

Lincoln University Investment Plan

2020–2022



LINCOLN
UNIVERSITY

TE WHARE WĀNAKA O AORAKI

Lincoln University Quick facts

90%

successful
course completion
for Level 7+



18th

rated for small
universities in
the world



Top 1.4%

of all universities
globally*

*2019/2020 QS World University rankings



**Major links
and collaborative
relationships**

with industry and research centres



15%

higher graduate
employment rate



Attracts
**urban
& rural**
students



Genuine

student staff
interaction



3rd

oldest University
in New Zealand



Higher

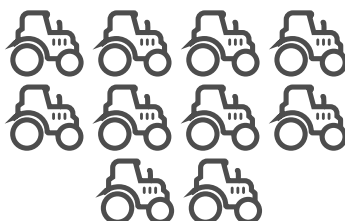
percentage of
graduates compared
to national average*

*For Level 4-7



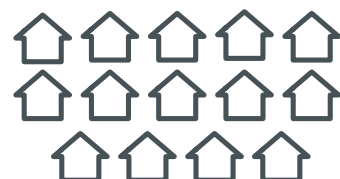
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farms



14

research
centres





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1. Introduction

Lincoln University conducts world-class research and delivers high-quality education to grow the knowledge of its students and help shape a world that benefits from a greater understanding of the relationship between land, food and ecosystems.

Lincoln enhances and enriches lives, producing thought leaders who will grow the future, so people can live well for generations to come.

Great learning and growth is the result of impactful applied research, deep industry relationships, world-class modern learning environments and teaching, and global connections, collaborations and partnerships that ensure what is taught at Lincoln is relevant today and tomorrow.

Lincoln University is placed at 356th equal in the QS World University Rankings and has a student headcount roll of 3181, along with approximately 650 staff. With three academic faculties, one teaching division, several research centres and a range of corporate service units, Lincoln University draws its students from over 80 countries throughout the world.

At Lincoln we enable our students to reach their potential so they can help shape a world that benefits from a greater relationship with the land: from tourism to viticulture, landscape architecture to food, science to agribusiness and more.

To achieve this, Lincoln has cultivated a few strengths of its own.

Course structure.

Many of the world's leading universities now allow their students to select their learning with their own end goal in mind. We do too.

This innovation, introduced in 2018, recognised a desire from students and industry for multi-disciplinary flexibility

and the delivery of programmes that reflect contemporary issues.

It came from the University identifying core disciplines, which better concentrate resources in research and teaching. It also pinpointed grand challenges facing society that Lincoln could tackle at a world-class level through a mix of disciplines in collaboration with members of other institutions.

The University sought to provide new generations with academic capacity to create and design solutions in the nexus between agriculture, water, tourism and conservation.

The introduction of additional majors add depth to degree programmes with meaningful study in a complementary discipline.

They also provide students with the ability to design their own course options, and ensure employers have a wider pool of potential employees with multi-disciplinary, job-ready capacity.

For example, students are able to include the environmental management major in commerce, science and tourism degrees, ensuring they are ready to meet our future environmental challenges. Other additional majors include Accounting, Facilities Management, Economics, Event Management, Finance, Global Business, Marketing, Parks and Outdoor Recreation, Supply Chain Management, Tourism Management and Water Management.

Small is big.

Being the smallest university in New Zealand is a good thing. It means we offer a more personable learning environment, with greater access to, and more face time, with lecturers. A village-like atmosphere leads to a greater sense of community and transfer of knowledge between students.

Research.

Not only are Lincoln's academic staff teachers, they're also high-quality researchers.

According to the latest Performance-Based Research Fund (PBRF) results, the University's students have more chance of having a high-ranking researcher in front of them than at any other New Zealand university.

In fact, Lincoln is ranked first in the measure of average quality scores of active researchers per postgraduate and final year undergraduate student.

The total Lincoln University research quality unit score for the 2018 PBRF round rose by 30% (from 688.7 units in 2012 to 895.7 units in 2018).

The results highlight Lincoln's strengths in land-based disciplines as well as its focus on producing world-class research.

Harnessing the value of our land.

Though diverse, Lincoln does not attempt to offer everything; it focuses resources where it truly excels. The University offers unique courses directly aligned with industry demand in the primary sector, with a focus on primary production, environmental management, agricultural commerce and tourism.

Lincoln students enjoy a wealth of opportunities to develop skills on campus and in the real world. Just as importantly, they become part of a thriving and inclusive student community, forging friendships that will last a lifetime. Graduates arrive at their careers globally connected, forward thinking and ready to shape tomorrow.

Lincoln University is here to enhance and enrich lives. To grow the knowledge of its students so they can shape a world that benefits from a greater understanding of the relationship between the land, the food produced from it and the ecosystems within it.

Lincoln University Framework

Vision

(where we want to be)



To be a globally ranked, top five, land-based, University, unlocking the power of the land, to enhance lives and grow the future

Purpose

(why we exist)



Lincoln University is here to conduct excellent research and education, and grow the knowledge of our students, shaping a world that benefits from a greater understanding of the relationship between our land, the food and ecosystems, and the experiences we create from these. We are here to enhance and enrich lives, and to produce thought leaders who will grow the future, so people can live well for generations to come.

