

LIVE the Future
Functional Plan:

CAMPUS INFRASTRUCTURE
AND UTILISATION PLAN
2013-2020





Campus Infrastructure and Utilisation Plan

Version 3.0

LIVE the Future Agenda 2020 describes the broad strategic directions that will be pursued over the remainder of this decade. The Strategic Agenda is supported by the *LIVE the Future Implementation Plan* (LIP) that is updated periodically, plus a series of *LIVE the Future Functional Plans* including this one, the Campus Infrastructure and Utilisation Plan.

Deakin's strategic plan goals are contained in the offer:

Deakin University offers you a borderless and personalised relationship, creating the power and opportunities to live the future in a new world. Deakin will be Australia's premier university in driving the digital frontier to enable globally connected education for the jobs of the future, and research that makes a difference to the communities we serve.

These goals are explicitly built into the *LIVE the Future* Implementation Plan and its set of supporting Functional Plans, and are organised around the four LIVE themes:

- Learning - offer brilliant education where you are and where you want to go
- Ideas - make a difference through world-class innovation and research
- Value - strengthen our communities, enable our partners and enhance our enterprise
- Experience - delight our students, our alumni, our staff and our friends

The Campus Infrastructure and Utilisation Plan's area of focus is the Value theme.



Introduction

Value is a core element of the Deakin Promise made within our new Strategic Plan *LIVE the future*. Our promise includes advancing value to ***Enhance our enterprise, strengthen our communities and enable our partners.***

Deakin will add value to our own university community by providing the right mix and availability of physical spaces, resources and technological processes and systems. Deakin will strive to be a 'Green Star Education' enterprise, integrating environmental sustainability principles into all of its operations, policies and activities.

As a financially responsible enterprise, Deakin is committed to managing its assets and resources on a disciplined basis, and supporting continued investment in and improvement towards the University's strategic goals.

(LIVE the future – Agenda 2020)

LIVE the future response

The Campus Infrastructure and Utilisation Plan details how Deakin will advance our built environment under our *LIVE the future* response:

V1 - Deliver services and support to enrich the learning, living and social experience for students

V3 - Progress a sustainable and competitive enterprise

Scope and relationship to other plans

The Campus Infrastructure and Utilisation Plan focusses on those assets and facilities which are required by all students and staff as part of the Deakin experience.

Other functional plans more specifically address services such as those targeting student success (Learning Plan 2013, Student Success Plan and Student Support Plan), ICT use (ICT Plan), workforce development (Workforce Management Plan) or university services (University Services Plan). The Campus Infrastructure and Utilisation Plan will have some overlap in both informing and supporting these and other functional plans as part of the Strategic Planning Framework.

The Campus Infrastructure and Utilisation Plan is also informed by the Disability Action Plan and the Sustainability Plan. Relevant strategies from these plans will be embedded into the design and advancement of the University's built environment through specific actions where applicable.



Objectives

V1 - Develop and deliver innovative located and cloud environments that support the needs of our students and staff

V3 - Enhance the value, performance and sustainability of Deakin

Measurement and baseline

The success of the Campus Infrastructure and Utilisation Plan will be monitored against key performance indicators for each of the initiatives within the Plan.

The indicators used in measuring the success of the Campus Infrastructure and Utilisation Plan vary from quantitative data based on space and occupancy metrics, such as the Gross Floor Area (GFA) provided per EFTSL, utilisation data derived from surveys, showing levels of use, and the use of qualitative measures such as student experience relating to University facilities.

Where appropriate, baselines have been set for indicators and targets provided for 2015. In some cases the targets are still under development and are to be provided.

Initial targets for the implementation of the Campus Infrastructure and Utilisation Plan are summarised below:

VALUE – Enhance our enterprise, strengthen our communities and enable our partners						
LIVE the future Objective	LIVE the future Initiatives	KPI	Baseline	2013	2014	2015
V1 Deliver services and support to enrich the learning, living and social experience for students						
Develop and deliver innovative located and cloud environments that support the needs of our students and staff	Develop innovative teaching spaces	a. Deviation of planned time schedule	NA	+/-5%	+/-5%	+/-5%
		b. % of requirements fully implemented	NA	100%	100%	100%
		c. Deviation to budgeted cost	NA	+/-5%	+/-5%	+/-5%
V3 Progress a sustainable and competitive enterprise						
Enhance the value, performance and sustainability of Deakin	Improve 'sustainability' of Deakin's physical assets	Gross Floor Area (GFA) per EFSTL	12.1m ²	11.3m ²	10.6m ²	10.0m ²



