# Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Message from the Vice Chancellor</td>
</tr>
<tr>
<td>6</td>
<td>Executive summary</td>
</tr>
<tr>
<td>14</td>
<td>Introduction</td>
</tr>
<tr>
<td>30</td>
<td>Theme 1. Academic intent</td>
</tr>
<tr>
<td>34</td>
<td>Theme 2. Functional elements</td>
</tr>
<tr>
<td>36</td>
<td>Theme 3. Campus structure</td>
</tr>
<tr>
<td>40</td>
<td>Theme 4. Built form</td>
</tr>
<tr>
<td>44</td>
<td>Theme 5. Heritage</td>
</tr>
<tr>
<td>46</td>
<td>Theme 6. Landscape</td>
</tr>
<tr>
<td>50</td>
<td>Theme 7. Transport and movement</td>
</tr>
<tr>
<td>54</td>
<td>Theme 8. Infrastructure</td>
</tr>
<tr>
<td>58</td>
<td>Theme 9. A living campus: social, community and commercial interests</td>
</tr>
<tr>
<td>60</td>
<td>Theme 10. Sustainability and the environment</td>
</tr>
<tr>
<td>64</td>
<td>Key area plans</td>
</tr>
<tr>
<td>73</td>
<td>Campus planning and development guidelines</td>
</tr>
</tbody>
</table>

---

**Figure Index**

<table>
<thead>
<tr>
<th>Page</th>
<th>Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Figure 1 National and city wide context</td>
</tr>
<tr>
<td>17</td>
<td>Figure 2 Local context</td>
</tr>
<tr>
<td>18</td>
<td>Figure 3 Other University properties</td>
</tr>
<tr>
<td>20</td>
<td>Figure 4 Previous Master Plans</td>
</tr>
<tr>
<td>25</td>
<td>Figure 5 Development opportunities</td>
</tr>
<tr>
<td>26</td>
<td>Figure 6 The Master Plan</td>
</tr>
<tr>
<td>33</td>
<td>Figure 7 2010 Uses distribution</td>
</tr>
<tr>
<td>41</td>
<td>Figure 8 Master Plan – Structural elements</td>
</tr>
<tr>
<td>45</td>
<td>Figure 9 Year of construction</td>
</tr>
<tr>
<td>47</td>
<td>Figure 10 Listed heritage</td>
</tr>
<tr>
<td>49</td>
<td>Figure 11 2010 Landscape structure</td>
</tr>
<tr>
<td>51</td>
<td>Figure 12 Master Plan – Landscape structure</td>
</tr>
<tr>
<td>55</td>
<td>Figure 13 2010 Pedestrian, bicycle and bus circulation</td>
</tr>
<tr>
<td>56</td>
<td>Figure 14 2010 Parking</td>
</tr>
<tr>
<td>57</td>
<td>Figure 15 Master Plan – Pedestrian, bicycle and bus circulation</td>
</tr>
<tr>
<td>65</td>
<td>Figure 16 Master Plan – Biodiversity protection zones and wildlife corridors</td>
</tr>
<tr>
<td>67</td>
<td>Figure 17 University Avenue concept sketch</td>
</tr>
<tr>
<td>68</td>
<td>Figure 18 Sullivans Creek concept sketch</td>
</tr>
<tr>
<td>69</td>
<td>Figure 19 Acton Ridge Walk concept sketch</td>
</tr>
<tr>
<td>70</td>
<td>Figure 20 Baldessin Square concept sketch</td>
</tr>
<tr>
<td>71</td>
<td>Figure 21 Clunies Ross Street and Daley Road concept sketch</td>
</tr>
<tr>
<td>74</td>
<td>Figure 22 Land use zoning</td>
</tr>
</tbody>
</table>
Message from the Vice-Chancellor

We have taken the opportunity to imagine what the campus should be like two decades from now.

While we cannot know with any precision what will have happened by 2030, we can presume that the University will be different then from now, and we know that there are certain institutional matters that should be an integral part of planning to accommodate the changes.

This Campus Master Plan 2030 will be the guiding document. Its role is largely to remind us of what is important and to plan developments with those features prominent. So, for example, the Plan reinforces our affection for green and open spaces and the natural beauty of our campus – and it respects our institutional heritage. It supports our culture of academic achievement and interaction. It acknowledges the pride we have in our past and the hope we have for our future.

The Plan will guide logistical, spatial and aesthetic solutions for the issues we will face as the University develops.

The ANU community, the citizens of Canberra and the people of Australia owe a debt of gratitude to the founders of the nation’s university. They had the vision to turn what was called a paddock into what they wanted – the campus of a great university in our nation’s capital.

This Campus Master Plan 2030 in part repays that debt. It highlights that we accept our responsibility to help ANU prepare carefully to meet the unpredictable future with confidence.

Professor Ian Chubb AC

Vice-Chancellor and President,
The Australian National University
Our campus, our future

The University is a delightful place set in a beautiful landscape that functions well. Research indicates that people are very satisfied with the existing amenity of the campus. This situation is the starting point for the development of The Campus Master Plan 2030 (CMP 2030).

Over the last six decades The Australian National University (ANU) has grown from the seed of an idea into a major national asset that engages thousands of academics, students, staff and people from the wider community every day.

In 2010, ANU is implementing the CMP 2030 to shape the growth of the University’s main campus in Canberra.

Projected increases in the size of the campus population over the next 20 years present an opportunity to develop ANU into a physical and social space of a quality that matches its intensive education and research credentials.

By 2030 the University will have a lively and efficient campus—a welcoming and safe place to study with facilities that provide world-class teaching and research underpinned by a distinctive on campus residential experience that creates a wealth of positive outcomes and memories.
By 2030

In two decades time, the main ANU campus in Canberra will be a:

> Suitable setting for world class research and teaching;
> Place with more undergraduate and postgraduate students, as well as the academic and general staff to support them;
> Place with more residential accommodation for students;
> Place where ageing buildings and those no longer fit for purpose have been adapted or replaced;
> Place where it is easy and safe to walk and ride;
> Smarter place, with more technologically enabled facilities; and infrastructure;
> Meeting place, with more mixed-use facilities bringing a diverse mix of people and endeavours together;
> Generator of renewable energy, user of recycled water and a carbon neutral asset with a minimal ecological footprint; and
> Greener place, with an even greater emphasis on biodiversity, recreation and open space.

The success of the Master Plan will be measured by how well people relate to the campus and how well it supports the values that are important to our community, including academic interaction, environmental resilience, sustainability, heritage, access and social inclusion.

The Master Plan sets out the development objectives and principles that will guide campus development until 2030. It doesn’t include designs for individual buildings, although it does discuss preferred sites for major developments.

The Plan is concerned with the big picture and provides a framework to create a campus that attracts, delights and encourages people to perform at the very highest standards. The Plan has also been created in consultation with key people from across the University. Further feedback will be invited and considered every five years.

The Master Plan can be viewed online at: www.anu.edu.au/campusmasterplan2030
The Campus Master Plan 2030 doesn’t include details of specific building designs, but it does guide how major sites should change in the coming decades. Five key areas have been identified in the Master Plan for special attention. Changes to these areas are fundamental to the future physical shaping of the campus.

**University Avenue**

The Plan proposes developing a ‘main boulevard’ concept for University Avenue, reinforcing this axis that runs through the campus from the city to Black Mountain.

Developments at the city end will create a clear gateway to the campus. Along the boulevard new spaces will improve mobility and access and provide spaces for celebrations and meetings.

New buildings will incorporate more commercial and retail development plus restaurants and cafes facing the avenue space. Other new additions will include more residential accommodation (such as short stay), administrative services and health facilities.

**Sullivans Creek Linear Park**

This meandering green strip that runs through the campus to the lake is acknowledged in the Plan as a welcome contrast to the formal built edge of the city. It also provides a physically unifying element to the site.

Sullivans Creek is to be developed into a linear park that also provides pedestrian and cycle access between the lake in the south and the northern part of the city.

New pedestrian bridges will improve access across the campus and developments at the water gate where the creek joins Lake Burley Griffin will provide better access and recreation spaces.

**Acton Ridge Walk**

The existing pathway will be developed into a shared formal walkway linking the heritage precinct at Acton past South Oval to a new pedestrian bridge over Sullivans Creek that finishes at the new Pryor Place.

New adjacent development and a formal landscape treatment will physically define the walk. A landscape perimeter edge will be provided to South Oval. Traffic calming will be introduced to the Garran Road crossing.
A. Campus Master Plan 2030 — Structure
Implementation of the Campus Master Plan 2030 has already begun. The principles it sets out form part of the framework for all current and future development on campus. This means that even projects underway will be influenced by the Plan and some have been tested against it.

The Plan also lists a number of major objectives to be achieved during the next 20 years. These objectives and the related physical proposals have been allocated implementation priorities.

**Short term**

- Program the development of strategic public realm elements that will create the links, paths and cycleways to unify the University’s structure, such as Acton Ridge Walk and the Sullivans Creek Linear Park;
- Reinvigorate the Union Court precinct by creating new and refurbished spaces for eateries and bars facing an improved Sullivans Creek, and by building new live-in academic accommodation, conferencing facilities and commercial buildings that frame the courtyard;
- Design and deliver a more coherant pedestrian and cycle network throughout the campus;
- Develop a campus wide bike hire facility available to registered campus users;
- Develop a campus information model to predict development impacts and assess policy directions; and
- Complete a plan for new signage including e-way finding.