Strategic Framework and Plan 2019-2028



Ambidextrous Strategy, with six goals

Renewal Strategy

- A distinctive Aotearoa New Zealand end-to-end student experience;
- Improved assets and sustainable operating models; and
- A culture which stimulates and inspire staff and students.

Shaping Strategy

- A world-class research and teaching precinct;
- An organisation focused on meaningful partnerships; and
- Facilitating growth.

Supported by four plans

1. Research
2. Education
3. Māori
4. Partnerships

Brand Positioning



GROW

For the world. Protect the future. Live well

Values



Manaakitaka
looking after
People

Rangatirataka
Kaitiakitaka
Tohatoha
Whanaungataka
Wairuataka

- Students at our core – Students are our reason for being
- Leadership – Taking responsibility as a leader at all levels
- Integrity – Doing the right thing in a reliable way
- Innovation – Encouraged through collaboration and partnerships

2. Governance

Lincoln University Council

The Lincoln University Council comprises a mix of members appointed by the Minister of Education, by Council itself, and elected staff and student members. The selection of appointed members involves a skills matrix framework that covers expected competencies and experience. Prospective candidates for elected positions are briefed on the expectations and selection framework. Additional high-calibre capability is co-opted for specific purposes, as demonstrated by the establishment of the Transformation Board in 2017.

Educational Performance

The Academic Board, a Committee of Council, ensures the quality and standards of learning, teaching and research are maintained across the University. The Board provides academic leadership that guides the academic community to achieve the best possible outcomes for the University's students, staff and stakeholders. Equal prominence is given to teaching and research, informed through its two major subcommittees (Learning and Teaching Committee and Research Committee).

Organisational Performance

Performance is monitored at governance level through a suite of standard reports including financials, student recruitment, research, and health and safety. Further, the institutional key performance indicators provide strategic financial and non-financial performance targets to give an overall view of organisational performance. Progress against these targets is regularly reported to Council.

Stakeholders and Partnerships

Lincoln University also acknowledges the importance of partnerships to the institution achieving its aspirations, and will monitor and report on how these relationships are contributing to organisational performance and outcomes.

Risk Management

Council's Audit and Risk Management Committee oversees the University's effective management of strategic risk. High-level strategic risks are reviewed every two months by the Committee and Council. Risk management systems are operated University-wide and for major projects undertaken by the institution.

Capital Asset Management

Council's Capital Asset Committee monitors and reports on the planning and progress of all capital and asset optimisation activities undertaken by the University to Council. Planning documentation and progress reports are reviewed on a regular basis, alongside policy and procedure documentation to ensure effective management of the University's capital and assets.

Farm Portfolio Management

The Council Farms Committee oversees the optimisation and strategic positioning of the University's substantial farm asset portfolio and monitors the implementation of strategy relating to these assets from a governance perspective.

Treaty of Waitangi

Under the Education Act 1989, the University Council has a duty to acknowledge the principles of the Treaty of Waitangi, in the performance of its functions. The Council constitution provides for one member to be appointed after consultation with Te Rūnanga o Ngāi Tahu. Ahumairaki oversees the Māori development aspirations of the institution on behalf of Council and in line with our obligations under the Treaty of Waitangi, the Tertiary Education Strategy and our University strategy.

Further, under the State Sector Act 1988, as a good employer the University operates a personnel policy containing provisions for the fair and proper treatment of employees in all aspects of their employment, including

an equal employment opportunities programme and recognition of: the aims and aspirations of the Māori people; the employment requirements of the Māori people; and the need for greater involvement of the Māori people in the education service.

The University's Māori Strategy outlines a range of value statements that guide the University's decision-making processes by focusing on appropriate expressions of: *whakawhanaukataka*, *manaakitaka*, *kaitiakitaka*, *rakatirataka*, *wairuataka* and *tohatoha*. As the journey towards bi-culturalism is core to the University's strategy, the Chancellor is championing the initiation of this work for Lincoln University governance and leadership. *Mana Whenua* have been approached to support the development of skills and awareness of the Council and the leadership team. It is hoped that the collaborative strategy can be co-designed with *Mana Whenua*.

Targeted support is provided to Māori students through the Māori and Pacific Island Support Coordinators. *Te Awhioraki* (Māori Students Association) supports students from its base at *Te Whare Whakakotahi*, running events and advocating to enhance the student experience for Māori.

3. Our Strategy

3.1 Alignment to existing strategies

Lincoln University is an organisation intent on growing to further contribute to the Government's strategic goals for the land-based sector. The University will contribute by increasing the number of land-based sector graduates, particularly domestic, to meet industry demand. It will also provide relevant capability and solutions to help tackle future technical and environmental challenges.

Lincoln University has a distinctive research profile, reflecting its specialist, land-based orientation. A key feature is its distinct pedagogy whereby there is a strong cohesion between research and education, meaning that its learning is positioned in a research-intensive environment where research revenue per academic FTE is the highest amongst New Zealand's universities. The University's research adds value across many sectors, including agribusiness, land and water, food, beverage, dairy, tourism and environmental management sectors. It achieves this through partnerships and collaboration with other land-based organisations, such as Crown Research Institutes (CRIs), other research entities and the private sector – many of which are based in the Lincoln community.

For Lincoln University, helping businesses and communities that are connected with the land - from agribusiness to tourism - share in the brightest possible future is behind its core purpose: unlocking the power of the land to enhance lives and grow the future.

