

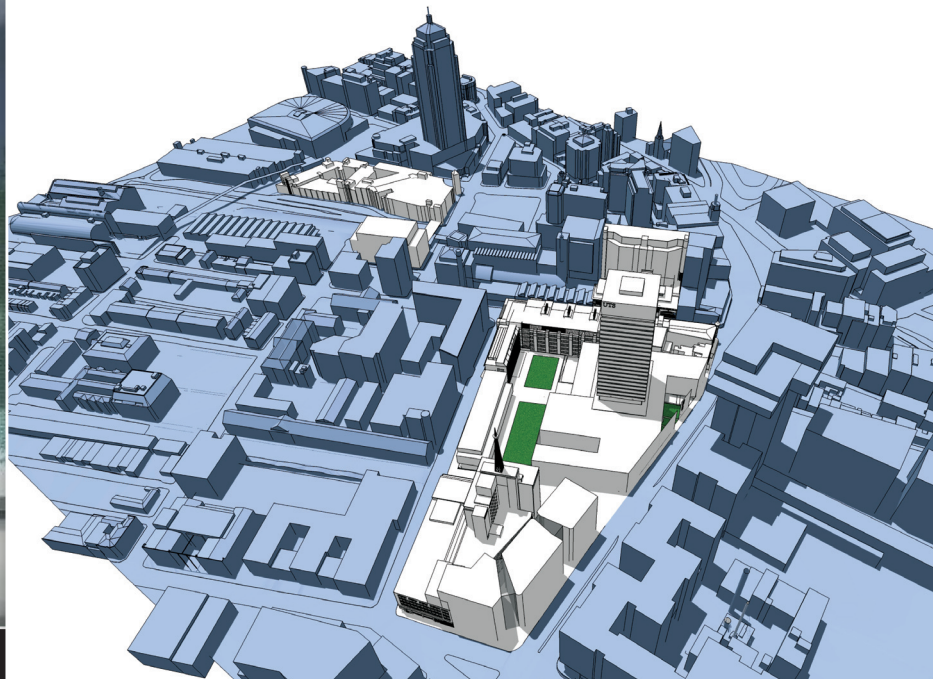
Appendix 6.2I

UTS: City Campus Master Plan - Economic Impact Assessment

Prepared by Urbis

UTS: CITY CAMPUS MASTER PLAN

Economic Impact Assessment
December 2010



UNIVERSITY OF
TECHNOLOGY SYDNEY

urbis

URBIS STAFF RESPONSIBLE FOR THIS REPORT:

Director	Clinton Ostwald
Consultant	Chrystal Desange
Job Code	SPE0189
Report Number	2

© URBIS 2010

This publication is subject to copyright. Except as permitted under the Copyright Act 1968, no part of it may in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission. Enquiries should be addressed to the publishers.

URBIS
Australia Asia Middle East
www.urbis.com.au

Executive Summary	i
1 Background	1
1.1 Study Purpose	1
1.2 City Campus Site Context	1
1.3 City Campus Key Statistics	1
2 City Campus Masterplan 2020	3
2.1 Key Objectives	3
2.2 Key Elements	4
3 Economic Impacts of the UTS City Campus Masterplan 2020	7
3.1 Economic Impacts of University Income & Expenditure	7
3.1.1 Jobs	7
3.1.2 Incomes	8
3.1.3 Output	9
3.2 Economic Impacts of Additional International Students	10
3.2.1 International Student Expenditure	11
3.2.2 Jobs	12
3.2.3 Income	12
3.2.4 Output	12
3.3 Redevelopment of Ku-ring-gai Campus	13
3.3.1 Jobs	14
3.3.2 Income	14
3.3.3 Output	14
3.4 Other Impacts of the Masterplan	15
3.4.1 Precinct Activation & Aesthetic Enhancement	15
3.5 Improved Safety & Amenity	17
3.5.1 Provision of Affordable Accommodation for Students	17
3.5.2 Community Access to Facilities	18
3.5.3 Enhancement of Australia's Reputation of Delivering World Class Education Programs	18
3.5.4 Emphasis on Environmental Sustainability	18
4 Economic Impacts of the Dr Chau Chak Wing Building	19
4.1 Business Tourism	21
4.2 Leisure Tourism	23
4.3 Attracting International Students	25
4.4 Attracting Skilled Workers	25
5 Key Issues & Challenges Relating to the Masterplan	26
5.1 Traffic Management	26
5.2 Parking	26

Executive Summary

The University of Technology Sydney (UTS) makes a significant contribution to the New South Wales and Australian economies. This economic contribution is set to grow upon redevelopment of the University in accordance with the City Campus Masterplan 2020 ("The Masterplan").

The Masterplan sets out a plan for refurbishment of existing buildings and development of new buildings programmed for completion by 2020, at an estimated cost of \$1 billion.

The redeveloped campus will provide UTS with additional capacity to accommodate larger student and teaching populations, including those that will be transferred from UTS' Ku-ring-gai campus, which commenced in 2010 and is scheduled to occur gradually to 2014. In addition the Masterplan will deliver new spaces and facilities that will allow expansion of other non-core activities such as the hosting of conferences and exhibitions.

The economic benefits incurred as a result of the Masterplan will be largely in the form of jobs, income and output. The benefits will accrue in two key phases: the construction period, which commenced in 2009 and is scheduled to be completed by 2018; and the operation phase of the new format campus.

The economic benefits of the Masterplan will be driven by three key factors, being:

1. University expenditure
2. Additional international student expenditure
3. Redevelopment of the Ku-ring-gai campus

Economic benefits of the Masterplan can primarily be measured in terms of output, jobs and incomes, defined as follows:

- Output: the market value of goods and services produced, or in other words, contribution to Gross Domestic Product (GDP) and Gross State Product (GSP)
- Jobs: new jobs created as a result of construction and operating activities associated with the Masterplan. Jobs figures refer to one year of full time equivalent (FTE) employment.
- Income: gross income earned by people taking up new jobs that are created by the activities associated with the Masterplan.

Apart from applying these definitions correctly, some additional care should be taken in interpreting economic impacts

First, it is important to understand that income and output are not additive, but rather they are two separate measures of the economic benefits of a project.

The second important factor to note is that the operating period benefits that are presented in the table and discussed in the report proper relate to the period 2009 to 2018. However, benefits will continue to accrue beyond this time period as UTS remains operational. The reason for adopting the 2009 to 2018 period is that it is the period for which UTS have prepared forecasts of important operating indicators upon which some of our analysis is based, such as revenues and student population. Without these forecasts it is difficult to quantify economic benefits. Thus, the operating period benefits presented in the table relate to a discreet period and therefore are largely understated.

Despite the conservative approach taken to quantifying the economic impacts of the Masterplan, it is evident that it will deliver substantial economic benefits.

In total, the Masterplan will generate enough activity to support the full time employment of an estimated 1,669 people (on average) in each year of construction, and 919 people in full time permanent capacity during the operation phase, once the Masterplan has been fully implemented.

Combined, these jobs will provide an estimated \$792.5 million (in NPV terms) in income to workers over the period 2009 to 2018.

Over the same period, the Masterplan will generate almost \$3.2 billion (in NPV terms) in output – or in other words, it will contribute \$3.2 billion to NSW's Gross State Product – throughout this period. This output would be generated during the construction and operating phases of the University.

Of particular note is the economic benefit that will be generated by the Frank-Gehry designed Dr Chau Chak Wing building that forms part of the Masterplan. The building is expected to generate significant economic value, due in part to the high profile status of the architect, as well as the world class standard of the facilities that it will deliver. It will be an iconic building for the University, which provides world-class teaching and research facilities. In addition to the core University activities that the building will accommodate, it will also be ideally equipped to accommodate various types of business events, such as conference, meetings, exhibitions and public lectures. We estimate that business events hosted at the Dr Chau Building could attract up to 24,000 interstate visitors and 2,000 international visitors annually, generating around \$36 million expenditure each year. The building is also likely to generate leisure tourism activities and influence international students' and skilled workers' decisions to study and work in Australia. These impacts will also deliver significant economic value to Sydney.