**Implementation**

Baldessin Square

The Plan describes this site adjacent to the city end of University Avenue as having formal and ceremonial characteristics.

Under the Plan, it will be developed to form a more visible entry point to the campus from the city, as well as a space for major ceremonial events, more underground car parking and improved access to Llewellyn Hall.

Clunies Ross Street

Clunies Ross Street will be upgraded in the future to increase its capacity, affecting connections with the Commonwealth Scientific and Industrial Research Organisation (CSIRO). Bruce Hall will not be demolished.

In the Plan, Daley Road will be extended to form a new entrance to the campus from Clunies Ross Street. There will be a new pedestrian bridge to CSIRO to the west that takes advantage of existing level changes to lower Clunies Ross Street from Barry Drive.
B. Campus Master Plan 2030 — Master Plan
Medium Term

> Adapt existing buildings at the centre of the campus for student accommodation;
> Build a new above-ground commercial car park facility;
> Build twin entrance buildings at the city end of University Avenue;
> Open additional strategically located child care facilities; and
> Construct Sullivans Creek Linear Park, paths and water elements.

Long term

> Deliver a new joint ANU-CSIRO facility that unites the Black Mountain and Acton campuses;
> Open two more child care facilities;
> Consider an integrated sports and swimming facility;
> Develop a distinct ceremonial building within the University Avenue Gateway and Baldessin precinct that links the new ceremonial landscape in time for 100th anniversary of ANU; and
> Complete the bulk of University Avenue redevelopment.

Leadership

The Campus Master Plan 2030 design and implementation process is being led and managed by the University’s Facilities and Services Division.

The future of the campus will be guided by the Campus Master Plan 2030 and the Campus Planning and Development Guidelines.
Introduction

Purpose

The University's academic prestige is high and attracts high quality professionals and students.

The primary purpose of the ANU Campus Master Plan 2030 (CMP 2030) is to transform the campus into a place that attracts, delights and impels people to perform at the very highest standards.

The CMP 2030 describes the aims and objectives for development on the main Acton campus of the University to 2030. It is the anchor document for the University's development processes and provides a coherent framework for future development. It demonstrates the capacity to redevelop campus infrastructure based on the analysis of the existing site, current development and future needs. It does not provide design solutions for individual buildings but identifies preferred sites suitable for future development.

The Acton campus is set in a high quality landscape on the shores of Lake Burley Griffin with water and city views, high levels of tree cover and ample open space. This has developed over time and recently has been guided by the “Strategic Landscape Plan” developed by Knox and Tanner in 1993. This plan provides a strong, clear structure which the CMP 2030 builds on to continue to improve amenity across the campus. The overwhelming impact across the campus is of trees and grass rather than asphalt and concrete.

The CMP 2030:

> guides ongoing development and maintenance of the physical environment of the University. It comprises a framework of drivers, objectives and planning principles against which future development proposals and decisions can be effectively evaluated;

> responds to the University’s ambition of exceeding recognised sustainability principles and includes strategies for developing a campus that enables and encourages academic interaction, is inclusive and resilient and able to accommodate and adapt to change whilst embracing social sustainability, equity and access;

> provides planning guidelines, direction and development rules that provide for a sense of rationale, unity, cohesion and balance for future development;

> seeks to maintain and improve the function and character of the University and to improve connection and circulation on the campus. The diversity of the landscape will be enhanced—new buildings will strengthen the campus structure and positively contribute to the social and academic life of the campus;
The Vision is:
“A great University set in a delightful campus”

The vision is supported by academic objectives that frame the development of the organisation. The Campus Master Plan 2030 draws on this vision and provides the necessary development framework to foster and strengthen the academic objectives through enhancements to the campus.

The Australian National University objectives

The University provides leadership on issues of international significance.

Aspirational Objective One

The core purpose of the campus is to produce an environment in which world class research and teaching thrives.

The campus provides a place in which academic endeavour thrives.

Aspirational Objective Two

The research, teaching and learning experience is provided within a unique Australian environment.

Research is the lifeblood of the University, teaching and learning are essential building blocks in the sharing and development of knowledge and the formation of enquiring and critical minds. The University’s cultural and physical environment provides a uniquely Australian experience.

Aspirational Objective Three

The value of the campus is more than the sum of the parts, it is the synthesis of its physical, ecological, cultural and economic functions.

The physical quality of the campus is a tangible and vital element in symbolising the values and aspirations of the University.

Aspirational Objective Four

The campus form and layout enables social and environmental responsibility across the University.

Planning for a well connected, resilient, adaptable and diverse campus will enhance social and environmental functionality.
Figure 1: National and city wide context

INTRODUCTION
Figure 2: Local context
Figure 3: Other University Properties
Aspirational Objective Five

The campus will be resilient and adapt in the face of change.

Providing for appropriate density and scale, managing development and providing built forms with sensible relationships to the environment will ensure that the campus and its functionality endures.

Aspirational Objective Six

The campus impels people toward greatness.

The development of the campus will create an environment that inspires people to greatness.

Context

The physical context

ANU is the oldest University in Canberra and is primarily situated on the Acton campus. A number of other holdings in the Australian Capital Territory, New South Wales and the Northern Territory are used for research purposes.

The Acton campus is located on the western side of the city between Canberra's central commercial precinct and Black Mountain Reserve, adjacent to CSIRO and a number of other national institutions including National Film and Sound Archives, National Museum of Australia, Australian National Botanic Gardens and Australian Academy of Science.

The campus is situated on a roughly rectangular block of land that is approximately two kilometres north to south and one kilometre east to west and covers approximately 147 hectares. The southern tip of the University protrudes into Lake Burley Griffin along Acton Ridge, while the site is bounded by Clunies Ross Street to the west, Barry Drive to the north and Marcus Clarke Street to the east.

The southern part of the campus incorporates the original Acton Peninsula development area. This area contains a number of heritage listed European buildings and Aboriginal meeting place sites and has high biodiversity values with remnant vegetation and links to Black Mountain Reserve.

Current campus development is characterised by low level, low density buildings that are generally at or below the tree canopy within a spacious landscape setting.

Statutory planning context

National Capital Plan

The ANU campus is included within a “Designated Area” of the National Capital Plan (NCP) — the Central National Area and planning and development is subject to Works Approval by the National Capital Authority (NCA).

Clause 1.6 of the NCP states, “The remaining parts of the Central National Area include The Australian National University, ADFA, Duntroon, and Campbell Park. The Authority will ensure that these areas also achieve high qualities of planning and development within a design context appropriate to their localities. The Authority will liaise directly with ANU and the Department of Defence on the preparation of master plans for these major sites. The Master Plans may be prepared by or on behalf of the relevant organisations and are subject to approval by the National Capital Planning Authority and incorporation into the National Capital Plan as Detailed Conditions of Planning, Design and Development. It is intended that the approval of Master Plans will expedite works approval requirements, especially in relation to routine and minor activities”.

Territory Plan

Over time the University will develop functional elements on Territory land under the auspices of the Territory Government which will need to comply with the prevailing Territory Planning framework.

The Griffin Plan

In his competition winning design for Canberra, Australia’s National Capital, American architect, landscape architect and planner, Walter Burley Griffin designed a city in, and at home with the landscape. Today much of the central area of the city faithfully reflects this visionary objective.

The strong geometric structure of broad avenues linking the various parts of central Canberra to the city and the Federal Parliamentary area are in place, although not yet fully developed.

At the heart of the city the main avenues form the great National Triangle crossed by the other principal organising elements of central Canberra, the Land Axis and the Water Axis. The Land Axis extends from the Australian War Memorial, at the foot of Mount Ainslie, along Anzac Parade, across the lake up to Capital Hill, the site of the Federal Parliament. Perpendicular to the Land Axis, the largely unrecognisable Water Axis extends from the lake’s shore beneath Black Mountain within Griffin’s Education Group (ANU) to the Jerrabomberra wetlands in the east (Eastlake in Griffin’s Plan).

At the western end of the Water Axis, the Education Group (today ANU) fulfills the intentions of the city founders to establish a capital that would not just be a Seat of Government, but also a centre of learning and culture. Griffin gave the University a central location in the plan at the confluence of Sullivans Creek and the Molonglo River and along the prominent Acton Ridge. The plan envisaged a grand ensemble of buildings and terraces, aligned with the Water Axis overlooking West Basin.
Figure 4: Previous Master Plans

Figure 4.1: Site plan — 1933

Figure 4.2: Site plan — 1948
Figure 4.3: Development plan — 1948
Figure 4.4: Site plan — 1976
In Griffin’s Plan, University Avenue extended from City Hill to the foothills of Black Mountain and provided the link between the Education Group and the city. The University was to be built from the avenue to the south down to the foreshore of the lake. University Avenue was intended to terminate at residential Colleges set in the foothills of Black Mountain in the area now occupied by CSIRO and the Australian National Botanic Gardens.

Later developments both within the city and University have diluted the strength of the avenue as a main front door for ANU, becoming a primarily pedestrian spine with modest developments along both sides.

