QUT STUDENTS AT QUT GARDENS POINT CAMPUS.
A MESSAGE FROM THE VICE-CHANCELLOR AND PRESIDENT

QUT grew out of educational institutions over a century ago, on sites that had already been places of learning for a millennia. Over the thirty years since those institutions came together as QUT, our university has matured both its learning and teaching presence and its research capacity, investing heavily in collaborative learning and interdisciplinary research environments. We have transformed our campuses into vibrant, purposeful and impressive university locations.

The QUT Estate Master Plan will continue to guide the development and management of our built environment and landscapes at Gardens Point and Kelvin Grove, and across a network of distributed sites with partners and industry. It will also improve connectivity within and between these locations.

The Master Plan is the strategic framework that will ensure the Estate’s social, environmental and financial sustainability while providing a vibrant and rewarding campus experience. It has been developed in consultation with QUT’s stakeholders, neighbours and, importantly, our staff and students who share a lifelong connection with the University. The result is an Estate Master Plan for the whole community, not just for QUT.

But the Estate Master Plan cannot be a static document. We work in a context of significant and rapid change – both globally, in the way higher education and research are conducted, and locally, as the shape of Brisbane continues to evolve. Our Estate Master Plan is flexible yet grounded, to enable QUT to...
As significant change affecting the university sector occurs both globally and nationally, the University’s physical environment must accommodate and embrace these changes.

adapt to emerging needs while continuing to be an attractive study destination for local and international students and an appealing working environment for academic and professional staff. In this increasingly digital era, QUT’s management of its physical environment must accommodate and embrace emerging trends, including those as yet unforeseen, in order to continue to meet the expectations of our students, staff and partners.

This Estate Master Plan reflects the significance of the University’s physical environment and its role in supporting the achievement of QUT’s goals, while recognising the importance and prominence of our heritage and cultural assets within QUT and the wider community. I commend those who have contributed to its development, and celebrate the strengthened relationships formed through our efforts to further improve our physical learning and discovery environment.

Professor Margaret Sheil AO
Vice-Chancellor and President
In keeping with the spirit of reconciliation, we acknowledge the Traditional Owners of the lands where QUT now stands and recognise that these have always been places of teaching and learning. We pay respect to their Elders – past, present and emerging – and acknowledge the important role Aboriginal and Torres Strait Islander people continue to play within the QUT community.

MEANJIN (GARDENS POINT) RIVER MANGROVE (AEGICERAS CORNICULATUM)

The area that became known as Gardens Point was originally covered in thick scrub and known by the Traditional Owners as “Meanjin”. Traditionally a favoured fishing area where turtles and freshwater mussels were plentiful, the bend in the river is fringed by the largest stand of mangroves left along the city reach of the Brisbane River. It is home to many kinds of wildlife, including birds, crabs, mudskippers, molluscs and small fish. These ecosystems continue to have high cultural significance. Many foods are still obtained from mangroves and the plants are also a source of medicines. Mangrove timber is used to construct canoes, paddles, spears and boomerangs.
Before redevelopment in early 2000s, there was a large stand of paperbark trees at Kelvin Grove at the bottom of what is now Musk Avenue. Paperbark trees can live for over 100 years, and the paper-like bark is used traditionally for making coolamons, shelter, wrapping baked food and lining ground ovens. The scented flower produces honey and also serves as a rich source of nectar for animals, including fruit bats and a wide range of insect and bird species. QUT's Aboriginal and Torres Strait Islander education and student success unit is named the Oodgeroo Unit in honour of the late Oodgeroo Noonuccal (Kath Walker) who was an acclaimed Australian poet, writer and activist. Oodgeroo is a word from the Noonuccal language, meaning paperbark.
1.1 QUT’S HISTORY

Over the last 160 years, QUT has grown from humble beginnings to being an integral part of education in Brisbane today. From the establishment of the Brisbane School of Arts in 1849 that led to the establishment of the Brisbane Technical College in 1882, QUT is today at the forefront of innovation and progress in tertiary education. The name “QUT” may only have been in use since 1989, but the institutions that came before QUT have made it the University it is today.

The main campuses of Gardens Point and Kelvin Grove have a rich history in delivering higher education in Brisbane with a combined total of 13 predecessor institutions as shown in (see Fig 1.1.1). Legislation was passed in 1988 to grant university status to the Queensland Institute of Technology, which then became operational as Queensland University of Technology (QUT) from January 1989 onwards. The Brisbane College of Advanced Education joined with QUT in 1990 to establish the current Kelvin Grove campus.

COLOURFUL HERITAGE

The history of the University’s estate extends beyond higher education and is rich with political and military history. There are a number of buildings and sites that are on the Queensland Heritage Register, including Old Government House, the former Brisbane Central Technical College at Gardens Point, Gona Barracks and the old Technical and Further Education Student Residences at Kelvin Grove.

At Gardens Point, Old Government House and the former Brisbane Central Technical College heritage listed sites are a significant part of the campus today. Old Government House provides a focal point on campus and its history can be traced to 1860 as Queensland’s first public building where it remained the home of state governors until 1910. After a lengthy restoration project by QUT, it was re-opened to the public in 2009 as a historic house museum, art gallery and stately function venue.

At Kelvin Grove, the Australian Army developed Gona Barracks from 1914 to 1998 as a military base reserve and training area. A series of drill halls and associated training facilities were constructed. The remaining barrack buildings are today on the Queensland Heritage Register and have been carefully restored to bring their history into the 21st century as part of the recently redeveloped QUT Creative Industries Precinct. The former student residences were erected in 1977 and 1978 as accommodation for country residents undertaking short-term technical and further education courses in Brisbane.
FIG 1.1.1 INSTITUTIONAL HISTORY OF QUT’S CAMPUSES.

1849
Brisbane School of Arts

1882
Brisbane Technical College

1908
Central Technical College

1911
Brisbane Kindergarten Training College

1914
Queensland Teachers Training College

1961
Kelvin Grove Teachers College

1965
Brisbane Kindergarten Teachers College

1961
Kedron Park Teachers College

1965
Queensland Institute of Technology

1974
North Brisbane College of Advanced Education

1976
Kelvin Grove College of Advanced Education

1979
Brisbane Kindergarten Training College

1982
Brisbane College of Advanced Education

1989
Queensland University of Technology

1990
QUT today
RECENT HISTORY

QUT’s Estate has been extensively developed over the last 10 years as the student population and research focuses have expanded. Both campuses have received substantial infrastructure upgrades as detailed in Fig 1.1.2, and as the need for specialised research spaces has increased, so too has the distributed sites network.
QUT'S RECENT HISTORY

2006
MEDICAL ENGINEERING RESEARCH FACILITY
(PRINCE CHARLES HOSPITAL)

2007
SAMFORD ECOLOGICAL RESEARCH FACILITY

2007
MACKAY PILOT PLANT

2007
DA VINCI PRECINCT
(AIRPORT)

2008
KELVIN GROVE
INSTITUTE FOR HEALTH & BIOMEDICAL INNOVATION

2008
KELVIN GROVE
URBAN VILLAGE

2008
REDLANDS GLASSHOUSES

2012
GARDENS POINT
SCIENCE & ENGINEERING PRECINCT (P & Y BLOCKS)

FIG 1.1.2: HIGHLIGHTS FROM QUT'S RECENT ESTATE HISTORY.
2013
TRANSLATIONAL RESEARCH INSTITUTE
(PRINCESS ALEXANDRA HOSPITAL)

2015
CENTRE FOR CHILDREN’S HEALTH RESEARCH
(SOUTH BRISBANE)

2016
QIMR BERGHOFER INSTITUTE - BIOMEDICAL RESEARCH
(HERSTON)

2016
KELVIN GROVE
CREATIVE INDUSTRIES (II)

2018
KELVIN GROVE
ACQUISITION OF X BLOCK
(88 MUSK AVENUE)

2018
KELVIN GROVE
EDUCATION PRECINCT

2013
HERSTON IMAGING RESEARCH FACILITY

2015
GARDENS POINT
Q BLOCK LABORATORIES

2016
KELVIN GROVE
SPORTS FIELD CAR PARK

2017
KELVIN GROVE
TRANSFORMATION

2018
GARDENS POINT
TIERED LECTURE THEATRE (D101)
TRANSFORMATION
1.2 QUT TODAY

QUT is a dramatically different University today compared to 1882 when the Brisbane Technical College taught 80 students. We are now one of the nation’s fastest growing research universities and our courses are in high demand. In 2017, almost 50,000 students enrolled in undergraduate and postgraduate courses, as well as Masters and PHDs. Also on offer are short courses and executive education for career advancement, or personal and professional development, as well as free, online learning courses. More than 300,000 students have enrolled in our open online courses since 2015. Our courses and study options are flexible and deliver substantial graduate outcomes. As a consequence, the University is proud of its real-world global outlook infrastructure, and learning and teaching that is equipping graduates with the skills to be the next generation of changemakers. Our teaching, research and executive staff are leaders in their fields and deliver the best outcomes for students. Last year, QUT employed some 9,500 staff in both professional and academic capacities.

LPF has awarded scholarships and bursaries to support more than 15,000 students. Every dollar donated by an individual or organisation is matched by QUT and continues providing opportunities for students to realise their potential. QUT is doubling its efforts to grow the fund from $50 million to $100 million in the next few years.

COMMUNITY RESOURCE

QUT is proud to have campuses within the urban frame that are readily accessible to the community and actively used for social, recreational, and professional purposes, as well as traditional educational and research roles. Popular public venues on campus are highly regarded by both visitors and the QUT community.

Both campuses boast a stage theatre, full gym fit outs, including an indoor pool, a campus bar, and contemporary food courts, providing students with more than just an educational experience. Gardens Point is also home to two museums, an art gallery, and a state-of-the-art Science and Engineering Centre which includes The Cube, acknowledged as one of the world’s largest open access digital interactive learning and display spaces. At Kelvin Grove, venues include the QUT Sportsfield, as well as a modern and thriving Creative Industries Precinct with strong ties to exhibitions and live performances, and the new E Block (Education precinct) which...
includes The Sphere, a five metre diameter digital interactive visualisation sphere suspended in the main atrium.

QUT’s two main campuses, in enviable CBD and inner-city locations, have grown and expanded as the demand for more teaching and research space has increased. Gardens Point is a highly accessible location for students, staff and the community set against the truly inspiring backdrop of the Brisbane Botanical Gardens and Brisbane River. QUT Kelvin Grove is closely interwoven with Kelvin Grove Urban Village and is a prime example of urban cohesiveness. Seen as a community resource, the campus encourages active engagement with the Inner Northern Busway and QUT Sportsfield.

The University’s current physical Estate has a distributed spatial arrangement encompassing two major campuses at Gardens Point and Kelvin Grove and a number of primary and associated distributed sites predominantly located in the South East Queensland region (see Fig 1.2.1). In living up to its name, QUT’s physical Estate integrates with comprehensive, contemporary technology services that support all aspects of teaching, research and management. These services are growing and changing rapidly, consistent with global technology trends and demand.
FIG 1.2.1: THE APPROXIMATE SIZE OF THE CURRENT PHYSICAL ESTATE (AS OF SEPTEMBER 2018) IS SUMMARISED IN THE FOLLOWING TABLE.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>BUILDINGS</th>
<th>LANDHOLDING (HECTARES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUMBER</td>
<td>GROSS FLOOR AREA (M²)</td>
</tr>
<tr>
<td>Gardens Point</td>
<td>26</td>
<td>185,000</td>
</tr>
<tr>
<td>Kelvin Grove</td>
<td>41</td>
<td>205,000</td>
</tr>
<tr>
<td>Off-Campus</td>
<td>17</td>
<td>23,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>84</strong></td>
<td><strong>413,000</strong></td>
</tr>
</tbody>
</table>

FIG 1.2.2: MAP DIAGRAM OF QUT’S PRIMARY DISTRIBUTED SITES IN AUSTRALIA AND SOUTH-EAST QUEENSLAND.

QUT OFFERS STUDY & RESEARCH DEGREES IN

- Building & Planning
- Business
- Creative Practices
- Communication & Design
- Education
- Engineering
- Health & Community
- Information Technology
- Languages
- Law & Justice
- Science & Mathematics
- Language & academic pathways for international students
INTRODUCTION

QUT GARDENS POINT P BLOCK LECTURE IN SESSION.

QUT KELVIN GROVE SPORTSFIELD.
OLD GOVERNMENT HOUSE MUSEUM AT QUT GARDENS POINT.
QUT KELVIN GROVE C BLOCK FOODCOURT.
QUT RESEARCH FACILITIES.
The current Master Plan was approved in April 2009 and focuses on the Gardens Point and Kelvin Grove campuses. Over the last nine years, this Master Plan has proven to be a valuable strategic document that has guided extensive physical transformation across both of the University’s major campuses. Since 2009, there have been significant changes to the University’s operating environment.

2.1 UNIVERSITIES NOW AND IN THE FUTURE

Global economic and political changes, along with advancements in technology and widening participation in online activities, have significantly impacted the nature of the tertiary education sector. Universities in Australia now have 1.4 million enrolled students, employ some 100,000 people, contribute $30 billion to the nation’s GDP, and university research continues to stimulate innovation and delivers solutions to economic, social, environmental and demographic challenges. In this context the direction of QUT’s vision, strategy and organisation have shifted and will continue to change to best meet future needs.

In response to the University’s developing strategies for learning, teaching and research, QUT’s physical Estate has taken on an increasingly distributed spatial arrangement. This has occurred particularly in response to the University’s strategy to expand its research activities in proximity with specialist facilities, while sustaining a vibrant QUT community concentrated at the University’s main campuses. This distributed model remains relevant for QUT and has become even more complex with the need to integrate and leverage all that technology has to offer to deliver and enrich learning and teaching and research experiences.

Teaching, research and staff work practices are continuing to change and the University’s Estate needs to be flexible and fit-for-purpose now and in the future. The Estate needs to meet future needs in developing new and refurbishing existing buildings and spaces while also providing high amenity open spaces and environments. Universities in Australia have been buoyed to some extent by the relative stability of the nation’s economy but they face an increasingly uncertain field of challenges, risks and opportunities. The uncertainties and disruption across many fields of endeavour, and the increasing rate of innovation and structural change, reshape teaching and research practices and technologies that resonate across most aspects of the planning of the physical Estate.

2.2 NEED FOR A NEW ESTATE MASTER PLAN

With such a dynamic operating environment and a spatially complex and distributed Estate, a new Estate Master Plan is needed to provide an integrated growth and development framework comprised of the following:

- Fundamental planning principles and guidelines that inform a consistent and co-ordinated planning approach for all sites across QUT’s distributed physical Estate
• Specific planning and interrelated development strategies for the University’s two main campuses and primary distributed sites that recognise the unique requirements of those sites and the connectivity of the whole Estate.

In providing this framework a new Estate Master Plan should be a living document, flexible and capable of responding to changing demands and priorities.

THE NEED FOR A NEW ESTATE MASTER PLAN

• To provide a sufficiently flexible plan which allows for changes and adaptations as QUT develops
• To ensure that QUT remains at the forefront of developments in learning and research
• To sustain the transformation of the QUT Estate as vibrant, purposeful and impressive university locations
• To reflect the significant changes taking place both globally and nationally in the university sector
• To deliver a high level, long-term strategy capable of guiding potential scenarios of growth and development of QUT’s physical environment
Planning for QUT’s future physical Estate needs to address a complex suite of internal and external factors that impact the University’s need for physical and virtual facilities and infrastructure. These factors relate to the changing university sector, QUT’s vision and functional requirements as outlined in QUT’S strategic plan, the Blueprint, and the challenges and opportunities of planning for a spatially distributed University Estate, both physical and virtual.

3.1 CHANGE AND DISRUPTION

Planning for QUT’s physical Estate will be impacted by the significant change and disruption happening in the higher education sector. Specifically there are a number of key areas of change in the University’s operating environment that have particular bearing on overall demand for higher education and the extent to which universities deliver services online or on-campus in the future.

Advancements in digital and online learning capabilities, and reduced government funding, bring into question the relevance and sustainability of maintaining a physical University Estate based on large, centralised concentrations of physical infrastructure and facilities. At the same time, effective integration of the physical Estate with technology and the virtual Estate provides the opportunity to enrich the physical Estate and be a differentiator for QUT.
BROADER ROLE

Against this increased competition, a more diverse student profile and a broadening role for universities in economic development signal an increasingly significant role for the University and its Estate. Arguably, high-quality, place-based physical facilities provide superior and diverse experiences that result in a competitive advantage and in the development of successful knowledge-based communities. High-quality physical environments are important to the development of successful knowledge communities because they provide a defined context in which collaborative learning, research and social interactions can occur. These interactions build a vibrant on-campus community that engages students, researchers, industry and community in a more intense culture of learning and research success.

Additionally, the provision of an integrated, seamless and high-quality experience across the University’s virtual and physical environments is equally important in building competitive advantage and a connected learning and discovery community.