Summary of Economic Benefits of UTS City Campus Masterplan 2020

Benefits from University Expenditure

Construction Period (2009-2018)

Jobs (average per year)	1,382
Output (\$m)	1,991.2
Employee Income (\$m)	407.4

Operating Period (2009-2018)

Jobs	666
Output (\$m)	705.6
Employee Income (\$m)	69.4

Benefits from International Student Expenditure

Operating Period (2009-2018)

Jobs	258
Output (\$m)	107.3
Employee Income (\$m)	70.0

Benefits from Kuringai Campus Redevelopment

Construction Period (2009-2014)

Jobs (average per year)	288
Output (\$m)	381.4
Income (\$m)	248.2

Total Economic Benefit (2009-2018)

Temporary jobs (average per year)	1,669
Permanent jobs	924
Output (\$m)	3,185.5
Employee Income (\$m)	794.9

Notes:

Values are in NPV terms at a 7% discount rate.

Benefits relate to the period 2009 to 2018, however economic benefits from the operating period of the City Campus will continue to be realised over the longer term.

Jobs relate to one year of full time equivalent (FTE) employment.

Output and income benefits are not additive, but rather, they are two alternative ways of assessing economic impacts.

1 Background

1.1 Study Purpose

In June 2009 UTS engaged Urbis to assess the economic and social impacts of the University's City Campus Masterplan 2020 ("the Masterplan").

Since this time a number of designs for specific projects that form part of the Masterplan have been confirmed, for example the Broadway Building, designed by Architects Denton Corker Marshall, and the Dr Chau Chak Wing Building, designed by Pritzker Prize-winning architect Frank Gehry.

As the details of these significant projects have evolved, it has become apparent that the economic and social benefits that they will generate could be even greater than first anticipated.

This is partly due to the fact that the total estimated cost of the Masterplan has been revised upwards from \$913 million to \$1 billion; and partly due to the fact that the new building designs are even more 'grand' and impactful than what was originally envisaged.

As such Urbis has prepared this update to the original June 2009 assessment based on the latest details available on project designs and costs.

1.2 City Campus Site Context

The UTS City Campus is located on the southern edge of the Sydney Central Business District, and falls within the City of Sydney Local Government Area.

Broadway, the major thoroughfare in the Southern city area, traverses the southern edge of the site. The campus is well serviced by public transport, being located in close proximity to Central Station, and light rail and monorail systems at Haymarket.

The campus occupies a central position in the City of Sydney LGA. It is in close proximity to a range of landmark buildings and significant institutions including the ABC Headquarters, Sydney Institute of TAFE, The Powerhouse Museum, University of Sydney and University of Notre Dame. Nearby major public facilities include Darling Harbour, the Entertainment Centre, and the Ian Thorpe Aquatic Centre. There are also a number of significant retail precincts surrounding the campus including Market City, Chinatown, Paddy's Markets and Broadway Shopping Centre.

The campus is divided in two main precincts:

1. The Broadway Precinct: Science; Arts & Social Sciences; Engineering & IT; Design, Building and Architecture; Nursing, Midwifery and Health
2. The Haymarket Precinct: Business, Law

1.3 City Campus Key Statistics

Below are key UTS City Campus statistics upon which this assessment is based. Given that we are seeking to measure the impact of the Masterplan from the time of implementation, we have drawn on statistics from 2008 – the period immediately prior to the commencement of the first stage of Masterplan works in 2009.

BACKGROUND

UTS City Campus Key Statistics (2008)

Domestic Students	15,110
International Students	5,376
Total Students (EFTSL) ¹	20,486
Staff (EFT)	2,255
Useable Floor Area (UFA; sq.m.)	127,600
Teaching Floor Space (sq.m.)	84,216
Revenues (\$m)	473.6
Student Accommodation Beds	470

Source: UTS

1. *Effective Full Time Student Load: a measure of the standard annual study workload of a student undertaking a full year of study on a full-time basis*

2 City Campus Masterplan 2020

The UTS City Campus Masterplan 2020 sets out a plan for the development of new buildings and refurbishment of existing buildings programmed for completion by 2020.

2.1 Key Objectives

The key objectives of the Masterplan are as follows:

- **Accommodate growth in student population:** The Masterplan seeks to accommodate growth in the student and staff populations at UTS over the next twelve years. Proportionally, major growth is projected for general teaching space (GTS), cultural facilities, research groups and the Library. Little growth is predicted for divisions, while existing space requirements for the University Union, Students' Association and 2SER Radio Station are to be maintained.
- **Improve accessibility and co-location:** The Masterplan seeks to improve faculties' access to the Library, general teaching spaces, cultural facilities, sports and recreational facilities and retail services. It also seeks to improve divisions' shared access to conference and boardroom facilities
- **Creation of a campus 'centre':** The library is a vitally important space within the university, being the only true cross-disciplinary space for both students and teachers on the campus. Given its importance, the revitalised library will become known as the 'Learning Commons' and its role as the 'core' of the university will be enhanced. The Learning Commons will play a crucial role in knowledge transfer, providing an environment for knowledge development and supporting students in both an individual and collaborative sense. The Learning Commons can also forge a sense of belonging, identity and community. A new and connected central location for the Learning Commons is fundamental to achieving this vision. The Learning Commons has the ability to form the campus centre, and become its 'intellectual home'. Under the Masterplan the visibility of the Learning Commons is improved, and its urban prominence from both within the campus and from the wider community is enhanced. As an innovative and engaging building the Learning Commons will reinforce the notion that UTS is an "innovative knowledge precinct".
- **Establish UTS as the 'Home of the Creative Industries':** The Masterplan seeks to project a more attractive and modern image which establishes UTS' reputation as the 'Home of the Creative Industries.' The physical environment of the campus is regarded as being vital to the reputation and identity of the university and representative of its attitude to the quality of educational programs.
- **Vital / connected campus:** A key objective of the Masterplan is to provide spaces that encourage students to remain on campus beyond formal teaching and working hours. Spaces will be created which allow students to socialise, relax, gather, and share ideas. The Masterplan not only seeks to improve internal connectivity but also external connectivity so that the campus becomes more accessible from the city.
- **Horizontal campus:** The Masterplan provides for development of low rise teaching spaces to shift the emphasis away from high rise spaces which have traditionally been a symbol of the University.

- **Sustainability:** The Masterplan adopts the key principles of environmentally sustainable development, seeking to fulfil the goals of ecological restoration, economic development and social equity. Implementation of these principles will bring both environmental and economic benefits to the community.
- **Maximise capacity of site:** As a major landholder in the city UTS aims to maximise the development potential of the campus, for both future commercial benefits and future space flexibility.