The Griffin Legacy

In 2004 the NCA published the Griffin Legacy, which presented a new vision and plan for development of the Central National Areas of the city in the 21st century. The Griffin Legacy undertook extensive research into the Griffin Plan(s) and related documents to assess the continuing relevance of the Plan by establishing which design elements are still relevant and should be protected, recovered or adapted for the benefit of the city.

The Griffin Legacy is not a blueprint that fixes the future planning of Canberra in rigid detail but is a strategic framework that sets the big picture, identifying those things of value that should endure while providing the flexibility to respond to changing needs and priorities. The Legacy maintains continuity with the internationally recognised Griffin Plan yet encourages the city to renew itself on contemporary lines while protecting the National Capital’s cultural and environmental heritage.

Three Griffin Legacy initiatives have the potential to impact on the University and have therefore been considered in the CMP 2030. These are:

- Reinforce the main avenues. The Plan envisages that University Avenue can be developed as the University’s main boulevard with a major gateway to the Campus at its intersection with Marcus Clarke Street and mixed use developments meeting University, commercial and residential needs along its length;

- Extend the city to the lake at West Basin. The Griffin Legacy proposes the development of West Basin as a predominantly low to medium rise residential precinct generally between the existing residential development around the former Acton Hostel and a new lakeside public promenade. It is unlikely that the development of West Basin will impact directly on the University and may even offer some residential joint venture opportunities; and

- Celebrate and mark the western end of the Water Axis. The Griffin Legacy proposes that the unrecognisable Water Axis be marked and visible by some form of development at either end and where possible along its length. The ideas included in the Legacy for marking the western end include a formal public place or space, an indicator that could be in the form of an obelisk or artwork or a building aligned with the axis.

The Griffin Legacy propositions are now enacted within the National Capital Plan, Amendment 56, 59, 60 and 61.

History of campus development

The layout and planning history at ANU reflects the powerful personalities of its visionary founders who established the initial four Research Schools each with academic autonomy and development demands. The University’s administration was established to protect and nurture the Schools, defending and promoting them without interfering with their structures. Independent precincts developed without guiding structural layout or visual identity but tied together with landscaping. This became the pattern of campus development almost from inception.

Architectural Professor Brian Lewis’s 1948 Beaux Arts concept and elegant avenues and vistas of Griffin’s Water Axis with grand plans for central avenues were not supported. From 1955 Professor Denis Winston applied a more pragmatic garden planning and functional architectural diversity approach to the campus.

Canberra University College was incorporated in 1960 creating a disordered campus of diverse building styles and orientation which was generously bound together by maturing landscapes of the early and prescient landscape architects of the University. The 1968 development plan created by Denis Winston was the first plan to define a more lasting structure for the campus.

By the 1980s the campus planner Roy Simpson had commenced a pedestrianisation and harmonisation of the University while accommodating car requirements. During this time the gravity of the city drew the density of the University northwards.

The Armes / Ratcliffe architectural Heritage Study (1993-5), the Knox and Tanner Strategic Landscape Master Plan (1993) and the University Site Master Plan in 2000, provided more robust direction for campus planning through to the century’s close. They identified buildings with important social attributes while clarifying the need for protection and development of some landscape attributes.

The ANU Campus Master Plan 2030 will integrate Australian best practice standards in cultural heritage conservation with the forward planning of the University through the ANU Heritage Principles. These will guide compatible development that integrates historic layers of occupation and the legacies of its scientific and teaching heritage, through architectural expression and adaptive use of the cultural landscape and early settlement architecture.
The primary purpose of the ANU Campus Master Plan 2030 (CMP 2030) is to transform the campus into a place that attracts, delights and impels people to perform at the very highest standards.

Campus Master Plan 2030

Structure

The Campus Master Plan 2030 provides clarity of direction to the University, development interests and stakeholders on the future development of the University.

It begins with the vision and identifies the aspirations for the campus. The developmental issues, objectives and guiding principles are highlighted under ten themes. Collectively these themes build on the past and define the future.

The Plan describes the options for the University. The CMP 2030 is supported by a number of documents including the CMP 2030 Implementation Strategy and a Campus Planning and Development Guidelines document both of which will be used to implement the Plan.

Consultation

A central element in developing the Master Plan is the realisation that it serves the University community and reflects their aspirations for the immediate and longer term.

Significant consultation has informed the Plan.

Current development

Development already approved, already within the approval process and otherwise on foot will continue through the process, but documentation should indicate how the objectives of the Master Plan can be achieved.

Growth planning scenarios

There are several influences that will impact the development of the University between 2010 and 2030. Growth however, is not the major driver for the development of the campus, and growth may not manifest in student numbers. The main driver for this Plan is improved amenity including infrastructure, landscape and public realm.

Changes based on other criteria would include the need to:

- Replace building stock that is ageing or not suitable for its existing purpose where adaptation or reuse are not options;
- Provide for changing pedagogy in various fields including less face-to-face teaching, increased field work and off-site, on-site teaching methods;
- Accommodate changing research methods in the sciences, especially communications, physical sciences and life sciences;
- Accommodate changes in the management and administration structures of the Colleges leading to better co-location of administration, some co-location of teaching and research, and co-location of these units with their administrative support arrangements;
- Provide commercial and other services around campus needs to account for viability of the service, access by users and access to associated services;
- Provide additional accommodation centrally on campus for long-term and short term accommodation, noting changing demand side requirements from College to self-contained facilities;
- Provide on campus the ability to host conferences related to the core business of the University;
- Provide for stronger relationships between the University and its neighbours, like CSIRO, Australian National Botanic Gardens, ACT Government, and so on;
- Deal with the need to be more aware of the global footprint of the University in areas like energy and water use, variability of climate and the reduction of maintenance costs; and
- Enable a net increase in landscaped area while accommodating an increased floor area from a deliberate policy of “up not out” building design requirements.

Staging options and development priorities

The Campus Master Plan 2030 facilitates change across the University that is driven by, to name a few, growth, pedagogy, ageing buildings, new directions in research, outdoor teaching requirements, visions and availability of finance.

Delivering infrastructure to match, or to anticipate change, is an ongoing challenge. Upgrades to the public domain have the largest single impact of the amenity of the campus. This section recognises some of the changes in the external landscape, the infrastructure and facilities that could be provided to support these changes.

Some works if done sooner would fill gaps, improve amenity and prepare for known development requirements. Some public domain upgrades have been forecast and if done, these would improve amenity across the campus.
Figure 5: Development opportunities
Figure 6: The Master Plan
### Strategic planning framework

#### Planning themes

The Campus Master Plan 2030 has been developed against ten key planning themes which taken together provide the basis for establishing the planning direction and desired outcomes for the future campus. Specific planning objectives, principles and consequent actions have been arranged around these themes which encompass the physical, social, economic and academic environment of the University.

#### Academic intent

Academic objectives guide the physical and planning outcomes of the Campus Master Plan 2030.

#### Functional elements

The functional elements of the campus are the primary building and recreational open space uses. They define what goes on within the campus and where these functions are located.

#### Campus structure

The campus structure describes the major ordering, physical and planning components of the University site and defines its physical essence, character and framework.

#### Built form

Built form examines the architectural and urban design qualities and spatial distribution of buildings on the campus as well as defining the overall character of the campus through the visual expressions of its buildings and spaces. Memorable built form provides a distinctive and memorable campus.

#### Heritage

Heritage identifies the historical context within which we assess the things that are important to keep connecting us with the past and identifying the way forward. People need places to celebrate, remember and reflect. Heritage plays an important role in helping us understand achievements of the past.

#### Landscape

The exceptional landscape setting of ANU dominates and defines the visual qualities of the campus. This theme examines the landscape structure, spaces and trees of the site and their importance to the amenity, identity and character of the campus.

#### Transport and movement

Pedestrian, cyclist and motor vehicle movement is addressed and corresponding route networks across the campus are identified. This theme includes entrances, circulation and parking arrangements as well as the provision for public transport and service and emergency vehicle access. It considers external linking networks and internal circulation.

### Infrastructure

This theme covers the infrastructure components that support the development and functioning of the campus. These include data and communications, pavements, electrical, lighting, water supply, stormwater, sewer and other services networks.

### A living campus

This theme addresses the social and commercial aspects of the campus including facilities that provide for living, working and the pursuit of academic endeavour. Because people live, work, study and play on the campus, they require a wide range of services. How successfully these services are delivered will be a measure of the success of this Master Plan.

### Sustainability and the environment

The University has strong guidelines on how to achieve environmental sustainability. It has developed clear policies that guide reductions in carbon emissions, water and energy consumption and waste generated across the campus. This theme explores the way the campus will advance these goals of sustainability.

### Functional needs – growth to 2030

University predictions, College plans and national guidelines for university take-up over the foreseeable future indicate that the University expects modest growth in its undergraduate population and steady growth in its graduate programs. The usage of existing facilities indicates that in some areas there is ready capacity to absorb growth over the early part of this planning period, but in other areas, office space and some Colleges and buildings are at or nearing capacity. Other buildings have reached their useable life expectancy and need refurbishment or replacement. A policy of co-location of some functions and the need to improve accessibility across the campus will all impact on the way the University functions.
Drivers of change

The primary drivers for change are:

> Replacement of ageing buildings and buildings that are no longer fit for purpose;
>
> Co-location of administration and College facilities where possible;
>
> Intensification of the University Avenue, ANU Exchange and Baldessin Square;
>
> Residential accommodation experience for up to 65% of students on campus;
>
> Expansion of “other” education facilities like conferencing;
>
> Meeting the demands of new education and research needs: web-based, high capacity computing, growth of business, economics and legal studies areas;
>
> Improving commercial opportunities and services for campus users including appropriate retail activities; and
>
> Growing awareness of climate change, sustainability and environmental responsibility.

