UNIVERSITY of TASMANIA

Infrastructure Tasmania Project Assurance – Introduction

The following report is part of Infrastructure Tasmania's project assurance process, which was established by the Tasmanian Government to identify project risks and provide recommendations to ensure the successful delivery of objectives, benefits and outcomes.

The University of Tasmania's STEM Precinct Detailed Business Case was considered through this framework. The below Gateway Review was carried out by independent, third-party reviewers on the Tasmanian Government panel.

On a scale of low – medium – high, the review team's overall level of confidence that the project is being effectively developed and delivered in accordance with the stated objectives is high.

The review team made a number of recommendations to strengthen the business case. It is important to note that all of the recommendations were accepted by the University and incorporated into the final business case.

This final business case, available here, has been submitted by Infrastructure Tasmania to Infrastructure Australia for review and evaluation.

EXECUTIVE SUMMARY

A Gateway review was undertaken by Paxon Group (Paxon) on the project to develop a STEM Precinct, which is being delivered by the University of Tasmania (UTAS).

The review focused on the planning and development of the Business Case, with particular emphasis on the investment decision and the extent to which the Business Case effectively analysed a range of options to address the identified service need while maximising benefits at an optimal cost.

Overall, the planning and development approach has been appropriate, with key focus areas following a reasonable process and being documented to varying degrees. However, the Business Case could be strengthened by:

- Considering a broader range of options to address the service need, forming an initial long list that includes non-infrastructure solutions and partial-scope options. While these alternatives may ultimately be ruled out when assessed against project objectives, it is important to provide clear evidence of their consideration and evaluation within the Business Case
- Incorporating additional information (currently contained within supporting documentation) to demonstrate how the development of new STEM facilities will lead to increased enrolments, which in turn will drive improvements in STEM productivity, engagement at both secondary and tertiary levels, and collaboration.
- Providing a comprehensive scope for each option, including a schedule of accommodation and additional design or operational considerations, to clearly demonstrate how each option addresses the service need. This should also include a rationale justifying the facilities proposed under the preferred option.

The Overall Rating for the project has been assessed as High. While the review identified areas where the Business Case could be enhanced, limited significant issues were found that require urgent attention. Ensuring timely management of the suggested improvements outlined within this review will further support the successful delivery of the project. The overall rating and success of the project is contingent on UTAS achieving the $100 million land value of its surplus land. If this amount is not realised, the project may require a reduced scope or a staged implementation approach.

The Critical Recommendations identified by the review team are outlined below.

CRITICAL RECOMMENDATIONS
Provide further information on the scope for each option, including a schedule of accommodation, and further design or operational considerations. This should include a rationale to justify what is being proposed under the preferred option.

THE REVIEW TEAM'S OVERALL LEVEL OF CONFIDENCE THAT THE PROJECT IS BEING EFFECTIVELY DEVELOPED AND DELIVERED IN ACCORDANCE WITH THE STATED OBJECTIVES IS:	HIGH

SUMMARY OF REVIEW FINDINGS

THE REVIEW TEAM'S OVERALL LEVEL OF CONFIDENCE THAT THE PROJECT IS BEING EFFECTIVELY DEVELOPED AND DELIVERED IN ACCORDANCE WITH THE STATED OBJECTIVES IS:	HIGH

Where the overall development and delivery confidence rating is defined as:

HIGH	Successful delivery of the project to time, cost and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten the successful delivery.
MEDIUM	Successful delivery is feasible but significant issues exist which require timely management attention.
LOW	Successful delivery of the project is in doubt, with major risks or issues apparent in a number of key areas. Urgent additional action is needed.