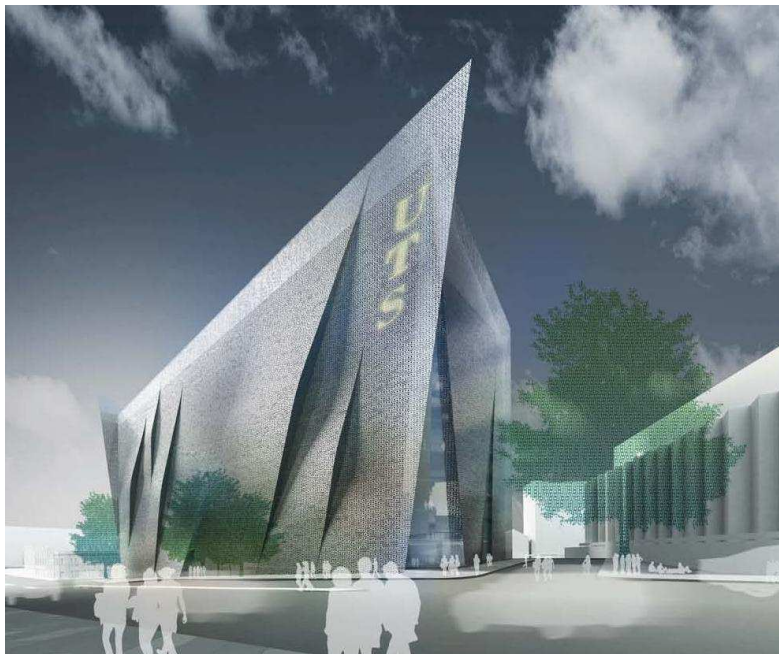
2.2 Key Elements

The Masterplan will deliver an additional 100,000sq.m. of Gross Floor Area (GFA), of which around 50,000sq.m. will be teaching and learning space and 20,000sq.m. will be student accommodation space, with the balance being accounted for by a mix of open space areas, retail spaces and public thoroughfares.

The Masterplan will be delivered through re-configuration and re-location of existing buildings and spaces, and through development of new sites.

New development sites include:

- **Broadway Building:** a fourteen storey building with 41,700 sq.m. GFA which will house the Faculty of Engineering & Information Technology. The building, designed by Architects Denton Corker Marshall, will feature aluminium shields that are laser cut with binary coding which read “University of Technology Faculty of Engineering and Information Technology”. The building has an estimated construction cost of \$246 million and is expected to be completed by 2013.



- **Dr Chau Chak Wing Building:** designed by Pritzker Prize winning architect Frank Gehry, this new, eleven storey building will comprise 16,000sq.m. GFA and will house the UTS Faculty of Business. The building is expected to be completed by 2013 at an estimated cost of \$150 million. Section 4 of this report assesses the impacts of the Dr Chau Building.



- **Thomas Street Building:** also known as the Nexus Laboratory, this five storey building comprising 8,000 sq.m. GFA, will be a world first, sustainable six green star rated centre for climate change and sustainability research. The building design will be chosen through a design competition process, with construction expected to be completed by 2013. The preliminary expected project cost is \$57 million.
- **Multi-Purpose Hall:** this new facility is located beneath Alumni Green and adjacent to the existing UTS Fitness Centre. The Sports Hall comprises an indoor sports court, connecting tutorial and change rooms, a gym and a dance studio, spread across 1,000sq.m. GFA. The hall is currently in the final phase of construction and will be completed by 2011.

The reconfiguration and relocation elements of the Masterplan include:

- **Building 1:** extension of the entrance podium to the south, adding approximately 3,900 sq.m. of GFA. The construction timeframe is currently under review.
- **Building 2:** the library will be relocated to building two which will undergo major refurbishment. 6,500 sq.m. of GFA will be added, and the boundary will be extended to Broadway. The new library will be known as the 'Learning Commons' and will become the centre and dynamic new heart to the campus. The construction timeframe is currently under review.
- **Building 3:** refurbishment for research space. The construction timeframe is currently under review.
- **Building 5:** general refurbishment, including refurbishment of the existing library space to accommodate faculty expansion. The refurbishment is scheduled for completion in 2018.
- **Building 6 / Student Accommodation Tower:** thirteen storeys of new student accommodation space, totalling 19,000 sq.m. GFA and around 720 new beds. The student accommodation is currently under construction and will be completed by 2011.

- **Building 10:** refurbishment to create space for the Faculty of Arts & Social Science and the Faculty of Nursing, Midwifery and Health. The refurbishment is scheduled for completion in 2014.
- **Robotic Library Stacker:** new automatic book storage and retrieval system under alumni green, comprising approximately 2,000 sq.m. GFA.
- **Public thoroughfares:** strengthening of public thoroughfares that surround and penetrate the campus, locating and emphasising major gateways into the campus, and identifying and creating a network of external and internal circulation routes;
- **Landscaping:** landscaping of 'outdoor rooms' including Alumni Green, Jones Street, the UPN and a number of new laneways and arcades that will become the "breathing spaces" of the urban campus.

3 Economic Impacts of the UTS City Campus Masterplan 2020

UTS makes a significant contribution to the State and National economies. Upon implementation of the campus Masterplan, the economic benefits that UTS brings will be enhanced.

In this section we assess the incremental economic benefits that will accrue as a result of implementation of the Masterplan.

Additional economic value will be generated largely as a result of three key drivers:

- UTS operating income and expenditure
- Expenditure by additional international students attending UTS
- Redevelopment of the Ku-ring-gai campus

The economic benefits that these factors will bring will be in the form of jobs, incomes and output, defined as follows:

- Jobs: paid full time employment for a one year period
- Income: gross income earned by people taking up new jobs
- Output: the market value of goods and services produced, or in other words, contribution to Gross Domestic Product (GDP) and Gross State Product (GSP)

These economic benefits are assessed in sections 3.1, 3.2 and 3.3 respectively. Additional non-quantifiable benefits of the Masterplan are assessed thereafter.

3.1 Economic Impacts of University Income & Expenditure

Economic benefits that arise from UTS income and expenditure would occur in two phases:

1. The construction phase – temporary direct and indirect jobs, income and output that will be created during refurbishment and construction.
2. The operating phase – recurring jobs, income and output that will be supported by the operation of the University in its expanded and improved format.

3.1.1 Jobs

Construction Phase

The \$1 billion worth of new construction and refurbishment works that are planned under the Masterplan will result in new construction industry jobs (direct jobs). The income earned and expenditure made by the additional construction industry workers will generate jobs in other industries (indirect jobs).

The number of new jobs created will fluctuate throughout the construction period, in line with fluctuating levels of development activity. Broadly, we estimate that the number of jobs created throughout construction will range from 80 jobs in 2009 to as many as 2,932 jobs in 2011 when the largest share of development activity is scheduled to occur. This translates to an average of approximately 1,400 jobs in each year of construction – in other words,

construction works will generate enough activity to support the full time employment of 1,400 people throughout the entire ten year construction period.

Job Creation Impact of UTS City Campus Masterplan 2020 - Construction Phase

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Capital Investment (\$m) ¹	5.8	82.4	157.7	185.3	213	70.4	70.0	94.6	111.2	13.3
Direct Jobs ²	32	455	871	1,023	1,176	389	387	522	614	73
Indirect Jobs ³	48	679	1,300	1,528	1,756	580	577	780	917	110
Total New Jobs	80	1,134	2,171	2,551	2,932	969	964	1,302	1,531	183

Source: ABS; Urbis

Note: Jobs refer to one year of full-time equivalent (FTE) employment.

Operating Phase

As the Masterplan is implemented UTS employees currently based at the Ku-ring-gai Campus will be gradually relocated to the City Campus, with all employees expected to have been transferred by the end of 2014.

Beyond 2014, after all Ku-ring-gai campus employees are transferred to the City Campus, it is anticipated that more people will be employed on the City Campus to support the additional student population and to operate the new facilities and services that will be delivered through the Masterplan.

By 2018 it is expected that UTS will employ an additional 365 FTE staff on the City Campus. This estimate is based on current floor space ratios for teaching and support staff.

The new jobs at UTS will generate an estimated 301 indirect permanent full time jobs throughout all industries.

Job Creation Impact of UTS City Campus Masterplan 2020 - Operating Phase

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Additional UFA (sq.m.)	287	4,080	7,809	9,175	10,547	3,486	3,466	4,684	5,506	659	49,700
Direct Employment ¹	0	0	0	0	6	6	86	114	133	21	365
Indirect Employment ²	0	0	0	0	5	5	71	94	109	17	301
Total New Jobs	0	0	0	0	11	11	156	208	242	39	666

Source: ABS; UTS, Urbis

Note: Jobs refer to one year of full-time equivalent (FTE) employment.