The University has acknowledged that achieving its purpose required change. Late in 2016 it embarked on a change agenda covering key areas of University functions: education, research, leadership, and a range of strategic enablers including, amongst others, campus development.

The new financial management model

introduced in 2016 called the Internal Economy has restructured budgeting activities and introduced tools to work towards financial performance standards.

Faculties and departments now have ownership of their direct costs and revenues, allowing them to manage efforts and resources to increase student numbers and research activities, ensuring a more sustainable institution for the long term. The suite of tools to support the Internal Economy process has been developed and rolled out across the University. These tools enable budget managers to be agile and react quickly to market changes. Following a decade of sub-standard financial performance, Lincoln University is now performing above the TEC's Financial Monitoring Framework (FMF) targets.

Financial performance standards

- EBITDA to revenue 9%
- Improved financial performance returning the University to "Low Risk" under the TEC's Financial Monitoring Framework
- Finalised total insurance settlement
- EFTS at the highest level post-earthquakes
- Strategic Plan 2019-2028 in place
- Cohesive Senior Management team in place
- Asset sales achieved, plus further surplus assets identified
- Partner with AgResearch in building science facilities

In 2017, the Transformation Board

was established, which subsequently released a report in October 2017 detailing five key themes, which are reflected in the University's major initiatives. The recommendations were:

1. Redefine quality course offerings and create new ways of student-focused learning for undergraduates, postgraduates and mid-career professionals
2. Build Lincoln University's research outcomes and reputation to deliver positive change for Aotearoa New Zealand in the land, food and ecosystems domain
3. Move away from being a standalone university to be the academic heart of the Lincoln community and a valued partner to institutions with shared goals
4. Imbue Lincoln University with a clear purpose that delivers for Aotearoa New Zealand and contributes globally to create knowledge and opportunities around land, food and ecosystems, building on the University's historical strengths
5. Reset the governance and executive capability to achieve Lincoln University's renewed purpose.

“Our Strategic Plan 2019-2028 aims to ensure our KPI's and key milestones are focused on six strategic goals. We are currently consulting with Council and aim to update staff on goals and guiding principles over the next three months.”

In 2018, the University developed a new strategic framework and core strategies.

An 'ambidextrous' approach was confirmed, where the University executes a Renewal strategy to complete the process of making the institution operationally excellent and viable, in conjunction with a Shaping strategy of collaboration with the land-based sector. The approach provided the framework for the Strategic Plan 2019-2028.

To help achieve its purpose, the University's focus is on six strategic goals under the Renewal and Shaping strategic framework:

Renewal

- Goal 1. A distinctive Aotearoa New Zealand end-to-end student experience
- Goal 2. Improved assets and sustainable operating models
- Goal 3. A culture which stimulates and inspires staff and students

Shaping

- Goal 4. A world-class research and teaching precinct
- Goal 5. An organisation focused on meaningful partnerships
- Goal 6. Facilitating growth.

The achievement of the Strategic Plan 2019-2028 is the key driver for Lincoln University's growth and sustainability. The transformation initiatives undertaken to achieve this plan include:

Transformation initiatives

Redefine quality course offerings and create new ways of student-focused learning:

- Flexible majors
- Online and blended delivery
- Joint programmes.

Partnerships and collaboration:

- Blinc He Puna Karikari
- Land-based sector graduate school
- AgResearch partnership
- Children's University Canterbury partnership
- University of Canterbury partnership

Academic reorganisation:

- Centres of Excellence








Campus development:

- Science facilities
- Student experience e.g. accommodation, and sport and recreation facilities
- Earthquake-damaged infrastructure
- Business as usual (research including learning equipment, systems, farm equipment, vehicles, general PPE, ICT, infrastructure.)



As a result of the changes and the ongoing efforts to address the Transformation Board recommendations, the University is a financially viable and sustainable organisation, considered low risk under the TEC's Financial Monitoring Framework, and has a formalised strategic plan in place to ensure the delivery of its goals, KPIs and key milestones.

Lincoln University continues to make significant progress against the risks previously identified for the organisation.

-  **New financial model and return to surplus**
 -  **Continued process of strengthening governance and management**
 -  **Developing and attracting capability to lead change**
 -  **Strengthening partnerships and collaboration with other universities, CRIs, industry, iwi and other research providers**
 -  **Improved financial performance - continued strong academic performance with EFTS at highest level since earthquakes**
 -  **Returned Lincoln University to 'Low Risk' under the TEC financial monitoring framework**
 -  **Finalised total insurance settlement and progressed asset sales**
 -  **Developed Campus Master Plan & commencing redevelopment of the campus.**
-

Lincoln University is committed to responding to future demand from the land-based sector for more skilled graduates to improve productivity, environmental quality and food innovation. The ability to attract students, researchers and academic staff is underpinned by a fit-for-future campus. Lincoln University recognises that achieving a fit-for-future campus requires strategic decision-making around what and where to invest and where to partner with others to leverage their experience and assets.

Changes, therefore, involve improvement and enhancement, but also some rationalisation and consolidation. In response, Lincoln University established a Campus Development Programme to ensure individual projects are delivered and the intended benefits are met.