In the context of all the diverse changes impacting the higher education sector, the challenge for QUT will be to successfully influence the potential benefits of high-quality physical and virtual environments while maintaining a prudent approach to expenditure on maintaining, enhancing and further developing the University’s Estate. At a time of diminishing government funding to the sector this will require an integrated and targeted approach to Estate Planning that will yield maximum benefit from the University’s investments.
<table>
<thead>
<tr>
<th>DIGITAL TECHNOLOGY</th>
<th>STUDENT EXPECTATIONS</th>
<th>RESEARCH AND GROWTH</th>
<th>EXTERNAL DEVELOPMENT</th>
<th>ECONOMY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid advancements in digital technology, online capabilities and mobile devices means:</td>
<td>A more diverse student profile requires:</td>
<td>QUT to develop solutions for global and national challenges through:</td>
<td>External developments in the vicinity of QUT’s Estate are opportunities and have impacts, such as:</td>
<td>Economic driver opportunities through:</td>
</tr>
<tr>
<td>• Knowledge and content, including user generated content, is becoming more accessible on demand by a wider audience</td>
<td>• Greater diversity of learning requirements and expectations</td>
<td>• The expansion of research ambitions in its areas of focus and strength</td>
<td>• Redevelopment of nearby parts of the inner and central business areas, including the Queens Wharf Brisbane integrated resort development, and redevelopment of the Herston Quarter within the Herston Health Precinct into a mixed-use community</td>
<td>• Tertiary education is a significant contributor to regional, state and national prosperity</td>
</tr>
<tr>
<td>• Learning can occur anywhere and anytime</td>
<td>• Formal and informal learning and teaching spaces that are flexible, engaging and high quality</td>
<td>• Multi-disciplinary, high-impact research enabled by specialised, fit-for-purpose flexible and high-quality spaces</td>
<td>• Transport and travel solutions including Cross River Rail and Brisbane Metro public transport projects.</td>
<td>• Campuses are urban villages that contribute to local and regional economies in their development and operation and as a destination for community and cultural events, and sport and recreational activities</td>
</tr>
<tr>
<td>• The ubiquity of digital communication is generating new ways of working and new knowledge-based economies</td>
<td>• Added emphasis on the relevance of study to employability and demand for learning in place</td>
<td>• Close connectivity with research partners.</td>
<td>• Students and researchers increasingly contribute to real-world opportunities and challenges</td>
<td>• Opportunities for investment, as partnerships form between universities, industry and government, become more prevalent.</td>
</tr>
<tr>
<td>• The nature, use and scope of the digital Estate strongly influences the cycle and scale of demand on the physical Estate</td>
<td>• Increased use of technology, digital media and mobile devices.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### QUT’S STRATEGIC PLAN

A key objective of QUT’s Estate Master Plan is to influence the University’s physical Estate to support delivery of QUT’s Institutional Strategic Plan; the plan is known as the Blueprint and is regularly updated. It identifies major priorities, conveys broad strategies and drives greater coherence and co-ordination across the University. At a time of significant change in the higher education sector, it is the role of QUT’s strategic plan to anticipate the nature and impact of change and to chart a vision forward to ensure that QUT remains at the forefront of developments in all of its teaching, research and outreach endeavours.

Linking with the key themes underpinning the vision of the current Blueprint (Fig 3.2.1) QUT’s Estate should provide high-quality, innovative environments and infrastructure that:

- Facilitates connection, engagement and partnership building
- Leverages technology and effectively integrates physical and virtual resources
- Supports all dimensions of sustainability
- Enables organisational agility, efficacy, innovation and capability building
- Facilitates the implementation of key strategies relating to learning and teaching, research and partnerships, and culture and sustainability.

#### FIG 3.2.1 KEY THEMES UNDERPINNING THE VISION ARTICULATED IN QUT’S STRATEGIC PLAN.

<table>
<thead>
<tr>
<th>Providing outstanding real world education through innovative physical and virtual learning environments</th>
<th>Undertaking high-impact, transdisciplinary research in partnership with end users</th>
<th>Recognising our civic responsibilities and connections to broader communities</th>
<th>Maintaining the various dimensions of QUT’s sustainability (financial, social and environmental)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leveraging QUT’s deep technological strengths</td>
<td>Aligning University activities with the human capital and innovation needs of the global economy</td>
<td>Building QUT’s sense of community</td>
<td>Developing and sustaining a highly capable workforce</td>
</tr>
</tbody>
</table>
## Key Strategies for QUT’s Estate

### Learning and Teaching Centred Environments
- Visible, cutting edge, learning environments that position QUT as a leader in innovative learning practices
- Physical and virtual infrastructure, adapting to continued transformation of the University’s learning and teaching processes
- Places where staff and students connect with industry and practising professionals and participate in collaborative, peer-to-peer learning in visible and accessible locations across the University’s Estate
- Interrelated learning environments that reflect contemporary pedagogical approaches and a spectrum of learning preferences
- Technology enabled prototyping and experimental learning environments that support staff and students to build their capabilities and develop innovative approaches to learning and research.

### Research and Partnerships
- Research and innovation hubs, on and off-campus, that enable transdisciplinary and translational research and partnerships with industry and end users
- High-quality, fit-for-purpose specialist facilities that support the specific needs of a wide range of disciplines and research activities
- On and off-campus space to accommodate QUT’s research focus by supporting the integration of research, learning and teaching, and entrepreneurship; encouraging growth; and facilitating timely and purposeful responses to new opportunities
- Permeable and welcoming campuses co-designed with industry partners and end users.

### Culture and Sustainability
- Contemporary, high-quality work environments that enable collaboration and foster a shared sense of community and identity
- Sustainable building and landscape design using advancements in technology to improve the quality of environments occupied by QUT staff and students by maximising the efficient use of resources, and minimising adverse impacts to the environment
- Well-designed places characterised by high-quality, well-resolved architecture and a high-amenity, public realm
- Physical demonstrations of QUT’s values, culture and heritage and its commitment to environmental sustainability
- World-class facilities that combine innovative use of physical space with leading technology to support social and professional interaction and community development.
3.2.1 GROWTH AND CHANGE

An important driver for development of QUT’s physical Estate is the future growth and change of the University’s core learning and research activities. The University’s current strategy for future growth includes:

- Modest growth in learning and teaching programs with particular emphasis on growing graduate and professional education and courses for international students
- Targeted and transformational step change for growth in research across the areas of research strength and priority identified in QUT’s Research Innovation Strategy
- Growth in activities related to programs for founders and entrepreneurs.

Forecasting the amount of space needed to support University growth and change has many risks and uncertainties because a wide range of factors, including government policy, actual growth rates, student course preferences, timing of growth sector competition and general economic conditions.

The changing relationship between University activities and the quantity of physical resources they require further complicates planning for future capacity of physical infrastructure. Advancements in technology and the continuing transformation of pedagogical and research practices are altering the way universities use space with the outcome often being more flexible and efficient uses of physical resources. The growth and change in activities and services no longer necessarily equates to the need for more physical infrastructure.

Growth is not the only driver for development of QUT’s physical Estate with high-quality, fit-for-purpose facilities being critical to the success of all aspects of the University. In this regard, development of the Estate through change or replacement of existing building stock is driven by a response to strategic organisational objectives including:

- Changes in contemporary teaching, learning and research practice and student preferences
- Organisational sustainability
- Enhanced engagement with students, community and industry partners.
### SECTORS OF THE ECONOMY

- Agriculture and agribusiness
- Advanced manufacturing
- Mining equipment, technology and services
- Infrastructure and transport
- Environment and energy
- Health and aging
- Biomedical and life sciences
- Defence
- Education
- Professional services
- Creative industries
- Information and communication technology

### RESEARCH STRENGTHS AND PRIORITIES

- Biomedical engineering and health technologies
- Biomolecular sciences
- Chronic disease prevention and interventions
- Creating and capturing value from new technology
- Data science, computational modelling and simulation science
- Digital media
- Education for better outcomes
- Health services (research)
- Injury prevention and management
- Material science and engineering
- Plant and industrial biotechnology
- Robotics and computer vision
- Technology, regulation and society

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QUT’s Mackay Renewable Biocommodities Pilot Plant specialises in plant biotechnology.

QUT’s Professor Michael Collins specialises in visual health research.
FIG 3.3.1 QUT’s Distributed Estate; Regional Context and Distributed Sites.

LEGEND

- QUT campuses
- Large community facilities (Sports/open spaces)
- Proposed new CBD limits (City Plan 2014)
- Proposed new railway station
- Proposed Brisbane metro station
- Special centre
- Major centre
- Proposed council renewal neighbourhoods
- Priority development areas

Motorways
Existing railway corridor
Proposed Cross River Rail
Proposed Brisbane Metro
Bike-ways
PAH: Princess Alexandra Hospital
RBWH: Royal Brisbane and Women’s Hospital
TRI: Translational Research Institute
PACE: Pharmacy Australia Centre of Excellence

Kelvin Grove
Gardens Point
The distributed spatial arrangement of QUT’s physical Estate poses a complex range of challenges and opportunities for future planning. This is due in part to the dual nature of the University’s Estate, as both a network of interrelated sites that must work together to ensure optimal benefit to QUT, and as a contributor to a broader urban fabric impacting the efficacy and quality of the surrounding city and region (figure 3.3.1).

3.3 DISTRIBUTED ESTATE

3.3.1 NETWORK OF SITES

QUT’s physical Estate can serve as an important mechanism for achieving organisational benefit in an increasingly competitive higher education sector. A University Estate that delivers organisational benefits is one that achieves an effective alignment of the University’s physical and virtual resources with the essential needs of the University’s core activities and functions. The qualities of an Estate that reflect this alignment include:

- High-quality spaces that are vibrant, active and highly utilised
- Fit-for-purpose facilities that meet the functional requirements of the University
- Facilities and spaces that are adequate in size and capacity to meet current and future growth needs
- Suitably sized and located facilities that are capable of supporting the optimal arrangement of core University functions based on a balanced consideration of proximity between University functions and closeness to industry and community partners
- Flexible, technology-enabled spaces with high-speed digital infrastructure responsive to future change
- Facilities and sites that are highly connected, integrated and permeable.

INFRASTRUCTURE AND PLANNING

To establish and maintain these qualities across all sites within QUT’s spatially complex and distributed Estate is inherently challenging and will require an integrated approach to infrastructure and resource planning that is based on the following:

- A planned distribution of University activities across all on-campus, off-campus and online locations
- Alignment of planning and delivery of QUT’s physical Estate with the planned distribution and rate of growth of University activities across all University locations, both physical and virtual
- Alignment of the University’s physical and virtual resources with the essential needs of the University’s core activities and functions
- Adequate provision of infrastructure and practices that support connectivity across all physical and virtual nodes within QUT’s distributed community. Such infrastructure and practices relate to digital connectivity and connectivity through access to multi-modal transport solutions
- Sustaining QUT’s strong sense of identity and community.
3.4 REGIONAL AND CITY PLANNING

KEY INFLUENCER

In addition to the impact that QUT’s Estate can have on the University’s organisational successes, QUT’s Estate also has a role to play in positively contributing to regional planning and city making in South East Queensland. The South East Queensland Regional Plan (Shaping SEQ) acknowledges QUT campuses as areas of economic significance.

Central to contemporary planning policy across all levels of Australian Government is the concept of improving the prosperity and quality of life for Australians through a sustainable knowledge-based economy where growth is underpinned by innovation, knowledge and creativity. Key to this strategy are urban and regional environments that can support a high quality of life and can provide a canvas upon which all elements of the economy can flourish.

QUT is a key influencer in this strategy both in terms of the knowledge capital it generates and in terms of the impact its significant physical Estate, students, staff and visitors have on the South East Queensland economy, community and broader urban realm. The distributed nature of QUT’s Estate means that it has capacity to impact and shape urban locations across South East Queensland. The majority of physical assets owned by QUT are concentrated in the Brisbane city centre and surrounding suburbs forming part of an identifiable “knowledge corridor”. It is in this area that QUT can have the most direct impact on the growth of Brisbane as a New World city that is vibrant, inclusive and that develops integrally as part of a smart, knowledge-based and economic growth strategy.

POSITIVE IMPACT

Key areas where QUT’s Estate can have a positive impact on its surrounding urban and regional context are:

- Improved public amenity
  
  Quality of the architecture and public spaces that exist across QUT’s distributed Estate is highly influential on the quality of experience had by a diverse range of people as they move through and around QUT’s sites. Through the provision of high-quality architecture and public spaces, QUT can provide genuinely beneficial and memorable experiences for QUT students and staff, industry partners, the broader South East Queensland community and visitors to the region at the same time as raising the profile of QUT and the surrounding region to a broad audience.

- Sustainable transport network
  
  Flow of people to and from QUT sites can have a significant impact on traffic, access and parking in the areas immediately surrounding those sites and on the broader regional transport network. By enabling sustainable transport behaviours through access to multi-modal transport solutions, QUT can positively contribute to a sustainable transport network in the South East Queensland region.

- Economic development
  
  QUT can actively contribute to economic development in the South East Queensland region through the collocation of appropriate University functions and physical facilities with industry partners at both on and off-campus locations. With regard to off-campus sites, maximum benefit will be achieved where the University aligns its facilities with key centres for economic development, as identified in local, state and federal government strategies, and sites where there is an existing critical mass of activity in particular sectors.

- Urban planning
  
  QUT can contribute to urban planning at state, regional, city and local levels. QUT can also demonstrate high-quality urban planning in developing and designing improvements to its Estate.
3.4.1 PLANNING AND CONTROLS

QUT will continue to exercise its physical Estate planning and development responsibilities in accordance with its strategic development priorities, its powers under the QUT Act 1998, and applicable provisions of Queensland’s statutory planning framework.

Queensland’s statutory planning instrument is the Planning Act 2016. It sets out, among other matters, how development is controlled. It provides for Infrastructure Designations, a decision of the minister or a local government that identifies locations for the development of one or more types of community infrastructure, such as educational facilities, hospitals and transport, etc. Such development is exempt from consideration under the Development Assessment process and the relevant local government planning scheme, although other state legislation and regulatory requirements, such as building, heritage places and environmental management, continue to apply.

A significant proportion of the Gardens Point and Kelvin Grove campuses are each covered by an Infrastructure Designation for education purposes. The University does not seek to amend the existing Infrastructure Designations. None of QUT’s distributed sites are within an Infrastructure Designation area.

POWERS AND RESPONSIBILITIES

If a proposed development is not located within the area covered by an Infrastructure Designation, or is inconsistent with the education purpose, the proposed development would be assessed in accordance with the relevant local government planning scheme and the associated development assessment process.

All development proposals on QUT land that is not freehold must be in accordance with the legal authority for QUT’s occupancy (lease, licence or other agreement), and may require the landholder’s consent.

A major proportion of the land on which the Gardens Point and Kelvin Grove campuses are located is state reserve, held in trust by QUT. Trust Land Management Plans for each campus have been approved in accordance with the Land Act 1994. The purpose of these two plans is to ensure that the management, development and use of the reserve land is consistent with the relevant statutory guidelines and the education purpose of each campus. QUT is able to issue leases for up to 100 years in a Land Management Plan Area provided QUT complies with the relevant Trust Land Management Plan and its powers under the QUT Act 1998. The Act provides powers and responsibilities for QUT to manage and control its property for the functions of the University.
3.4.2 SUSTAINABLE TRANSPORT

Transport and mobility systems are a strategic area of impact for the University. They are key enablers for students, staff and visitors to access and experience QUT. Also the transport behaviours of the QUT community impact on the broader urban network and sites surrounding QUT’s Estate as well as providing models for sustainability for the broader community. As part of the master planning process, QUT engaged an external consultant to conduct a Transport, Traffic, Access and Parking Planning Study to inform and guide the University into the future. A summary report of the study can be found on the publicly accessible QUT Facilities Management website (www.fmd.qut.edu.au).

Through the provision of legible, technology enabled, and sustainable ways to access QUT’s Estate, the University can:

- Provide a superior experience to the large number of students, staff, visitors and support service operators going to, from, and within QUT sites every day
- Positively contribute to congestion management and reduced carbon emissions related to transport activities across South East Queensland.

A number of emerging trends and opportunities are driving a need to rethink and reshape QUT’s approach to planning, service delivery and advocacy activities relating to transport, as follows:
### Changing Demographics

#### Generational Change
Students now entering university are the most technologically literate and socially empowered generation. They have a strong global outlook and increasing attachment to a sustainable and healthy culture. They are less likely to get a driver’s licence, and use public and active transport and other transport modes (ride share, car share, etc.) at a higher rate than previous generations.

#### Work and Study
Increasing focus on participative learning with more industry-based learning and internships, and an increasing proportion of students working part-time, means students have greater travel mobility needs both to and beyond the University Estate.

#### Staying at Home Longer
Surveys by the Australian Bureau of Statistics show younger Australians are staying at home longer, and consequently the accessibility and connectivity of geographically dispersed residences through public and active transport and other transport modes is critical for student travel options.

#### International Student Appeal
A key factor for attracting and retaining international students is access to simple, legible, safe and value for money public and active transport.

### Regional and City Planning and Development

#### South East Queensland Regional Plan (Shaping SEQ)
Provides a platform for QUT to advocate for improved travel connectivity that prioritises public and active transport.

#### Major City and Regional Developments
Significant transport and traffic opportunities and impacts for QUT include: Cross River Rail project, Brisbane Metro project, Brisbane CBD developments e.g. Queens Wharf, active transport improvement projects to the city bikeway network, and potential new green bridges over the Brisbane River to improve pedestrian movement in key CBD streets.

### New Mobility Models

#### Customer Relationships
The concept of customer relationships has changed from delivering transport to managing mobility and providing mobility as a service.

#### Mobility as a Service
Mobility management represents a new approach to delivering transport which moves beyond providing a “single transportation service to a range of services” philosophy that is a one-stop-shop approach for a wide range of services. Mobility as a service manages personal travel demands and mobility by seamless aggregation of travel services, information, booking, payment and other lifestyle services.

### Changing Technology
- Autonomous and electric vehicles suited to supplementing mass transport systems with both collective and personal on-demand and shuttle services.
- Electric vehicles and bicycles increasingly able to compete with existing forms of public and active transport.
- Account-based ticketing that is more flexible, and easier to implement incentives and opportunities to connect with broader mobility management services.
3.5 ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability is a fundamental objective of this Estate Master Plan. Figure 3.5.1 illustrates QUT’s model for environmental sustainability that incorporates eight specific themes.

The below will require the integration of environmental sustainability into all aspects of campus planning and design, capital development and facilities management activities. A QUT Sustainability Action Plan will be produced in 2019 and this document should also be used as guide in the future planning of campus infrastructure.