The following initiatives will support the *LIVE the future* objectives and initiatives shown above:

1. [Sustainable enterprise](#)
Maximise the economic, environmental and social benefit of our facilities and spaces through employing sustainability principles in all our decisions.
2. [Space use efficiency](#)
Optimise our campuses through facilitating the design, planning and practice of using and sharing facilities and spaces for most effective and efficient use.
3. [Learning and Research](#)
Reposition located learning spaces so that they are characterised by their support of 'active learning, human interaction, comfort and excitement'. Develop spaces for research that maximise collaboration, increase access to key equipment and facilities and allow for interaction with industry and government end users.
4. [Framework for maintenance](#)
Provide a planning and decision framework to be used to facilitate the planning and prioritisation of new and refurbished buildings, lifecycle maintenance programs and provision of a range of infrastructure and services.
5. [Land use futures](#)
Land use futures: Deliver broad Campus design principles through Masterplanning, optimising the property portfolio through development, acquisition and rationalisation to meet the current and future needs of the University.

Initiatives

1. Sustainable enterprise: Maximise the economic, environmental and social benefit of our facilities and spaces through employing sustainability principles in all our decisions.

Over the past 10 years, Deakin has been one of the fastest growing Universities in Australia. As an example, the Burwood on-campus EFTSL was 9,637 in 2003 and is forecast to double by 2014. While anticipated future growth is not expected to be at these rates, projections are still considerable with an increase of approximately 43% from 2012 to 2020, equivalent to an additional 11,458 EFTSL.

The Burwood campus will account for 61.5% of this growth, equivalent to an additional 7,050 EFTSL. Waterfront will account for 19.6% (2,244 EFTSL), Waurin Ponds 16.2% (1,622 EFTSL) and Warrnambool 4.7% (542 EFTSL).

Within this context the University must progress a sustainable and competitive enterprise, being financially responsible in managing its assets and resources on a disciplined basis. Investment needs to be part of a long term planning strategy considering non-asset solutions, life cycle costs and risk mitigation.

In recent times the University has embarked upon an expansive phase involving considerable capital investment in new buildings. As at April 2013, there is \$300m of approved projects currently under construction that will complete progressively until 2015. This investment will leave the University well placed in terms of overall space.



We will adopt a strategy that builds upon this legacy by minimising new building construction and consolidating, rationalising, re-tasking, improving and developing the existing buildings, assets and spaces currently used by the University. This will enable the University to significantly reduce the potential capital cost required to accommodate future growth.

Environmentally sustainable design (ESD) principles have been incorporated into all new buildings at Deakin for some years and several of these buildings have been recognised as being outstanding in terms of ESD. Deakin is committed to reducing its environmental impact and integrating environmental sustainability principles into our strategies, plans, policies, operations, and curricula.

Initiative 1: Sustainable enterprise		
Maximise the economic, environmental and social benefit of our facilities and spaces through employing sustainability principles in all our decisions.		
Measures	Baseline	2015
<ul style="list-style-type: none"> Gross Floor Area (GFA) m² per EFTSL 	12.1m ²	10.0m ²
Actions	Responsibility	
1.1 Plan within the context of financial sustainability while providing for investment in, and improvement of, the property portfolio	ED, FSD*	
1.2 Create nominal capital savings of \$260m in accommodating growth to 2020.	ED, FSD	
1.3 Long term investment decisions to consider non-asset solutions, life cycle costs and risk mitigation	ED, FSD	
1.4 Refurbishment and realignment of space rather than new building	ED, FSD	

* ED, FSD= Executive Director, Facilities Services Division

2. Space use efficiency: Optimise our campuses through facilitating the design, planning and practice of using and sharing facilities and spaces for most effective and efficient use.

Increasing space utilisation enables the University to avoid significant new construction costs and directs these savings to enhancing the capacity and effectiveness of the existing spaces to support LIVE the future.

Improving the efficiency by which the existing physical assets are used, through increases in space utilisation, will involve three key aspects of University activities – located learning, staff accommodation and student support.

Located learning spaces: Overall utilisation of located learning spaces at Deakin vary according to space type. The Tertiary Education Facilities Management Association (TEFMA) Space Guidelines provide best practice utilisation targets. Based on these standards, there is considerable opportunity for improving the utilisation of current located learning facilities by adopting strategies that are in place, or in the process of being adopted, at other Australian Universities.