4. Proposed outcomes for the coming three years



Key Changes

- Increased blended and online Learning
- Campus Development plan is underway



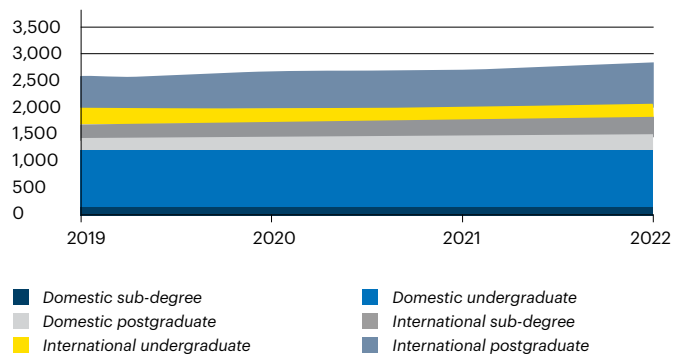
Key Targets

- Grow overall EFTS by 13%
- Grow domestic EFTS market share within the next three years
- Grow postgraduate EFTS to 33% of the student population
- Grow international EFTS to 48% of the student population

The forecast student volume is summarised below:

	2019 forecast	2020 target	2021 target	2022 target	Total growth
Domestic	1,475	1,491	1,486	1,543	4.58%
Sub-degree (Domestic)	162	164	165	167	3.02%
Undergraduate (Domestic)	1,140	1,135	1,125	1,152	1.02%
Postgraduate (Domestic)	173	192	196	224	29.52%
International	1,133	1,267	1,324	1,407	24.22%
Sub-degree (International)	273	315	322	328	20.29%
Undergraduate (International)	302	320	331	340	12.70%
Postgraduate (International)	558	632	671	739	32.36%
Total	2,608	2,758	2,810	2,950	13.11%

Total projected EFTS broken down by domestic and international qualification levels:



An increase in EFTS from 2596 in 2019 to 2863 EFTS in 2022.

This is to be achieved through the strategies and key initiatives detailed in the 2018 Student Growth Strategy.

Over the next three years Lincoln University expects to:

- Grow overall EFTS by 13% (see further details in section 4.2)
- Grow the market share of domestic EFTS after 2021 when it is expected this trend will stop declining
- Grow postgraduate EFTS to 33% of the student population (see further details in section 5.3)
- Grow international EFTS to 48% of the student population (see further details in section 5.4).

This will be achieved through a series of initiatives covering both recruitment and retention, which have been grouped into five key themes.

To achieve student growth, Lincoln University must increase the number of students it is recruiting. At the same time, to ensure year-on-year growth, newly recruited students have to be retained. To achieve this, a series of initiatives have been identified that address both recruitment and retention. These have been grouped into five key themes, which sit across target markets and cover the end-to-end student lifecycle:

Key initiatives include:

Academic Programmes:

All initiatives relating to Lincoln University's product mix (e.g. introducing online and blended learning, staircasing, taught master's degrees and changes to the University organisation)

Marketing Campaigns:

All initiatives relating to brand awareness and positioning of Lincoln University, and the key marketing campaigns and activities for target markets

Student Experience and Engagement:

All initiatives relating to the student experience, improving pastoral care and increasing student engagement, including through the Student Experience Board. These initiatives are integral to growing retention and progression, ensuring that students have a positive experience at Lincoln University

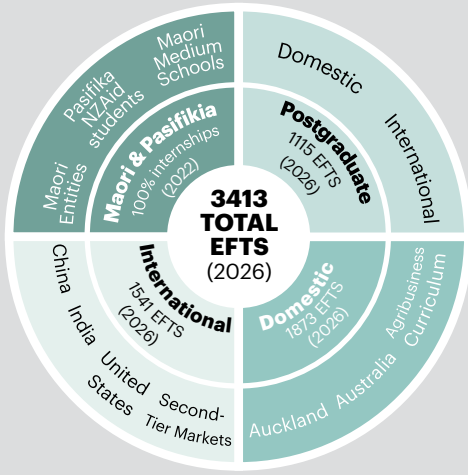
Campus Development:

All initiatives relating to Lincoln University's facilities and grounds. The Campus Development project is a key project in this category that will be integral to growing student recruitment and retention, as it is recognised that quality facilities and an outstanding campus environment will attract students, researchers, and academic staff

Partnerships:

All initiatives relating to partnering with research institutes, industry, iwi, and community, to drive student growth and retention, with a particular focus on the postgraduate market. The partnerships with the University of Canterbury, Blinc Innovation and AgResearch are integral to the University's strategy, due to the research, industry-access, and employment opportunities they present for students, researchers and academic staff.

Over the next decade there will be a need to increase the skill level of New Zealand's primary industries by both up-skilling the existing workforce and attracting more highly skilled new people to meet a projected demand of 93,000 more people with tertiary qualifications.