QUT’S CARBON EMISSIONS REDUCTION ASPIRATIONS

QUT will be setting its emissions reduction targets for 2030. One of the implications for this in implementing this Estate Master Plan is that the University will need to decouple growth in gross floor area from growth in carbon emissions. This can be achieved by activities such as:

- Incorporating the Greenstar principles of the Green Building Council of Australia into the University’s Design Standards and all capital works and maintenance projects
- Deployment of renewable energy and low carbon infrastructure both on and off campus
- Reducing Scope 1 and 2 energy (electricity and gas) consumption on campus
- Reducing Scope 3 emissions such as waste to landfill and travel emissions.
A technology enabled Estate is critical to QUT’s future for operating across a distributed spatial model, both physical and virtual, and in an increasingly dynamic and competitive University sector. A virtual Estate, which has a network of digitally connected technologies that are meaningfully integrated with the built environment to monitor and respond to the needs of the University’s people, practices and place, will enable QUT to:

- Provide a superior and seamless end user experience
- Support high-quality teaching and research outcomes
- Achieve greater organisational cohesion
- Deliver operational improvements that contribute to ongoing financial, environmental and organisational sustainability
- Provide a technology-enabled physical Estate that is a significant differentiator in the tertiary education sector.

More broadly, there is opportunity for QUT to influence technology across its Estate to contribute to the national Smart Cities Plan agenda that looks to use virtual technology to improve the sustainability of our cities and to revolutionise how our cities are planned and function.
4.1 PURPOSE

The Estate Master Plan seeks to harness the potential of the University's physical Estate to support the University’s strategic plan and objectives by providing a framework that is capable of guiding a range of potential scenarios for growth and change into the future. The Estate Master Plan stands independent of specific growth targets and instead seeks to provide a guiding structure within which a broad range of growth and change scenarios can occur.

4.2 VISION

The vision for QUT’s physical estate is to have a vibrant and sustainable network of University campuses and distributed sites that collectively support QUT in providing outstanding, real world education and high-impact, transdisciplinary research. The Estate Master Plan will continue to build QUT’s reputation as the home for knowledge applicable to the real world.
4.3 OBJECTIVES

The objectives of the Estate Master Plan are to:

- Align the nature, size and location of the University’s physical environment with the University’s strategic vision, goals and priorities
- Provide high-quality spaces that support transformational, transdisciplinary education and research activities
- Create stimulating and engaging campuses that enhance student, staff and community experiences
- Deliver on the University’s commitment to sustainability
- Positively contribute to the knowledge-based development of Australia and Queensland and the plans and priorities of commonwealth, state and local governments.

4.4 PRINCIPLES

The principles that will guide development of the strategies and proposals put forward in this Master Plan are detailed as follows:

- Create environments that have a sense of place and that embrace the unique nature of each location within QUT’s physical Estate.
- Create experience-driven environments that are underpinned by heritage, aesthetic and cultural integrity.
- Create spaces that foster a connected QUT community and provide authentic connections with the broader community and industry partners.
- Cultivate integrated environments (physical and virtual) that engage with their surrounding context which connect people, place and knowledge to achieve extraordinary outcomes.
- Create “Smart Environments” that leverage the transformational potential of digital technologies to support learning, research and strategic outcomes and enrich the physical Estate.
- Create environments that are easy to get to and that are inherently legible, equitable and accessible.
- Create a QUT Estate that delivers financial, environmental and social sustainability.
- Create well-designed, high-quality spaces that communicate the QUT brand and that reflect the multifaceted values of the QUT community.
- Establish an Estate Master Plan that is sufficiently flexible and robust so as to be applicable to a range of evolving and potential futures.
- Cultivate a consultative approach for future development planning to ensure stakeholder needs are identified and addressed.
This section identifies principles for maintaining an integrated approach to planning and development of the University's physical Estate.

5.1 INTEGRATED PLANNING

QUT’s physical Estate is important for achieving strategic benefit in an increasingly competitive higher education sector and for delivering the University's strategic vision and objectives.

AN INTEGRATED APPROACH

To leverage the full potential of QUT’s physical Estate and maintain a high-quality experience across all sites will require an integrated approach to infrastructure and resource planning that effectively aligns the University's physical and virtual resources with the needs of the University's core activities and functions. The following principles will guide decision making regarding:

- Rate of growth of physical facilities
- Types of spaces and physical facilities
- Supporting infrastructure
- Quality of built form and the public realm
- Location and distribution of University functions.
5.2 OPTIMISE THE ESTATE

OBJECTIVE
Achieve an integrated and planned approach to the location and distribution of University functions across QUT’s entire physical Estate.

PRINCIPLES

Across QUT sites:
- Priority will be given to locating core University functions and activities at QUT’s two main campuses (Gardens Point and Kelvin Grove) to ensure the vibrancy and optimum utilisation of those sites are maintained and enhanced. Off-campus (distributed site) locations will be managed and created as an integrated and connected part of the whole Estate consistent with the objectives for distributed sites (refer Section 8).
- A precinct approach on each campus will be used to collocate activities and functions that are similar, or compatible, to facilitate flexible and responsive space management for a range of future scenarios, and for an efficient use of resources as similar activities often require similar building services and space types. Precincts are in this context geographic locations within which there will be multi-functional and cross-disciplinary activities. As a geographic mapping frame for the Estate Master Plan they are not intended to be aligned to any one function of the University nor be for wayfinding purposes.
- The planned distribution of University activities and the physical facilities they require across all QUT sites will align with the capacity of each individual site (and the surrounding areas) to accommodate those functions and facilities now and in the future. A key consideration for the University is that the Kelvin Grove campus has a greater amount of developable land than the Gardens Point campus and so possesses a greater capability to accommodate future growth. This consideration includes the potential to relocate functions and activities from Gardens Point to Kelvin Grove in order to free up capacity at Gardens Point. In the first instance, new and major developments will be concentrated in currently underdeveloped and underutilised sites and precincts.
- Activities with specialist building services or structural requirements will be located in buildings that can adequately support those requirements.
- Identify and activate opportunities for greater outreach and engagement with industry and the community.
- Through the planned distribution of University activities the Estate will consider the potential for QUT to positively contribute to the sustainable development of South East Queensland, with particular reference to opportunities to accelerate economic and community development and minimise traffic congestion and transport related emissions.

Within QUT sites:
- Active and engaging functions will be located at the ground plane and lower floors of buildings. Less active and engaging functions will be located at the upper floors of buildings.
- High-activity centres will be established at key locations across QUT’s campuses, adjacent to significant public open space and primary pedestrian connections. High-activity centres involve the collocation of University-wide, student-centred activities and public engagement spaces to create vibrant and lively hubs of activity. Examples of functions and spaces that might be collocated in an activity centre are centrally managed teaching spaces, informal learning environments, student services, retail, and venue and event space.

The distribution and collocation of activities, functions, and space uses within an individual site will give consideration to supporting the following positive organisational outcomes:
- Organisational cohesion through the collocation of related organisational units
- Transdisciplinary engagement through the collocation of multiple associated disciplines
- Industry and community engagement through the collocation of industry and community partners with University activities, functions, and spaces
- Student entrepreneurship, professional development, and exposure to real-world experiences.
5.3 GROWTH OF PHYSICAL FACILITIES

OBJECTIVE

Achieve alignment between the construction, or acquisition of additional physical facilities, and the actual rate of growth in demand for those facilities.

PRINCIPLES

Growth and new opportunities:

- Growth in physical facilities will occur in planned alignment with the forecast rate of growth in demand from University activities across all University locations.
- Growth in physical facilities will occur in a timely, proactive, logically sequenced and financially sustainable manner that supports the University’s ability to respond to new opportunities.
- Maximum use of existing facilities and their usability will occur through timely rehabilitation and renewal.
- Priorities for development of new physical facilities will be guided by this Estate Master Plan and regularly reviewed.
- New individual developments will be assessed on their own merits.

5.4 INTEGRATE TECHNOLOGY AND THE PHYSICAL ESTATE

OBJECTIVE

Effectively integrate technology across QUT’s physical Estate to support the needs of the University’s people and practices and to contribute to the development of smart city capabilities in South East Queensland.

PRINCIPLES

Technology and connectivity:

- Align the use of technology across QUT’s Estate with the guiding principles and strategies of QUT’s Digital Strategy.
- Use technology to augment and enrich the experience and operation of QUT’s physical facilities and support all aspects of sustainability.
- Place end users at the centre of all strategies to integrate technology with the built environment.
- Provide seamlessly integrated digital experiences online and on-campus that are high-quality, personalised and flexible.
- Leverage technology to support connectivity, engagement and collaboration across QUT’s distributed physical Estate.
- Use technology to positively contribute to the experience and operation of the broader urban networks surrounding QUT’s Estate.
- Jointly leverage QUT’s Digital Strategy campus initiatives with digital initiatives of local and State governments to improve the student and community experience and drive efficiencies.
- Improve student experience through spaces that enable integration of research and teaching technology (e.g. integrate immersive virtual research environments with simulated teaching environments).

5.5 SPACE AND FACILITIES

OBJECTIVE

Provide spaces and facilities that support QUT’s functional requirements and delivery of the Blueprint and related University strategies.

PRINCIPLES

Provide a diverse range of environments that support:

- High-quality, flexible and collaborative learning environments
- Contemporary, pedagogical research and teaching
- Fit-for-purpose specialist research facilities that support the specific needs of a wide range of disciplines
• Prototyping and experimental learning and research environments that support staff and students to build their capabilities

• High-quality work environments that enable collaboration and foster a sense of community

• Short-term projects and community and industry engagement opportunities.

Flexible and engaging spaces:

• Create spaces that facilitate connection, engagement and partnership building and that enable organisational agility, efficacy, innovation and capability building.

• Establish flexible, multipurpose environments that can respond to the dynamic change and disruption occurring in the University sector.

• Provide greater on-campus opportunities and spaces for informal individual and collaborative learning and study.

• Leverage existing and emerging technology and effectively integrate physical and virtual resources.

• Provide multidisciplinary spaces that support the integration of research, learning and teaching, entrepreneurship and industry partnerships.

• Progressively renew teaching spaces to support contemporary, pedagogical practices for flexible and collaborative learning.

• Provide teaching and learning spaces that are suitable for new and emerging graduate and continuing professional education programs.

• Provide research and innovation spaces that enable high-impact, transdisciplinary research in partnership with end users that allows for scalable research.

• Provide spaces that showcase research activities to promote student, community and industry engagement.

• Enhance and retain existing areas of significant retail, sport and recreation services, and activities that complement surrounding areas and future development.

• Establish new retail, sport and recreation facilities that create and enhance vibrant, social environments on campus in tune with market trends, as well as locations that align with student, staff and community demand, and site suitability and capability.
5.6 IDENTIFY AND CHARACTER

OBJECTIVE

Provide a consistent, high-quality experience across all sites within the physical Estate while also preserving and reinforcing the distinct identity of each individual site.

PRINCIPLES

All QUT sites will be identifiable across Brisbane by high-quality landmark architecture, and landscaping and iconic signage. All site edges will be treated as key frontages that promote integration with the adjacent area and offer a permeable and inviting threshold to visitors and the local community. Each site will have a unique sense of place underpinned by the following:

- Welcoming, well-branded gateways
- Views and access to the surrounding natural and urban setting
- Notable contemporary and heritage buildings
- A unique pattern of buildings, streets and significant open spaces that is reinforced by new development
- A sense of integration will be achieved for each site through linking open spaces, landscaping, and paths and roads that have consistent materials, plantings and colour
- Clearly identified and inviting places and spaces for social learning and informal gathering, meetings and events
- Unique site topography will be embraced to maximise views and vistas and to create easily traversable pedestrian connections.

5.7 BUILT FORM

OBJECTIVE

Provide buildings that enhance all aspects of the on-campus experience and that are exemplars of high-quality, sustainable architecture that is relevant and sympathetic to its surrounding context and environment.

PRINCIPLES

All buildings will be of a high architectural standard. New buildings and major refurbishments of existing buildings will be shaped by a range of architectural styles but will also consider the character of the campus (or distributed site) as a whole in relation to the surrounding context and adjacent architectural forms. A balance between unity and diversity of built form will be targeted to yield the following benefits:

- Built form with a homogeneous character contributing to places that are memorable and have a sense of continuity
- The introduction of diverse built form contributes to visual interest and an attractive environment
- Demonstrate a commitment to high quality design principles appropriate to the climate e.g. sub-tropical design principles

Equal consideration will be given to the external impact of buildings, the internal functionality, and the relationship between indoor and outdoor spaces.

Attributes to be incorporated into all new buildings include:

External:

- Active frontages that positively address the public domain.
- Form and orientation that help define pedestrian routes and adjacent spaces.
- Tower buildings that minimise overshadowing of adjacent buildings and spaces.
- Awnings and undercrofts that provide shade, shelter and amenity for pedestrians.
- Loading and service areas designed to minimise impact to the public realm both visually and in terms of sound.
- Rooftop services that are enclosed and concealed as part of the building design.
- External lifts that facilitate improved accessibility across multiple levels of the campus.
• Building heights and massing that achieve a balance between maximising site yield and being sympathetic to their surrounding context.

• Minimise risk of floodwater entry into existing buildings through appropriate floodwater entry barrier and protection measures.

• No floodwater to enter a new Gardens Point building for a flood up to 1 metre above RL 5.5 metres (Australian Height Datum) or the 1% annual exceedance probability flood level from the Brisbane River Catchment Flood Study (2017), whichever is the higher.

Internal:

• Ground floors that have high ceilings to support flexibility of use and that are outwardly focused and permeable providing connections through to external spaces.

• Modular, flexible and adaptable configurations of internal spaces, fittings, fixtures and building services to accommodate expansion, growth and changing needs.

• Fit-for-purpose spaces and facilities that fully support and advance the contemporary, functional requirements of learning, teaching, research and professional functions.

• High-quality environments that maximise natural light and provide optimal indoor air quality.

• Subtropical designs that, where possible, provide occupants with a choice to access naturally ventilated areas.
5.8 TRANSPORT AND MOBILITY

OBJECTIVE

Provide a superior experience to all groups accessing QUT’s Estate and positively contribute to congestion management and reduced carbon emissions related to transport activities across South East Queensland.

PRINCIPLES

Through providing and encouraging diverse, cost effective and sustainable modes of transport, as well as emerging technology, to and from QUT sites, QUT will:

- Provide greater connectivity and cohesion between the distributed sites that make up QUT’s total Estate
- Minimise adverse parking and traffic impacts on areas surrounding QUT sites
- Minimise QUT’s contribution to traffic congestion across the broader South East Queensland transport network
- Promote health and wellbeing
- Encourage greater use of public transport services to and from QUT sites
- Improve active transport, such as bicycle and pedestrian access, to and from QUT sites
- Reduce single occupant vehicle travel, providing options for ride sharing, carpooling and other modes of transport and access to new technology for personal decision making on the best way to travel
- Embrace emerging technology to optimise mobility solutions, providing digital access to personal mobility solutions for QUT staff and students.
5.9 GREEN SPACE AND OPEN SPACE

OBJECTIVE

Enhance the campus experience whilst reinforcing the campus identity and demonstrating QUT’s commitment to environmental sustainability.

PRINCIPLES

Pedestrian connections and landscaping:

- Existing areas of significant open space and green space will be retained and enhanced.

- New open and green spaces will be introduced at locations that reinforce the existing public space network and that facilitate greater connectivity across campus.

- Open and green spaces will enhance campus identity and provide spaces for social learning, informal gathering, recreation, and events.

- High-amenity pedestrian connections will be established between significant open and green space.

- Landscaping will recognise the intrinsic quality and character of each campus and site, having regard to the local biodiversity, topography, aspect, heritage, geology, access and legibility.

- Landscape design will be complementary and integrate with building and services design and operation, biodiversity objectives, and campus design principles.

- Landscaping will improve campus amenity and benefit user health.

- Local, indigenous, and drought tolerant planting will be prioritised, except where heritage-related guidelines specify otherwise.

- External furniture, lighting, signage, planting and hardscaping will be of consistent materials and colours reinforcing a sense of integration.

- Public art will be incorporated into the campus and used in a meaningful way to enhance the campus experience and to support wayfinding and campus legibility.

- Outdoor areas will be developed with a high degree of climate responsive design to provide shade and breezes in summer and rain protection and windbreaks in all seasons.

- Landscaping will be used to soften hardscape, provide variation in materials and provide substantial shade coverage.

- Designs will account for our subtropical climate and contribute to an amenity-rich environment.

- Designs for individual or groups of buildings will be aware of the problems of wind turbulence and wind tunnelling, particularly at the Gardens Point site.
5.10 CIRCULATION, ACCESS, WAYFINDING AND PARKING

OBJECTIVE

Ensure pedestrian wayfinding and connections across campus are convenient, pleasant, safe and accessible.

PRINCIPLES

Visibility and accessibility:

• Highly visible, well-branded gateways will be established at key entry points into QUT sites, and vehicle movement on site will be minimised.

• Well defined and separate vehicular, cycle and pedestrian connections will be created where possible to avoid conflict, with pedestrian movement being prioritised.

• High-amenity, primary pedestrian connections will be established between key destinations and new connections across and into campus that reinforces the existing urban structure.

• Accessible connections will be provided between site levels, either externally or with “through-building” connections. Campus edges will be permeable and provide connections to adjacent sites.

• Consistent materials, colours and signage will be used across campus to unify all aspects of the campus into an integrated, legible and accessible whole.

• Leverage technology to support circulation, access, and wayfinding on-campus through smart technologies including online applications, digital signage, and autonomous technologies.

• Equity of access will underpin all aspects of planning and development. Pedestrian connections and significant open spaces will be safe, well-lit, have adequate surveillance and access to campus security, and incorporate hostile vehicle mitigation measures.

• Parking and end-of-trip facilities will be located at consolidated points near to site perimeters.
5.11 SERVICES INFRASTRUCTURE

OBJECTIVE

Ensure there is adequate, reliable services infrastructure to support the functional and strategic needs of the University, including QUT’s commitment to all aspects of sustainability.