The need for space

Some of the University’s space is under utilised, while other areas, including offices for administration, research and study are either under pressure or poorly utilised due to spaces no longer being of a contemporary standard, or of appropriate age, layout or internal amenity.

The primary space management issue for the University is availability of the right type of space in the right place at the right time.

In the future, people will make more use of the internet and telecommunications to connect to each other, while the physical campus will continue to meet the need for personal interaction for teaching, learning and socialising.

To achieve this, space needs to be functional and have appropriate facilities, Colleges and sporting and recreation venues located to encourage students and staff to come into contact with each other for a variety of purposes.

Longer term needs

The final outcome will be a University where Colleges are co-located based on function and relationships. At the moment, some Colleges separate their research facilities from their teaching and undergraduate functions. Others are separated because of a lack of space in their own area.

Administrative, counselling and service functions are unevenly distributed and some are far from a preferred central location.

Optimising the location of these facilities to better meet user needs will require a long term complex strategic process. While the distribution of these facilities is not dealt with in detail in this Master Plan, the framework within which balanced and efficient development that will occur is outlined.
What this Plan proposes

This Master Plan creates a sense of being in a special place that functions well by:

- Recreating University Avenue as the University’s main boulevard;
- Creating a linear park along Sullivans Creek that connects the lake to Canberra’s north;
- Providing for the redevelopment of Union Court to create places that take advantage of a redeveloped Sullivans Creek, improved solar access and utilisation of services;
- Improving pedestrian and cycle mobility by linking the central campus to Acton Peninsula by creating a new axial walkway along Acton Ridge;
- Creating a new major gateway to ANU at the intersection of University Avenue and Marcus Clarke Street;
- Recognising and building on the arts precinct and its interface with the city and making provision for parking and celebratory spaces around Baldessin Square as set out in the ANU Exchange Master Plan;
- Creating the centrally located Pryor Place as a meeting and gathering space;
- Improving Kingsley Street and Ellery Crescent to enhance access to the campus;
- Redesigning Clunies Ross Street and Daley Road to better link to CSIRO;
- Introducing a deliberate policy of “up not out” for new buildings to gain a net increase in a landscape area;
- Introducing a building and geographic based information and scenario modelling tool to facilitate management of development;
- Introducing an annual reporting function to measure progress and recommend planning changes;
- Recommending relocation of the Chancelry to a gateway building;
- Recommending consideration be given to an integrated sporting complex that may include aquatic functions;
- Providing better amenity, services and after hours activation at the central part of campus;
- Challenging the current environmental goals to ensure the campus is an expanse of greenery; and
- Improving landscape outcomes.

What will be achieved

- Creating a living campus by adding density, form and structure to the northern part of the campus and introducing residential accommodation within the central area;
- Providing a clear framework for future growth will guide more consistent outcomes;
- The net landscape areas will slowly increase through a policy of reducing building footprints and allowing more height in some areas;
- Rationalising surface car parking into fewer periphery multi-storey car parks;
- Improving pedestrianisation and shared bikeways;
- Establishing new development opportunities in the south of the campus for conferencing, research, redevelopment of some sites and building the “Water Axis” into a visual amenity opportunity;
- Recognising the existence of a biological sciences corridor between CSIRO and the University’s science facilities and improving communication;
- Identifying opportunity at the campus periphery for relevant developments;
- Increasing social services, e.g. child care, counselling and improving the availability of the living on campus experience;
- Proposing redevelopment of the University’s sports union to provide additional centrally located facilities; and
- Enhancing the unique landscape that the University sits in by increasing its size and value while also increasing the University’s total usable floor area to accommodate co-location and development.
Theme 1

Academic intent

The ANU campus is a place that actively facilitates world leading research and education.

The University’s academic endeavours are the primary focus of the University. The campus provides a place that actively facilitates world leading research and education.

2010 condition

Seven ANU Colleges exist as coherent groupings of education and research activities and facilities. The history of the campus development together with its geographical size and low density of development has encouraged a spread of activities and buildings across the landscape. The sequential nature of establishment of new centres resulted in some inefficient functional relationships – many comments during the CMP 2030 consultation process sought ways of ensuring compatibility between teaching and research functions both within the College structure and between those Colleges with strong alliances. The ANU Colleges are:

> Arts and Social Sciences;
> Asia and the Pacific;
> Business and Economics;
> Engineering and Computer Science;
> Law;
> Medicine, Biology and Environment; and
> Physical and Mathematical Sciences.
Figure 7: 2010 Uses distribution

Legend
- Amenities
  - Car Parking Stations
  - Cloakroom Centres
  - Halls of Residence/Accommodation
  - Lecture Theatres
  - Library
  - Space-Related Buildings
- Service Divisions
  - Campus Services
  - Other Leased Buildings
- Colleges
  - ANU College of Arts & Social Sciences
  - ANU College of Asia & the Pacific
  - ANU College of Business and Economics
  - ANU College of Engineering & Computer Sciences
  - ANU College of Law
  - ANU College of Medicine, Biology & Environment
  - ANU College of Physical & Mathematical Sciences

North Oval
Willows Oval
Fellows Oval
South Oval
Opportunities and constraints

Much of the University infrastructure is ageing providing a chance, as redevelopment occurs, to co-locate similar interests, redevelop sites and intensify some parts of the campus. At the same time this provides an opportunity to re-establish some landscape settings that have been overtaken by low rise buildings and at grade car parks.

The opportunity to increase density and go up rather than out in some localities will help protect landscape areas. Introducing realistic land values into the development assessment process to cost greenfield development on campus will provide better visibility of the cost of land and assist in quantifying the actual cost of new development.

There is an opportunity to create a pedestrian link between the University and CSIRO to leverage academic activity and to promote better interaction.

Values to 2030

By 2030, the University will have a lively and efficient campus—a welcoming and safe place to study with facilities that provide world-class teaching and research underpinned by a distinctive on campus residential experience that creates a wealth of positive outcomes and memories.

Planning objective

Reinforce the University as a centre of academic excellence, and its importance to and within the National Capital.

Planning principles

> Intensification and rationalisation of developable areas;
> Co-location of related functions;
> Theme development for College precincts and quadrangles to define each ANU College;
> Creation of innovative learning spaces;
> Improved linkages between research, learning and other centres;
> Ensure that all new development strengthens the University’s academic objectives and provides a welcoming and lively community experience;
> Provide a Campus Master Plan 2030 that is flexible, adaptable and forward looking to allow the University to respond to changing educational and research circumstances; and
> Ensure that buildings and other campus structures provide the necessary spatial qualities, technical capabilities and facilities to support and enhance the high standards of research and teaching at ANU.
The Plan provides for a logical distribution of functions and uses to ensure a lively and efficient campus.

The functional elements of the campus are essentially the primary building and recreational open space uses and functions. They define what goes on within the campus and where these activities take place.

**2010 condition**

Functional elements are distributed across the campus, although generally undergraduate and teaching functions tend to be located in the northern sector with research and graduate functions found in the south. Student accommodation is located on the western and north-eastern edges of the site and student services and eating places are grouped around Union Court on the northern end of University Avenue. Sporting facilities such as playing fields, ovals and the Sports and Recreation Centre are clustered along the Sullivans Creek spatial corridor. The distribution and nature of the functional elements also broadly define the land uses of the site. Parking structures are generally strategically located at perimeter sites.

There are seven named precincts, which together with ANU Exchange, makes eight. These precincts provide a convenient physical grouping to assist wayfinding as well as a grouping in some instances of like functional elements. For example, Banks contains science functions, Dickson provides for student accommodation and Baldessin functions as the arts precinct. Generally, however, because like uses are not strongly organised in groups these precincts do not well define land use across the campus.

This Plan has for the first time established a framework of planning zones for the Acton campus (refer to Figure 22).

There are a number of facilities that receive high levels of external visitor and community use (visitor magnets) distributed throughout the campus. These include University House, the Schools of Music and Art, the Arts Centre, the Sports and Recreation Centre, the Drill Hall Gallery, Llewellyn Hall, the National Film and Sound Archive, and the ACT Government’s Street Theatre.
ANU Exchange is a precinct adjacent to the campus that includes student accommodation developments and facilitates partnerships between business and ANU in order to foster innovation and collaborative activities.

**Opportunities and constraints**

Future major changes to the functional elements of the campus are constrained by the investment in buildings and associated infrastructure. However there are opportunities to enliven the campus through the introduction of key functions such as student accommodation and commercial activities into the central core of the campus. There are also opportunities to rationalise the location of shared functions and to better group similar academic facilities to improve the functional efficiency of the campus.

A major development opportunity is to strengthen and develop University Avenue and its built form edges as the functional and living core of the campus.

