

# Cost-benefit Analysis

A conventional economic CBA methodology has been applied to the costs and benefits that can be monetised for the two development alternatives. The cost and benefits for each option are compared against each other, with the net position for the CBD in comparison to the Sandy Bay consolidation presented in the marginal contribution table below.

The cost-benefit analysis has been undertaken based on the following key assumptions:

- EFTSL growth medium forecast for each development option
- Evaluation Period 30 years. All benefits accrued in this period are measured for their useful life
- Base year 2018. All costs and benefits are measured in real 2018 dollars
- Construction period 10 years, 2020-2030, with both development options separated into two building stages
- Land disposal value-
- Residual building value depreciated useful life (40 years).

The benefits of an investment in higher education to the broader community is difficult to monetise and hence, this CBA should be considered in conjunction with the broader social, environment and economic impacts of the project.

#### **Net Present Value**

The present value of costs and benefits for each development option are summarised in the following table. The core assumption forming the basis for the NPV is the growth forecasts undertaken by against a baseline (based on no capital expenditure with growth in line with the past five years).

CBD Relocation								
NPV (real discount rate)								
	4%	5%	6%	7%	10%			
Costs								
Capital Cost	569	547	527	508	457			
Additional Teaching Costs	169	141	119	100	62			
Land Acquisition Costs	19	19	18	18	17			
Total Cost	757	707	664	626	536			
Benefits								
Additional Student Revenue	273	228	192	163	101			
Research Benefits	114	95	80	67	41			
Maintenance and Utilities Savings	28	24	20	18	12			
Residual Building Value	312	309	306	303	295			
Land Disposal	109	101	94	87	70			
Total Benefits	835	757	692	637	519			

Figure 22: CBD relocation NPV



Sandy Bay Consolidation									
NPV (real discount rate)									
	4%	5%	6%	7%	10%				
Costs									
Capital Cost	518	491	466	442	379				
Additional Teaching Costs	123	103	87	73	46				
Land Acquisition Costs	_	<u></u>	<u>~</u>	-	¥				
Total Cost	641	594	552	515	425				
Benefits									
Additional Student Revenue	187	159	135	116	75				
Research Benefits	75	63	53	45	28				
Maintenance and Utilities Savings	19	16	14	12	8				
Residual Building Value	302	299	296	293	285				
Land Disposal	38	36	33	31	26				
Total Benefits	621	572	532	497	422				

Figure 23: Sandy Bay consolidation NPV

## **Key Findings**

Figure 23 outlines the marginal benefits and costs for the CBD development option in comparison to consolidation at Sandy Bay. The comparison clearly demonstrates the major drivers of benefits as the student outcomes, research output and revenue received through land disposal.

## **Increased Student Revenues**

As noted within the EFTSL modelling undertaken in the table, it is forecast that there would be a greater increase in EFTSL from a CBD relocation on the back of improved student retention. This in turn would result in an increase in the student revenue and teaching costs.

## Benefit of Vacated Sandy Bay Land

The University is currently assessing the potential benefit that could be derived from land that would be vacated through either consolidation below Churchill Avenue or a relocation to the CBD. Both development options will unlock value in the Sandy Bay site, with a total relocation creating an additional approximately \$100m revenue in comparison to consolidation on the Sandy Bay campus.



# 5. Recommendation

As identified by the above analysis, both options 1 and 2 require significant capital expenditure. Noting this, long-term considerations regarding social and economic impact were critical determinants when developing this recommendation.

Option 2 is the recommended option as it provides the greatest benefit in terms of social and economic considerations. It aligns closely with the University's strategic objectives, supports the Academic Vision for Southern Tasmania and adopts the guiding principles. A relocation of the entire Sandy Bay campus to the CBD will produce improved outcomes for teaching, learning and research while further establishing the University as an integral part of the Hobart community

Irrespective of which of the above options is endorsed, significant improvements need to be made to facilities management and operational expenditure to ensure the University remains a competitive academic institution of the national and global stage.