Staff accommodation: Increasing space use in staff accommodation is a more challenging enterprise than increasing located learning utilisation. With located learning spaces it is possible to increase the use of space across the week by increasing the activity that takes place within the room. However staff accommodation is traditionally a one-to-one relationship – one work station to one staff member. Strategies to increase staff accommodation therefore need to revolve around a need to increase physical capacity in existing spaces. To be effective these strategies will need to reflect the operational requirements of staff.

Student support spaces: Student support spaces include library, student catering and lounge facilities, sports and recreational facilities and student association spaces. The dictates of *Learning 2013* are focused on creating an environment that encourages students to remain on campus. Support spaces are therefore crucial in maximising the student learning experience and overall engagement with the University.

Initiative 2: Space use efficiency		
Optimise our campuses through facilitating the design, planning and practice of using and sharing facilities and spaces for most effective and efficient use.		
Measures	Baseline ¹	2015
<ul style="list-style-type: none"> Overall utilisation rate for located learning spaces Average floor space per Effective Full Time (EFT) staff member 	31.7%	41.5%
	16m ²	14m ²
Actions	Responsibility	
2.1 Improve efficiency in the use of existing physical assets to enable their use in accommodating future growth	ED, FSD	
2.2 Extend the timetabling week to 65 hours, Monday to Friday 8am to 9pm	ED, FSD	
2.3 Increase located learning activities load in Trimester 3	ED, FSD	
2.4 Improve University timetabling processes, procedures and functionality	ED, FSD	
2.5 Reduce average floor space per Effective Full Time (EFT) staff member	ED, FSD	

1. Based on 60 hour timetable week equivalent

3. Learning and Research: Reposition located learning spaces so that they are characterised by their support of ‘active learning, human interaction, comfort and excitement’. Develop spaces for research that maximise collaboration, increase access to key equipment and facilities and allow for interaction with industry and government end users.

Of the *LIVE the future* Implementation Plans, *Learning 2013* will have the most significant impact on planning for the spaces within the University required to deliver learning activities. The concept of the campus as a holistic learning environment is explicitly addressed. Spaces are to be designed for: active learning; providing human interaction; comfort and excitement; support of informal learning and interaction by creation of multiple small ‘eddy’ spaces; and retaining students on campus by creating an environment that supports their learning.



The notion of the ‘flipped classroom’, where the key concept is about repurposing rather than reducing class time, will require major change in the type of learning facilities provided. The new facilities will need to support more interactive and engaging learning experiences. Typically, lecture and homework elements are reversed so that in-class time is repurposed for interactive learning. The typical Deakin learning space in the future is more likely to be a collaborative space, designed to facilitate learning with moveable chairs, accessible writing surfaces and providing for interaction between learners, than traditional lecture theatres, with a subsequent reduction in the current seating capacity provided in lecture theatres by at least 50%.

The other significant physical space driver is the research conducted by the University. The key priorities for research under LIVE the Future are: grow research capability, depth and quality; make innovation and collaboration core business; and develop an impressive international research footprint.

The Burwood Highway Frontage Building, when it is completed in 2014, will provide increased research capacity on the Burwood Campus. Planning is currently underway for a new laboratory focussed research building on the Burwood Campus and on a new building to support spinout and start-up companies at Waurnd Ponds. Significant capital expenditure, particularly at Waurnd Ponds, and to a lesser extent Burwood, will continue to be required to support Deakin’s research agenda.

Initiative 3: Learning and Research		
Reposition located learning spaces so that they are characterised by their support of ‘active learning, human interaction, comfort and excitement’. Develop spaces for research that maximise collaboration, increase access to key equipment and facilities and allow for interaction with industry and government end users.		
Measures	Baseline	2015
<ul style="list-style-type: none"> Quality of Located Learning space rated as ‘good’ / ‘very good’ Ability of Located Learning space to support student engagement rated as ‘good’ / ‘very good’. 	40%	50%
Actions	Responsibility	
3.1 Develop the campus as a holistic learning environment	ED, FSD	
3.2 Provide located learning spaces that are better aligned to the pedagogical requirements of academic delivery	ED, FSD	
3.3 Provide engaging student support spaces that maximise the student learning experience and overall engagement with the University	ED, FSD	
3.4 Provide capacity for research growth and collaboration	ED, FSD	

4. Framework for maintenance: Provide a planning and decision framework to be used to facilitate the planning and prioritisation of new and refurbished buildings, lifecycle maintenance programs and provision of a range of infrastructure and services.