1. The additional people that will be employed by the University as a result of additional floor space introduced under the Masterplan. It is assumed that no new jobs will be created from 2009 to 2014, apart from 6 research jobs per annum, as additional floor space will be absorbed by staff that are transferred from the Kuringai campus. These are not new jobs, but rather a transfer of existing jobs.

2. Indicates the estimated number of jobs created in other industries upon implementation of the Masterplan, as a result of new jobs at UTS.

3. Six additional research jobs per annum from 2013 to 2019. Research staff forecasts were provided by UTS and are not dependent on floor space.

3.1.2 Incomes

Construction Phase

The new direct and indirect jobs created during construction and refurbishment will result in an estimated \$407.4 million (in NPV terms at a 7% discount rate) in additional incomes over the construction period from 2009 to 2018.

Income Increase Resulting from the UTS City Campus Masterplan 2020 - Construction Phase											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Direct Incomes (\$m) ¹	1.3	18.1	34.7	40.8	46.9	15.5	15.4	20.8	24.5	2.9	220.8
Indirect Incomes (\$m) ²	2.0	29.0	55.5	65.2	75.0	24.8	24.6	33.3	39.1	4.7	353.3
Total Income Increase (\$m)	3.3	47.1	90.2	106.0	121.8	40.3	40.0	54.1	63.6	7.6	574.1
Discount Rate	4%		7%		10%						
NPV of Income Increase	\$469.3		\$407.4		\$356.2						

Source: ABS, Urbis, UTS

1. Income earned by construction industry workers.

2. Income earned by workers from all other industries apart from construction.

Operating Phase

By 2018, upon full implementation of the Masterplan, the additional staff employed on the expanded campus will earn approximately \$28.9 million in incomes annually, and this will generate an additional \$44.5 in indirect incomes for workers throughout all industries.

The NPV of the estimated additional direct and indirect incomes earned over the period 2009 to 2018 is \$69.4 million (at a 7 discount rate). Of course, incomes will continue to be earned beyond 2018, and therefore the economic benefit of the Masterplan, in terms of employee incomes, is actually far greater than this.

Income Increase Resulting from the UTS City Campus Masterplan 2020 - Operating Phase											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Direct Incomes (\$m) ¹	0.0	0.0	0.0	0.0	0.5	0.9	7.7	16.7	27.2	28.9	81.9
Indirect Incomes (\$m)	0.0	0.0	0.0	0.0	0.3	0.5	4.2	9.1	14.8	15.7	44.5
Total Income Increase (\$m)	0.0	0.0	0.0	0.0	0.7	1.5	11.9	25.8	41.9	44.5	126.3
Discount Rate	4%		7%		10%						
NPV of Income Increase	\$89.2		\$69.4		\$54.4						

Source: ABS, Urbis, UTS

1. Initial income increase assumes new jobs will be broken down as follows: Senior Management (1%); Teaching (39%); Support /

3.1.3 Output

Construction Phase

An alternative way of gauging the economic impact of the Masterplan is in term of the amount of output – or in other words, Gross Domestic Product (GDP) – that it will generate.

After accounting for flow-on effects it is estimated that the Masterplan will contribute more than \$2.8 billion to Australia's GDP throughout the construction period. The annual rate of output will vary in line with the varying amount of development activity over the period, ranging from \$16.2 million in 2009 to as high as \$595.5 million in 2013 when the largest amount of development activity is scheduled to occur.

The NPV of the estimated output generated by the Masterplan is \$1.99 billion (assuming a 7% discount rate).

Output Increase Resulting from the UTS City Campus Masterplan 2020 - Construction Phase											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Initial Effects (\$m) ¹	5.8	82.4	157.7	185.3	213.0	70.4	70.0	94.6	111.2	13.3	1003.7
Multiplier Effects (\$m)	10.4	148.0	283.2	332.8	382.5	126.4	125.7	169.9	199.7	23.9	1802.6
Total Output Increase (\$m)	16.2	230.4	440.9	518.1	595.5	196.8	195.7	264.5	310.9	37.2	2,806.3
Discount Rate	4%		7%		10%						
NPV of Output Increase	\$2,294.1		\$1,991.2		\$1,741.2						

Source: ABS, Urbis, UTS

1. Initial output increase is equivalent to the capital costs of the Masterplan.

Operating Phase

Operation of the expanded University is expected to result in further output gains (i.e. increases in UTS revenues). Like the output gained during construction, these output gains will have flow-on effects on other industries.

Each year, improvements made to the University will generate additional revenues for UTS. By 2018 – upon full implementation of the Masterplan – we estimate that the improvements to the University which form part of the Masterplan will generate an additional \$80 million in revenues for UTS. That is, of total UTS revenues, \$80 million could be attributed to improvements to the University that were achieved through the Masterplan

The NPV of additional direct and indirect output generated as a result of the Masterplan over the period 2009 to 2018 is \$705.6 million – however, additional output will continue to be generated beyond 2018 as the University continues to operate. Therefore, the economic benefit of the Masterplan, in terms of output / GDP will actually be much greater than this.

Output Increase Resulting from the UTS City Campus Masterplan 2020 - Operating Phase											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Initial Effects (\$m) ¹	9.8	6.2	26.8	27.2	25.1	33.9	46.3	55.9	66.7	80.0	378.0
Multiplier Effects (\$m)	19.6	12.4	53.3	54.0	50.0	67.5	92.1	111.2	132.6	159.0	751.8
Total Output Increase (\$m)	29.4	18.6	80.1	81.2	75.1	101.4	138.5	167.1	199.3	239.0	1,129.7
Discount Rate	4%		7%		10%						
NPV of Output Increase	\$856.8		\$705.6		\$587.3						

Source: ABS, UTS, Urbis

1. Forecasted additional revenues earned by the University which can be attributed to the Masterplan. Our assumption is that 50% of UTS's revenue growth would be attributed to the Masterplan and 50% of revenue growth would be earned irrespective of implementation of the Masterplan.

3.2 Economic Impacts of Additional International Students

The redeveloped University is expected to attract a larger population of international students. The increase will in part be due to an increase in the provision of additional student accommodation delivered by the Masterplan, and in part due to the fact that the new state of the art campus will be more attractive to internationals.

The international student population forecasts presented in the table below have been prepared by UTS. From 2009 to 2018 the international student population located at the City Campus is forecast to increase by 28% to 6,800.

International Student Population Forecast (2009-2018)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of Students	5,376	5,449	5,602	5,759	5,921	6,087	6,258	6,434	6,614	6,800
Growth on 2008 (No.)	76	149	302	459	621	787	958	1,134	1,314	1,500
Growth on 2008 (%)	1%	3%	6%	9%	12%	15%	18%	21%	25%	28%

Source: UTS

3.2.1 International Student Expenditure

Spending by the additional international students will result in a net economic benefit to the state and national economies, as this represents expenditure that would otherwise not have been captured. In contrast, an increase in expenditure that will be achieved as a result of an increase in domestic students is not considered to have a net economic benefit as domestic students' expenditure is not dependent on them attending UTS. That is, it is assumed that they will spend the money anyway. Domestic student expenditure captured by the University is therefore considered as a transfer of benefits.

Based on data produced by Australian Education International (AEI) as well as research conducted by the National Centre for Social and Economic Modelling (NATSEM) on retail and services expenditure by university students, we estimate that expenditure by additional international students attending UTS will be in the order of \$14.2 million annually by 2018.

From 2009 to 2018 the additional international students at UTS will spend an estimated total of \$39.7 million (in NPV terms at a 7% discount rate).