Heat map of impact on target markets

KEY:

- High impact
- Medium level impact
- Minimal level impact

Initiative	Domestic					International					Category	
	Postgraduate	Auckland	Canterbury	Australia	Agri-business	Maori	Pasifika	China	India	Second-tier		United States
Product Mix review	High	High	High	High	High	High	High	High	High	High	High	Academic Programmes
180 Credit Taught Masters	High	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	
Blended Learning	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	
Completely online courses	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	
Revised pathways	Medium	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium	Medium	
University Studies and English Language	Medium	High	High	High	Medium	Medium	High	High	High	High	High	
Centres of Excellence	High	Medium	Medium	Medium	Medium	Medium	High	High	High	High	High	
Whenua Arotake Akoranga	Medium	Medium	Medium	Medium	High	High	Medium	Medium	Medium	Medium	Medium	
Campus Development plan	High	High	High	High	High	High	High	High	High	High	High	Campus
Student accommodation	High	High	High	High	High	High	High	High	High	High	High	
New science facilities	High	High	High	High	High	High	High	High	High	High	High	
AgResearch/Lincoln Hub	High	High	High	High	High	High	High	High	High	High	High	Partnerships
International partnerships and rankings	High	High	High	High	High	High	High	High	High	High	High	
International joint programmes and pathways	High	High	High	High	High	High	High	High	High	High	High	
UC and others	High	High	High	High	High	High	High	High	High	High	High	
Māori / Pasifika community partnerships	Medium	Medium	Medium	Medium	High	High	Medium	Medium	Medium	Medium	Medium	
Māori and Pasifika awareness building	Medium	High	High	High	High	High	Medium	Medium	Medium	Medium	Medium	Brand Management and Marketing
Domestic school visits and marketing campaigns	High	High	High	High	High	High	Medium	Medium	Medium	Medium	Medium	
Auckland / Canterbury / Australia specific campaigns	High	High	High	High	High	High	Medium	Medium	Medium	Medium	Medium	
Strategic domestic scholarships	High	High	High	High	High	High	Medium	Medium	Medium	Medium	Medium	
International scholarships, conferences, digital marketing	High	High	High	High	High	High	High	High	High	High	High	
Pastoral care and wellbeing services	High	High	High	High	High	High	High	High	High	High	High	Student Experience and Engagement
Onboarding support	High	High	High	High	High	High	High	High	High	High	High	
Student participation and direct engagement	High	High	High	High	High	High	High	High	High	High	High	
Student Management System (SMS) replacement/upgrade	High	High	High	High	High	High	High	High	High	High	High	
Learning support	High	High	High	High	High	High	High	High	High	High	High	
Māori engagement	High	High	High	High	High	High	High	High	High	High	High	
Parent communications	High	High	High	High	High	High	High	High	High	High	High	
Student insights and market intelligence	High	High	High	High	High	High	High	High	High	High	High	

4.1 Academic programmes



Key Changes

- Ensured all undergraduate courses have an online course site in LEARN
- Increased the number of 180 taught master's. These include the Master of Pest Management and the Master of Wine and Viticulture
- Transitioned staff from traditional face-to-face delivery to using a blended learning approach.



Key Targets

- Offer a selection of postgraduate programmes 100% online by early 2020
 - Implement micro-credentials to enable learners to access specific knowledge and skills
 - Improve academic pathways for students to align and promote jointly-taught and awarded programmes with other universities
 - Implement a new 180-credit jointly taught Master of Precision Agriculture with the University of Canterbury in 2020.
-

Lincoln University's Annual Academic Programme Review measures programmes against a 5A matrix to ensure they are flexible, relevant, and connect with Lincoln's specialist portfolio, with commentary required via the University's Customer Business Partner. Programmes are also subject to an External Academic Programme Review on a cyclical basis involving both internal and external review panels. All new programmes are subject to an external peer-review process managed by Universities New Zealand within three years following graduation of the first cohort.

Academic staff are responsible for the design of programmes, including stakeholder, student and iwi consultation and input, and professional accreditation (where relevant). Industry representation on liaison and advisory groups within faculties, divisions, and departments ensures current needs and advice are identified in the design. Deans and Directors must provide a business case to the Deputy Vice-Chancellor to confirm the viability of any new programmes. All programme proposals are scrutinised and endorsed by the respective Faculty and Division Teaching Committees. Proposals are submitted to the Learning and Teaching Committee and Academic Board for review and endorsement, and progressed to Council for final approval.

Lincoln University encourages Māori and student input into programme development by ensuring membership on academic committees, including each Division/Faculty Teaching Committee, the Learning and Teaching Committee and the Academic Board.

The University's Māori Strategy aims to inculcate a kaupapa Māori ethic and approach to course and programme design. These are assessed against Māori value statements and matauraka Māori to ensure the curriculum content, delivery and overall pedagogy reflect Māori desires to study as Māori. The Learning and Teaching Committee, in partnership with the Assistant Vice-Chancellor, Māori and Pasifika, is working actively with Faculties and the Division to apply the objectives, skills and values from the Māori Strategy to support the design and implementation of programmes and courses

For 2020 the following initiatives are planned:

1

Implementation of micro-credentials intended to enable learners to access specific knowledge and skills, evidenced by a need from industry, employers, iwi, professional associations, and/or community

2

Improve academic pathways for students, commencing with addressing the credit disparity at postgraduate level to align and promote jointly-taught and awarded programmes with other universities.

¹5A's Matrix: Acceptability; Accessibility; Accreditation; Affordability; Appropriateness

180 credit taught master's

- 180 credit taught master's, are a growing feature of the New Zealand tertiary education market, and are expected to account for a substantial portion of the expected increase in postgraduate enrolments, as has occurred internationally. Lincoln University has committed to increasing its taught master offerings. The 180-credit master's introduced in 2019 included the Master of Pest Management and the Master of Wine and Viticulture. In 2020 a new 180-credit jointly-taught Master of Precision Agriculture with the University of Canterbury is planned.