Making the campus work with a sparse population embedded on a large site causes viability concerns for some facilities, for example, coffee shops rely on dense populations to make them viable.

**Values in 2030**

- A safe, convenient and comfortable place to learn, work and live; and
- A logical distribution of functions and uses.

**Planning objective**

Ensure a higher level of campus amenity and functional efficiency within a lively and efficient campus.

**Planning principles**

- Rationalise and redevelop existing functions where appropriate and develop new facilities to improve functional connections, operational efficiency and access for students, staff and the community;
- Ensure the logical and convenient location of major shared functions such as lecture theatres, libraries, campus services and parking structures in order to minimise where possible internal circulation distances and in particular allow convenient pedestrian access; and
- Ensure that all new development is located and undertaken to enliven the campus and its sense of identity and to improve spatial qualities and environmental values.
The campus structure describes the major ordering, physical and planning components of the University site and defines its physical character and framework. Proper enhancement and strengthening of the existing structure is a fundamental issue for the efficiency of the campus.

2010 condition

The campus spatial structure is made up of major and significant spaces and edges, corners, gateways and entrances, hubs and nodes, precincts and organising axes.

The campus is defined by major perimeter roads (Barry Drive and Clunies Ross Street) that form boundaries and separation from surrounding land uses to the north and south-west respectively. A more open, informal and engaging edge is available to the city at the eastern side of the campus that is largely defined by Marcus Clarke Street. A number of entrances are located around the perimeter with the major address points at North Road and University Avenue.

An internal road network provides physical edge definition to the various named spatial precincts. Buildings are clustered together within these broadly functionally based precincts.

Various intersections of pedestrian paths and spaces define activity nodes and hubs such as the intersection with University Avenue and Ellery Circuit and Kingsley Street. Other examples include University Avenue and North Road.

Buildings are aligned on the City Axis in the north and to the south on the cardinal axis (due north, south, etc). These distinctive site ordering axes are a result of the simultaneous historic development of the site from the city and Acton Peninsula ends. An axial point running east west through the south side of South Oval and terminating in the centre of City Hill resolves the axis change with University Avenue’s City Axis.

By 2030 we will clarify and strengthen key elements of the campus structure.

The strongest physical structural element of the campus is formed by the open space corridor along Sullivans Creek that also includes other major open spaces such as the ovals and playing fields. This corridor runs north-south and roughly bisects the site. Set at right angles to the Sullivans Creek spatial spine is University Avenue which provides the other major linear internal ordering space of the campus. University Avenue is located on the City Axis. Apart from University Avenue the campus structure is not defined by a strong pedestrian/cycleway path system.

Major high use urban spaces are clustered around University Avenue. ANU Exchange, although parts of this precinct fall outside the formal boundaries of the University, provides a strong and open interface with the commercial area of the city centre.

Despite the scale and intensive planning that has guided the campus development there are few memorable urban spaces. Union Court, for example, presents as oversized, barren space and lacks active building edges which accommodate cafe and retail functions. There is a distinct change of level that disrupts the flow of pedestrians and cyclists on the eastern edge.

Topographically the campus generally varies from flat to gently sloping in the northern and middle sections but is elevated to the south east rising up towards the lake and across the ridge which extends into the centre of the Acton Peninsula.

Historical axes from the Griffin Legacy are aligned to the site through University Avenue (the City Axis) and cross the site from West Basin near the intersection of Balmain Lane and Liversidge Street on the Acton Peninsula (the Water Axis).
Values to 2030
A unique campus linked to the city, bushland and the lake in a beautiful landscape.

Planning objective
Strengthen, enhance and clarify the physical structure of the site in order to provide a memorable, easily legible and attractive campus.

Planning principles
> Provide greater clarity and legibility for the campus structure through the establishment and reinforcement of a clear hierarchy of gateways and entrances, movement networks (roads, pathways and shared zones) and external spaces;
> Continue to recognise and strengthen existing and historic planning axes within and to the campus;
> Reinforce the realisable elements of the Griffin Legacy, including enhancement of the Water Axis within the University adjacent to West Basin;
> Ensure that the campus structure facilitates and enables efficient and effective circulation systems, logical site planning and the strategic location of functional elements;
> Physically emphasise the gateways, edges, knowledge clusters and hubs, and strengthen key public and ceremonial spaces;
> Provide more positive and attractive edge treatments to address perimeter streets and to provide stronger connections and linkages to surrounding land uses and community linkages;
> Ensure that the structural organising elements of the University remain part of the University’s connection with the National Capital;
> Ensure that the physical development and changes to the campus structure enhance the campus image and reinforce the University as a centre of academic excellence, and its importance to and within the National Capital;
> Create strong linkages, both physical and visual, with Civic, CSIRO, Australian National Botanic Gardens, Black Mountain, Lake Burley Griffin and Acton Peninsula;
> Encourage greater integration with metropolitan public transport links; and
> Actively increase the development density within existing developed areas and draw fingers of landscape into the urbanised landscape.

Opportunities and constraints
Although the campus structure is largely constrained by existing development and by the high site coverage, there are opportunities to clarify and strengthen key elements of the campus structure.

While Walter Burley Griffin and later planners provided a strong framework for the current campus, there is an opportunity to look to the future and develop a more consolidated structure.

These opportunities include establishing a more convenient and coherent pedestrian movement pattern, developing a hierarchy of major gateways and entrances and strengthening major open and urban spaces to improve the legibility and physical qualities of the campus. There are also opportunities to improve linkages between the campus and surrounding land uses, neighbours and the lake. Specifically, an opportunity exists to provide a shared path link between the lake and the north of the city along Sullivans Creek. The landscape is an important feature of the structure of the University. Some areas have very low density which can be significantly increased to reclaim additional landscape space.
Figure 8: Master Plan – Structural elements
Looking down on the University from Black Mountain, or from high rise buildings in Marcus Clarke Street, it is clear that the dominating feature of the University is its treescape. Yet the buildings provide the campus with functionality. The way buildings are organised in the landscape defines much of how users interact with the campus.

**2010 condition**

University campuses are often memorable through their landmark or iconic buildings which assist the establishment of the character of the visual environment and orientation and place making of the site. Historically ANU has generally been characterised by low rise and architecturally recessive buildings dominated by their landscape setting.

There are very few older iconic structures on campus. Examples of memorable buildings include University House, the Menzies Library and some of the heritage structures such as Old Canberra House, Graduate House and Canberra High School. University House and Graduate House provide important services to the University, while the relationship between these two buildings and the Acton Ridge axis is recognised as being important. Strengthening this axis would add value to these buildings. There are no Great Hall type centrepiece buildings at ANU. Llewellyn Hall within the School of Music performs this function for ceremonial needs such as graduations.

More recently there have been a number of more visually prominent buildings constructed often with competing architectural character which has further exacerbated the lack of architectural cohesion. Several high profile and recently constructed buildings such as the John Curtin School of Medical Research and the Crawford Building have the potential for future iconic status.

Early buildings from the Lewis and Winston eras tended to be thin rectilinear buildings that either enclosed internal courtyards or defined strong semi enclosed spaces between buildings. Some recent buildings have followed this trend such as Graduate House. However, most have simple block shapes as stand alone pavilions that offer no spatial enclosure or amenity for pedestrians.

The 1992 Development Policy Plan noted the lack of cohesion in architectural style and building form across the campus and the lack of connectivity between buildings. This Plan did however comment on some consistent physical characteristics such as materials, fenestration...
Building projects often are generally not funded to address external issues outside their immediate functional needs such as service and visitor parking and the immediate landscape setting.

Focus on the visual coherence of individual planning precincts comes at a cost to broader considerations of campus open space and the campus circulation network, including the loss of future options for the campus structure.

Opportunities and constraints
A significant number of existing buildings on the campus do not meet current functional and or condition standards. The management of these buildings is a major point of consideration for the future development of the campus.

For geographic, historical and functional reasons the campus is organised into seven precincts plus ANU Exchange. To date most detailed planning and the establishment of architectural character has been undertaken at the precinct level rather than a campus-wide approach.

Short term decision making based on individual building projects within the precincts has failed to address the broader campus wide development needs based around movement systems, the landscape setting and improvements to major structural spaces such as University Avenue, Sullivans Creek corridor and the ovals and open courts.

Building projects often are generally not funded to address external issues outside their immediate functional needs such as service and visitor parking and the immediate landscape setting.

Focus on the visual coherence of individual planning precincts comes at a cost to broader considerations of campus open space and the campus circulation network, including the loss of future options for the campus structure.

Opportunities and constraints
A significant number of existing buildings on the campus do not meet current functional and or condition standards. The management of these buildings is a major point of consideration for the future development of the campus.

There is an opportunity to further develop the partly explored theme of courtyards and quadrangles in new buildings to provide more useable and memorable building edged spaces as well as covered access ways to link buildings and to provide covered access for pedestrians.

In order to ensure efficient use of land, new buildings will generally be four storeys or higher as appropriate. The development control provisions allow four storey developments as permissible activities although there is scope for taller structures at ANU Exchange.
A major built form feature of the University could be created through the development of new buildings at the eastern gateway to the University. These would defray densification of the campus while also promoting better interaction with the city.

Values in 2030
Memorable buildings in a distinctive and memorable campus.