PRINCIPLES

Infrastructure services, provisions and enhancements:

• Integrate knowledge of services infrastructure opportunities and constraints with estate planning and development.

• Ensure all infrastructure services (water, wastewater, stormwater, electricity, gas, building climate control, data and wireless networks etc.) are reliable and sufficient at all times.

• Enhancements to services infrastructure will be provided progressively as part of new developments, except for priority enhancements required to maintain service reliability and sufficiency.

• All infrastructure services that may be affected by floodwater, e.g. electricity substations, digital infrastructure hubs, are to be placed no lower than 1 metre above RL 5.5 metres (Australian Height Datum) or the 1% annual exceedance probability flood level from the Brisbane River Catchment Flood Study (2017), whichever is the higher.

• Consult in a timely manner with the relevant service utility providers on the potential development and growth demands of each Estate site, and identify utility service providers’ lead times for external works to supply these needs for development planning, design and construction programming.

• Provision of infrastructure facilities will ensure a reduction in the Estate carbon footprint.

• Reduce reliance on utility service providers for water, energy, potable water use, net energy purchase and the costs of these services to the University.

• Consolidation or expansion of teaching laboratories and research intensive laboratories will be directed into selected buildings that are the most suitable in terms of building services and the structural needs of these laboratories, rather than distributed in a number of discreet buildings that are of variable suitability for these uses.
OBJECTIVE

QUT’s physical Estate demonstrates QUT’s commitment to environmental sustainability and carbon emissions reduction.

PRINCIPLES

The following principles are fundamental considerations for the whole Estate.

Minimise energy and water consumption

Minimise the consumption of energy and water through consideration of:

• Provision of centralised chilled water stations and chilled water storage tanks
• Building design that includes passive energy conservation solutions such as building orientation, sun shading and screening, materials selection, etc.
• Deployment of technologies to optimise operation and monitoring of building engineering services (i.e. energy, water) to achieve best environmental footprints and efficiencies
• Maximising the capacity of renewable energy infrastructure on campus
• Development of a large scale renewable energy facility off-campus to significantly reduce the University's carbon footprint and purchase of grid-supply electricity

• Opportunities to harvest storm water and waste water sources for reuse

• Use of drought resistant endemic native plants in campus landscapes to minimise water consumption associated with landscape irrigation.

Enhance campus biodiversity

• Natural ecosystems on the Estate should be preserved.

• Native vegetation and ecosystems and their contribution to ecological processes and services should be treated as valuable assets.

• Manage campuses and distributed site landscapes to protect and support species endemic to a particular campus or site and minimise pest species.

• Provide for the restoration of the ecological and environmental condition of Estate land where necessary.

• Establish and implement an Estate Landscape and Public Realm Strategy that incorporates enhancing natural biodiversity and campus amenity.

Minimise environmental impacts

• The design and development of the QUT estate does not impact negatively on the natural environment on neighbouring property, for example in the form of noise and light, stormwater run-off, soil erosion, groundwater contamination, habitat and ecosystem networks and corridors, and visual impact.

Implement environmental sustainability transport strategies

• Estate design and development should include infrastructure to promote active transport, increase use of public transport and ride share options, and promote the use of zero and low emissions vehicles.

Maximise the utilisation of space

• Monitor, evaluate, and improve utilisation of space to minimise unnecessary consumption of scarce resources.

• Building design should provide spaces that are flexible, adaptable and efficient in the use of resources.

• The University's Design Standards and building design are focused at improving the utilisation of space in all of its buildings.

Minimise waste to landfill

• Campus design and development should incorporate opportunities for on-campus resource recovery facilities, associated waste collection activities, reduction of individual and organisational waste disposal, and opportunities for recycling.

• Products used for new developments should be durable and lasting so that unnecessary waste is avoided.

Climate change adaptation

• The design and development of the Estate should consider the potential impacts of climate change impacts such as sea level rise, bush fire, extreme weather events, hotter climate, flooding, and extreme drought.

• Critical infrastructure should be located above predicted long term sea level rise and flooding levels and increased weather protection should be provided along campus access connections, and building design should be more aligned with that of North Queensland’s cyclone region.
5.13 HERITAGE

OBJECTIVE

Celebrate and preserve the unique heritage and cultural attributes of QUT’s physical Estate.

PRINCIPLES

Heritage and conservation:

• Respect and enhance the heritage value.

• The conservation and acknowledgement of heritage and culturally significant features of QUT’s physical Estate will be an integral outcome of all development activities.

• Improve the usability, activation and amenity of key heritage sites and buildings through sensitive refurbishments and adaptations for new uses.

• New buildings and public realm developments will be sensitive to their heritage context.

• Heritage management plans and protocols will be reviewed, updated as necessary, and adhered to for planning, design, development, operation and maintenance activities.

• Provide opportunities on the Estate for recognition of Traditional Owners and their cultural heritage.
6.1 CURRENT CAMPUS

The Gardens Point campus is located in the Brisbane central business district (CBD) on a prominent peninsula of the Brisbane River. The campus is bounded by a number of iconic Brisbane landmarks – City Botanic Gardens, Queensland Parliament House and the Brisbane River – and is positioned across the river from South Bank Parklands and Kangaroo Point Cliffs. The campus has a distinct identity characterised by a unique subtropical inner-city location, a mix of heritage and contemporary built form and a fine grain, orthogonal grid pattern defined by the existing network of buildings, streets, laneways and open spaces. The campus is part of the Brisbane city fabric, a short walk from the CBD and South Bank. Its unique identity, accessibility, amenity and community services attract many visitors.

Its heritage is an integral part of the campus’ character. The prominent peninsula where the campus is located was reserved as public and government gardens for the convict settlement in the 1820s. Following the establishment of Queensland as a separate State in 1859, Old Government House was constructed from 1860 to 1862 at Gardens Point and Parliament House from 1865 to 1867. Old Government House was the first major project completed by the newly formed colony of Queensland and is located at the heart of the Gardens Point campus.

From 1862 until 1910, the House was the private residence of Queensland’s governors. Following the relocation of the governor’s residence to Fernberg at Bardon, the House was dedicated as the initial home of the new University of Queensland, with five acres around it set aside for both a university and a technical college.

There was strong support for technical education in Queensland at that time. Queensland was the only Australian State to plan and construct a complex of buildings for a technical college, following investigations of similar arrangements in America and Britain. The initial development of the site for the former Brisbane Central Technical College began in 1911 and was completed and opened for classes in 1915. Although altered and extended over the years, the former Brisbane Central Technical College represents an important era in education in Queensland and is the most extensive group of technical college buildings of the period with a unity of scale, design and materials.

The former Brisbane Central Technical College was absorbed into the Queensland Institute of Technology in 1965, which was reconstituted as the Queensland University of Technology in 1989. The University of Queensland fully relocated from Gardens Point to its St Lucia campus in 1972.
GARDENS POINT LOCAL CONTEXT.

AERIAL PHOTO OF THE BRISBANE CITY CENTRE AND SURROUNDS (PHOTO APRIL 2016).

Brisbane CBD
City Botanic Gardens
QUT Gardens Point
South Bank Parklands
Kangaroo Point Cliffs
Old Government House was placed on the Queensland Heritage Register in 1992, as one of Queensland’s most significant historic buildings and as such was the first building in the state to be State Heritage listed. The former Brisbane Central Technical College was placed on the Queensland Heritage Register in 1999.

After its full restoration in 2009 by QUT, Old Government House site provides an important insight into Brisbane’s early colonial life. There are now 11 heritage-listed buildings on the campus that house some of QUT’s academic and administrative activities as well as popular public venues including a museum and an art gallery. The contrast and interaction between legacy and modern buildings on the campus is highly regarded by QUT and campus visitors.

The use of the site as a university campus has grown significantly since 1911 when around 80 students attended the first year of teaching by the University of Queensland. Some 23,500 undergraduate and 6,720 post-graduate students are enrolled (as at December 2017) at the campus for studies and research in the fields of Building and Planning, Business, Design, Engineering, Health and Community, Information Technology, Languages, Law and Justice, and Science and Mathematics. The campus is the workplace of some 5,130 full-time, part-time, casual and sessional academic and professional and technical staff. The campus occupies 7.3 hectares of land (excluding the under-freeway car park) with a total building portfolio of 26 buildings and approximately 185,000 m² gross floor area (or 100,000 m² usable floor area).

The campus now is home to a number of heritage, arts, retail, sporting, entertainment and new world venues, including the digital Cube, Old Government House, Gardens Theatre, QUT Art Museum, a sizeable gym with an Olympic-sized pool, and large event spaces such as Room 360 with 360 degree panoramic views. The popular Brisbane City Council owned open air Brisbane Riverstage concert and entertainment venue adjoins the campus. There are a number of campus venues that are available for hire and they are regularly booked for community and industry events and conferences.
GARDENS POINT CAMPUS (SCIENCE AND ENGINEERING CENTRE ILLUMINATED) AS SEEN FROM THE KANGAROO POINT SIDE OF THE BRISBANE RIVER.
6.2 OPPORTUNITIES AND CHALLENGES

Over the last three decades significant development at the Gardens Point campus has transformed the campus into a vibrant destination of choice for students, staff and visitors. Over this time, key components of the campus have been converted into high-amenity, permeable environments that are well connected with the surrounding urban fabric. Notwithstanding the significant development that has occurred to date there still exists a range of opportunities to further improve and develop the campus, including:

- Enhancing legibility, orientation and wayfinding
- Increasing permeability and connection to adjoining sites along several edges of the campus
- Improving pedestrian movement across the challenging campus topography
- Reducing the impact of delivery networks and building services infrastructure in some parts of the campus
- Addressing conflict between vehicles, pedestrians and bicycles along key access ways
- Making best use of a campus location that offers high visibility and accessibility to the general community

- Transforming teaching spaces for new pedagogical methods and strategies
- Maximising the amount and amenity of open spaces, and formal and informal learning and teaching spaces
- Further celebrating and enhancing the built and cultural heritage.

Key challenges for future campus development include:

- The single point of access for vehicles into and out of the campus between the freeway ramps and Gardens Point Road. Access through this point is at capacity and regularly experiences periods of congestion which will be further exacerbated through future development and occupancy of adjacent and nearby sites
- Minimal vacant land available for development
- A limited number of buildings are suitable for redevelopment as a significant number of buildings and sites on campus are heritage listed and so have limitations on the extent to which they can be redeveloped
- Current buildings are at, or approaching, capacity for teaching and research
- Addressing the current shortage of student informal study and collaborative group areas, covered spaces and open areas, spaces for student entrepreneurship, postgraduate professional development, and short-term and industry engagement projects
- Minimising the Brisbane River flood risks.
FIG 6.2.1 DEVELOPMENT OPPORTUNITIES AND CHALLENGES AT QUT GARDENS POINT.

LEGEND
- Poorly defined and congested campus gateways
- Limited room for expansion without demolition
- Pedestrian, bicycle, vehicle movement clashes
- Dramatic east-west topography change
- Limited interaction with edges due to heritage fabric
- Limited & constrained open spaces
- Poor utilisation & engagement of heritage buildings
- Estimated 1 in 100 year (Q100) flood extent
6.3 DEVELOPMENT CONTROLS

The planning and approval of proposed development on Gardens Point campus is controlled by a number of components of the statutory planning framework. The extent of these controls over the campus is illustrated in Figures 6.3.1 and 6.3.2. An overall description of these development controls is included in Section 3.4.1. The application and operation of these controls for planning and development on Gardens Point campus is outlined below:

PLANNING ACT 2016

As shown in Figure 6.3.2, most of the Gardens Point campus is currently designated as Infrastructure under the Planning Act 2016. The relevant Certificate of Designation describes QUT Gardens Campus as:

“A facility intended primarily as an Education Facility, described as: a place of higher education with the associated teaching, research, social and public support functions, including car parking, cultural and sporting facilities, residential and conference accommodation, together with a range of commercial activities allied with the university.”

The University does not seek to amend the existing Infrastructure Designation and will continue to exercise its relevant planning and development responsibilities in accordance with the current Infrastructure Designation and the Planning Act 2016. Proposed development that is within the provisions of the Infrastructure Designation is assessed through the University’s own governance processes and powers as provided by the QUT Act, with no further development approvals required under the Planning Act, except for approvals required under other legislation.

Where a proposed development on the campus is not within the provisions of the Infrastructure Designation, a development application for assessment is made to the local assessment manager, in this case the Brisbane City Council. The Brisbane City Plan 2014 (the City Plan) is the applicable local planning instrument. The development assessment process also has regard to state requirements, as outlined in the State Planning Policy, the South East Queensland Regional Plan and State Referral Triggers. The application of state and local planning requirements will depend on the nature and intensity of the proposed development and the subject site’s locational characteristics in relation to public infrastructure and heritage places.

As shown in Figure 6.3.2, a major part of the Gardens Point campus land and buildings is listed on the Queensland Heritage Register. Proposed developments in these areas are subject to controls provided for under the Queensland Heritage Act 1992.

LAND ACT 1994 AND LAND TITLE ACT 1994

The land tenure of the Gardens Point campus physical Estate includes state land reserve, freehold land, lease agreements and easements. As shown in Figure 6.3.1, a major part of the land on which the Gardens Point campus is located is state reserve for educational purposes held in trust by QUT. A Trust Land Management Plan was developed in accordance with the Land Act 1994 and was approved in December 2013 to have effect for 20 years to November 2033.
LEGEND

- Reserve held in Trust by QUT
- Land Lease from State
- Freehold owned by QUT
- Easement

FIG 6.3.1 QUT GARDENS POINT CAMPUS LAND TENURE.
FIG 6.3.2 QUT GARDENS POINT DEVELOPMENT CONTROLS.

LEGEND
- Property Boundary
- Infrastructure Designation Area (Educational Facility) as designated 20.4.2000
- State Heritage Listed Building
- State Heritage Listed Sites boundary
6.4 CAMPUS DESIGN STRATEGIES

This section identifies specific planning and development strategies for QUT’s Gardens Point campus consistent with the integrated planning and design principles outlined in Section 5.

6.4.1 A DISTINCT CAMPUS IDENTITY

Future development of the Gardens Point campus will further cultivate the distinct identity of the campus that is characterised by:

- A mix of heritage and contemporary built form
- An orthogonal grid pattern defined by the existing network of buildings, streets, laneways and open spaces
- A unique subtropical, inner-city location, bound by the expansive City Botanic Gardens and the iconic Brisbane River.
6.4.2 UNLOCK SITES AND SPACE FOR EXPANSION

- Meet the University’s projected demand for floor area by decanting and redeveloping underperforming facilities and by developing on vacant sites.

- Consider the potential to change or develop space by relocating functions and activities from Gardens Point to Kelvin Grove campus developments.

**Legend**

- Currently vacant and underutilised sites for potential development.
**6.4.3 IMPROVE GATEWAYS, WAYFINDING AND CONNECTIVITY**

- Introduce new facilities and public realm improvements to foster a formal arrival experience at key gateways that feed into the wider movement network.

- Use new development opportunities to achieve greater engagement with the river and City Botanic Gardens and leverage views to surrounding natural amenity.

- Undertake public realm improvements along key campus edges that promote greater integration with the adjacent area and offer a permeable and inviting threshold to visitors and the local community.

**LEGEND**
- Engagement opportunities
- Campus gateways
- Major pedestrian thoroughfares
6.4.4 PRIORITISE PEDESTRIAN MOVEMENT AND CONNECTIONS

- Redevelopment of the Riverside Entry site to create new direct pedestrian connections between the upper and lower campus, both external and through-building connections.

- Public realm improvements that establish legible, high-quality, safe, primary pedestrian connections along easily traversable routes linking key campus destinations.

- Maintain the existing network of elevated walkways and through-building connections.
**6.4.5 IMPROVE ACCESS TO TRANSPORT MODES**

- Limit parking and high capacity vehicular access to the lower edge of the campus through Gardens Point Road and Lamington Drive.

- Establish a legible, high amenity, shared transport spine of parking, electric vehicle charging, shared vehicles, bicycle storage and end-of-trip amenities along Lamington Drive, in adjacent buildings, and in a Riverside Entry Precinct redevelopment.

- Use redevelopment of the Riverside Entry site to address existing conflict in this area between vehicles, bicycles and pedestrians and improve active transport opportunities.

- Establish a legible, high-amenity connection between the campus and the Brisbane City Council ferry terminal.

- Provide digital signage on campus which provides real-time public transport and mobility information.
6.4.6 IMPROVE OPEN AND GREEN SPACE NETWORK

- Enhance and retain existing areas of significant open space and green space.
- Enhance and protect the native and heritage protected vegetation and ecosystems of the campus.
- Use the redevelopment of the Riverside Entry site to unlock gains in flexible, open space.
- Establish high amenity, pedestrian connections between significant open and green spaces.
- Create more covered spaces and walkways to enable better use of outdoor facilities, access around campus, and improved pedestrian weather protection.
6.4.7 CELEBRATE CAMPUS BUILT AND CULTURAL HERITAGE

- Improve the performance and activation of The Yard Heritage Precinct (situated next to a main gateway to the University) and laneways through enacting public realm enhancements, sensitive refurbishments and adaptations for new uses, and emphasising the values, quality and amenity of the heritage buildings.

- Renew and manage sites and buildings that are heritage listed in accordance with heritage approvals and management plans.

- Contribute to and create a sense of belonging and place for Indigenous peoples on campus and provide opportunities that enable everyone to experience the Indigenous culture.
6.4.8 QUALITY RETAIL, RECREATION AND PUBLIC VENUES

- Enhance and retain areas of significant retail and recreation services and public venue activities to complement surrounding areas and future development.

- Establish new retail facilities in line with market trends to create vibrant environments that enhance social learning and interaction on campus and in locations to accommodate student and staff demand.

- Sustain existing and establish new recreation facilities in line with demand trends to support health and wellness for students, staff, and local community, and to attract visitors.