Domestic Postgraduate growth

	2018	2019 forecast	2020 target	2021 target	2022 target
Bachelors with Honours	38	34.5	31.5	31.3	31.1
Postgrad Certs/Dips	8.5	9.6	8.8	8.7	8.7
Masters Taught	32.7	44.6	72.3	79.3	107.9
Masters Research	38.2	30.5	30.5	30.5	30.5
PhD	54.7	47.4	43.05	40.2	40.03
Total	172.1	166.5	186.1	189.9	218.2

Note: These figures do not include Certificate of Proficiency EFTS as they do in the figures on page 9.

Blended learning

Blended learning at Lincoln University combines face-to-face and online activities in a seamless and complementary flow of learning. Academics are encouraged to use flipped classrooms, where online activity is introduced prior to a face-to-face class, in the form of reading materials and other artefacts. These resources are provided through the Learning Management System LEARN. Lincoln uses a range of different blended approaches; the balance between online and face-to-face components, and the integration of other methods, depending on the needs of learners and the context within which the learning is implemented.

Effective blended learning builds on the traditional strengths of face-to-face teaching at Lincoln University. The blended learning rollout across the University has seen staff from all three faculties and the University Studies and English Language Division take part in a structured staff development programme. This development programme led by the Teaching Quality Team is run each year over 12 weeks (delivered in a blended learning format) with face-to-face sessions and online modules. All attendees have transitioned from traditional face-to-face delivery to using a blended learning approach.

Feedback from students indicates they appreciate the higher quality and quantity of interaction with Lincoln's academics, and their peers, that blended learning offers. Academic staff development in blended learning will continue as we look to move the majority of our first-year courses into a blended format.

All undergraduate courses have an online site in LEARN, and a structured course outline which sets out the learning contract between the examiner/lecturer and the student, including all the assessment items for that course. In the last two years the availability of a media studio has promoted the use of digital education resources that students can access at times that suit their learning needs. The content can be created in the studio or the equipment can be taken out into the field. Our camera team works closely with our academic staff to create a number of videos on farm management, vineyard operation and animal welfare.

Online programmes

The use of digital education resources extends to Lincoln's objective of offering online programmes. This supports our ability to grow our presence outside of the Canterbury region. The flexibility and accessibility of online learning reduces the amount of time students have to spend on campus, and therefore better enables them to complete their studies around employment and geographic constraints. There is potential for students living throughout New Zealand and overseas to complete a qualification entirely through distance learning – which broadens opportunities for the University and potential students alike.

By early 2020, Lincoln plans to offer a selection of postgraduate programmes that are offered 100% online.

Provide clear pathways to degree level study

The Certificate in University Studies (CUS) and Diploma in University Studies (DUS) are key staircase qualifications, with 90% of students who've completed one or more of these qualifications being retained by the University.

Once students have successfully transitioned from CUS and DUS to degree study and a completed degree, they can expect the same employment outcomes as their peers who entered with University Entrance.

The table below shows the progression from higher study to Lincoln University programmes. The Level 5 programmes (excluding DUS) includes the Diploma in Agriculture and Diploma in Horticulture from which students most commonly graduate into employment. Nominal numbers of students do choose to progress from the Diploma in Agriculture to the Level 6 Diploma in Farm Management, and then to the Bachelor of Commerce (Agriculture). The majority of DUS students progress into either the Bachelor of Commerce or Bachelor of Science.

Progression to Higher Study

	2018 actual	2019 forecast	2020 target	2021 target
CUS	88.9%	91.0%	91.5%	92.0%
DUS	90.0%	97.5%	97.8%	98.0%
Level 5 (excluding DUS)	27.2%	38.5%	39.0%	40.0%

Note: These figures denote progression to Lincoln University programmes only.

The value of CUS and DUS to students at Lincoln University is that they offer shorter and more highly supported pathways to degrees than traditional bridging programmes.

The anticipated time to completion of a degree for a CUS student is a further three years, with a shorter time frame available for those on an accelerated pathway. For DUS students, the expected time to completion of degree is between two and three years.



4.2 Marketing campaigns



Key Changes

- Initiating the change in focus on growing its home region of Canterbury
- Developing a bicultural campus that has a commitment to work with takata whenua and provide greater visibility of the University's commitment to Māori
- Supporting and engaging with relevant schools and communities with a focus on Māori and Pasifika to bring a broader awareness and engagement to our specialist programmes
- Continuing to build and foster partnerships and internships with Pasifika, iwi, hapū and Māori land-based entities through a variety of organised events such as the Hui Taumata Taiohi
- Supporting excellence in Mātauraka Māori and Putaiao (science) by funding Te Whare Wānaka o Aoraki trophies at high school prizegivings
- Providing direct sponsorship for local and national kapa haka competitions and supporting the winners of regional South Island competitions to attend national events.



Key Targets

- Increase enrolments from the Canterbury region; from within schools with the Agribusiness curriculum; from students in urban environments; and, specifically, from the Auckland and Australian markets
- Increase enrolments of Māori by 10-11% and Pasifika by 10%
- Increase the number of postgraduate researchers and implement changes to ways of working, which includes allowing researchers from other organisations to serve as supervisors of PhD students
- Implement a joint graduate school for studies in the land-based land sector with New Zealand Crown Research Institutes and other New Zealand and international universities
- Grow international numbers with a focus on postgraduate-taught research and global partnerships.