This is the amount of expenditure that would be captured by the additional international students that could be accommodated as a result of implementation of the Masterplan; it does not represent expenditure by the international student population that are accommodated within the existing campus structure.

It also excludes money paid to the University by international students (i.e. study fees, and rent at University accommodation) as this is already accounted for in the previous section where we quantified the increase in UTS' forecasted revenues which can be attributed to the Masterplan.

Additional International Student Expenditure (2009-2018)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Rent (\$m) ²	0.3	0.6	0	0	0	0.3	0.9	1.6	2.3	3.0	8.9
Other Goods & Services (\$m) ³	0.6	1.1	2.3	3.5	4.8	6.0	7.4	8.7	10.1	11.5	56.1
Total Additional Expenditure (\$m)	0.9	1.7	2.3	3.5	4.8	6.3	8.3	10.3	12.4	14.5	65.0
Discount Rate	4%		7%		10%						
NPV of Additional (\$m)	\$48.7		\$39.7		\$32.8						

Source: NATSEM; Australian Education International; Urbis

1. Annual expenditure based on a 32 week year, taking into account 14 weeks teaching and two weeks for exams per semester.

2. Rent paid by students who can not be accommodated in new UTS accommodation that will be available from 2011. Based on rent of \$120 per week.

3. Includes expenditure on food, clothing, entertainment, transport, travel, telephone and incidental costs.

3.2.2 Jobs

Expenditure by international students will create jobs throughout the broader economy. By 2018 an estimated 258 direct and indirect permanent full time jobs will be created as a result of spending by the additional international students that UTS will take on.

Job Creation Impact of International Student Expenditure										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Expenditure (\$m)	0.9	1.7	2.3	3.5	4.8	6.3	8.3	10.3	12.4	14.5
Direct Employment ¹	7	14	20	30	40	53	70	87	105	123
Indirect Employment ²	8	16	22	33	44	59	77	96	115	135
Total New Jobs	16	30	41	63	85	112	147	183	220	258

Source: ABS; Urbis

Note: Jobs are for the equivalent of one year of full-time equivalent (FTE) employment.

1. Indicates the estimated number of jobs created in the industries from which international student purchase goods and services

2. Indicates the estimated number of jobs created in all other industries as a result of international student expenditure

3.2.3 Income

The new direct and indirect jobs that are generated by increased international student expenditure will result in additional incomes of around \$70.0 million (in NPV terms at a 7% discount rate) over the period 2009 to 2018.

Income Increase Resulting from International Student Expenditure											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Direct Income (\$m) ¹	0.2	0.4	0.6	0.9	1.2	1.6	2.2	2.7	3.2	3.8	16.9
Indirect Income (\$m) ²	1.3	2.6	3.5	5.3	7.2	9.5	12.4	15.4	18.6	21.8	97.4
Total Income Increase (\$m)	1.5	3.0	4.1	6.2	8.4	11.1	14.6	18.1	21.8	25.5	114.3
Discount Rate	4%		7%		10%						
NPV of Income Increase (\$m)	\$85.7		\$70.0		\$57.7						

Source: ABS, Urbis, UTS

1. Income earned by employees from the industries in which international students purchase goods and services directly from.

2. Income earned by employees from all other industries as a result of the increase in incomes of workers in the industries from which international students purchase goods and services directly from

3.2.4 Output

As explained in section 3.1.3 an alternative way of gauging the economic impact of the Masterplan is in terms of output, or contribution to GDP and GSP. In this case, the initial increase in output is simply the additional \$65.0 million in expenditure by new international students at UTS.

This additional international student expenditure will drive an increase in output in other industry sectors worth more and estimated \$110.4 million, resulting in a total increase in output of around \$175.4 million

In other words, the additional international students that will be accommodated at UTS as a result of the expanded campus will contribute \$175.4 million to New South Wales' Gross State Product between 2009 and 2018. The NPV of the estimated output increase is \$107.3 million.

Output Increase Resulting from Additional International Student Expenditure (2009-2018)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Initial Effects (\$m) ¹	0.9	1.7	2.3	3.5	4.8	6.3	8.3	10.3	12.4	14.5	65.0
Multiplier Effects (\$m)	1.5	2.9	3.9	6.0	8.1	10.7	14.1	17.5	21.0	24.7	110.4
Total Output Increase (\$m)	2.4	4.6	6.3	9.5	12.9	17.0	22.3	27.8	33.4	39.2	175.4
Discount Rate	4%		7%		10%						
NPV of Output Increase (\$m)	\$131.5		\$107.3		\$88.5						

Source: ABS, Urbis

1. Additional spending by international students, excluding study fees and rent for on-campus accommodation (these expenses are already accounted for in UTS's revenue forecasts)

3.3 Redevelopment of Ku-ring-gai Campus

Implementation of the City Campus Masterplan would free up UTS' Ku-ring-gai Campus. The campus, located in Lindfield, comprises some 208,000 sq.m. of land and 35,000 sq.m. of building space, of which 19,000 sq.m. is UFA.

The undeveloped area of the site has capacity for 340 mixed density dwellings. Meanwhile, there is potential for the University buildings to be converted to a high school. The Department of Education & Training (DET) has entered into preliminary negotiations to acquire the campus area of the site with the intention to undertake the conversion.

Whilst plans for the Ku-ring-gai site are not yet finalised, we have prepared some preliminary estimates of site redevelopment costs, in order to quantify the economic benefits that redevelopment would bring.

The cost of constructing 340 dwellings is estimated at \$380,000 per dwelling, translating to a total construction cost of around \$129 million. The cost of refurbishing the campus buildings so that they can be utilised for a high school are estimated at \$7.2 million. Note that the cost estimates for refurbishment of the campus buildings relates to raw construction and refurbishment costs, and does not include the costs of land.

The capital investment made to construct the dwellings and refurbish the existing buildings will create jobs and drive incomes and output. Given that there are no other available sites in Lindfield or surrounding areas of this scale where such development could take place, we have deemed the activity that would be generated as a result of the campus redevelopment to be activity that would not otherwise have taken place. In essence it would drive new activity rather than transfer existing activity from one location to another. Since redevelopment of the site could only occur if UTS implements the Masterplan so that it can accommodate its Ku-ring-gai staff and students on the City Campus, the benefits associated with the Ku-ring-gai site redevelopment are attributed to the Masterplan.

The benefits would occur mainly as a result of construction. Any benefits arising during the operation would be negligible and therefore, in order to be conservative, we have not quantified them. For example, operation of the school might result in, say, a couple of hundred new direct and indirect jobs and around \$10 million to \$20 million in direct and indirect incomes over the long term.

The economic benefits of construction of the dwellings and high school are quantified below and overleaf, based on the construction cost estimates stated above.

3.3.1 Jobs

Redevelopment of the Ku-ring-gai campus would generate enough activity to support the full time employment of 405 people, directly and indirectly, throughout the construction period.

Job Creation Impact of Ku-ring-gai Campus Redevelopment - Construction Phase (2009-2014)

Construction Costs (\$m)	136.4
Direct Jobs (average per year)	108
Indirect Jobs (average per year)	161
Total Jobs (average per year)	405

Source: ABS, Urbis

Note: Jobs are for the equivalent of one year of full-time equivalent (FTE) employment.

3.3.2 Income

The jobs and expenditure generated from redevelopment of the Ku-ring-gai campus would result in an estimated \$248.2 million in incomes throughout the entire construction period. This means that if the Ku-ring-gai campus is redeveloped over a period of five years, the direct and indirect jobs supported by the redevelopment would generated around \$49.6 million in incomes to workers annually.