- Support on-campus public venues for arts, theatre, event spaces and child care, in line with market trends and consumer demand.

**LEGEND**

- Public venue
- Retail
- Recreation
6.4.9 ESSENTIAL SERVICES INFRASTRUCTURE

- Ensure campus infrastructure services meet future needs and the University’s objectives regarding its digital and wireless infrastructure, carbon footprint, water and energy conservation, waste management, redundancy risks, whole of life cycle management and value for money.

- New long-term teaching and research intensive laboratory spaces and facilities should be directed into buildings with the most suitable building services and infrastructure, such as M, S, Q, P buildings, and as part of new building developments.

- Prepare a high level review of key campus infrastructure services for campus planning and development. Ensure all infrastructure services are capable of meeting potential new developments in a timely, efficient and sustainable manner.
6.5 CAMPUS PLANNING AND DEVELOPMENT

The planning and future development (and major refurbishment) of buildings and open spaces at the Gardens Point campus will serve as a significant catalyst for campus renewal as well as a mechanism for accommodating the changing space needs of the University as it continues to deliver on its strategic objectives through an integrated approach to the planning and development of the University’s entire Estate.

This section identifies short to medium term and long-term opportunities for priority areas of the campus that could be developed to meet the changing needs of the University. The short to medium term is notionally in the next 10 years and the long term is later. Four on-campus priority areas or precincts have been identified, based on the opportunities and challenges outlined in Section 6.2. They are:

- Riverside Entry Precinct
- Intensive Laboratory Locations
- The Yard Heritage Precinct
- Gardens Theatre Precinct.

The objectives for the planning and development of the campus are to:

- Optimise the activation and uses of the existing buildings and open spaces through targeted refurbishments that improve student, staff and visitor experiences.
- Enhance pedestrian access, connectivity and amenity.
- Make best use of the limited new development opportunities.
- Ensure the campus continues to be a key part of Brisbane’s inner-city fabric.
- Sustain the interaction between the heritage assets of the campus and the wider urban environment.

The application of the long-term planning and development objectives to the four priority areas or precincts is described in the following sections. Individual developments that may arise from the planning and development opportunities identified in the priority areas or precincts would be subject to detailed planning and development assessments and approvals consistent with the development controls outlined in Sections 3.4.1 and 6.3.
FIG 6.5.1: 3D MODEL OUTLINING THE FOUR PRIORITY AREAS AT GARDENS POINT.
6.5.1 RIVERSIDE ENTRY PRECINCT

The Riverside Entry Precinct currently provides a large area of grassed and vegetated open space that has a low level of use compared to the rest of the campus. As shown in Figure 6.5.1.1, it has limited and indirect connectivity into the campus heart, is a poorly defined arrival and wayfinding experience, and has significant pedestrian and vehicle conflict zones dominated by vehicles accessing parking and service/loading areas.

Renewal and redevelopment of this Precinct offers a crucial opportunity to enhance the access to the Gardens Point campus from the Riverside walk way and from the approach from South Bank provided by the Goodwill Bridge. Further, the enhancement and strategic development of this Precinct has the potential to create additional open space contiguous with and at the same level as the heritage site of Old Government House and the associated Lady Bowen Lawn. This would create a significantly larger open courtyard that would also be directly accessible from the riverside level. It also provides the opportunity to establish a generous public stairway to connect the lower level of the riverside approach to the upper level of the campus.

Development on this Precinct could provide significant additional undergraduate learning and teaching, research, postgraduate study space and academic and professional workspace, offer locations for large events and prominent research, and include a teaching and innovation hub facility.

FIG 6.5.1.1: RIVERSIDE ENTRY PRECINCT OPPORTUNITIES AND CONSTRAINTS.

**LEGEND**

- Accessible ground level access
- Underutilised/vacant site
- No access to ground level
- Opportunity for new open space
- Current parking/loading zones
- Vehicle/pedestrian conflict zone
- Goodwill Bridge arrival gateway
- Non-accessible firestairs
- Opportunity for connection
Overall, the development of this Precinct would enhance the campus’ presence, provide greater activation and use of the Precinct, enrich the arrival experience from the Goodwill Bridge and significantly improve the pedestrian access into this quarter of the campus while reducing conflict between pedestrians, vehicles and traffic at this busy access point.

Preliminary concept assessments indicate development on this Precinct could be planned in one or several stages. The Estate Master Plan proposes that it proceed in one stage that provides:

- A generous open and public realm on a new decked space adjacent to and at the same level as the Old Government House site
- A platform and stairway/escalator connection to the existing pedestrian walkway between P Block and the Kindler Theatre and down to the Goodwill Bridge level campus entry, separating pedestrians from vehicles
- A new built form below the new deck for formal and informal learning, teaching spaces and research laboratories
- A new multistorey gateway building for University and partnership purposes that also provides a pedestrian spine and additional decked space.

The prominence of what will be a landmark building and overall redevelopment will entail a high quality of design resolution. Detailed assessments and designs of the form and nature of such redevelopment are
yet to be undertaken and consideration would need to be given to the potential impacts of the built form, landscape, and cultural and historical significance of Gardens Point.

Early concepts of what may be considered for the redevelopment opportunity associated with this Precinct are shown in Figures 6.5.1.2 through 6.5.1.5.

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**LEGEND**

- New built form concept
- Existing building
- Newly activated zone
FIG 6.5.1.5: POTENTIAL CONCEPT VISION OF DEVELOPMENT FOR THE RIVERSIDE ENTRY PRECINCT.
6.5.2 INTENSIVE LABORATORIES LOCATIONS

Laboratory spaces are reaching capacity at Gardens Point with varying degrees of wet and dry lab spaces in E, R, W, M, S, Q, O Podium and P blocks. Research and teaching laboratories will continue to be a significant area of growth. To facilitate this growth, specialist laboratories with high-building services requirements should be collocated in buildings that can support the building services and structural needs of those laboratories. Collocation of these specialist laboratories in suitable buildings will allow for better utilisation of spaces across a campus whose existing buildings are at, or are approaching, capacity and has minimal vacant land for new development.

E, R and W blocks are Queensland State Heritage listed buildings. Their heritage constraints limit their suitability and operation as intensive laboratories. Over time these laboratories need to be relocated out of these buildings and into more appropriate spaces as they become available. Q and M blocks have been identified as most suitable for creating new and additional research and teaching intensive laboratories. The existing laboratories in P, S and O Podium blocks should be retained and renewed as needed.
The opportunity for a new development at Gardens Point campus that delivers new laboratories with intensive building services is limited to a potential future building development on the vacant land in the Riverside Entry Precinct. While the development is proposed for the short to medium term it will not assist in addressing the current and emerging needs regarding intensive laboratories.

As part of optimising the entire Estate, short to medium-term initiatives for new developments at Kelvin Grove campus and the network of distributed sites should plan for new laboratory spaces to also alleviate pressure for specialist spaces at Gardens Point. For example, there is the opportunity as a short-term initiative to plan for collocating health-related teaching activities from Gardens Point to the Kelvin Grove campus, which could significantly reduce demand on existing laboratories at the Gardens Point campus and enable the development of new laboratories in buildings such as Q and M blocks.
6.5.3 THE YARD HERITAGE PRECINCT

The current campus infrastructure in The Yard Heritage Precinct illustrates the evolution of education in Queensland’s history. The heritage buildings shown in Figure 6.5.3.2 as A, E, F, G, H, J, R, W and U blocks, along with the surrounding open space, are Queensland State Heritage listed in order to protect and preserve a surviving part of the early urban fabric of Brisbane and its association with the early development of technical education in Queensland in the early 20th century. These are the remnants of the former Brisbane Central Technical College, the only technical college in Queensland designed and constructed as a complex of buildings which commenced classes in 1915 and continued through to 1965. The site is aesthetically and culturally significant and contributes to a larger context that connects to the heritage trail along George Street through the city.

Sensitive adaptive reuse and revitalisation of historic buildings offer potential social, economic, cultural and environmental returns. The possibility exists to strengthen the remaining facilities to create a vibrant student-focused Precinct that is strategically located near a primary gateway into the campus along George Street. The Precinct opens up the opportunity to reactivate underutilised spaces with heritage buildings improving viability, conservation and long-term maintenance while preserving their heritage significance.
The George Street gateway is a main gateway to the University, which plays an important role in the sense of arrival on campus and into the Precinct. As such it should be a welcoming, outward facing and inviting experience, however there are currently significant constraints and challenges within the Precinct, including:

- Inactive public realm of courtyard and laneways with limited useability and amenity
- Poor connection between buildings and with other campus precincts
- Poor integration between indoor and outdoor
- Poor visual engagement with heritage buildings
- Poor functionality and yield.

**LEGEND**
- Connections
- Courtyard entrances
- Limited indoor/outdoor integration
- Heritage listed buildings
- Entry gateway

**FIG 6.5.3.2** THE YARD HERITAGE PRECINCT OPPORTUNITIES AND CONSTRAINTS.
Social and collaborative learning experiences form an integral part of QUT campus life for students. The Yard Heritage Precinct is an opportunity to house a mix of services and student engagement spaces, formal and informal learning spaces, and staff related spaces aligned with student services and engagement, so that the campus expands its on-campus options for students with collateral benefits for staff and visitors. The range of functions and experiences that could be housed in the Precinct would further develop student life skills that an on-campus university education can provide for both undergraduate and postgraduate students.

This is also an opportunity to renew and celebrate the heritage-listed buildings and surrounding open spaces to make the Precinct a welcoming, outward facing and inviting experience.

Detailed assessments and designs of the form and nature of renewal and redevelopment of this Precinct are yet to be undertaken. The planning and development of the renewal of sites and buildings in the Precinct that are listed on the State Heritage Register would be subject to the appropriate assessment and approvals associated with their heritage status.

The overall objective for The Yard Heritage Precinct is to create a human-scaled student-focused Precinct through sensitive adaptation, renewal, and reuse of the existing facilities by:

- Converting the ground floors to be contemporary, social and communal environments with strong connections and permeability to the outside areas
- Improving the building frontages and entry points to create greater connection between the indoor and outdoor environments
- Achieving consistent accessibility and enhancement between the indoor and outdoor environments
- Strengthening connections to the campus library and its student services and study spaces and the surrounding context through strong pedestrian links back to the Library (V block through and around H and E blocks) and elsewhere on the campus
- Redefining the courtyard and laneway spaces and connections between buildings as purposeful, inviting environments for students, staff and visitors.

Planning for short to medium-term redevelopment initiatives for The Yard Heritage Precinct is proposed to focus on:

- A laneways project for connecting the buildings and transforming larger open space and associated laneways into a broader integrated network of activated open spaces,
- Sensitive adaptation of the buildings for their renewal and repurposing, commencing with G and E blocks
- Transforming The Yard courtyard into a vibrant public space that is covered with an iconic roof structure to create a more usable outdoor environment capable of housing significant University and community events and gatherings
- Improving the connectivity of this Precinct and Main Drive with the River and the Gardens Point City Cat terminal, particularly through MacGregor Lane.

These proposed initiatives would provide general spaces while also improving access to these buildings and their visibility, and celebrating the site’s heritage buildings and their cultural significance. The initial schematic concepts representing an enriched usage of the Precinct are shown in Figures 6.5.3.3 through 6.5.3.7.

The short to medium-term planning would also include an assessment of opportunities to improve the Gardens Point Road gateway area associated with W and R Blocks, having regard to neighbouring developments, vehicle and active transport access and connectivity, and the future uses of W and R Blocks following implementation of the strategies for the Intensive Laboratories Locations.
FIG 6.5.3.3: POTENTIAL CONCEPT VISION OF IMPROVED G – V BLOCK CONNECTION.

LEGEND

1. New connection with reconfigured levels to provide a direct and seamless connection from V Block to The Yard
2. Removal of existing concrete stair connection
3. Clear line of sight to The Yard courtyard from V Block, celebrating the heritage character and amenity
4. Building entry levels aligned to directly address the connection

FIG 6.5.3.4: PHOTO OF CURRENT G – V BLOCK CONNECTION AT QUT GARDENS POINT.
The long-term renewal vision for The Yard Heritage Precinct is to:

- Finalise all aspects of the laneways project
- Continue with the sensitive adaptation of the buildings for their renewal and repurposing, on A, F, J and H blocks for informal and formal learning on the lower levels and more specialised uses on the higher levels, and W and R blocks for academic and administrative uses.

**LEGEND**

1. Improved access to heritage buildings with primary entrances addressing the courtyard
2. Ground floor retail uses integrated with new public realm
3. Activity oriented to the centre of the courtyard, allowing the buildings to breathe
4. “Clutter” removed from the courtyard, improving access to and visibility of the buildings
5. Reconfigured ground plane, stepping up to address building edges

**FIG 6.5.3.5:** CONCEPT VISION OF A POTENTIAL FUTURE COURTYARD SPACE BETWEEN E AND D BLOCKS.
FIG 6.5.3.6: POTENTIAL CONCEPT VISION OF A FUTURE COURTYARD SPACE BETWEEN E AND D BLOCKS.

FIG 6.5.3.7: PHOTO OF THE CURRENT COURTYARD SPACE BETWEEN QUT GARDENS POINT E AND D BLOCKS.
6.5.4 GARDENS THEATRE PRECINCT

The site that constitutes the Gardens Theatre Precinct is possibly the most prominent location on the Gardens Point campus. It commands a view along the whole of the principal axis into the campus as an extension of George Street, and also across the City Botanic Gardens to the Brisbane River and the intensively developed part of the central business district. A redevelopment of this site would provide the opportunity to create a signature building that would embody and convey QUT’s commitment to answering and advancing solutions to the needs of the real world while also having regard to the built form, landscape, and cultural and historical significance of Gardens Point.

The existing building which houses the Gardens Theatre and some of the University’s academic, administrative and professional functions, as well as the campus medical centre, is 47-years-old. While still functional, it is not a modern and future-driven design and does not optimise the potential of the unique site. It has limited connection to the adjoining City Botanic Gardens and to the body of the campus.

As shown on Figure 6.5.4.1 the Precinct sits on a site with inward and outward addresses and has the potential to offer a new city vantage point where campus edge and built form meets the park. This Precinct has the opportunity to strengthen the relationship between the City Botanic Gardens, the

FIG 6.5.4.1 GARDENS THEATRE PRECINCT OPPORTUNITIES AND CONSTRAINTS.
campus and Riverstage. There is the opportunity to either significantly refurbish the existing building (X Block) or demolish and create a new building on this site. The development of a new building, its form, height and scale, would require considered design resolution to respond to the heritage implications of the relationship with Old Government House and its immediate setting. A schematic indication of a new building footprint on this site is shown in Figure 6.5.4.2.

The future refurbishment or redevelopment of this Precinct will need spaces to relocate the staff and functions housed in the existing building at that time. Any future works on this site should result in a significant and signature building that provides a strong and innovative representation of QUT, and supports a broad range of University, and community and cultural uses.
6.5.5 PLANNING AND DEVELOPMENT SUMMARY

The short to medium-term (notionally in the next 10 years) development plan for the campus is shown in Figure 6.5.5.1, and the overall, long-term development plan is shown in Figure 6.5.5.2.

The University will undertake more detailed assessment of the new Riverside Entry precinct development concept and the new Gardens Theatre precinct development concept to further advance their concept designs and determine which of these should have priority and if both or only one are needed in the short to medium term.

All individual developments will continue to be subject to defined University protocols and approvals before any works can be undertaken, together with any external approvals as may be relevant to a particular project. This includes appropriate public consultation on projects that have significant impact on the local community.

Those parts of the campus that are not identified in these figures would continue to be part of the University’s ongoing program of maintenance and refurbishment according to priority needs.

**FIG 6.5.5.1: SHORT TO MEDIUM-TERM POTENTIAL DEVELOPMENTS FOR QUT GARDENS POINT CAMPUS.**

**LEGEND**

1. Sensitively renew and adapt The Yard Heritage Precinct for new uses in a broader integrated network of activated spaces and celebrate the site’s heritage.  
   - Sensitive adaptation and renewal of G & E blocks and transform the Yard courtyard into a vibrant covered public space.  
   - Initiate laneways project for connecting buildings into a broader and activated campus network.  
   - Assess and implement opportunities to improve Gardens Point Road gateway and connections.

2. Refurbish and create new intensive teaching and research laboratories with high-building services needs.

3. Maximise building utilisation for intensive teaching and research laboratories.  
   - Optimise the Riverside Entry Precinct through a potential redevelopment opportunity, having regard to the cultural and historical significance of Gardens Point, to:  
   - Enhance campus presence, visibility, and arrival experience.  
   - Provide a new direct pedestrian connection and safety by reducing conflict between pedestrians, bicycles, and vehicles at a key gateway.  
   - Extend the public realm through new open space to increase activation and informal spaces for students, staff and visitors.

4. Provide a new building for learning, teaching and research, industry collaboration, and indoor event opportunities.  
   - Major refurbishment or potential redevelopment opportunity for a new building, having regard to the cultural and historical significance and landscape of Gardens Point. This is subject to further assessment of relative priority with the Riverside Entry Precinct.

5. All buildings will continue to be part of the University’s ongoing program of maintenance and refurbishment according to priority needs.
LEGEND

1. Continue to sensitively renew and adapt The Yard Heritage Precinct for new uses in a broader integrated network of activated spaces, and celebrate the site’s heritage buildings.

2. Create greater connection between the indoor and outdoor environments.
   - Sensitive adaptation and renewal of A, F, J, W, R and H blocks

2. All buildings will continue to be part of the University’s ongoing program of maintenance and refurbishment according to priority needs.

FIG 6.5.5.2 LONG-TERM POTENTIAL DEVELOPMENTS FOR GARDENS POINT CAMPUS.
The Kelvin Grove campus is located some three kilometres northwards from the Brisbane CBD. The campus is bound by the Inner Northern Busway and Victoria Park Golf course to the east, Herston Road to the north, Kelvin Grove State College to the west, and is part of the Kelvin Grove Urban Village (KGUV) to the south.