Planning objective
Promote the site’s national significance through high quality architectural, landscape and urban design.

Planning principles
➤ Ensure that building sides on key frontages are used to form positive edges to address and define external open spaces to enclose courtyards and emphasise movement corridors;
➤ Orientate buildings to allow solar access and to allow for active edges and adjacent external spaces such as outdoor dining on northern edges where appropriate;
➤ Ensure that development makes efficient use of land and landscape setting and makes efficient use of rationalised infrastructure;
➤ Develop a recognisable, deliberate campus image by achieving cohesiveness of buildings and landscape design and presentation;
➤ New buildings are generally four storey buildings; and
➤ Provide and deliver built form that will support the efficient functioning of the University and that will enhance the visual, social and environmental qualities of the campus.

Figure 9 identifies buildings across the campus by age. The earliest settlement is on the south of the Acton Peninsula, research facilities were later developed slightly north-west of this area in what is now the Garran precinct. A teaching institute developed in what is now the north west of the campus. These two organisations were formed in the 1960’s and since that time buildings have been constructed more centrally. In recent years research activities have moved north while teaching spaces have populated the south.
Figure 9: Year of construction
Theme 5
Heritage

The Plan celebrates heritage values, places and landscapes.

Heritage identifies places, landscapes and objects and their historical context which helps us to connect with the past and identify the way forward. Heritage plays an important role in understanding ourselves and our community.

2010 condition
ANU has already actively responded to its responsibilities under the Environmental Protection and Biodiversity Conservation Act 1999 and the Aboriginal and Torres Strait Islander Heritage Protection Act 1984, managing the 45 Commonwealth Heritage Listed places within the Acton campus in accordance with the ANU Heritage Strategy and its Heritage Management Manual.

Opportunities and constraints
Today's changing education agenda and communications revolution is demanding a fresh approach to the environmental management and future development of University heritage places. The Master Plan secures and maintains the University’s rich legacy through the recognition and integration of heritage values in the master planning and development decision making process.

The campus is a place where a particular opportunity for the celebration of Indigenous occupation of the land, the establishment of European development and reflections on Australia’s national capital can be achieved.

Values in 2030
The campus heritage values, places and landscapes are celebrated and appreciated throughout the campus, conserved and well maintained and integrated operational assets.

Natural and developed features of the campus have been conserved or enhanced and new buildings have been sensitively integrated into the heritage curtilage.

Planning objective
Important places with heritage significance provide outstanding places for reflection on past achievements.

Planning principles
> The identification, conservation and celebration of heritage is an integrated component of development outcomes;
> Development decisions and actions that may impact the campus heritage places, landscapes and values will be assessed using the Burra Charter principles and processes and Commonwealth heritage management principles;
> As recognition that Indigenous people are the primary source of Indigenous heritage information they will be actively engaged in identification assessment of Indigenous heritage places and values on campus;
> The management of ANU heritage places will ensure their use, maintenance and preservation is consistent with the conservation of heritage values;
> New buildings and works will respond to their heritage context, in terms of the landscape setting, siting, bulk, form, scale, character, colour, texture and materials. Architectural imitation will be avoided and new work will be readily identifiable as such, but contextually respectful;
> Enhance important natural and developed features on the site and integrate new development sensitively within the campus; and
> To incorporate where possible the interpretation of Indigenous and European heritage in the development of buildings and landscapes.
Figure 10: Listed heritage
Theme 6
Landscape

The distinct visual character of the University is established by its landscape; trees, vegetation, undulating topography, lake views and connections to natural areas and the city. The dominance of the landscape over buildings with a green spine and undulating wide valley form is a distinctive feature of the University.

2010 condition
The campus is approximately two kilometres long and one kilometre wide and lies in a wide valley. Sullivans Creek forms a serpentine line through the middle, rolling hills to the south extend along a peninsula and create the impression of harmony toward the lake, and to the north the valley opens to flat, broad land.

The campus extends into Acton Peninsula with Old Canberra House and heritage cottages dotted along the ridgeline surrounded by native and introduced trees. The Peninsula has a strong visual connection with West Basin.

The new Crawford Building and Old Canberra House overlook remnant native woodland and grassland, the ANU International Sculpture Park and the lake. The setting is serene and peaceful and creates a harmonious blend of old and new.

Opportunities and constraints
The distinctive character of the existing landscape provides a foundation for the future. The control of future development must ensure an enhanced landscape setting is achieved.

Strengthening the University’s links to natural areas to the south and west of the site and concentrating future built form to the eastern areas of the site, closer to the city and along University Avenue will strengthen the campus main hub and its connections with the city.

The vegetation quality provides a major landscape resource for the emerging campus structure.

Values to 2030
A campus in a delightful landscape.

A distinctively harmonious campus landscape setting with inviting edges that relate to their surroundings. A vibrant central hub with a formal grand avenue and a living main boulevard. A green central spine with a healthy living landscape.

The informal landscape of the University has developed in a manner that encourages development and enrichment of existing biodiversity values and external habitat linkages.

Planning objective
The landscape creates a memorable setting for the University.
Figure 11: 2010 Landscape structure
Planning principles

> A series of high quality usable outdoor spaces are integrated into the movement and built form framework to provide for a range of passive and active recreation;

> Utilise landscape elements to define the physical campus structure, provide a clear hierarchy of external spaces and legible linkages and a positive relationship to built forms;

> Establish landscape treatment that requires less water and lower levels of maintenance;

> Develop landscape and water elements to increase the level of biodiversity on the campus;

> Maintain the visual dominance of the landscape over built form when the campus is viewed from elevated external locations;

> Increase the existing total area of open space despite future development pressures;

> Continuity of landscape elements unifies major landscape form and structure;

> Open spaces and pedestrian linkages are hierarchical, legible and provide character appropriate to the use and location of the space; and

> Structured landscape character enhances the localities intended function and aesthetic appeal.

The landscape creates a memorable setting for the University.
By 2030 Acton campus will be a pedestrian, bicycle and public transport oriented place.

Pedestrian, cyclist and vehicular movement and corresponding route networks across the campus define its effectiveness as a place. Issues such as entrances, circulation and parking arrangements as well as provision for public transport, service and emergency vehicles, including external linking networks and internal circulation all need careful consideration, planning and ongoing review.

2010 condition

An important aspect of the character of the Acton campus is its permeability from the city, circulation, internal destinations, pedestrian and traffic facilities.

In recent years the integrity of the landscape has been compromised by the incursion of successive building, surface car parking and infrastructure. A number of buildings have been poorly integrated with little thought to the location, resulting in pedestrian ways being cut and open spaces overshadowed or interrupted.

The current entry points to the campus on the eastern edge are not well defined and internal connections are not particularly legible.

The western side does not have a well defined entrance. The proposed new entrance on Clunies Ross Street provides an opportunity to use green space to mark a new entrance.

The east-west axis of University Avenue changes in character, has lost its integrity and is in need of distinct nodes or places of attraction and interest.

There is no distinct road hierarchy on the campus.

Some footpaths, cycle paths and shared pathways end abruptly and bus and public transport facilities are non-existent or infrequent.

A new bus way along Barry Drive and bus interchange within ANU Exchange is currently being designed for construction in 2011/12.
Opportunities and constraints

The Plan recognises that Clunies Ross Street will be upgraded in the future to increase its capacity as a major bypass of Civic. This will have an adverse impact on pedestrian and cycle access between ANU and CSIRO. This Plan proposes a grade separated access linking the two institutions as part of this road upgrade to benefit both institutions.

The Plan also proposes a new entrance to ANU along Clunies Ross Street, opposite Black Mountain Drive. This would provide several benefits to ANU, CSIRO and the Australian National Botanic Gardens. Other opportunities are to:

> Rationalise the principle traffic circulation by creating a clear road, pedestrian and cycle hierarchy;
>
> Discourage through-traffic using traffic management techniques that limit the disruption to users on campus;
>
> Develop more regular clear public transport systems with real time advice to travellers; and
>
> Create a green bridge across Clunies Ross Street to connect CSIRO and the University.

Values to 2030

> An important aspect of the character of the Acton campus is its permeability from the citywide open spaces and quiet enjoyment of the landscape. Buildings have been developed with respect to location resulting in pedestrian axes being more clearly defined;
>
> A campus that is easy and safe to navigate and attracts visitors;
>
> Mass transport and transit facilities are regular and well publicised electronically;
>
> Campus bicycle facilities that are well organised, frequently used and available to all.

Planning objective

> Create a pedestrian and bicycle oriented campus.
Planning principles

- Create an efficient land use structure integrated with circulation systems so that the campus population, visitors and service vehicles can move safely about the campus, with priority given to pedestrians, cyclists and public transport access;

- Traffic modes are separated and safe with consistent surface standards and width identifies hierarchy;

- Cycle paths, pedestrian areas and roads follow a clearly determined hierarchy;

- Reduce vehicle movements on campus to a minimum consistent with functional requirements by discouraging through traffic and reducing the speed of vehicles;

- Current entry points to the campus are well defined on the eastern edge and internal connections are legible and defined;

- There is a distinct road hierarchy around the campus for people entering from other parts of the city and the suburbs;

- Multi-storey parking facilities are located within 300m of all frequent use areas and facilitate mode change across the campus;

- Link the University with Black Mountain, Australian National Botanic Gardens and CSIRO; and

- Link the University with public transport facilities.
Figure 13: 2010 Pedestrian, bicycle and bus circulation
Figure 14: 2010 Parking
Figure 15: Master Plan – Pedestrian, bicycle and bus circulation
Theme 8
Infrastructure

This section considers the physical infrastructure including communication and data, energy, gas, water, sewer, lighting and stormwater. It also considers resource recovery, use and disposal through provision of a recycling facility. Planning, management and development of infrastructure has a direct impact on the campus running costs and ecological footprint.