THE REVIEW TEAM'S RATINGS FOR THE PRESCRIBED KEY FOCUS AREAS ARE:		NO. OF RECOMMENDATIONS		
		Critical	Essential	Suggested
1. Service need	Satisfactory	1	3	3
2. Value for money and affordability	Satisfactory	0	0	2
3. Social, economic & environmental sustainability	Strong	0	0	1
4. Governance	Strong	0	0	1
5. Risk management	Strong	0	0	0
6. Stakeholder management	Satisfactory	0	1	0
7. Asset owner's needs & change management	Strong	0	0	0
8. Other matters	-	0	0	1
TOTAL		1	4	8

Where the key focus areas are rated to appraise how the topic has been addressed or considered by the project team and what risk it poses to the development/delivery confidence according to the following rating definitions:

STRONG	There are no major outstanding issues that at this stage appear to threaten delivery.
SATISFACTORY	There are issues that require timely management attention.
WEAK	There are significant issues in this key focus area that may jeopardise the successful delivery of the project.

Where each recommendation of the Review Team is rated according to its urgency and criticality:

SUGGESTED	The recommendation is not considered critical or urgent but the project development may benefit from the uptake of this recommendation.
ESSENTIAL (DO BY)	The recommendation is important but not urgent. The project team should take action before further key decisions are taken.
CRITICAL (DO NOW)	This item is critical and urgent. The project team should take action immediately. "It means fix the key problems fast, not stop the project"

BACKGROUND

Project name:	Southern STEM Precinct
Program name:	NA
Description of project scope:	The University of Tasmania (UTAS) seeks to transform Tasmania's economic and social future through the development of a state-of-the-art STEM Precinct at its Sandy Bay Campus. To realise these outcomes, UTAS is seeking supplementary government funding of $401.6 million over seven years, enabling this transformative initiative to deliver enduring benefits for education, housing, and economic development in Tasmania. This visionary project aspires to enhance STEM education and research, enabling Tasmanians to address evolving technological, environmental, and workforce challenges. By creating world-class facilities that foster innovation and collaboration, the STEM Precinct will support the upskilling of Tasmanians, attract high-quality students and researchers, and provide the critical infrastructure required to drive economic diversification and productivity. In addition to advancing education, the Project will unlock surplus UTAS-owned land for alternative uses, including the delivery of significant housing stock to address Hobart's housing shortfall. It will also facilitate the hand back of land to the Aboriginal Land Council of Tasmania (ALCT), supporting reconciliation efforts and creating public open spaces for the community.
Objectives and intended benefits of the project:	• Contemporary learning and teaching and innovative STEM research, to grow critical knowledge and skills to deliver a productive and sustainable future across the nation. • The ability to attract and retain high quality educators, researchers and students with access to critical equipment and emerging technologies. • Support for community and schools engagement, closing attainment gaps and increasing access to quality higher education opportunities. • Upskilling and building STEM capacity of primary and secondary school teachers, to lift workforce capability and to engage the next generation of STEM students • Urban renewal of Sandy Bay campus consolidating it into a vibrant, innovative, livable and inclusive place with sustainable development, community connection, and protection of existing bushland • Potential to establish an innovation precinct, co-locating STEM vocational and high school facilities, a public science public attraction and industry presence • The creation of local jobs during and after construction, supporting state and national labour markets through driving job growth and increasing employment opportunities

PRIMARY PURPOSE OF THE GATEWAY REVIEW

Gateway Reviews are independent reviews undertaken on behalf of the Tasmanian Government and administered by Infrastructure Tasmania. This Gateway Review Report is strictly confidential.

This Report is provided by Infrastructure Tasmania to the Project's Senior Responsible Officer (SRO) for the Project to consider appropriate action following the Review Team's recommendations.

REVIEW METHODOLOGY

REVIEW TEAM'S APPROACH TO THE REVIEW

This Gateway Review is being conducted in line with the Infrastructure Tasmania Project Assurance Framework.

The purpose of this Gateway Review is to provide an independent peer review that assesses the development and delivery confidence of this project at a point in time in the project's phase of development and delivery. This Report includes constructive commentary and recommendations intended to enhance the delivery agency and project team's ability to confidently develop and deliver the project and realise the business objectives and benefits expected from the investment.

The Review principles adopted in approaching this Gateway Review are:

- be helpful and constructive to the Senior Responsible Officer and Project Team
- be independent, with the recommendations not directed or influenced by others outside the Review Team
- adhere to the agreed Terms of Reference
- prepare a Review Report that clearly highlights substantive issues, the causes and the consequences, with recommended actions to address those issues.