KGUV is a master-planned Precinct that brings together residential, educational, retail, health, recreational and business opportunities into one area, while sustaining the significant heritage of the site. The Urban Village is the result of a partnership in 2001 between the Queensland State Government and QUT to develop a 16.5-hectare site adjacent to the then Kelvin Grove campus. Construction commenced in 2002 and has advanced to the point where the only few land parcels yet to be developed are held by QUT.

The current physical site of the campus can trace its roots in the education sector back to 1911 when it was known as the Brisbane Kindergarten Training College. After being amalgamated eight times into different teaching institutions, the site became QUT in 1990 where a number of disciplines are now taught; among them is the Faculty of Education that continues the century-long tradition of training the next generation of teachers. Also a part of the campus’ rich history is a number of heritage-listed sites. The former Technical and Further Education (TAFE) Student Residences were built in 1977 and 1978 and entered on the Queensland Heritage Register in 2004; Gona Barracks buildings and site were entered on the Queensland Heritage Register in 2002.

Gona Barracks was first developed as a military reserve and training area in the early 20th century. From 1914 to 1998, the Australian Army used the barracks site as training grounds and it offers an important insight into Queensland’s military history. The redevelopment of Gona Barracks site for QUT’s Creative Industries Precinct has involved extensive refurbishment and repurposing of many of the barracks buildings to preserve their heritage values while enabling their use for contemporary and innovative teaching and learning and research. The central parade ground has been retained along the alignment of Gona Parade.

The former TAFE Student Residences departed from the traditional institutional approach of dormitories with individual rooms and corridors, to providing a domestic and village-type environment with maisonettes and winding paths. Use of the residences by country residents for short-term TAFE courses commenced in 1979 and ceased some 10 years later. QUT purchased the site in 1993 and for some time used one of the units for offices. As part of the development of KGUV, three clusters of maisonettes were demolished in 2002, the remaining are unoccupied.
QUT Kelvin Grove Campus Boundary and Surrounding City Context (Photo: April 2016)

Inner Northern Busway

Brisbane CBD

Inner City Bypass

Victoria Park Golf Course

QUT Kelvin Grove

Kelvin Grove State College

Herston Health Precinct

QUT Kelvin Grove Urban Village

Herston Station

RNA Station

RNA

RBWH Station

Existing heavy rail + proposed cross river rail alignment

FIG 7.1.2 Diagram of Kelvin Grove Local Context.
Brisbane City Council placed A Block on its local heritage register in 2001, in recognition of its aesthetic significance and history in education in Brisbane in the 20th century. In 1910, plans for a new Government House to be erected at Victoria Park were being prepared, however work on the new House at this site never progressed beyond the construction of footings once the permanent site at Fernberg was adopted in 1911. The existing building was constructed in the early 1930s and initially used as Brisbane’s first north side intermediate school, and then from 1942 for the training of Queensland teachers. It is now used as offices for academic and professional staff.

The campus is home to public arts and entertainment venues such as La Boîte Roundhouse Theatre, public health clinics and top sporting and fitness facilities including a gym, pool and new Sportsfield. Some 14,300 undergraduate and 4,550 postgraduate students are enrolled at the campus for studies and research in the fields of Creative Practice and Communication, Education, Health and Community, Languages, and it is the site of QUT’s International College. The campus is the workplace of 4,070 full-time, part-time, casual and sessional academic and professional and technical staff. The campus occupies 20.18 hectares of land with a total building portfolio of 41 buildings and 205,000 m² gross floor area (or 110,000 m² usable floor area).

The campus has a more active and extensive native fauna population and flora habitat compared to Gardens Point. The care and protection of this native fauna and flora is a feature and part of the campus identity. Regular surveys of the fauna and flora are undertaken to monitor their extent and trends.

A number of external developments in neighbouring areas of the campus are expected to both impact on and be opportunities for QUT. These include the Cross River Rail and Brisbane Metro public transport projects, and redevelopment of large parts of the Herston Health Precinct as a mixed-use precinct. The Herston Health Precinct redevelopment will make it one of Australia’s largest integrated health, teaching and research sites, including the Royal Brisbane and Women’s Hospital, the QIMR Berghofer Medical Research Institute, the University of Queensland’s medical school, the Herston Quarter integrated health development, and research infrastructure such as the Herston Imaging Research Facility.
7.2 OPPORTUNITIES AND CHALLENGES

Over the last three decades, Kelvin Grove campus and its adjoining area has undergone significant change with development of the Kelvin Grove Urban Village, QUT’s Creative Industries Precinct, the Institute of Health and Biomedical Innovation, and Inner Northern Busway. Over this time the identity, amenity, use and population of the campus has progressively evolved and expanded.

The campus has ample scope and opportunities for further substantial renewal and activation including:

- Creating a strong campus heart and position in the city inner-urban fabric
- Further connecting with the varied range of inner-urban uses and major developments that surround and merge with the campus edges
- Creating a more highly-connected campus that prioritises convenient, safe and equitable pedestrian journeys between all parts of the campus and across its challenging campus topography
- Enhancing the legibility, permeability and wayfinding along and through the campus
- Facilitating edge of campus vehicle circulation, parking and services that address conflicting uses

**FIG 7.2.1:** QUT KELVIN GROVE CAMPUS TOPOGRAPHY.
- Expanding and enhancing the campus structure through new buildings on vacant land and redeveloping existing buildings that among other things celebrate and promote the expansive views provided by the campus ridge lines
- Extending and unifying QUT’s expertise in health and wellness, in concert with the nearby and growing Herston Health Precinct and other health related partnership opportunities
- Transforming teaching spaces for new pedagogical methods
- Expanding student informal learning and study spaces
- Expanding research spaces and facilities
- Improving the nature, condition and amenity of the large pockets of vegetation that define the local campus landscape.

Key challenges for future campus development include:

- Specialised health and wellness related research and teaching facilities are at or close to full capacity
- Convenient and equitable pedestrian movement and wayfinding across the campus is hindered by its steep topography and distributed nature. Topography of the campus rises and falls some 40 metres with precincts spread over one kilometre
- Direct connection to the campus via public and active transport is not available from a number of large areas of the city (e.g. western suburbs) due to the radial nature of Brisbane’s public and active transport network
- Creating a coherent and active campus identity while also contributing to the identity and activation of the Kelvin Grove Urban Village.

**FIG 7.2.2: OPPORTUNITIES AND CONSTRAINTS OF QUT KELVIN GROVE CAMPUS.**

**LEGEND**
- Future renewal/redevelopment areas
- Campus gateways
- Urban Village retail
- Campus heart
- Campus spine connection
7.3 DEVELOPMENT CONTROLS

The planning and approval of proposed development on Kelvin Grove campus is controlled by a number of components of the statutory planning framework. The extent of these controls over the campus is illustrated in Figures 7.3.1 and 7.3.2. An overall description of these development controls is included in Section 3. The application and operation of these controls for planning and development on Kelvin Grove is outlined below.

PLANNING ACT 2016

As shown in Figure 7.3.2, a large part of the Kelvin Grove Campus is currently designated as Infrastructure under the Planning Act 2016. The relevant Certificate of Designation describes the QUT Kelvin Grove Campus as:

“A facility intended primarily as an Education Facility, described as: a place of higher education with the associated teaching, research, social and residential, and conference accommodation, together with a range of commercial activities allied with the university.”

The University does not seek to amend the existing Infrastructure Designation and will continue to exercise its relevant planning and development responsibilities in accordance with the current Infrastructure Designation and the Planning Act 2016.

Proposed development that is within the provisions of the Infrastructure Designation is assessed through the University’s own governance processes and powers as provided by the QUT Act, with no further development approvals required under the Planning Act, except for approvals required under other legislation.

Where a proposed development on campus is not within the provisions of the Infrastructure Designation, a development application for assessment is made to the local assessment manager, in this case the Brisbane City Council. The Brisbane City Plan 2014 (the City Plan) is the applicable local planning instrument. The development assessment process also has regard to state requirements, as outlined in the State Planning Policy, the South East Queensland Regional Plan and State Referral Triggers. The application of the state and local planning requirements will depend on the nature and intensity of the proposed development, and the subject site’s locational characteristics in relation to public infrastructure and heritage places.

As shown in Figure 7.3.2, there are parts of the Kelvin Grove campus land and buildings that are heritage listed on the Queensland Heritage Register and by the Brisbane City Council. Proposed developments in these areas are subject to controls provided for under the Queensland Heritage Act 1992.
LAND ACT 1994 AND LAND TITLE ACT 1994

The land tenure of the Kelvin Grove campus physical Estate includes state land reserve, freehold land, lease agreements and easements.

Figure 7.3.1 shows a major part of the land on which the Kelvin Grove campus is located is state reserve for educational purposes, held in trust by QUT. A Trust Land Management Plan was developed in accordance with the Land Act 1994 and was approved in March 2015 to have effect for 20 years to February 2034.

FIG 7.3.2: QUT KELVIN GROVE DEVELOPMENT CONTROLS.

LEGEND

- Property Boundary
- Infrastructure Designation Area (Educational Facility) as designated 20.4.2000
- Infrastructure Designation Area and Queensland Heritage Register Listed Site (QUT Property)
- Brisbane Heritage Register Listed Building
- Queensland Heritage Register Listed Building
- Queensland Heritage Register Listed Site (QUT Property)
- Queensland Heritage Register Listed Site (BCC Property)
7.4 CAMPUS DESIGN STRATEGIES

This section identifies specific planning and development strategies for QUT’s Kelvin Grove campus consistent with the integrated planning and design principles outlined in Section 5.

7.4.1 CELEBRATE VIEWS AND VISTAS

• Celebrate and promote the expansive views provided by the upper ridgelines.
7.4.2 BUILD ON THE RICH LANDSCAPE

- Enhance and retain existing areas of significant open space and green space that define the local landscape to enhance the environment and amenity offered on campus.

- Enhance and protect the native and heritage protected vegetation and ecosystems of the campus.

- Locate and design new infrastructure to avoid significant campus habitat.

- Monitor and report on campus fauna and flora.

- Work with and respect the campus geology and topography.

- Create more covered spaces and walkways to enable better use of outdoor facilities, access around campus, and improved pedestrian weather protection.

LEGEND

- Protected habit and green landscape site
- Protected trees of significance
7.4.3 ACTIVATE AND STRENGTHEN CAMPUS CONNECTIVITY

• Establish a strong campus heart and gateway entrances.

• Activate edges of key pedestrian zones improving the campus experience and reinforcing activity clusters across the campus.

• Create a highly-connected campus that prioritises convenient, safe and inclusive pedestrian journeys between all campus precincts.

• Create more covered spaces and walkways to enable better use of outdoor facilities and access around campus.

• Reduce pedestrian barriers presented by the campus topography and built form, through a network of elevated walkways and through building connections, and intra-campus transport options.

• Improve connectivity through the campus to the Inner Northern Busway.

• Enhance connectivity for active travel along the east-west spine (Busway-University-Kelvin Grove State College), and along the north-south spine (Musk Avenue-Ring Road-Herston Road), and along Ring Road.

• Address areas of conflict between vehicles and pedestrians.
7.4.4 ESTABLISH A CAMPUS HEART

- Enhance the Musk Avenue arrival sequence into the heart of the University with public realm and building edge treatments that frame the main campus threshold.

- New developments in the Campus Heart Precinct should focus on enhancing and consolidating undergraduate student experiences, and teaching and learning activities.

- Provide casual recreational and sport opportunities for ad-hoc use by students and staff and visitors.
7.4.5 UNLOCK SPACES FOR EXPANSION AND RENEWAL

- Enhance the campus structure by establishing new buildings in the Campus Heart, Lower Campus and Creative Industries Precincts.

- New development and renewal of existing built form to activate and strengthen campus connectivity.

- Expansion and renewal to contribute positively to the broader fabric of the Kelvin Grove Urban Village and inner city.
7.4.6 A CONSOLIDATED VEHICLE NETWORK

- Encourage edge of campus vehicle circulation, parking and services to facilitate a more usable and connected pedestrianised public realm within the campus that is safer and more inviting for users.

- Establish legible, high-amenity, edge-of-campus locations for parking, electric vehicle charging, shared vehicles, bicycle storage and end-of-trip amenities.

- Optimise parking wayfinding signage to limit vehicle circulation, idling and associated emissions.

**LEGEND**

- Parking areas
- Connectivity
7.4.7 CELEBRATE THE BUILT AND CULTURAL HERITAGE

- Improve the performance and activation of the heritage-listed sites through public realm enhancements and sensitive refurbishments and adaptations emphasising the values, quality and amenity of the heritage buildings.

- Renew and manage sites and buildings that are heritage listed in accordance with heritage approvals and management plans.

- Contribute to and create a sense of belonging and place for Indigenous peoples on campus and provide opportunities that enable everyone to experience the Indigenous culture.
7.4.8 QUALITY RETAIL, RECREATION AND PUBLIC VENUES

• Enhance and retain existing areas of significant retail and recreation services and activities to complement surrounding areas and future development.

• Establish new retail facilities, in line with market trends, to create vibrant environments that enhance social learning and interaction on campus and in locations to accommodate student, staff, and visitor demand.

• Redevelop and establish new recreation facilities to support health and wellness for students, staff, local community, and to attract visitors.

• Sustain public venues for arts, health clinics and childcare.
7.4.9 ESSENTIAL SERVICES INFRASTRUCTURE

- Ensure campus infrastructure services meet future needs and the University’s objectives regarding its carbon footprint, water conservation, redundancy risks, whole of life cycle management, and value for money.

- All campus infrastructure services are capable of meeting current demands. However significant new developments or redeveloping existing buildings for teaching and research intensive facilities and equipment will require substantial upgrades of campus infrastructure services, including the electricity network, water supply and gas pipeline network, and trade waste facilities.

- Prepare a high level review of key campus infrastructure services for campus planning and development. Ensure all infrastructure services are capable of meeting potential new developments in a timely, efficient and sustainable manner.
7.5 CAMPUS PLANNING AND DEVELOPMENT

The planning and future development (and major refurbishment) of buildings and open spaces at the Kelvin Grove campus will serve as a significant catalyst for campus renewal, as well as a mechanism for accommodating the changing space needs of the University as it continues to deliver on its strategic objectives through an integrated approach to the planning and development of the University’s entire Estate.

This section identifies short to medium term and long-term opportunities for priority areas of the campus that could be developed to meet the changing needs of the University. The short to medium term is notionally in the next 10 years and the long term is later. There are four priority areas or precincts that have been identified, based on the opportunities and challenges outlined in Section 7.2.

They are:

- Lower Campus Precinct
- Campus Heart Precinct
- Musk Avenue Spine Precinct
- Creative Industries Precinct.

FIG 7.5.1: CURRENT 3D MODEL SHOWING THE PRECINCTS AT QUT KELVIN GROVE CAMPUS.
Objectives for the planning and development of the campus are to:

- Maximise the significant development opportunities on campus for the benefit of the entire Estate, and for student, staff and visitor experiences.
- Enhance pedestrian access, connectivity and amenity.
- Optimise the activation and uses of core buildings and open spaces through targeted refurbishments.
- Ensure the campus grows and develops as a key part of Brisbane’s inner-urban fabric.
- Sustain the interaction between the heritage assets of the campus and the wider urban environment.

The application of these long-term objectives to the four priority areas or precincts is described in the following sections. Individual developments that may arise from the planning and development opportunities identified in the priority areas or precincts would be subject to detailed planning and development assessments and approvals consistent with the development controls outlined in Sections 3.4.1 and 7.3.
7.5.1 LOWER CAMPUS PRECINCT

QUT is seeking to substantially grow its contribution to community health and the sustainability of public health services, building on QUT’s strengths with a collaborative approach, bridging the gap between science and better health through a focus on prevention, evidence, innovation and real outcomes.

QUT is already home to one of Australia’s largest concentration of tertiary education programs for health professionals, reaching well beyond the health disciplines to related programs in science and engineering, law, education, business and creative industries. Our health students learn and work with real patients under the supervision of professionals at QUT Health Clinics, and learn through simulated real world experiences in a Clinical Simulation Centre.

Kelvin Grove also houses QUT’s Institute of Health and Biomedical Innovation, which brings together QUT’s cutting-edge technology and world-class capability in biomedical sciences, robotics, data science and machine learning, 3-D printing, security and privacy, to conduct multidisciplinary research into ways of improving health and wellbeing.

However these facilities are operating at capacity, and will require supplementation soon if QUT is to draw fully on, unify, and extend its capability to address looming skills shortages, entrenched health systems challenges and technological opportunities in healthcare.

FIG 7.5.1.1: LOWER CAMPUS PRECINCT OPPORTUNITIES AND CONSTRAINTS.
A key opportunity for the Lower Campus Precinct is to support this ambition and unlock this potential by progressively developing significant parts of the Precinct as a centre for interdisciplinary and translational biomedical and health research and innovation. It would also be integrated with teaching and learning, and community services in healthcare and wellness, as well as being linked digitally and physically to the nearby growing Herston Health Precinct and QUT’s existing health related facilities. It offers the opportunity for QUT’s Kelvin Grove campus and the Herston Health Precinct to combine to become one of Australia’s largest health and biomedical ecosystems with education, clinics, full hospital services, cutting-edge research and industry collocation spaces.

The Precinct’s frontage on Herston Road and its connection to QUT’s new sportsfield strengthen the opportunities for fully integrated health clinic and learning spaces for the community and real world learning environments for students, and research engagement with elite sports individuals and teams.

Developing the Lower Campus Precinct in this way would support the University’s intention to unify and extend its expertise and contribution to community health and wellness, and in time result in an array of new buildings and renewed current infrastructure.

Within the Precinct, P Block is currently utilised by the QUT International College and will continue to operate in this capacity.