Income Increase Resulting from Ku-ring-gai Campus Redevelopment - Construction Phase

Construction Costs (\$m)	136.4
Direct Income (\$m) ¹	30.0
Indirect Income (\$m) ²	218.2
Total Income Increase (\$m)	248.2

Source: ABS, Urbis

1. Income earned by construction industry workers

2. Income earned by workers from all industries apart from construction.

3.3.3 Output

Once again, we can look at the potential output increase that would result from redevelopment of the Ku-ring-gai campus as a means of gauging the economic benefits that redevelopment would bring.

The initial output increase is simply the estimated costs of constructing the dwellings and converting the existing University buildings to a high school. As explained previously, the increase in construction industry output will drive output increases across other industries. The estimated value of direct and indirect output increases resulting from the redevelopment of the Ku-ring-gai campus is \$381.4 million. These output increases will be realised over the period of the redevelopment.

Output Increase Resulting from Ku-ring-gai Campus Redevelopment - Construction Phase

Initial Effects (\$m) ¹	136.4
Production Induced Effects (\$m)	120.2
Consumption Induced Effects (\$m)	124.8
Total Output Increase (\$m)	381.4

Source: ABS, Urbis

1. Initial output increase is equivalent to the capital cost of the redevelopment

3.4 Other Impacts of the Masterplan

3.4.1 Precinct Activation & Aesthetic Enhancement

Development of new architecturally designed buildings and refurbishment of existing buildings under the Masterplan will improve the aesthetic quality of the University precinct. The new development sites and major renovations will have a significant impact on the surrounding streetscapes with some 600 metres of new built frontage to public streets. This will aid in building the overall appeal of the broader Ultimo Cultural and Education Precinct (UCEP) in which UTS sits.

“The new built environment will be of exemplary design quality, and will be rich and diverse. The quality of the buildings will be judged by the quality of the spaces they create, the way they integrate with the city, the relevance and flexibility they have to current and future teaching practices, and the manner in which they facilitate human engagement.” – Bligh, Voller, Nield; UTS City Campus Masterplan 2020

The UTS City Campus redevelopment, in conjunction with nearby neighbouring major developments, will create a vibrant commercial, education and cultural precinct that extends from the Central Park development on Broadway in the south, to Barangaroo in the North.

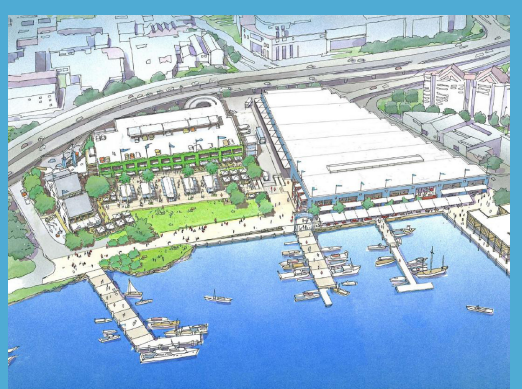
Emergence of a vibrant commercial, cultural and education precinct



Barangaroo
One of the largest waterfront greening projects in the world
500,000sq.m. of commercial office space
11,500sq.m. of public domain
Residential, retail & tourism uses



Star City
New 300 room hotel with associated ancillary facilities
Additional 550 car spaces
Redevelopment of retail arcade, connecting Pyrmont Bay Park to Union and Pyrmont Streets
Redevelopment of eastern part of the casino with additional restaurants, retail outlets and gaming space
New Multi-use Entertainment Facility (MUEF) with 3,000 seats and 4,000 standing spaces (to replace existing Ballroom)



Fish Markets
Providing additional 28,000 sq.m of retail space
Additional 204 car spaces
New boardwalk, outdoor dining parkland and public foreshore access



Darling Walk
55,000 sq.m commercial office space and 5,000 sq.m of retail space over two new 9 storey buildings
New public open space areas



UTS City Campus Masterplan
\$1 billion redevelopment of the UTS campus
100,000sq.m. of additional GFA
Iconic buildings including Dr Chau (designed by Frank Gehry) and Broadway (designed by Denton Corker Marshall)
Additional student accommodation
New recreation and retail spaces



Central Park
A new urban village situated on the former Carlton United Brewery site on Broadway.
235,000sq.m. of residential, commercial and retail space over 11 buildings
Up to 1,600 apartments
6,500 sq.m public park
Delivered over various stages over the next 3-10 years

- Commercial Development Precincts
- Entertainment Development Precincts
- Education Development Precincts
- Residential Development Precincts

3.4.2 Improved Safety & Amenity

The new teaching, entertainment and recreational facilities and spaces that will be incorporated in accordance with the Masterplan will result in a concentration of activity in the area, thereby improving safety and amenity. Urban design elements such as lighting and security will also aid in improving security in and around the campus.

This will reduce the amount of police presence required in the precinct and allow for reallocation of these resources to other areas in the community. The University would take on a stewardship role in the management of the precinct with a strong focus on long term development within a complex inner city urban environment.

To put these benefits in perspective, we look at the costs of crime to the community. The NSW Bureau of Crime Statistics and Research (BOCSAR) reported that there were over 35,000 reported crimes in the Sydney LGA in 2007. Whilst crime statistics are not available at the suburb level, BOSCAR's crime 'hotspot' maps illustrate that a significant proportion of these crimes were concentrated in the area surrounding the UTS campus. In particular, the area had a high incidence of robbery, steal-from-person, steal from vehicle, and violence and assault related crimes in that year.

These crimes impose significant non-tangible costs to society, such as emotional and psychological damage, as well as significant monetary costs. In 2005, the estimated cost of crime to the Australian community was \$36 billion, representing 4.1% of national GDP in that year. Based on data produced by the Australian Institute of Criminology, the crimes that we have identified to occur most frequently in the areas surrounding the university campus have an average cost per incident of around \$900. These figures put into perspective the costs that could be saved through activation of the University campus and surrounding area as a result of implementation of the Masterplan.

3.4.3 Provision of Affordable Accommodation for Students

Construction of the new student accommodation commenced in 2010 and is scheduled for completion in 2011. The development will deliver an additional 720 student beds – this is more than the anticipated cumulative increase in international students studying at UTS until 2013. This means that from 2011 to 2013 the new student accommodation development will have capacity to accommodate new international students, in addition to some students that are currently renting in the private market. This will alleviate pressure on the private rental market, aiding in controlling rents. It is important that rents be maintained at a reasonably affordable level in order to maintain the attractiveness of UTS and Sydney generally to international students who bring significant economic benefits.

We note, however, that beyond 2013, the cumulative increase in international students will exceed the number of additional beds within the new accommodation development will provide. This will once again put pressure on the private rental market as new international students will be once again be forced to take up accommodation outside of the University. It will be important for additional student accommodation developments to be considered at this time in order to bridge the potential supply gap so that the price of rent remains competitive in the international context.

3.4.4 Community Access to Facilities

A key objective of the Masterplan is to strengthen and reinforce a sense of community. One mechanism for achieving this objective is to provide the community with access to a number of arts, cultural, entertainment and sporting facilities, including a new cinema, gymnasium and art gallery. Community benefits that can accrue as a result of utilisation of these facilities include development of cognitive skills and educational attainment; community pride, identity and cohesion; crime prevention; and self-esteem and life skills

3.4.5 Enhancing Australia's Reputation of Delivering World Class Education Programs

Internationally, Australia has established a reputation of providing world class education programs. As a result, the number of internationals studying in Australia has been growing. The international education industry is Australia's largest services export sector, contributing \$11.7 billion to the Australian economy in 2006-07. New South Wales, in particular, leads the other states and territories of Australia in the income that it earns from education exports, contributing \$5.3 billion to GSP in 2007-08.

The UTS redevelopment will assist with continuing to build the profile of education institutions in Sydney and Australia more broadly at the global level, exemplifying the leading edge programs and resources which international students can gain access to. The exposure gained as a result of the UTS redevelopment will cement Australia's and NSW's position in the increasingly competitive global education market, and this will bring significant benefit to the NSW and Australian economies over the short and long term.