Following the Infrastructure Tasmania Project Assurance Framework, the Review Team will address the following Key Focus Areas:

1. Service need
2. Value for money and affordability
3. Social, economic and environmental sustainability
4. Governance
5. Risk management
6. Stakeholder management
7. Asset owner's needs and change management.

Review Team commentary that does not fall within the Key Focus Areas is covered in 'other matters'.

FOCUS OF THE REVIEW

The purpose of this Review is to assess whether the delivery agency is ready to submit the Final Business Case for investment approval and proceed to market. The Final Business Case is the key document that justifies the project scope and investment as an appropriate and deliverable response to the service need and which will maximise benefits at optimal cost.

The Review Team has sought to provide commentary relating to the Terms of Reference provided by Infrastructure Tasmania. The Terms of Reference included:

- If the business case articulates a clearly defined challenge and scope to respond to the STEM education crisis in Southern Tasmania; and
- If benefits of the development are considered clearly defined and calculated in association with the cost plan and schedule for a robust cost benefit analysis and cost benefit ratio (BCR) outcome presented.

Out of scope items of the review include:

- Assessment of other University of Tasmania capital projects in Tasmania beyond this specific STEM Business Case project proposal.

It should be noted that the Review Team assessed the 'Silver Draft' version of the Business Case rather than the 'Gold Final' version. The Project Team acknowledged that the 'Silver Draft' may be subject to change and noted that it did not include appendices, which will be incorporated into the 'Gold Final' version.

1. SERVICE NEED

The Review Team's view on whether the Success Factor requirements relating to service need have been appropriately addressed are represented below:

REQUIREMENT	ASSESSMENT
The preferred project scope has been clearly articulated and evaluated against the service need and project objectives.	Partially
A detailed assessment of the risks of both meeting and not meeting the service need has been completed and documented.	Partially
The community and non-monetary benefits have been identified and optimised for project outcomes.	Yes

The Business Case provides a comprehensive analysis of the service need for the project, identifying three key challenges currently facing the Tasmanian STEM sector. Investment Logic Mapping (ILM) was undertaken and incorporated into the Business Case to outline these challenges, assess their impact, and identify potential solutions.

The three key problems identified in the Business Case are:

1. Tasmanian STEM related productivity is in decline
2. Tasmania's STEM engagement and retention is the nation's lowest at both the secondary and tertiary levels
3. Tasmania's STEM facilities lack the critical technical infrastructure required to foster collaboration

While these problems effectively highlight the service need for the project, it was noted during the interview process that the shortfall in Tasmania's STEM workforce is a key driver that could warrant greater emphasis. Although this issue is partially documented in the Business Case, further strengthening this argument could enhance the rationale for investment. Additionally, measuring and comparing productivity, especially using Gross State Product (GSP) per capita as a metric, can present challenges due to variations in workforce participation rates, industry composition, and cost-of-living differences, which should be acknowledged to contextualise the decline in STEM productivity.

The service need is well-documented, and three options to address it have been identified and analysed within the Business Case. These options were previously included in the 2017 Business Case for the project and consist of:

1. Option 1: Base Case (Do Nothing).
2. Two options involving the development of new STEM facilities at different locations:
    a. Option 2: New Sandy Bay
    b. Option 3: New Hobart CBD

While the options involving new STEM facilities are documented, the Business Case would benefit from additional detail on these options. Specifically, further elaboration is needed on:

- How the proposed facilities will address the identified service needs, particularly the links between new facilities and increased enrolments which will lead to improvements in STEM productivity, engagement, retention, and collaboration.
- Detailed descriptions of the STEM facilities, including a facility brief or schedule of accommodation that outlines the components of each development option.

- How the design and development of these facilities were informed by stakeholder input to ensure alignment with the identified service need.