Noting that assessments of the detail, form and nature of such redevelopment are yet to be undertaken, preliminary concept assessments indicate development on this Precinct could be planned in several stages, in a way that progressively provides additional spaces for:

- teaching
- research and innovation
- incubators and industry projects
- integrated health clinics and real world learning
- partnership and research connectivity
- improved campus connectivity
- activation for student engagement and visitor amenity.
The early stages commencing in the short to medium term could be through development on the currently underdeveloped part of the Precinct around the internal Sports Lane and adjoining Herston Road, complemented by the redevelopment of the M Block site adjoining the Inner Northern Busway (fig 7.5.1.2).

Noting that assessments of the design, form and nature of such redevelopment are yet to be undertaken, early concepts of what may be considered for the short to medium term are shown in figures 7.5.1.2 through 7.5.1.5.
Fig 7.5.1.6 is a potential schematic plan that indicates what may be possible for redefining the Lower Campus Precinct in the long term, building upon the indicative short to medium-term concept. This potential schematic plan would provide:

- Redevelopment of a largely undeveloped area fronting Herston Road for teaching and research
- Opportunity for indoor sporting facilities and health and wellness clinics for teaching, research and community use
- A good connection to the existing Sportsfield and car park, noting that the structural design of the sportsfield and car park is such that it can be raised by two levels if needed in the future
- An active campus gateway using the newly constructed Sports Lane entry from Herston Road

• A good balance of open and green space, and built space
• Redevelopment of the O Block buildings to connect to the Campus Heart Precinct, providing enhanced teaching and learning facilities
• Opportunities for health related research and innovation connected to the nearby Herston Health Precinct (RBWH)
• A new pedestrian connection from Herston Road to the Inner Northern Busway through a new and strongly defined pedestrian axis
• Improved ground level relationships between outdoor spaces and internal spaces
• A feature pathway and passive spaces through the existing open-space gully.

An initial step in further exploring the development opportunities associated with this Precinct is a concept design study of the potential form and functions for a short to medium-term development with a focus on health and wellness.
7.5.2 CAMPUS HEART PRECINCT

This Precinct is the central part of the campus situated around the dominant ridgeline of the campus (Figure 7.2.1). As the campus heart it should provide a strong, identifiable, and inviting campus core that draws and sustains student and community interest and activity.

Many of the buildings in this Precinct were established 50 to 80 years ago. There are a number of temporary and underutilised buildings, as well as vacant and underutilised sites (Figure 7.5.2.1). While there has been progressive refurbishment of many buildings, their built form in many cases limits their suitability for the future needs of the University. The Precinct is closely connected to the Kelvin Grove Urban Village, the adjoining schools and the Inner Northern Busway.

**FIG 7.5.2.1: LOWER CAMPUS PRECINCT OPPORTUNITIES AND CONSTRAINTS**
The distributed nature of the campus and its precincts means the campus needs to have a strong heart or campus core and identity that is supported by key nodes across the campus. This heart needs to provide clear connectivity with the other precincts and the general campus, and play a vital role in the transformation of the Kelvin Grove campus into a far more vibrant and innovative campus.

This Precinct has a significant potential for renewal and redevelopment. It has a particular focus on enhancing and expanding the campus teaching and research infrastructure and the on-campus experience of students and the community, while bringing a focus to the Precinct as the campus heart and embracing the changing role and experience of higher education for students in a social, innovative and collaborative environment.

The Precinct also offers the potential for further developing QUT’s research strengths and industry partnerships. This could be done in stages, with initial focus on refurbishment of suitable existing buildings followed by progressively replacing aged or unsuitable buildings with new fit for purpose buildings. It could be advanced in the context of establishing an Innovation Hub that has a focus on the sectors of the economy that would benefit from QUT’s transdisciplinary research and innovation through its research institutes, potentially with a focus on material science and engineering, advanced manufacturing and similar technologies and services. An Innovation Hub in this Precinct would be located with good transport and access connections and further build on the campus’ strategy for stronger overall campus connectivity. This part of the Precinct could also provide new student experience opportunities.

Redevelopment could proceed in some parts of the Precinct that are vacant or underutilised and then following demolition of other buildings where appropriate as determined by future needs. The planning and development of the renewal of sites and buildings in the Precinct that are listed on the State Heritage Register would be subject to the appropriate assessment and approvals associated with their heritage status.

Short to medium-term potential planning and development initiatives for the Campus Heart Precinct include:

- Development of new buildings on currently vacant or underused sites, or aged buildings (land around Musk Avenue and its junction with Victoria Park Road) for the provision of future-driven teaching, learning and research spaces, as well as the consolidation of core professional services, and opportunities for community services facilities (Fig 7.5.2.4)
- Enhancement of pedestrian amenity and access such as assisting access up from the lower campus to the campus heart through a new elevated walkway over Ring Road
- Enhancement of open and public realm spaces to improve their amenity, such as remodelling the open space between A and R blocks
- Activation of open spaces through the provision of recreational and sport facilities for casual ad-hoc use by students, staff and visitors, such as outdoor fitness facilities, half basketball court, sign-posted walking/running route, etc.
- Creation of a “University meets College” connection to Kelvin Grove State College on the western threshold of the Precinct.
FIG 7.5.2.2: POTENTIAL CONCEPT VISION FROM RING ROAD ANGLE OF FUTURE QUT KELVIN GROVE M AND S BLOCKS.

FIG 7.5.2.3: POTENTIAL CONCEPT VISION FOR REDEVELOPING THE CURRENT QUT KELVIN GROVE K BLOCK AND CAR PARK SITES.

FIG 7.5.2.4: POTENTIAL CONCEPT VISION FROM VICTORIA PARK ROAD ANGLE OF FUTURE QUT KELVIN GROVE B BLOCK AND CAMPUS HEART.

FIG 7.5.2.5: POTENTIAL CONCEPT VISION FROM BUSWAY ANGLE OF FUTURE QUT KELVIN GROVE M AND S BLOCKS.
Figure 7.5.2.6 is a potential schematic plan intended to show what may be possible for redefining the Campus Heart Precinct in the long term. The schematic plan would provide a significant increase in the area and amenity of open and public realm space and in the space for teaching, learning, research and student on-campus experiences. Assessments of the detail, form and nature of such redevelopment are yet to be undertaken. An initial step in further exploring the improvement opportunities associated with this Precinct is a planning and urban design study of the potential options for the land around Musk Avenue and its junction with Victoria Park Road and K Block.
The principal public connection between the Campus Heart and the Creative Industries Precinct is that provided by Musk Avenue. It is effectively the Urban Village part of the campus spine and thus the principal interface between the University and many elements of the Urban Village.

This crucial artery for both QUT and the Urban Village was intended in the master planning for the Kelvin Grove Urban Village to be a central “main street” or neighbourhood “high street” acting both as a link between Kelvin Grove Road and Victoria Park Road and as the lively central place of the Village. This is reflected in the Brisbane City Council’s Kelvin Grove Village Local Plan, which among others things, contains the following development principles:

- Embrace urban design “main street” principles which, in conjunction with the proposed uses, contribute to and assist in establishing a vibrant and active main-street centred urban neighbourhood linking Kelvin Grove Road with the Kelvin Grove campus on Victoria Park Road,

- Include high quality streetscape and public open space network that comprises continuous/linked public spaces and parks that are designed to be safe, comfortable, and well landscaped.

The physical alignment of Musk Avenue is cranked in plan and rises and falls across the contours of the topography as it makes its way over and down between the two main ridges. Taken together these characteristics diminish the sense of a coherent urban thoroughfare. The relative hilliness of the route increases the effort for pedestrians as they ascend and descend the sloping topography, more so for people with limited mobility. Wayfinding and legibility is challenging as the combination of the rise and fall of the avenue, the crank in its plan, the number of junctions, and limited building signage diminish the sense of a coherent urban frame.

To signal QUT’s intention to work with other key Urban Village stakeholders to enrich the legibility, vitality and character of this crucial link the Estate Master Plan designates this spine as the Musk Avenue Spine Precinct, with the objective of strengthening its overall coherence and its activation and vibrancy as a major public linking space within the Village. These objectives also apply to the parts of the Creative Industries Precinct with Musk Avenue frontage. The enhancement of this significant corridor increases the opportunities for the University to directly engage with the Village community and to raise the profile, engagement and connectivity of the whole Kelvin Grove campus.

The strategies to be employed in those buildings owned or occupied by QUT (namely U, Q and X) and related spaces within this linear Precinct include:
• Establish well-branded, welcoming and active frontages at the ground plane of each building.

• Energise activation along the Avenue through creating and embedding spaces and amenities at the lower levels of each building to encourage and facilitate engagement with community and industry partners.

• Populate the respective buildings with functions and activities relevant to the local community and industry partners.

• Locate engaging University activities at highly visible locations.

• Adopt some of the entry identifying elements proposed for Parer Place/Musk Avenue (see 7.5.4) to signal the principal entries to University functions and facilities.

• Review and enhance, as necessary, the provision of shade and shelter together with ensuring sufficient night lighting, surveillance and student and staff access to campus security.

• Establish pause points outside of the principal pedestrian flow lines to enhance opportunities for orientation and to strengthen wayfinding.

• Strengthen the provision of street vegetation and furniture guided by an urban landscape plan.

A further significant strategy is to designate the Musk Avenue Spine Precinct as the backbone of a future campus-wide active transport or shuttle bus service. Such a service would improve mobility over the full extent of the campus. It would help to overcome many of the challenges presented by the topography and would link the key activity nodes.
7.5.4 CREATIVE INDUSTRIES PRECINCT

The Creative Industries Precinct was initially shaped as part of the Kelvin Grove Urban Village development between 2000 and 2010, and more recently between 2014 and 2016. It is used by QUT’s Creative Industries faculty for teaching and learning, and research and administration. The Precinct houses the popular public venue La Boite Theatre, as well as Creative Enterprise Australia, a hub for creative industries innovation start-ups. About one-quarter to one-third of the usable area of the Precinct is vacant or underdeveloped.

The site offers expansive views to the east, south and west. It also offers extensive frontage to Musk Avenue, which is the main road in and out of the Kelvin Grove Urban Village. Further, the site possesses a significant presence on Kelvin Grove Road, a major arterial road, and is a well-defined portal from this major thoroughfare into the Kelvin Grove Campus and Urban Village.

A significant component of this Precinct is the Gona Barracks which was entered on the Queensland Heritage Register in December 2002. The site and remaining buildings have been carefully restored as part of QUT’s development of this Precinct from early 2000 to now and are used as part of the University’s Estate.
Currently, the courtyard spaces associated with Parer Place, its adjoining buildings and the connecting Gona Parade spine to Musk Avenue are not providing the desired levels of amenity, activation and place-making character for the Creative Industries Precinct. Lack of adequate shade provision and usable break out seating space is also compounding this condition. In addition, the frontages of Z1 and Z2 buildings that address Musk Avenue do little to activate this part of the key spine of the Urban Village resulting in an outdated and underutilised streetscape. There are opportunities to explore the functionality of these buildings and how they could better integrate with the street to provide a more vibrant activation and connection to the Urban Village and the Musk Avenue Spine Precinct.

Detailed assessments and designs of the form and nature of such redevelopment are yet to be undertaken, and these will need to be sensitive to the heritage values of the site. Preliminary early concepts of what may be considered for the short to medium term are shown in Figures 7.5.4.2 through 7.5.4.8, to enhance and activate these spaces and deliver increased amenity and new identities for this part of the Precinct. The short to medium-term potential initiatives for the Creative Industries Precinct seek to address the need to improve the activation, amenity and usability of open and public realm spaces associated with Parer Place and adjoining buildings and their connection to Musk Avenue, and to improve the legibility, accessibility and usability of the Musk Avenue frontage of buildings Z1 and Z2.

A further short to medium-term potential initiative is to provide a public war memorial and venue for remembrance events.
FIG 7.5.4.3 POTENTIAL CONCEPT VISION OF PARER PLACE RENEWAL.

FIG 7.5.4.4 PHOTO OF CURRENT PARER PLACE.

FIG 7.5.4.5 POTENTIAL CONCEPT VISION OF PARER PLACE RENEWAL.

FIG 7.5.4.6 PHOTO OF CURRENT PARER PLACE.
FIG 7.5.4.7: POTENTIAL CONCEPT VISION OF MUSK AVENUE RENEWAL.

FIG 7.5.4.8: POTENTIAL CONCEPT VISION OF MUSK AVENUE RENEWAL.

INSET: CURRENT PHOTO OF LA BOITE THEATRE FRONTAGE ONTO MUSK AVENUE.
Figure 7.5.4.9 is a potential schematic plan that indicates what may be possible for enhancing and redefining the Creative Industries Precinct in the longer term. The planning and development of the renewal of sites in the Precinct that are listed on the State Heritage Register would be subject to the appropriate assessment and approvals associated with their heritage status. Detailed assessments of the design, form and nature of such redevelopment are yet to be undertaken.

The long-term plan would provide:

- A significant increase in the activation, amenity and usability of open and public realm spaces
- A significant increase in space for Creative Industries teaching, research, community culture, events and industry partnership
- A built form that has strong alignment with Musk Avenue and surrounding built forms
- Further legibility, accessibility and commercial and retail spaces on Musk Avenue frontage
- Additional underbuilding car parking.

**FIG 7.5.4.9:** POTENTIAL CONCEPT VISION OF LONG-TERM DEVELOPMENT FOR THE CREATIVE INDUSTRIES PRECINCT.

**LEGEND**

- New built form concept
- Buffer vegetation
- Pedestrian circulation
7.5.5 CAMPUS PLANNING AND DEVELOPMENT SUMMARY

The short to medium-term (notionally in the next 10 years) development plan for the campus is shown in Figure 7.5.5.1, and the overall, long-term development plan is shown in Figure 7.5.5.2.

All individual developments will continue to be subject to defined University protocols and approvals before any works can be undertaken, together with any external approvals as may be relevant to a particular project. This includes appropriate public consultation on projects that have significant impact on the local community.

Those parts of the campus that are not identified in these figures would continue to be part of the University’s ongoing program of maintenance and refurbishment according to priority needs.

FIG 7.5.5.1: SHORT TO MEDIUM-TERM POTENTIAL DEVELOPMENTS FOR QUT KELVIN GROVE CAMPUS.

Initial Lower Campus Precinct development new buildings and facilities on vacant or underused sites with a focus on health and wellness for: teaching, research and innovation, clinics, sporting facilities, community and industry engagement and partnerships.

Priority initiatives for the Campus Heart Precinct:
• Initial development of new buildings and facilities on vacant or underused sites for future driven teaching, learning, research, and consolidating professional services.
• Strengthen the Precinct’s identity as the campus’ heart.
• Enhance public realm amenity and access and open spaces.
• Enrich student experience opportunities.
• Explore a “University Meets School” connection on the western threshold.

Priority initiatives for the Creative Industries Precinct:
• Improve the amenity and usability of the Precinct’s open spaces and Musk Avenue frontages.

Priority initiatives for the Musk Avenue Spine Precinct:
• Establish well-branded, welcoming and active frontages at the ground plane which signal the principal entries to University functions and facilities.
• Enhance opportunities for orientation and to strengthen wayfinding.

All buildings will continue to be part of the University’s ongoing program of maintenance and refurbishment according to priority needs.

LEGEND

1 Initial Lower Campus Precinct development new buildings and facilities on vacant or underused sites with a focus on health and wellness for: teaching, research and innovation, clinics, sporting facilities, community and industry engagement and partnerships.

2 Priority initiatives for the Campus Heart Precinct:
• Initial development of new buildings and facilities on vacant or underused sites for future driven teaching, learning, research, and consolidating professional services.
• Strengthen the Precinct’s identity as the campus’ heart.
• Enhance public realm amenity and access and open spaces.

3 Priority initiatives for the Creative Industries Precinct:
• Improve the amenity and usability of the Precinct’s open spaces and Musk Avenue frontages.

4 Priority initiatives for the Musk Avenue Spine Precinct:
• Establish well-branded, welcoming and active frontages at the ground plane which signal the principal entries to University functions and facilities.
• Enhance opportunities for orientation and to strengthen wayfinding.

5 All buildings will continue to be part of the University’s ongoing program of maintenance and refurbishment according to priority needs.
Further develop the Lower Campus Precinct with a focus on health and wellness that contains:
- Research facilities and incubator spaces
- Specialised undergraduate teaching
- Sport and recreation facilities
- Integrated clinic and learning spaces
- Community engagement and sporting opportunities
- Spaces for community service providers and industry research partners
- Optimum utilisation of the precinct to support preventative health programs and services.

Strengthen the Campus Heart Precinct by the following strategies:
- Reinforce the identity of a campus core and “heart”.
- Establish a pedestrian spine through the campus for better connectivity.
- Further development of new buildings and facilities on vacant or underused sites for future driven teaching and learning and student experience opportunities, and consolidating core professional services.
- Continue to enhance student on-campus experiences through new learning and social spaces.
- Provide a significant area for an Innovation Hub through development of new buildings and facilities on vacant or underused sites that:
  - Focuses on working in science, technology, engineering and mathematics
  - Builds partnerships with industry and entrepreneurs
  - Allows for future student experience opportunities

Provide a significant area for an Innovation Hub through development of new buildings and facilities on vacant or underused sites that:
- Focuses on working in science, technology, engineering and mathematics
- Builds partnerships with industry and entrepreneurs
- Allows for future student experience opportunities

Utilises the main connection gateway for street frontage, transport connectivity and access.

Expand opportunities for the Creative Industries Precinct by:
- Developing new buildings and spaces for learning, teaching, and research facilities
- Expanding engagement with industry partners
- Continuing to improve the amenity and appeal of the Precinct’s open and public realm spaces.