3.4.6 Emphasis on Environmental Sustainability

UTS has accepted responsibility for developing new buildings on its urban campus based upon high standards of environmental sustainability. The University's approach toward the issue is demonstrated by comments displayed on its website:

"Sustainability must be a holistic and permanent objective. So UTS is taking a whole-of-university approach to respond to environmental concerns now confronting our country and our world. We aim to lead by example and show others that sustainability is a goal we must all attain" – UTS

In an effort to achieve the objectives that it has set, the University commissioned ARUP, to prepare an Environmentally Sustainable Design (ESD) plan that would guide implementation of the Masterplan in an environmentally sustainable manner.

The Masterplan provides an opportunity for UTS to be an advocate of ESD, and act as a role model to other institutions, establishing a benchmark against which other institutions can measure their own ESD effectiveness. Implementation of ESD principles by UTS and other institutions can result in significant savings to the community over the long run, as detailed in ARUP's ESD report.

"The Masterplan provides the ideal opportunity to reinforce existing or introduce new sustainable practices into the University's operations, education, research and outreach to the community and should enhance the socio-cultural experience of the community." – Bligh Voller Nield, UTS City Campus Masterplan 2020

4 Economic Impacts of the Dr Chau Chak Wing Building

In June 2010 UTS announced that it would build a Frank-Gehry designed building as part of the City Campus Masterplan 2020.

Frank Gehry is widely considered to be one of the world's greatest architects, having won the US Pritzker Prize and the British Royal Gold Medal - the two biggest honours in architecture. His designs have been described as "dramatic and influential, often achieving fame through their spectacular effect".

Gehry's portfolio of work is extensive, with some of his most famous works including the Guggenheim in Bilbao, the Walt Disney Concert Hall in Los Angeles, the Dancing House in Prague, and the Art Gallery of Ontario.



Guggenheim Museum, Bilbao

Walt Disney Concert Hall, Los Angeles

Dancing House, Prague

The Dr Chau Chak Wing Building – named after the Chinese businessman who donated \$20 million toward the \$150 million building – will be a 16,000 square meter academic building that will replace the current home of the business faculty in the Haymarket Building. It will contain teaching and learning spaces, research spaces, and faculty offices, as well as support facilities including a publicly accessible café.

The building will be located on the Dairy Farmers building site at the corner of Ultimo Road and Omnibus Lane. The 2,800 square meter site is bounded on the north by Mary Anne Street and on the east by the Ultimo Pedestrian Network (UPN).

The site will be accessed from the main campus by two primary routes: one on the street level via Harris Street to an entry on Ultimo Road, and a second via a bridge across Harris Street connecting to the UPN and then north to a second level entry directly off of the UPN. The UPN will also be the primary route for visitors coming from the Central Station.

The current building design incorporates the idea of a "vertical tree house" with each of the larger lower floors divided into six floor segments. The building façade folds in between these elements bringing natural daylight deep into the centre of the floors.

"This is going to be a tree house, with a trunk and a core of activity, and houses in the branches for people to connect and do their private work". – Frank Gehry

ECONOMIC IMPACTS OF THE DR CHAU CHAK WING BUILDING

An event and gallery space will be located on the ground floor facing Omnibus Lane to be used for the school's outreach functions, lectures, and exhibits related to the work of the school. Situated in this event and gallery space will be two stacking oval-shaped classrooms with tiered seating. The lower classroom will be able to open to the social space for large events that require additional seating.

A 240 seat lecture theatre will be located adjacent to the northern ground floor entry. This will be a venue for public lectures, panel discussions and debates. It will have an extensive audio/visual system and video conferencing. Event check-in and informal receptions will take place in the lobby space outside this room.

Given the building's innovative design and high profile status of the architect, it is expected to gain significant public interest and produce substantial economic and social benefits for Sydney, including benefits generated from:

- Business tourism
- Leisure tourism
- International students
- Skilled workers
- Precinct Activation and improved amenity



Dr Chau Chak Wing Building – West Elevation



Dr Chau Chak Wing Building – East Elevation

4.1 Business Tourism

The building will provide a modern, state of the art space suitable for hosting business events – a collective term referring to conventions, conferences, public lectures, corporate and gala dinners and exhibitions.

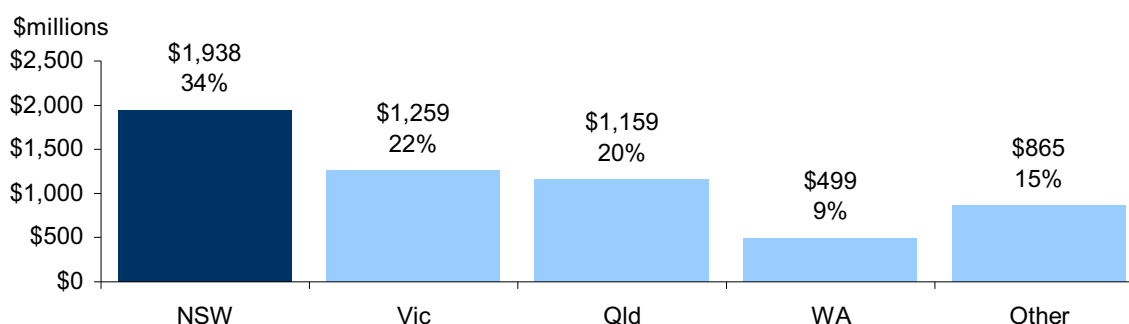
Business events generate significant economic benefits for host destinations. From New South Wales' perspective, economic value can primarily be generated through events that attract participants from interstate and overseas, since this generates expenditure that would otherwise not occur in NSW.

In 2008 there were 7.3 million international and domestic business event travellers to Australia. New South Wales was the most popular business event destination, attracting 2.6 million travellers (36%). Melbourne and Brisbane were the next most popular markets, both attracting 1.6 million travellers (22%).

Business event travellers spent \$5.7 billion in Australia in 2008 – this includes money spent on actually attending an event and expenditure on other items such as accommodation, food and drink, transportation and entertainment. The largest market was New South Wales, attracting an estimated \$1.94 billion (34%) of expenditure. Victoria was the next largest business events market (22% of expenditure), followed by Queensland (20% of expenditure).

Whilst NSW is the largest market, it has lost share to Victoria and Queensland since 2003, when market share was 40%. The loss in market share has been largely attributed to limitations – in terms of quality and capacity – of Sydney's business event Venues.

Expenditure by Interstate and International Business Events Visitors by State (2008)



Source: TRA, Urbis

Business event travellers are high yield visitors, spending on average \$234 per night compared with \$163 per night for the average traveller. Nearly three-quarters of international Business event travellers report that they would not have come to Australia at the time if not for the event, while the majority of business event travellers spend time travelling for leisure before and / or after attending events.