Lincoln University Open Day July 2019.

Lincoln University has prioritised specific target markets to drive growth in student recruitment and retention.

The majority of Lincoln University's domestic students have traditionally come from the Canterbury region. Its representation continues to be significant. However, we are seeing a decline in the domestic Canterbury market with Canterbury now accounting for between 38% and 70% of students across each of Lincoln's top nine programmes.

In order to build its domestic market share, Lincoln University must invest in building student numbers from the broader New Zealand student pool, in particular urban students. Lincoln has a number of competitive advantages compared to other New Zealand tertiary institutions, which should prove attractive to students from all regions.

Lincoln University's competitive advantages compared to other New Zealand tertiary institutions include:

- 1 The highest percentage of students that transition into paid employment compared to other tertiary institutions in New Zealand (see Section 5.1)
- 2 Specialist degrees in fields that are in-demand, and speak directly to the New Zealand land-based sector including primary production, environmental management, agricultural commerce and tourism
- 3 Global reach and access to global experts, including collaborations with CRI and industry partners.

Recognising this, Lincoln is focused on increasing student numbers from across the regions but with a particular focus on growing its home region of Canterbury, and the high urban market of Auckland. However, despite these having the greatest growth potential, it will require significant investment to change the traditional perception of Lincoln University.

Key objectives to increase student numbers include:

→ **Increase applications** from the Canterbury region by **15%**

→ **Increase applications** from schools with the Agribusiness curriculum by **10%**

→ **Focus on students** from urban environments, specifically Auckland with the goal to increase applications by **5%** (10% in Auckland)

→ **Look for growth** from the Australian market with the goal to increase applications by **10%**

→ **Increase the number** of enrolments by **10 – 11%** for Māori and **10%** for Pasifika.

Māori and Pasifika communities: Lincoln University and its wider entities understand that it has a role to play in supporting the goals and aspirations for Māori and Pasifika communities and contributing to their specialist land-based industries. Actively considering how the University can contribute and collaborate with whānau, hapū and iwi, allows a broader awareness and engagement in our specialist programmes. These are done through the following actions:



- **Attendance** at a variety of Māori and Pasifika events nationwide including Poly Fest, Waitaha Regionals, and the National Manu Korero Competition
- **Preparing** marketing material that is appropriate for and relevant to Māori and Pasifika audiences
- **Developing and promoting** Māori and Pasifika scholarships
- **Developing** a digital strategy to promote Lincoln to Māori and Pasifika audiences
- **Networking** with whānau trusts, incorporations, hapū entities, iwi and Rūnanga to increase the visibility and reputation of Lincoln University
- **Running** a variety of on-campus events for the Māori community.

The Waitaha Regional Ngā Manu Kōrero Speech Competition involving 820 high school students from Canterbury and the West Coast took place on 28 June 2019, and a Mahika Kai Conference to support indigenous mahika kai practitioners, research and innovation will be held in December 2019. Both these events support new Māori content course offerings on campus.

Other key activities include:

- Developing a bicultural campus that has a commitment to work with takata whenua and provide greater visibility of the University's commitment to Māori
- Supporting and engaging relevant schools and communities with a focus on Māori and Pasifika such as through Hui Taumata Taiohi
- Continuing to build and foster partnerships and internships with Pasifika, iwi, hapū and Māori land-based entities.

Case study 1: Hui Taumata Taiohi

In 2018, Lincoln University hosted a Hui Taumata Taiohi which involved 38 schools and four tertiary providers across New Zealand, including 68 high school students from the North Island. The focus of the Hui was to engage taiohi in a national hui to obtain their voice on areas of importance to them. These included cultural identity, te reo, whānau ora, mahika kai, Māori business and hauora. Taiohi identified a number of key challenges and the intention is to provide regional workshops to support Taiohi in some of those areas. Registrations were received from 175 high school students. The University plans to host this biannually in the future and, as a result, expects a continued interest in pathways to university to come from this.

Case study 2: Supporting excellence in Mātauraka Māori and Putaiao

Lincoln University has identified it can make a difference by supporting young Māori leaders to find solutions to both local and global challenges and showcase their talents and skills at national forums. The University has provided awards to selected high schools across New Zealand to support excellence in Mātauraka Māori and Putaiao (science) by funding Te Whare Wānaka o Aoraki trophies at their prizegivings. These schools include Māori boarding schools, Te Kura Kaupapa and Māori specific kaupapa schools. This is coupled with providing direct sponsorship for local and national kapa haka competitions and supporting the winners of regional South Island competitions to attend national events. The winners of the Te Rangaihi Waitaha Primary Schools Kapa Haka Competition 2018 and the 2019 Waitaha Regional Ngā Manu Kōrero Speech Competition have been provided awards to support their participation at their national competitions.



Postgraduate students:

Key initiatives to grow postgraduate numbers in response to increasing industry and student demand, primarily driven by partnerships with research institutes include:

- Growing the number of 180 credit taught master's programmes, in response to demand from students and industry
- Increasing the number of postgraduate researchers and changes to ways of working, which includes allowing researchers from other organisations to serve as supervisors of PhD students. This will allow an attendant increase in research-based postgraduates at the University
- Implementing a joint graduate school for studies in the land-based sector with New Zealand Crown Research Institutes and other New Zealand and international universities.