Documents provided during the review process, specifically the *20241015 UTas STEM Business Case_Student Enrolment Projections Model Workshop* and the *Case Study: Enhancing School Engagement through a STEM Centre,* offer valuable insights into the calculation of increased student enrolments and the relationship between new facilities and student engagement. However, this information is limited within the Business Case. It is recommended that these insights be incorporated to strengthen the Business Case.

Additionally, alternative approaches to meeting the service need, such as non-infrastructure solutions or smaller-scale facilities, have not been explored or analysed. In particular, because there is no justification of how the Schedule of Accommodation was arrived at, it is not possible to compare the option to smaller or larger scale developments. Typically, a Business Case includes a broad assessment of potential solutions through a long list of options, qualitatively evaluated against the project objectives. From there, shortlisted options are subjected to more detailed social, environmental, and economic analysis. Including documentation of a wider range of options considered, and an explanation of how each aligns with project objectives, would strengthen the Business Case and demonstrate robust option development and evaluation.

The Business Case includes an assessment of the initial delivery, change, and operational risks for each option, with an overall risk rating applied to each. While this assessment provides valuable insights, the Business Case would benefit from additional detail on the risks associated with failing to meet the service need. Specifically, further analysis of the potential economic and social impacts on Tasmania, should the service need remain unmet, would strengthen the case for the project and highlight its importance to the state's economy and community.

The Business Case does well to identify the project's benefits, including both community and non-monetary benefits. Five high-level benefit categories are outlined, with detailed descriptions provided for each, along with specific benefits within these categories. The assessment also identifies the beneficiaries for each benefit.

THE REVIEW TEAM'S RATING FOR SERVICE NEED **IS:**	Satisfactory

2. VALUE FOR MONEY AND AFFORDABILITY

The Review Team's view on whether the Success Factor requirements relating to value for money and affordability have been appropriately addressed are represented below:

REQUIREMENT	ASSESSMENT
A Cost-Benefit Analysis of the project has been completed and documented.	Yes
The risk analysis has clearly informed the cost plan and the approach to contingency.	Partially
The benefits identified have been shown to be achievable.	Yes

A Cost-Benefit Analysis (CBA) of the project, conducted by Deloitte Access Economics, is included in the Business Case, with key findings and outputs clearly outlined. The CBA is considered comprehensive and robust, adhering to Infrastructure Australia's *Guide to Economic Appraisal* (2021). Assumptions are outlined in the CBA and Business Case, however, providing additional details, particularly the justification for intrastate, interstate, and international student numbers and the projected increases under each option, would strengthen the CBA.

The analysis evaluates the expected benefits and costs of each option from a national perspective, with the rationale for using Infrastructure Australia guidelines stemming from the project's initial pursuit of federal funding. However, if the focus has shifted to seeking funding from the Tasmanian Government, the CBA should be updated to assess the costs and benefits specific to Tasmania. This adjustment would require revising certain assumptions in the analysis to better reflect the local economic and social impacts.

A detailed cost plan for Option 2: New Sandy Bay was developed by Quantity Surveyor Slattery's, including a comprehensive cost buildup for the proposed facility and risk-based contingencies. For Option 3: New Hobart CBD, no new cost plan was developed; instead, the Project Team relied on the cost plan from the 2017 Business Case (also prepared by Slattery's), escalating and adjusting it to align with the current Business Case. Option 1: Base Case utilised building condition reports and maintenance expenditure estimates to calculate its costs.

During the interview process, the Project Team justified the absence of a new cost plan for Options 1 and 3, citing the project's current stage of development and the adequacy of existing information. However, this rationale is not included in the Business Case. It is recommended that the Business Case provide further explanation for the absence of a detailed cost plan, particularly for Option 3.