2010 condition
Infrastructure has developed to service development projects, often in an ad hoc manner.

Some of the campus infrastructure is reaching the end of its design life. A range of external and internal agencies own or are responsible for the infrastructure. Some of the infrastructure condition, position and capacity is not clearly identified or accurately located. An ongoing process of improving infrastructure data is assisting the planning phase of projects. Some infrastructure, especially power, is at capacity and needs significant upgrades to meet immediate demands even before considering long term needs.

Opportunities and constraints
The University has an opportunity to reduce the costs of energy and water by rationalising demand and generating power or harvesting water. Significant data and power upgrades will be required to meet immediate needs.

There is an opportunity to identify the condition and capacity of infrastructure to improve management of the networks.

Dedicated corridors, service tunnels for the reticulation, maintenance and incremental expansion of infrastructure will be required to reduce the degree of uncertainty in regard to the sequence of long-term service development.

Values in 2030
A well organised infrastructure network that has capacity for growth, serviceability and where possible, feeds more energy and water back to the ACT than it purchases. A better than zero net user of power and water. A net water and power generator and the relationship with built form using Geographic Information Systems and Campus Information Modelling.

Planning objective
Infrastructure will have the capacity to provide for future needs, add to the University’s sustainability and ability to meet climate change and water saving objectives.

Planning principles

> Infrastructure will be progressively rationalised and placed within predetermined easements. Shared trenching will be introduced in line with Australian Standards;

> New development will contribute towards upgrades in proportion to anticipated usage calculations for capital works and maintenance programs;

> The provision of infrastructure facilities will ensure a reduction in the campus “carbon footprint”;

> Reduce reliance on utility service providers for water, energy, potable water use and net energy purchase and reduce costs to the University for these services;

> Stormwater systems will lead to improved water quality into receiving systems; and

> Non-potable water on site will go through water reuse facilities.

Infrastructure will add to the University’s sustainability and ability to meet climate change and water saving objectives.
Because people live, work and play on the campus they require a wide range of residential, social, and commercial services.

2010 condition
The University has a wide range of on-campus and off-campus social and commercial facilities providing for a range of needs. The student demographic is steadily changing and includes local, national and overseas students.

Some facilities are centrally located, while others are dispersed. Others are located away from the main campus. For some services, the University relies on external providers or students to go off-site.

The existing University campus has a paucity of on-campus celebration space. Some University functions facilitate services for the wider community that would not otherwise be available. These include music, the arts, Indigenous services, research and lecture functions and the presence of visiting academics. The Griffin Legacy and Territory Plan recognise the concept of the “Town and Gown” interface, which enriches the culture of both places.

Opportunities and constraints
An opportunity exists to provide central on-campus accommodation and the living on-campus experience for a larger proportion of students. An upgrade of University Avenue, connections with CSIRO and the city through ANU Exchange and the ability to provide for concentrated areas and limit the extent of activity areas to activate the centre of the campus remains an underdeveloped opportunity.
Some campuses are constructed as an exclusive walled domain while others integrate successfully into the surrounding metropolitan areas. This campus has the opportunity to flow beyond its boundaries into adjacent areas east and west, while preserving its identity to the north and south.

Values in 2030

The University has great locations for cultural, recreation, leisure and community support activities to meet the needs of the present and future campus population and is inclusive of the wider Canberra community and beyond.

Planning objective

The campus provides for a lively place for robust academic interchange and draws and develops leaders whose influence is international.

Planning principles

> Commercial, sporting, social, entertainment and religious places are an integral part of University life;
> Provide for a campus that is safe, secure and welcoming for all users and visitors at all times of the day and night;
> Recognise the value of existing cultural facilities through the development of adjoining cafes and social spaces and the introduction of impromptu spaces to enliven living places;
> The distribution of commercial, social and not-for-profit activities in locations that are accessible to a large proportion of the University community;
> Core activities of the University will be located so as to minimise walking distances for students and staff by concentrating higher usage facilities such as lecture theatres, libraries and major venues along main pedestrian paths to provide safe access by day and night;
> Facilitate a positive memorable social experience through the creation of a place that develops a culture of learning for life;
> Develop the University community by using facilities, spaces, events and technology to deliver a rich University lifestyle experience;
> Development of viable commercial, social and not for profit activities that add value to the life of the University community and help to create a sense of community;
> Promote and harness innovation, stimulate enterprise and enrich employment opportunities;
> Develop the arts and music precinct to enrich the ‘Town and Gown’ interface;
> Co-locate the administrative and services functions of the greater University;
> Create places for celebration;
> Equity of access is a fundamental planning and design objective;
> Health, social welfare, child care and student services facilities will be strategically located and well planned; and
> Ensure that accommodation and student services buildings provide leading edge facilities that will facilitate a high quality campus experience.
In recent times the way we have been thinking about water availability and use is changing. Existing development of the campus has assumed, like much of the rest of Australia, that water supply and disposal is a municipal responsibility. Today people are taking more individual responsibility for water management and this is being reflected across the campus.

There is an expectation that people wish to drive to the campus and park in close proximity to their activities. If they are active across several parts of the University, they expect to drive and park in several places. This is not a sustainable practice for the campus.

**Opportunities and constraints**

ANU has an opportunity to demonstrate world’s best sustainability practice. The specified targets exceed statutory requirements and industry standards, with the intent that ANU will innovate and lead in the global sustainability challenge.

The cost of a low level building structure is the inefficient use of land and the tendency for buildings to spread onto the landscape. The benefits are reduced construction costs. There is an opportunity to reduce landscape loss and improve density through the introduction of an “up not out” policy. As an incentive, the introduction of a system of financially valuing the land by comparison with adjoining city land could be introduced to “value” the foregone cost of land.
A campus that inspires an achievable ecological footprint.

2010 targets

In 2010 the University adopted the following targets for the campus:

> Reduce energy use and neutralise greenhouse gas emissions over 2006 figures across the campus:
  > 10% by 2010, 15% by 2012, 20% by 2015, 35% by 2020. By 2030, the University should be energy neutral.
> Reduce total water use over 2010 use levels by:
  > 30% by 2015, 50% by 2020. By 2030, the University should not be a net importer of potable water.
> Remove potable water from landscape irrigation by:
  > 50% by 2012, 100% by 2015.
> Reduce material waste by:
  > Continually reducing resource waste by applying the waste hierarchy (an emphasis on waste avoidance, reduction, re-use, recycling and disposal, in that order).
> Reducing unsustainable procurement, and increasing re-use and recycling.
> Reducing waste to landfill 40% by 2015 and 70% by 2020. By 2030, waste to landfill will be a negligible amount.
> Maximise sustainable transport by:
  > Increasing green commuting to 80% by 2015, and minimising single-occupant vehicles;
  > Reducing fleet vehicle emissions 20% by 2015 and continuing to off-set 100% of fleet emissions; and
  > Offsetting 100% of the carbon dioxide equivalent load from air travel by 2015. By 2030, 90% of daily arrivals will be by public transport.
> Maximise resilience by continually reducing:
  > Residual pollution risk below a 20% baseline;
  > Stocks and flows of hazardous materials on campus; and
  > Exposure to environmental hazards.
> Establish a sustainable landscape by:
  > Balancing vegetation losses with new assets through new protection zones and plantings.
Values in 2030

The Master Plan provides an environmentally responsive framework for creating a ‘green’ campus through policy, physical expression and by influencing behaviour. All new buildings are to be designed to meet high standards for minimising environmental impact, including whole of life-cycle costing, recycling, energy and water consumption and management. Sustainable transport to and from, and within the campus, will be facilitated.

The campus will be connected environmentally to Black Mountain and the Australian National Botanic Gardens and has an aspirational vision for a sustainable energy transformation across the campus.

Relationship opportunities with the Canberra community and with surrounding establishments will be enhanced.

Planning objective

A campus that has net zero carbon and water input and inspires thinking about an achievable ecological footprint, while reducing its incursion into the landscape.

Planning principles

The following principles have been identified as guiding principles for design, development and operation of the University:

> Exceeding world and Australian best sustainability practices, in particular for energy and water use;
> Encouraging sustainability in the broader community through outreach activities and demonstration projects;
> Mainstreaming sustainability management across University decision-making processes and operations;
> Fostering an organisational culture for sustainability through responsibility, innovation and leadership;
> Integrating sustainable campus management with professional development and academic program;
> Promote and implement Green and Ecologically Sustainable Development (ESD) principles;
> Land has a commercial value that must be offset against the cost of introducing height to reduce landscape loss;
> Create an attractive and safe setting for all the operations of the University;
> Encourage innovative planning, building and landscape design;
> Ensure that the University’s footprint for water and energy is maintained at 2006 levels;
> Principles of environmental sustainability and green building initiatives are incorporated into design, construction and operation of all new buildings and retrofitted into building refurbishment projects; and
> The real value of the new area footprints is added to the cost of development as a net additional value. Where existing buildings are demolished and land returned to the landscape this cost is offset.
Figure 16: Master Plan – Biodiversity protection zones and wildlife corridors
This section describes development outcomes and activities for five on campus sites and three additional campuses within the Australian Capital Territory: Weston, Mount Stromlo and Spring Valley Farm.