All buildings will continue to be part of the University’s ongoing program of maintenance and refurbishment according to priority needs.
FIG 7.5.5.3: LONG-TERM POTENTIAL DEVELOPMENTS FOR QUT KELVIN GROVE CAMPUS.
8.1 THE SITES

QUT owns, leases, or otherwise invests in distributed sites that are located at places other than the Gardens Point or Kelvin Grove campuses. The sites are used to support the achievement of the University’s strategic priorities of research, teaching and learning, as well as to enrich community and industry engagement. Such sites may be permanent or fixed term and are chosen by the nature of the intended site use and related collaborative partnerships.

As an indication of the scale and functions of QUT’s investment in distributed sites, a brief outline of the existing distributed site network and their purpose is given in the following pages.

Development controls for the distributed sites vary from site to site, but none of the current sites have an Infrastructure Designation, meaning that their use must be in accordance with the planning and development controls of the relevant local government. In addition, their use must be in accordance with the legal authority for QUT’s occupancy (lease, licence or other agreement).

FIG 8.1.1 GEOGRAPHICAL LOCATION OF QUT’S PRIMARY DISTRIBUTED SITES.

LEGEND
1. School of Nursing, Lowson House, Royal Brisbane Women’s Hospital
2. Herston Imaging Research Facility, Royal Brisbane Women’s Hospital
3. QIMR Berghofer Medical Research Institute
4. Biofabrication Institute, Royal Brisbane Women’s Hospital
5. Centre for Children’s Health Research
6. Translational Research Institute
7. Australian Translational Genomics Centre
8. Samford Ecological Research Facility
9. Carseldine Research Facility
10. Medical Engineering Research Facility
11. Banyo Pilot Plant Precinct
12. Da Vinci Precinct
13. Redlands Crop Development Facility
14. Polaris Data Centre, Springfield
15. Genomics Clinical Trials Centre, Mermaid Waters
16. Mackay Renewable Biocommodities Pilot Plant
17. Graduate School of Business, Canberra
Samford Ecological Research Facility is a living laboratory for researching the impact of urban development on ecosystems, providing undergraduate students with field work experience and educating the community. It is a peri-urban location situated on a 51-hectare property north-west of Brisbane in the Samford Valley. Seventy per cent of the property is covered with vegetation protected under the Vegetation Management Act 1999 which provides refuge to native plants and animals that are under increasing pressure from urbanisation.

Mackay Renewable Biocommodities Pilot Plant, based at Racecourse Sugar Mill in Mackay, is a facility that converts agricultural plant waste into renewable transport fuels (bioethanol), green chemicals and other high-value biocommodities. There is no equivalent biorefinery pilot plant in Australia. Large-scale fermentation also supports the up scaling of industrial biotechnology processes by providing infrastructure at a pilot scale that links product and process innovation with commercial viability assessment.
BANYO PILOT PLANT PRECINCT

QUT’s Banyo Pilot Plant Precinct located in Brisbane’s north side in an industrial precinct and consists of two warehouses with specialised labs, workshops and large-scale engineering infrastructure. The plant facilitates structural, mechanical and electrical testing, geological analysis, aquaculture, product testing and validation that requires heavy engineering equipment and spaces. Research projects undertaken include the development of pilot equipment and processes as well as long-term monitoring of industrial products.

HERSTON IMAGING RESEARCH FACILITY (HIRF)

HIRF is a partnership between University of Queensland, QUT, QIMR Berghofer Medical Research Institute, and Metro North Hospital and Health Service. Located at the Herston Health Precinct, it is one of only a few imaging research facilities in Australia and the first to be devoted entirely to clinical research. The facility gives researchers access to high-quality imaging equipment and allows the rapid translation of research into clinical practice. With its cutting-edge scanning technology, HIRF aims to revolutionise patient care in the areas of dementia and ageing, mental illness, brain development and cancer.

HERSTON BIOFABRICATION INSTITUTE (CURRENTLY IN DEVELOPMENT)

The institute is a partnership between Metro North Hospital and Health Service, and QUT, and will be located in the Herston Health Precinct. It aims to accelerate the convergence of biofabrication technology innovation and biological systems knowledge leading to novel medical solutions. It will provide a unique opportunity to transform current thinking and pursue collaborative innovation within the world-class health, scientific, research and industry corridor of Brisbane.

LOWSON HOUSE, SCHOOL OF NURSING

Located at the Royal Brisbane and Women’s Hospital, this site is used by QUT’s School of Nursing primarily for nursing research and training, both in a lecture room and also as an in-hospital service.
QUT PRIMARY DISTRIBUTED SITES

GENOMICS CLINICAL TRIALS (GCT) CENTRE
The GCT Centre, located on the Gold Coast, consists of a multidisciplinary team actively involved in sponsored clinical trials. The centre is a fully equipped clinical site actively involved in study recruitment, management, biostatistical analysis and reporting of research studies. The centre aims to design and manage clinical trials to provide substantiated, statistically relevant data regarding the effectiveness of health interventions. Research studies have been conducted in Alzheimer’s disease and migraine.

MEDICAL ENGINEERING RESEARCH FACILITY (MERF)
MERF has been established to meet Australia’s emerging needs in orthopaedic and artificial organ research. Located at the Prince Charles Hospital in Brisbane’s north, MERF provides a comprehensive suite of research and training facilities such as the Anatomical and Surgical Skills Laboratory that enables surgeons to experience new procedures in a realistic surgical environment. There is a strong focus on applications in orthopaedics, but the capabilities extend to all clinical fields.

TRANSLATIONAL RESEARCH INSTITUTE (TRI)
TRI is located at the Princess Alexandra Hospital precinct in Brisbane and is the largest medical research institute in the southern hemisphere. QUT is one of four founding institutions together with The University of Queensland, Mater Medical Research Institute and Queensland Health. QUT’s key research themes focus on cancer, immune diseases and inflammation, metabolic medicine and addiction (food, alcohol). Researchers are “translating” their work from the laboratory bench to real-life medical treatments.

AUSTRALIAN TRANSLATIONAL GENOMICS CENTRE (ATGC)
ATGC is a partnership between QUT and Metro South and is located within the Translational Research Institute in Brisbane. The centre concentrates on providing tumour sequencing and mutational profiling for cancer patients across Queensland. It is the first of its kind in the state and will provide clinicians treating cancer patients with advanced genetic information addressing the underlying causes of tumour development, predicted outcomes and personalised treatment avenues.
QUT PRIMARY DISTRIBUTED SITES

CENTRE FOR CHILDREN’S HEALTH RESEARCH (CCHR)
Located alongside the Queensland Children’s Hospital precinct in South Brisbane, CCHR is Queensland’s first dedicated child and adolescent health research centre aimed at providing competitive and impactful research. CCHR is a partnership between Queensland Health through Children’s Health Queensland, the University of Queensland, Translational Research Institute and QUT. This partnership aims to place Queensland at the forefront of international paediatric research.

QIMR BERGHOFER MEDICAL RESEARCH INSTITUTE
This site is located in the Royal Brisbane and Women’s Hospital in the Herston Health Precinct. QUT works in partnership with researchers from QIMR Berghofer Medical Research Institute to conduct biomedical research in infectious diseases, and in neuroscience and neuroimaging.

QUEENSLAND CROP DEVELOPMENT FACILITY, REDLANDS
The Queensland Department of Agriculture and Fisheries Crop Development Facility at Redlands is a world-class facility supporting the future of tropical, subtropical and molecular farming. QUT leases glasshouses and other facilities to develop new varieties of tropical/subtropical fruit and vegetables, sugarcane, grain, pulses and fodder crops, and to conduct pest and disease research on plants. The site is also used to conduct trials on QUT’s new generation of crop and weed management robotic machinery.

CARSELDINE RESEARCH FACILITY
The Science and Engineering Faculty and Institute of Future Environments use this site in the north of Brisbane as a storage facility and for non-regulated plant houses. The micro-gravity drop tower on this site has been decommissioned.
**DA VINCI PRECINCT**

The Da Vinci Precinct is a research facility designed and purpose built to meet the unique needs of researchers engaging in aerospace automation activities. Based at Brisbane Airport, it includes an aircraft simulation and testing laboratory, real-time flight traffic data, avionics development area, workshop, indoor flying area and office spaces. Thanks to unique flight test capabilities and access to leading technology, QUT researchers have the exclusive ability to translate automated aerospace concepts from paper to flight-tested reality.

**GRADUATE SCHOOL OF BUSINESS**

This site in Canberra is an Executive Education Centre managed by QUT’s Graduate School of Business. Study options include Executive Master of Business, Public Sector Management Program, and full-day Business Connect Leadership Development workshops that cover a variety of topics.

**POLARIS DATA CENTRE**

The Polaris Data Centre, Springfield, in Brisbane’s west, is a secure, purpose-built data centre which QUT uses for IT equipment-hosting services.
8.2 DISTRIBUTED SITES PLANNING AND DEVELOPMENT

This section identifies specific planning and development strategies and initiatives for the University’s Distributed Site network consistent with the integrated planning and design principles outlined in Section 5 and the key objectives for distributed sites in Section 8.1. An integrated approach that connects both campuses and the distributed sites is to be followed when planning and implementing changes to the physical Estate in response to emerging research, teaching and learning objectives, operational needs and engagement opportunities.

The University intends to further grow its research and development capability, and its industry engagement. To achieve this there is a need to explore and implement opportunities for the Estate that would support this growth, both on-campus and at distributed sites. In that context, expansion or improvement at existing distributed sites and development of new or additional distributed sites in off-campus locations will be given consideration where there is a clear strategic or specialist requirement that cannot be adequately accommodated at either of the two main campuses. Each potential additional site will be assessed on its own merits according to the key objectives for the University’s distributed sites. Examples include:

- Strategic requirement where collocation of a University function with an industry partner will yield tangible, long-term strategic benefit to QUT, and the industry partner is unable to be accommodated at one of the University’s two main campuses
- Specialist requirement where a University activity and the physical facilities it requires are incompatible with the other facilities, functions and land uses that exist on and around QUT’s two main campuses
- Operational requirement where there is a need to accommodate overflow activities or to provide additional buffer space to aid with the reallocation and development of spaces on the principal campuses.

The close integration of the physical and digital environments enhance the inclusion of the distributed sites as part of the operational and cultural fabric of the University.

8.3 EMERGING NEEDS

QUT’s realignment and growth in its collaborative research activities, driven by the research strategy, and the rate of and scale of change, generates needs that are not easily accommodated at short notice on either of the principal campuses or at many of the existing distributed sites tailored to specific purposes. These needs, while having a research focus, are also connected to the growing need for multipurpose spaces for undergraduate work integrated learning and placement and postgraduate study.

Emerging needs to be addressed in the near future in regard to distributed sites include:

- A large multipurpose, generalist site readily accessible from both Gardens Point and Kelvin Grove to accommodate material and activities transferred from Carseldine and Banyo sites and to accommodate the projected future growth of hard research and heavy engineering activities
- A large, open and flexible site that can accommodate activities as diverse as rural and energy management possibly to be achieved through an expansion of the use of the existing Redlands Bay facility
- A rebalancing of space between TRI and IHBI, and possible consolidation and/or growth at the Herston sites (RBWH, Herston Quarter) and Chermside (Prince Charles, MERF)
- A way that provides for greater industry outreach and graduate and professional education not only on campus but also to enable closer connection and engagement.

These examples flag the relatively fast moving emerging needs created across the University. Consideration and resolution of these needs are part of optimising the whole Estate and the application of the Integrated Planning and Design Principles (refer Section 5) and the key objectives for Distributed Sites.
DISTRIBUTED SITES

MACKAY RENEWABLE BIOCOMMODITIES PILOT PLANT.
<table>
<thead>
<tr>
<th>DISTRIBUTED SITE</th>
<th>STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANBERRA - GRADUATE SCHOOL OF BUSINESS</td>
<td>QUT will continue to invest in this site and its services while the demand for the Executive Education programs continues.</td>
</tr>
<tr>
<td>MACKAY RENEWABLE BIOCOMMODITIES PILOT PLANT</td>
<td>QUT will continue to develop and operate this site in the long term for its valuable research and industry engagement in biocommodities with a national and global perspective.</td>
</tr>
<tr>
<td>MEDICAL ENGINEERING RESEARCH FACILITY (MERF)</td>
<td>This is a highly-utilised facility providing valuable research and industry engagement for medical engineering at a national and global level over the long term.</td>
</tr>
<tr>
<td>LOWSON HOUSE, SCHOOL OF NURSING</td>
<td>There is a continuing need for this type of facility at the Royal Brisbane Women’s Hospital to provide a teaching facility for nursing students and their supervisors while doing their practice placements at the hospital.</td>
</tr>
<tr>
<td>TRANSLATIONAL RESEARCH INSTITUTE (TRI)</td>
<td>QUT is strongly committed to its long-term participation in this institute and the biomedical research being undertaken at the site.</td>
</tr>
<tr>
<td>DA VINCI PRECINCT</td>
<td>This site will continue to provide opportunity for further industry collaboration relating to engineering, robotics and aeronautics over the long term.</td>
</tr>
<tr>
<td>BANYO PILOT PLANT PRECINCT</td>
<td>This facility is close to full capacity for heavy engineering research and testing with limited space for additional research. Subject to further expansion requirements, QUT will investigate establishing another similar facility in this locality or a new facility elsewhere.</td>
</tr>
<tr>
<td>SAMFORD ECOLOGICAL RESEARCH FACILITY (SERF)</td>
<td>QUT will continue to use this site for teaching and research on environmental science activities.</td>
</tr>
<tr>
<td>HERSTON BIOFABRICATION INSTITUTE (IN DEVELOPMENT AS OF OCTOBER 2018)</td>
<td>QUT is committed through this site to bringing together clinicians, scientists, researchers and engineers on one of the largest integrated health, teaching and research precincts in Australia to focus on developing next generation fabrication technologies combined with biological systems and to translate these into practical applications.</td>
</tr>
<tr>
<td>DISTRIBUTED SITES</td>
<td>CARSELDINE RESEARCH FACILITY</td>
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<td></td>
<td>REDLANDS RESEARCH STATION</td>
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<td></td>
<td>QUEENSLAND CENTRE FOR CHILDREN’S HEALTH RESEARCH (CCHR)</td>
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<td></td>
<td>HERSTON IMAGING RESEARCH FACILITY (HIRF)</td>
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<td></td>
<td>GENOMICS CLINICAL TRIALS CENTRE</td>
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<tr>
<td></td>
<td>QIMR BERGHOFER MEDICAL RESEARCH INSTITUTE</td>
</tr>
<tr>
<td></td>
<td>SPRINGFIELD DATA CENTRE</td>
</tr>
<tr>
<td></td>
<td>AUSTRALIAN TRANSLATIONAL GENOMICS CENTRE</td>
</tr>
</tbody>
</table>
The purpose of this plan is to harness the potential of the University’s physical Estate to support the University’s strategic objectives by providing a guiding framework so that the physical estate is capable of meeting a range of scenarios for future growth and change. This plan has been broadly framed around a notional 10-year horizon for the short to medium term initiatives, and later for the long term initiatives. Yet, the structure of the Master Plan is intended to allow it to flex and respond to the patterns of changing demands and emerging priorities in step with QUT’s overarching strategic plan, Blueprint, and the related strategic plans for Research, Teaching and Digital Infrastructure.

This plan is a living document designed to allow the most effective planning decisions to be made in the face of the constantly changing environment for higher education. Over the foreseeable future the University’s current strategy for future growth includes:

- Modest growth in learning and teaching programs with particular emphasis on growing graduate and professional education and courses for international students
- Targeted and transformational step change for growth in research across the areas of research strength and priority identified in QUT’s Research Innovation Strategy
- Growth in activities related to programs for founders and entrepreneurs
Growth and change of the physical Estate will be driven by the optimisation of the physical Estate in step with the realities of the evolving capital program. The ordering dynamics will be driven by innovative responses to external opportunities and to the challenges of emerging teaching and learning initiatives and growth in supporting the needs of research priorities.

Against the background of change, the efficient, sustainable and logical sequencing of developments will be critical to the effective and efficient implementation of the vision, objectives and principles defined in this master plan to ensure that developments and projects contribute to the vitality of QUT and its Estate and resonate with the ideals and ambitions of the University.

It will be necessary to maintain flexibility when developing and implementing initiatives that are dependent on completing other actions. Short to medium-term initiatives, outlined in Sections 6.5.5 and 7.5.5, and emerging distributed needs outlined in Section 8.3, have been identified based on:

- Their strategic benefit for QUT
- Momentum for the Estate Master Plan
- The ability to move the Estate forward into the future
- The ability to provide the greatest opportunity to incorporate positive uses that benefit the wider community.

The success of this Estate Master Plan relies on the adoption of an integrated and holistic approach to planning across the entire Estate. Individual future developments and specific strategies should be cohesive and fully responsive to the defined master planning principles (Section 4.4) and integration strategies (Section 5), the design strategies and precinct-based approach for the campuses (Sections 6 and 7), and the planned development and use of distributed sites (Section 8).

This optimisation of the entire Estate is needed to ensure an efficient and logical sequencing of developments that is financially sustainable. At the same time the parts of the Estate that are not identified for future developments will continue to be part of the University’s ongoing program of maintenance and refurbishment according to, and in step with, priority needs.

A first step in translating the vision, objectives, principles and concepts of the Estate Master Plan into a purposeful strategy for guiding future development and actions is to advance the planning and assessment of the short to medium-term development opportunities for each campus identified in Sections 6.5.5 and 7.5.5, the emerging distributed site needs identified in Section 8.3, and the specific planning and design principles and strategies identified in Sections 5, 6.4 and 7.4. These initiatives have the potential to provide the catalyst for further developments and actions.

Each individual development will continue to be subject to defined University protocols and approvals before any works can be undertaken, together with any external approvals as may be relevant to a particular project. This includes appropriate public consultation on projects that have significant impact on the local community.

It is anticipated that planning and development priorities will regularly be reviewed and revised as part of the University’s asset management planning, and in step with the evolution of the University’s strategic priorities.