the Trustees to advocate widely for support of the Museum.	Positive – project will improve all aspects of current Museum facilities and service delivery capacity
Surrounding businesses	Corporate	Modern, secure facilities that support efficient back of house operations; sustainable services and utilities; and streamlined facility maintenance, cleaning and utilities management; and provide a facility that attracts strong program sponsorship and donors.	Positive – project will improve all aspects of current Museum facilities and service delivery capacity

Source: MAAS

7.7.2 Approach and Principles

People rather than processes are the central focus of any successful stakeholder engagement strategy.

The change generated by the project will have a positive impact, addressing issues raised by users and staff at the current facility for many years. Communicating these positives will be a major part of the approach together with encouraging two-way communication with stakeholders in order to address any stakeholder concerns.

The following activities will be undertaken:

- ▶ Active participation of the stakeholders and users in the design process thus ensuring the new facility meets their business needs
- ▶ Changed business processes will be documented and integrated into the project via the project control group
- ▶ During delivery, all variations and scope changes will be agreed by the project control group (or delegate)
- ▶ Staged implementation of changed business processes prior to occupation of the new facility to test and ensure they work
- ▶ Monitor and review changed business processes for impact and effectiveness.

To ensure successful communication a number of common principles will be followed. Table 69 describes these principles.

Table 69: Change management and communication principles

Principle	Reason
Consultative and open	Supports a transparent approach and stakeholder engagement with the project.
Credibility	A credible communication approach engenders the stakeholder community towards a belief that the end goal is achievable.
To involve not just inform	Supports a transformational approach and stakeholder engagement with the project.
Visible management support	An active management commitment gives credibility to communication. Support from management must be visible.
Face-to-face communication	Facilitates audience involvement and feedback.
Avoid information 'overload'	Too much information leads to confusion and irritation. Accurate and timely information is essential.

Consistent messages	Consistency enhances the professionalism and credibility of the project.
Repeat messages and vary mechanisms	The more ways a message can be communicated, the more likely it is to be internalised. Using different mechanisms ensures repetition without individuals 'switching off' and has more chance to reach a wider audience.
Respond to information demand	Encourage team to seek the kind of information stakeholders need rather than management pushing it at them. Ensures engagement with the change.
Tailor communication to audience needs	Makes information 'real' to the audience. The audience is more likely to listen if the information is pertinent to their current frame of reference.
Central co-ordination	Ensures consistent approach.
Manage expectations	Encourages audience to believe in what you tell them. Need to be realistic not overly optimistic.
Listen and act on feedback	Encourages support in the approach by being responsive to the needs of the audience. Ensures approach meets changing audience needs.

7.7.3 Plan and Schedule of Events

In this section a number of mechanisms, strategies and events are detailed and mapped to the expectations articulated in Section 7.7.1. During project implementation further items will be added in response to stakeholder feedback to address interests and expectations not yet considered.

Table 70 shows that stakeholder engagement for the project will occur in relation to a number of phases.

Table 70: Stakeholder change/communication strategy

Project phase	Related stakeholder change/communication phase	Description
Business case/concept phase	Awareness	Stakeholders develop knowledge of the change. Value management workshop involves stakeholders in decision making
Design phase	Understanding	Stakeholders comprehend the nature and intent of the change and start to develop an understanding of what this will mean for them.
Approval process	Positive perception	Strategies are implemented to try and engage stakeholders in developing a positive perception of the change
Construction	Pilot	The change becomes operational for a small select group of stakeholders in order to test strategies, support and systems.
Operation	Implementation	The change is fully operational in the new facility
Post occupancy evaluation	Adoption	The change has been operational for long enough to evaluate its worth and impact (this phase is not within the timeframe of the current project).

While particular communication events and strategies will be developed to support stakeholders through these phases and in relation to their expectations, a range of regular and ongoing initiatives will be employed to monitor stakeholder expectations, feedback and attitudes. These will include:

- ▶ Key stakeholder groups
- ▶ Attendance by designated project team members at a broad range of meetings involving stakeholder groups

- ▶ Conducting focussed evaluation forums and information sessions
- ▶ Creating awareness about the project on the AMS website and the Department's Intranet

Table 71 maps particular events that will occur during each phase of the project, targeted stakeholders and the expected outcomes of the events.

Table 71: Stakeholder change/communication schedule

Event/ Strategy	Timing	Stakeholders targeted	Purpose	Method
Project start-up workshop	June 2015	MAAS, Project Manager, Architect, Masterplan Steering Committee	Introduce project management team to internal stakeholders. Formation of key stakeholder groups and confirmation of governance structure	Workshop
Community consultation	June 2015	MAAS, Project Manager, Architect, Masterplan Steering Committee, external stakeholders (local residents, council)	Consult with key stakeholders on broad requirements for new facility	Workshop
Requirements workshop	July 2015	MAAS, Project Manager, Architect, Masterplan Steering Committee, external stakeholders	Develop detailed design requirements for new facility	Workshop
Preliminary design review workshop	July 2015	MAAS, Project Manager, Architect, Masterplan Steering Committee, external stakeholders	Review preliminary design proposals	Workshop, document review
DA review	August 2015	MAAS, Project Manager, Architect, Masterplan Steering Committee, external stakeholders	Review DA for submission	Workshop, document review
Final design workshop	January 2016	MAAS, Project Manager, Architect, Masterplan Steering Committee, external stakeholders	Review final design proposal for tender documentation	Workshop, document review
Preliminaries workshop	October 2016	MAAS, Project Manager, Architect, Masterplan Steering Committee, external stakeholders, construction contractor	Review proposed program of works	Workshop
Masterplan Steering committee	Ongoing during construction	Masterplan Steering committee, other government agencies	Review progress during construction	Meeting
Handover	June 2022	MAAS, Project manager, architect, construction contractor	Finalise details of handover, commissioning	Meeting
Project updates	Ongoing	All stakeholders	Provide updates to parties with registered interest	E-mail

7.8 Resourcing

A summary of the resources required to implement the project is provided in the governance diagram in Section 7.2.

The project will be delivered utilising the project methodology outlined in the *NSW Government Procurement System for Construction*. An external Project Manager will act as the Expert Adviser on the project and will assist in managing the design consultant team and construction contractor.

The project will be procured in two components:

- ▶ **Component A** - Procurement for the delivery of the Museum renewal would be best achieved through a traditional construction tender process. MAAS will fully develop the design and specifications for the new buildings and then tender the building works, with a building contractor appointed on the basis of price and quality among other attributes.
- ▶ **Component B** - The Harwood South redevelopment will be procured through a PDA approach whereby MAAS maintains a degree of control over the project with a modest risk profile; while the private sector takes all development risk.

MAAS retains control of the project with an internal project sponsor and project manager. These Department representatives attend steering committee and project control group meetings with various stakeholders involved in the delivery of the project. The internal project manager will have day to day responsibility for representing MAAS both internally and externally liaising with the external project management team.

Procurement methodology and vendor management will follow the *NSW Government Procurement System for Construction* and vendors will be selected from pre-qualified panels. Legal capabilities will come from the NSW Crown Solicitors Office.

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