The benefits assessed in the CBA, both quantitatively and qualitatively, are demonstrated to be achievable. Option 2: New Sandy Bay and Option 3: New Hobart CBD each offer unique benefits specific to their respective scenarios. For Option 2: New Sandy Bay, two key benefits include:

- Unlocking surplus UTAS-owned land for alternative uses including the delivery of significant housing supply and public and open space.
- Enabling the hand back of land to ALCT to continue reconciliation efforts

These options would benefit from some additional information being explicitly stated within the Business Case, specifically:

- Unlocking UTAS-owned land for alternative uses
    - This benefit is contingent on the passage of enabling legislation by the Tasmanian Government, which would allow the land to be used for alternative purposes. Although this dependency is mentioned in some sections of the Business Case, other areas do not reference it, and it is not consistently framed as a precondition for the benefit to be realised. This dependency should be explicitly stated to ensure clarity.

- The $100 million land value referenced should not be positioned as a direct sale from UTAS to the State Government. Instead, the Business Case should clarify that this figure reflects the State Government's potential assistance in unlocking the development potential of the land to help offset the project's capital costs. Wording should be softened to avoid suggesting a straightforward transaction.

- Handback of land to ALCT
  - The land handback is likely to occur regardless of the option selected for this project. However, Option 2: New Sandy Bay would facilitate the process, making it easier and enabling it to occur earlier than under other options. The Business Case should reflect this nuance, noting that while the benefit is not exclusive to Option 2, it would be realised sooner and with less additional effort under this scenario

THE REVIEW TEAM'S RATING FOR VALUE FOR MONEY AND AFFORDABILITY **IS:**	Satisfactory

3. SOCIAL, ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY

The Review Team's view on whether the Success Factor requirements relating to social, economic and environmental sustainability have been appropriately addressed are represented below:

REQUIREMENT	ASSESSMENT
The scope of the project has considered the social, economic and environmental sustainability issues in the context of the location and integration with the wider asset network.	Partially
The planning pathway has been assessed and documented and the risks around network and place integration have been articulated.	Yes
The scope optimises access to services and has appropriately addressed economic and social inequality and environmental enhancements.	Yes

The project evaluates the development of new STEM facilities at either Sandy Bay or the Hobart CBD. In assessing these options, the Business Case considers the University's long-term strategy, integration with its broader asset network, and the provision of services.

While some social, economic, and environmental sustainability costs and benefits are assessed quantitatively or qualitatively in the Cost-Benefit Analysis section, the Business Case does not include a comprehensive social and environmental comparison of the options. The Project Team has indicated that various environmental assessments and considerations have been undertaken, however, these are not reflected within the Business Case. Including a specific social and environmental analysis would enhance the document by providing a more holistic evaluation of the options and their broader impacts.

The planning pathway and UTAS approval processes are addressed in the Business Case, with relevant activities incorporated into the delivery schedule. Additionally, risks associated with integration have been identified and outlined within the document.

THE REVIEW TEAM'S RATING FOR SOCIAL, ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY **IS:**	Strong

4. GOVERNANCE

The Review Team's view on whether the Success Factor requirements relating to governance have been appropriately addressed are represented below:

REQUIREMENT	ASSESSMENT
The project team is appropriately structured and has the skills, capability and capacity to take the project through procurement and plan for delivery.	Yes
All levels of governance understand and endorse the procurement methodology as representing an appropriate sharing of risk.	Yes
The approach to benefits measurement and realisation has been clearly articulated and documented.	Partially

A clear governance structure is in place for this project, and the UTAS team has demonstrated the skills, capability, and capacity to guide the project through procurement and delivery planning. This is evidenced by their experience in delivering other major infrastructure developments, including the Northern Transformation project.

An initial procurement strategy has been developed to outline how UTAS may deliver the STEM facilities. This strategy includes an assessment of how the development could be divided into separate work packages and an evaluation of the most appropriate delivery model based on a range of criteria. As a result of this assessment, a preferred packaging and delivery model has been selected. Interview discussions indicated market capacity and understanding of the project, and incorporating this detail into the Business Case would be beneficial.

The approach to benefits measurement and realisation is well-articulated in the Business Case. A benefits realisation plan has been developed in alignment with the *NSW Government Department of Finance, Services and Innovation Benefit Realisation Management Framework*. It is noted that a detailed breakdown of the benefits realisation plan is included as an appendix to the Business Case. However, this document was not available for review at the time of assessment.