"Over the past decade the world has woken up to the fact that the business event delegate is the most lucrative visitor and they can also impact on the yield of the leisure market" – Christopher Brown, Managing Director, Tourism & Transport Forum (TTF)

As noted, whilst New South Wales had the largest share of the business events market in 2008, it has lost market share to Victoria and Queensland since 2003 and this has been largely attributed to limitations in Sydney's business event venues. This view is reflected in several reviews of the business events market at the state and national levels:

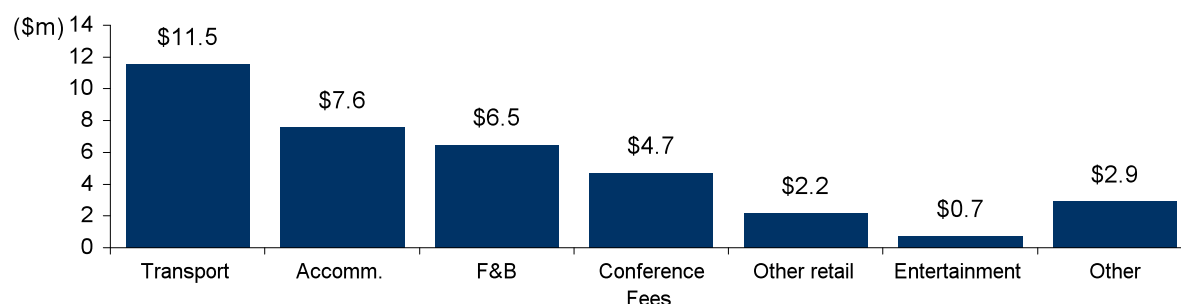
- *Review into Sydney Convention and Exhibition Space*, prepared by John O'Neil AO for the NSW Government in 2007, recognises the need to expand Sydney's meeting facilities to ensure Sydney continues to maximise economic returns from the business events sector. The report recommended an upgrade and expansion of facilities in the Central Business District and Sydney Showgrounds;
- *The National Business Events Strategy 2020*, prepared through collaboration between the business events and tourism industries, with support from the Department of Resources, Energy and Tourism (RET), recognises a shortfall in both convention and exhibition space in Sydney;
- In 2007 Tourism & Transport Forum (TTF) and Property Council of Australia engaged HVS International to investigate approaches to facility development and expansion that would best meet future exhibition and conference demand in Sydney. HVS's report, *Revitalising the Convention & Exhibition Industry in Sydney*, notes Sydney's significant loss of market share, and predicts that this trend will continue if convention and exhibition facilities are not expanded.
- A study commissioned by TTF and prepared by URS Finance in 2007 identified that the under-provision of convention and exhibition facilities costs NSW \$477 million in gross output, \$218 million in Gross State Product and 3,000 jobs each year.

"Events are major drivers of tourism, attracting people from across the country and around the world, but capacity constraints mean Sydney has been missing out on the economic equivalent of the Rugby World Cup every year." – Christopher Brown, Managing Director, Tourism & Transport Forum (TTF)

Given the innovative design of the building and the global influence and high profile of its designer, it is anticipated that the Dr Chau Chak Wing Building will be highly sought after for hosting business events. The building will partly address the current gap in the provision of business event venues in Sydney, providing capacity for events with attendance of up to around 500 people.

We estimate that business events hosted at the Dr Chau building could attract up to 24,000 interstate visitors and 2,000 international visitors annually. These interstate and international business event travellers will spend an estimated \$36 million annually, of which approximately \$25 million would be captured within Sydney with the balance being dispersed nationally.

ECONOMIC IMPACTS OF THE DR CHAU CHAK WING BUILDING

Estimated Annual Business Events Expenditure Generated by the Dr Chau Building

Source: Urbis

4.2 Leisure Tourism

In addition to business tourism, the Dr Chau Building is also likely to generate a certain amount of leisure tourism. Leisure travellers within an interest in building and design may be drawn to Sydney to see the building – in some instances visiting specifically for that purpose.

The Dr Chau Building, in conjunction with neighbouring nearby recent and upcoming developments, will form a vibrant and connected education, cultural and commercial precinct comprising engaging and world-leading architecturally designed buildings, with arguably some of the most significant ones including:

- Sydney Aquarium and Exhibition Centre – Cox Richardson
- Ian Thorpe Aquatic Centre – Harry Seidler
- Central Park on Broadway– Lord Foster, Tonkin Zulaikha Greer and Jean Nouvel
- Hotel at Barangaroo (proposed) – Lord Richard Rogers

This group of buildings could potentially be pitched as a conceptual “Modern Architectural Precinct” where tourists could view the buildings by way of an ‘Architecture Walk’.

“The area west of Central Station is shaping up as Sydney's newest architectural hot spot” – Sydney Morning Herald

It is difficult to measure the economic value of leisure tourism that could be generated by the Dr Chau Building – it largely depends on the extent to which the building is marketed as a tourist destination. Broadly, we would expect the leisure tourism value to be substantially less than the business tourism value, but significant none-the-less.

An Emerging Architecture Precinct

Exhibition Centre
Cox Richardson



Hotel at Barangaroo (proposed)
Lord Richard Rogers



One Shelley Street
Clive Wilkinson Architects



Sydney Aquarium
Cox Richardson



Central Park Laneway
Tonkin Zulaikha Greer

Commercial Building, Frasers CUB
Foster + Partners



One Central Park
Atelier Jean Nouvel



Second residential stage of Central Park (un-named)
Richard Johnson



Ian Thorpe Aquatic Centre
Harry Seidler & Associates



Powerhouse Museum
Philip Cox Richardson Taylor and Partners/Lionel Glendenning



Broadway Building, UTS
Denton Corker Marshall



Dr Chau Chak Wing Building, UTS
Frank Gehry



4.3 Attracting International Students

The incorporation of a Frank Gehry designed building is expected to gain significant international exposure which will raise UTS' profile as an innovative, world leading University. This will improve UTS' ability to compete in the global education market, and drive growth in the University's international student population – which delivers significant economic value to the state and national economies, as discussed in Section 3.

“Not only does it guarantee UTS the most exciting university campus in Australia, it immediately and significantly advances our strategic aims, particularly with regards our internationalisation agenda” – Professor Ross Milbourne, UTS Vice Chancellor

4.4 Attracting Skilled Workers

The Dr Chau building will add to Sydney's cultural offering – seen as a key influencing factor on a city's ability to attract skilled overseas migrants that are essential to economic growth and development.

With almost half of the nation's finance industry and a large proportion of the workforce employed in the services sector, Sydney is fundamentally linked to the global economy. As such, it is part of the global competition to attract talent. This competition has intensified over time, particularly as a result of the rapid growth of economies such as China and Qatar. As such, delivering lifestyle enhancements through culture and technology in order to attract foreign talent is increasingly important.

One of the best known examples of the ability of cultural developments to generate economic benefits is Frank Gehry's Guggenheim museum in Bilbao, Spain. The museum, which was completed in 2007, has been credited with reviving the old Basque industrial city. The Museum has not only delivered economic benefits through increased tourism; it has improved the cultural offering of Bilbao, providing a drawcard for skilled foreign workers which has been an essential ingredient to the city's reinvention.

5 Key Issues & Challenges Relating to the Masterplan

5.1 Traffic Management

Changes to traffic flows may arise as a result of changes to current transport routes under the Masterplan. One example of such change is the proposed closure of Jones Street. However, given the relatively small volume of traffic that currently utilises Jones Street, its closure is not expected to have a significant affect.

Traffic flows around the University precinct are also likely to be affected by the increased volume of traffic in line with the increased student and staff populations. This could exacerbate the problem of traffic congestion which already exists during peak hour periods. UTS will need to work with RTA and council to address this issue in order to avoid inefficiencies and costs that could arise due to increased traffic congestion. We note however, that traffic disruptions are likely to be minimal given that the additional students will be mainly international students who typically utilise public transport rather than drive personal vehicles.

5.2 Parking

Demand for car parks is likely to increase as a result of the larger student and teacher populations. However, there is no provision for additional car parking under the Masterplan. As the competition for parking spaces increases, drivers may be forced to park further away from campus. This could cause disruption and inconvenience to drivers currently parking in these areas.

Brisbane
Level 12, 120 Edward Street
Brisbane, QLD 4000
Tel: +617 3007 3800
Fax: +617 3007 3811

Perth
Level 1, 55 St Georges Terrace
Perth WA 6000
Tel: +618 9346 0500
Fax: +618 9221 1779

Sydney
Level 21, 321 Kent Street
Sydney, NSW 2000
Tel: +612 8233 9900
Fax: +612 8233 9966

Melbourne
Level 12, 120 Collins Street
Melbourne, VIC 3000
Tel: +613 8663 4888
Fax: +613 8663 4999