The Campus Master Plan 2030 does not include details of specific building designs, but it does guide how some important areas on campus that have an impact on the rest of the campus, should change in coming decades.

**University Avenue axis**

University Avenue is the major unifying and signature space of the University. The intention of the Master Plan is to strengthen its physical presence and enliven its use as the main boulevard of the campus and the focus of student life.

The Plan proposes the development of the Avenue to reinforce this axis that runs from the city to Black Mountain. This axis facilitates other formal structural boulevards and avenues that link the University internally and externally and provide reference points, places for celebration, connections and hubs and nodes which essentially are places for people to bump into each other.

At the city end new developments will create an identifiable gateway entrance to the campus. Along the axis new buildings and spaces will enhance mobility and access, improve connections and create new places including a new Union Square for celebrations and meetings.

New buildings will incorporate more commercial and retail developments including restaurants and cafes. Other improvements will enliven the street including more residential accommodation, service and administrative functions, health facilities, and short stay accommodation.

Ground floor activities on the southern side of University Avenue will predominantly be commercial/retail development organised to activate the street frontage through restaurants/coffee shops and other active commercial interests.

The northern side of the University Avenue (Mixed Use, Residential and Academic and Administration zones) will accommodate administrative and health facilities, short stay accommodation (hotels, hostel accommodation and the like) with the possibility of University administration being co-located.
Figure 17: University Avenue concept sketch
Sullivans Creek Linear Park

As the casual observer moves from the city to Black Mountain, this park provides a landscape corridor that provides a refreshing contrast to the formal built edge of the city that is still more organised than the Black Mountain interface.

The intention is to develop this locality as a linear park that also provides for pedestrian and cycle movement between the lake in the south and the northern part of the city.

This green strip that runs through the campus to the lake is acknowledged in the Plan as a welcome contrast to the formal built edge to the city and parts of the campus.

New bridges will improve connectivity across the campus and developments at the water gate, where the creek joins Lake Burley Griffin, will provide enhanced access and recreational opportunities. The Sullivans Creek Linear Park will be characterised by shared paths and links between Canberra and the Water Gate. Other elements of the Park include:

- A new bridge at Pryor Place that will terminate the Acton Ridge Peninsula connection. An improved bridge at Denis Winston Walk will improve service traffic access to the south side of University Avenue;

Develop Sullivans Creek as a linear park.

- Widening the creek to the south of University Avenue will provide for new water features and improve access; and
- Improvements to lighting and walkways will provide for a more uniform and safer walking experience along the north-south axis of the campus.

The Plan respects the existing biodiversity links through the Australian National Botanic Gardens and provides for strengthening of this feature.

At the same time it is intended to extend Daley Road to a Black Mountain connection to improve human links between these two organisations and sites.

It is intended to undertake a landscape intervention, possibly through installation of a weir to the north of University Avenue subject to flood studies to create a new water feature.

To the south the boat shed should be moved closer to the Water Gate. On the eastern side of the watercourse the recycling and grounds workplace should be relocated.
Acton Ridge Walk

The existing poorly defined pathway is to be developed into a shared formal walkway providing a strong pedestrian link from the heritage precinct at Acton past South Oval to a new bridge over Sullivans Creek and terminating at a new Pryor Place.

The Acton Ridge axis is designed to link the centre of the campus and Sullivans Creek with the Acton cottages to reinforce the north-south (Research Schools) grid. This axis provides for major new building opportunities between the Acton cottages and Sullivans Creek which will help to define the edge of the axis.

The eastern edge of this axis, which is associated with the Law Faculty, can facilitate a new building that addresses the axis and the South Oval. A height of five or six storeys would strengthen the axis and facilitate room for growth within the Faculty. Existing low level buildings adjacent should be removed to reclaim space for future higher density development.

Acton Ridge Walk is a formal walkway providing a strong pedestrian link from the heritage precinct to Pryor Place.

New developments and informal landscape will address the walkway and a formal edge will be provided to South Oval. Traffic calming will be introduced to the Garran Road crossing. At this intersection it will be necessary to introduce traffic calming devices. Pryor Place can be developed to be a formal landscape setting that in the future could be a building forecourt.
Baldessin Square

The Plan includes the redevelopment of Baldessin Square to provide additional underground car parking, improved access to Llewellyn Hall, the School of Arts and a new formal and ceremonial gathering space. The development will enhance the setting for the existing heritage assets in the area. The primary characteristics of this area are identified in the ANU Exchange Master Plan, which is adopted by this Campus Master Plan 2030.

This area is an important connecting space for the “Town and Gown” ethos and the arts and music link between the University and the region. It is also the place most graduates will celebrate the climax of an education journey.

Figure 20: Baldessin Square concept sketch
**Clunies Ross Street and Daley Road**

The Plan recognises that Clunies Ross Street will be upgraded in the future and increase its capacity, further impacting on the connections to CSIRO. At the southern end of the campus Daley Road will be extended to a new entrance to the campus from Clunies Ross Street.

To attain the Master Plan objectives for the northern end of Clunies Ross Street, the creation of a green bridge across the road will allow a connection between important biological sciences work areas at the University and CSIRO and create a pedestrian and green corridor that has national and international significance.

This locality will be characterised by buildings that address both roads (Clunies Ross Street and Daley Road) within the campus and while continuing to provide for residential accommodation in the vicinity also make room for teaching and research facilities that accentuate the links between CSIRO and the University.

A green pedestrian corridor of national and international significance links the University, CSIRO and the Australian National Botanic Gardens.

**Ellery and Kingsley intersection**

This important corridor on the campus is characterised by a short path linking the two roads and partial visual connection through the existing buildings. It is important to create a strong visual connection between the northern and southern parts of the campus at this point. The Plan also intends to create an improved link and recognises that this is a major pedestrian, cycleway cross-link that will require significantly improved capacity in the light of development in the northern part of the University and to the ANU Exchange. Removal of the existing stairs, improvement in pedestrian ramps and separation of the cycleway cross-linked from pedestrian crossings in this area are required to improve efficiency and safety.
Other properties

The University has several additional ACT properties that are not covered by this Plan. They are mentioned due to the significant interrelationships between them and the Acton Campus. See figure 3.

Weston Creek property

The University-owned property at Weston Creek is currently vacant. This property should be investigated for future off-campus residential accommodation for a range of facility types including single bedroom, bedsit, multiple bedrooms, family accommodation and study facilities.

Spring Valley farm

Ostensibly this property is a farm which has considerable potential for research facilities. At the current time the property is used by forensics, forestry and biological sciences students and researchers for a range of activities. One of the primary uses of this property is for forensics research in the study of decaying animals, on the surface and buried. A cluster of existing facilities lend themselves to animal research, research in the fields of forestry and other biological research activities.

Mount Stromlo

Mount Stromlo is a developed centre for research in astrophysics and astronomy and provides core research facilities for the University, which will continue to be characterised by a number of buildings that are isolated from the main city, need to be protected from light pollution and yet is within easy reach of a growing research and training population.
Overview

The ANU Acton Campus is Designated Land under the National Capital Plan.

The consent authority for works on Designated Land is the National Capital Authority (NCA). For development on Territory Land, such as identified in the ANU Exchange Master Plan, the consent authority is ACT Government Planning and Land Authority (ACTPLA).

CMP 2030 sets out the broad objectives for the long term planning of the Campus and guides the preparation of planning reports and impact statements in relation to future development. The CMP 2030 underpins the assessment framework set out in the Campus Planning and Development Guidelines and subsidiary area specific Master Plans.

Consent authority

For all development on campus a referral to the Vice Chancellor as the responsible authority (the delegate) must be made through the ANU Campus Planning and Development Committee (CPDC).

The CPDC will administer the assessment process and provide ongoing advice and oversight for the implementation of the CMP 2030 and decisions and recommendations of the Vice-Chancellor.

Design and siting approvals

The Campus Planning and Development Guidelines set out the assessment and approvals process to be followed, along with the design and siting requirements prior to the lodgement of development applications to the NCA.

The leading planning model for Development Assessment in Australia (the DAF model) will be used as the basis for describing the detailed conditions of planning and design relevant to each development proposal.

The intent of the development assessment framework is to establish a guide for future campus development and to ensure decision making regarding the location of land use activities is strategic and beneficial to the University’s objectives.

Key area plan controls

Supplementary development controls are prescribed for key areas on campus to ensure future development is undertaken in a considered and strategic manner to allow the University to grow and respond to its evolutionary requirements. Key area plans have specific design and siting controls that differ from the whole of campus controls and override general campus wide controls.

CMP 2030 will be implemented through campus planning and development guidelines.
CONTACT US

For details about this document or planning and development matters, contact: campusmasterplan2030@anu.edu.au