THE REVIEW TEAM'S RATING FOR GOVERNANCE **IS:**	Strong

5. RISK MANAGEMENT

The Review Team's view on whether the Success Factor requirements relating to risk management have been appropriately addressed are represented below:

REQUIREMENT	ASSESSMENT
An appropriate assessment of risks against the defined scope has been completed and documented.	Yes
A robust risk management plan has been developed.	Partially
The risk assessment includes procurement, delivery and operational risks to benefit realisation.	Yes

A detailed risk assessment, aligned with the UTAS Risk Management Framework, has been developed and included in the Business Case. As part of this process, a risk workshop involving key stakeholders identified 27 risks, of which seven were rated as 'High' or 'Extreme' prior to the application of mitigation measures. Mitigation strategies were outlined within the risk assessment, resulting in revised residual risk ratings. Following these measures, only one of the seven 'High' or 'Extreme' risks retained a 'High' rating.

Although a comprehensive risk management plan was not sighted during the review, the Business Case states that the Project Team will continue to monitor and report on risks in accordance with the Risk Management Framework. This ongoing process aims to ensure that mitigation strategies are effectively implemented, and residual risks are appropriately managed.

The risk assessment addresses procurement, delivery, and operational risks, with a focus on risks to benefit realisation.

THE REVIEW TEAM'S RATING FOR RISK MANAGEMENT **IS:**	Strong

6. STAKEHOLDER MANAGEMENT

The Review Team's view on whether the Success Factor requirements relating to stakeholder management have been appropriately addressed are represented below:

REQUIREMENT	ASSESSMENT
The project scope has been developed and refined based on stakeholder input.	Yes
An assessment of the risks of the acceptability of the project to key stakeholders has been completed and documented.	Partially
The identified benefits have been linked to key stakeholders.	Yes

A Business Case for this project was originally developed in 2017. During interviews, it was noted that extensive stakeholder engagement has been conducted as part of the 2017 Business Case development, as well as during the intervening period and the preparation of the current Business Case. Stakeholder engagement with students, staff, the community, and government has informed the development of the STEM facility requirements, however the Business Case could be improved with further documentation of this process.

While stakeholder impacts are considered within the Business Case, the documentation of the stakeholder management process could be strengthened. Specifically, the development and maintenance of a Stakeholder Communication and Engagement Strategy and a stakeholder register would be beneficial. These tools would help capture stakeholder details, monitor interactions, and track current sentiment on the project throughout its duration.

Although relevant stakeholders have been engaged in defining the project scope, options, and design, it is unclear if stakeholder management activities for the procurement and delivery stages are adequately defined or if responsibilities for consultation have been assigned. Furthermore, based on the reviewed material, it is not evident whether past or planned stakeholder engagement includes setting clear expectations around delivery impacts and anticipated benefits.

The benefits identified in the Business Case have been linked to key stakeholders, demonstrating an understanding of their relevance and importance.

THE REVIEW TEAM'S RATING FOR STAKEHOLDER MANAGEMENT **IS:**	Satisfactory

7. ASSET OWNER'S NEEDS AND CHANGE MANAGEMENT

The Review Team's view on whether the Success Factor requirements relating to asset owner's needs and change management have been appropriately addressed are represented below:

REQUIREMENT	ASSESSMENT
The operational impacts /changes have been investigated and outlined.	Yes
The affected organisations and their likely response to change has been considered.	Yes
The benefit owners have been identified and there is a clear methodology to capture benefits.	Partially

The STEM facilities are currently owned and operated by UTAS, and the new facilities will remain under UTAS control. Operational impacts are expected to be minimal under Option 1: Base Case and Option 3: New Hobart CBD. However, under Option 2: New Sandy Bay, disruptions to operations and potential temporary relocations may occur during the development of the new STEM facilities. While an initial staging approach has been considered and assessed to minimise these impacts, more detailed investigations will be required as the project progresses, the scope of the new facilities is finalised, and the procurement approach is confirmed.