The key maintenance target relating to the University’s physical infrastructure is to maintain backlog maintenance to less than 3% of Asset Replacement Value (ARV). This benchmark has been adopted by the



Federal Government as part of assessing the University’s annual Institutional Performance Portfolio Report and represents good practice in managing the University’s physical assets.

As buildings age, maintenance liabilities progressively increase starting at approximately 0.5% of ARV rising to 3% of ARV after 30 years. Over the next three years, as new building projects are completed, the ARV of buildings in the <5 year category will significantly increase as over \$300m of projects complete. This will add to the maintenance expenditure requirement.

Maintenance liabilities will accrue at an increasing rate over the next 7 years. Unfunded maintenance, arising from this increase and if not adequately addressed, will contribute to the deferred backlog maintenance liability.

It is envisaged that reallocation of the capital budget will be required to ensure backlog maintenance liabilities are included in the strategic prioritisation of refurbishment projects. Targeted asset demolition programs, for those assets that have poor functionality and are at the end of the building’s useful life, will also contribute to the backlog reduction.

The University has made a commitment to supporting students with disabilities. Legislative requirements for DDA compliance have increased significantly over the years and now form a key component of building codes. All of Deakin’s Campuses include aging building stock built on land with significant grade changes.

An audit of external areas on all campuses has been completed and a similar audit of all internal spaces is due for completion shortly. The information gathered from these audits will enable priorities for a retrofit program of works to be developed and costed.

Upgrading the existing infrastructure, and creating new infrastructure, to achieve a reasonable level of accessibility represents a significant on-going financial commitment.

Initiative 4: Framework for maintenance		
Provide a planning and decision framework to be used to facilitate the planning and prioritisation of new and refurbished buildings, lifecycle maintenance programs and provision of a range of infrastructure and services.		
Measures	Baseline	2015
<ul style="list-style-type: none"> Backlog maintenance liability 	Below 3% of ARV	Maintain at below 3% of ARV
Actions	Responsibility	
4.1 Implement an integrated and planned management approach to maintaining the physical asset that incorporates both the condition and functionality of the space	ED, FSD	
4.2 Maintain overall backlog maintenance liability at below 3% of Asset Replacement Value (ARV)	ED, FSD	



5. Land use futures: Land use futures: Deliver broad Campus design principles through Masterplanning, optimising the property portfolio through development, acquisition and rationalisation to meet the current and future needs of the University.

The University’s Asset Replacement Value (ARV) as at the end of 2012 is estimated to be nearly \$1 billion with a gross building area of over 400,000 square metres in more than 250 buildings. There are substantial surplus land holdings, particularly in Waurm Ponds, Warrnambool and Waterfront. Each of the campuses has significant capacity to expand in the future.

Campus Masterplans have been approved by University Council for the Melbourne Burwood Campus, Geelong Waurm Ponds Campus and the Geelong Waterfront Campus. There is currently no Campus Masterplan for Warrnambool, instead a land use strategy has been produced.

Campus Masterplans set the broad design principles and provide the framework for:

- Potential development sites for each Campus.
- Significant development including transport paths, environmental catchment zones, general service and infrastructure planning and car parking locations.
- General volume, height and location for new buildings.
- Potential built capacity of each Campus.

The University and its associated entities lease property that make up approximately 2% of the University’s total floor space. Conversely, approximately 2.3% of usable floor area, equivalent to 9,520m², was allocated to non-University purposes.

At present 57 leases / licences / management agreements, generate income for Deakin of approximately \$1.3 million per annum, covering a range of business activities, including agriculture, residential housing, telecommunication installations, offices and retail.

Initiative 5: Land use futures		
Deliver broad design principles, identify potential development sites, opportunities for rationalisation and provide a framework for any significant developments.		
Measures	Baseline	2015
<ul style="list-style-type: none"> • Masterplan/land use strategy in place for all campuses 	Yes	Yes
Actions	Responsibility	
5.1 Provide a Masterplanning framework for significant campus developments	ED, FSD	
5.2 Optimise the use of surplus assets	ED, FSD	
5.3 Plan for future service and infrastructure needs	ED, FSD	