A change management plan has been developed as part of the Business Case, outlining the impacted stakeholders and change management activities for each phase of the project. Lessons learned from previous change management activities across UTAS have been incorporated into the change management strategy for this project.

As noted earlier, a benefits realisation plan has been developed as part of the Business Case. However, the detailed breakdown of this plan was not included in the reviewed material. As such, it is unclear whether benefit owners have been identified or if a clear methodology for capturing and tracking benefits has been established.

THE REVIEW TEAM'S RATING FOR ASSET OWNER'S NEEDS AND CHANGE MANAGEMENT **IS:**	Strong

OTHER MATTERS

The Review Team did not assess the 'Gold Final' version of the Business Case nor review the appendices to be included in that version. While the Project Team indicated that only minimal changes are expected between the 'Silver Draft' and 'Gold Final' versions, any material changes should be evaluated in the context of the requirements outlined in this Gateway Review.

Interview discussions indicated that UTAS is unable to directly fund the project due to constraints on borrowing. This constraint is not outlined in the Business Case and including it would help clarify the need for government funding for the full capital requirement for the project.

CONCLUSIONS

Based on documentation reviewed and interviews conducted, the Review Team has the following conclusions:

1. The Business Case and its development process are largely appropriate, with key focus areas such as Service Need, Value for Money and Affordability, Social, Environmental, and Economic Sustainability, Governance, Risk Management, Stakeholder Management, and Asset Owner's Needs and Change Management following reasonable processes and being documented to varying extents.
2. While the service need is articulated, there is an opportunity to enhance the evidence and information supporting the identified problems. The focus of the service need should shift toward addressing the shortage of Tasmania's STEM workforce, as this is a primary driver for the project, rather than focusing predominantly on productivity issues.
3. The Business Case does not adequately explore all potential solutions to meet the service need. A broader range of options should be considered and documented in a long-list assessment. This should include non-infrastructure solutions and partial scope options. While these alternatives may ultimately be ruled out when assessed against the project objectives, it is important that evidence of their consideration and evaluation is clearly included in the Business Case.
4. The connection between the provision of new STEM facilities and the resolution of the three identified problems within the Business Case is not clearly established. More detailed information should be included to demonstrate how developing new STEM facilities will lead to increased enrolments, which in turn will drive improvements in STEM productivity, engagement at both secondary and tertiary levels, and collaboration. Strengthening this link will reinforce the justification for the project.
5. The Business Case lacks sufficient detail on the three options presented. Additional information is needed on the process and outcomes associated with the development of new STEM facilities under Option 2: New Sandy Bay and Option 3: New Hobart CBD. This should include a comprehensive scope for each option, a schedule of accommodation, and further design or operational considerations to demonstrate how each option addresses the service need.
6. It is important to confirm whether the Business Case is seeking Commonwealth or State funding as this distinction will influence the focus of the CBA and may require adjustments to assumptions, benefits, and other key elements outlined within the Business Case.

The Review Team also observed the following areas of good practice that may be transferable to other projects or programs:

1. A well-structured CBA that contains clear qualitative and quantitative assessments of the benefits of each option.
2. A dedicated project governance framework, clear governance reporting processes, and clear experience and expertise in project delivery.
3. A thorough and well-documented risk assessment process has been undertaken to identify and manage potential risks.

FUTURE GATEWAY REVIEWS OR HEALTH CHECKS

Based on the outcomes of this Review and if funding is being provided by Tasmanian Government, the Review Team recommends to the Sponsor and Infrastructure Tasmania that consideration be given to undertaking a further Gateway Review, Health Check or Deep Dive as indicated:

THE REVIEW TEAM RECOMMENDS THAT THE NEXT REVIEW TO BE UNDERTAKEN IS:	Gate 3 Delivery Strategy & Readiness for Market

The Review Team recommends that the timing of this next Review be once the Business Case has been approved, and funding has been confirmed.

The Review Team recommends that the focus of this Review should be:

1. The STEM Facility scope based on the funding committed.
2. The procurement strategy to meet the scope of preferred option.