International students:

We're growing international numbers by focusing on postgraduate taught, research and global partnerships. Outlined below are key directions associated with the following market segments:

- Maintaining China – presently the largest market where enrolments may be strengthened by pipeline partnerships with Chinese universities
- Growing India – Lincoln's second largest market, with rapid growth and prevalence of postgraduate study. An on-the-ground presence since August 2018 has helped to grow this market
- Maintaining the United States – crucial to fostering diversity of the student population
- Growing second-tier international markets – this will minimise the risk of over-reliance on large markets. Opportunities have been identified in Asia, South Asia (notably Sri Lanka) and South East Asia (notably Indonesia, and Vietnam), which are particularly attractive given their potential for growth.

4.3 Student experience and engagement



Key Changes

- Strengthened the Student Experience Board
- New Student Experience Benchmark.



Key Targets

- Improve the end-to-end student experience through the adoption of a student-centred design model
- Introduce student experience operational plans to ensure the University takes a unified approach to enhancing student experience and engagement.



Students at our core is one of Lincoln University's values and to support this a series of initiatives to improve the end-to-end student journey have been adopted. Student experience and engagement is a powerful recruitment drawcard and also has a positive impact on retention. It is integral to supporting academic success and promoting progression into higher levels of study. Many student experience and engagement initiatives apply to all students. However, to recognise the unique needs of student segments, Lincoln has developed a series of market-specific initiatives:

Market-specific initiatives:

Hauora:

Hauora wellbeing is at the heart of the student experience, and is frequently found outside of the lecture hall. Lincoln University has invested in a number of services, ranging from general social facilities and activities, to specific one-on-one health and support services. A new Respectfully Lincoln sex and consent programme has been established and positively received by students. A Wellbeing mentor programme has allowed students to be trained in, and advocate for, health and wellbeing

Welcoming:

Lincoln University has adopted a comprehensive transition and orientation programme for all new students to ensure they are well equipped to begin tertiary level education or, for international students, prepared for study in a New Zealand education environment. Student-to-student interactions have been increased to support new students with the adoption of supervised buddy systems and student-led events that encourage interaction between domestic and international students

Engaging:

There is a correlation between student involvement in on-campus activities, and retention and progression rates; the more engaged a student is, the more likely they are to progress and return. Examples of involvement include working on campus, having a gym membership, and/or being a member of a team or club

The Parent Experience:

Parents are also impacted by Lincoln University's offering and, as key influencers of both their own and others' current and future children, it is important that they have a positive experience of the Lincoln University brand

Voice of the Student:

The best way to improve student engagement is to go to the students themselves, incorporating the voice of students into all decision-making on matters affecting their experience. This includes ensuring there is student representation on our academic committees and Council, working groups, and our Student Experience Board which is co-chaired by a student representative.

Prior to enrolment, Student Liaison and Customer Engagement help prospective students make informed choices about their tertiary enrolments, by working with them to determine if the career path they are looking at is right for them. This could be through assisting them with finding people within the industry for networking and/or shadowing. A large amount of time is also spent talking about outcomes, and coaching students to 'work backwards' by looking into their area of interest and seeing what type of jobs come up; how buoyant the market is; and what qualifications and attributes are required. The service works with both prospective students and their influencers, with graduates in key sectors being brought back to their schools to talk about what they do, so students can make informed decisions.

Lincoln University conducts an annual Student Experience Benchmark survey to measure and improve the student experience. The outcomes of this survey inform key initiatives and quick wins alongside recommendations from the Student Experience Board.

Measuring and enhancing the student experience

Lincoln continuously strives to improve the University experience and apply formal research methods aligned with an annual improvement lifecycle to benchmark, enhance and measure the student experience.

A Student Experience Benchmark Survey was conducted in October 2018. All current Lincoln University students were invited to complete the survey. The survey represented a range of student cohorts: full and part-time, domestic and international, and a mix of qualifications. Net promoter scores (NPS) as a measure of success were used. NPS is established by subtracting the percentage of people not likely to recommend (detractors, 0-6) from the percentage of those likely to recommend (Promoters, 9-10). Passive scores, 7-8 are ignored.

Lincoln students were particularly positive about the natural environment around campus, teaching programmes and acquisition of work-related skills, as well as 'being generally easy to deal with'.

Student Experience Benchmark Survey

October 2018

Key findings were:

87% 87% of students are satisfied with Lincoln University

82% 82% of students state Lincoln University meets or exceeds their expectations

83% 83% of students are likely to recommend Lincoln University to friends or colleagues

72% 72% have already recommended Lincoln University to others.



Adopting a student experience model

To improve the end-to-end student experience, Lincoln University has adopted a student-centred design approach. When designing student experiences and engagements, the following are assessed:

1. How students consciously view their experiences (what they are thinking)
2. How students subconsciously view their experiences (what they are feeling)
3. What actions students take during their experiences (what they are doing)
4. What students are thinking, feeling and doing throughout their user experiences, social experiences and learning experiences.

Greater investment goes towards initiatives designed to collectively enhance all three components of the student experience.

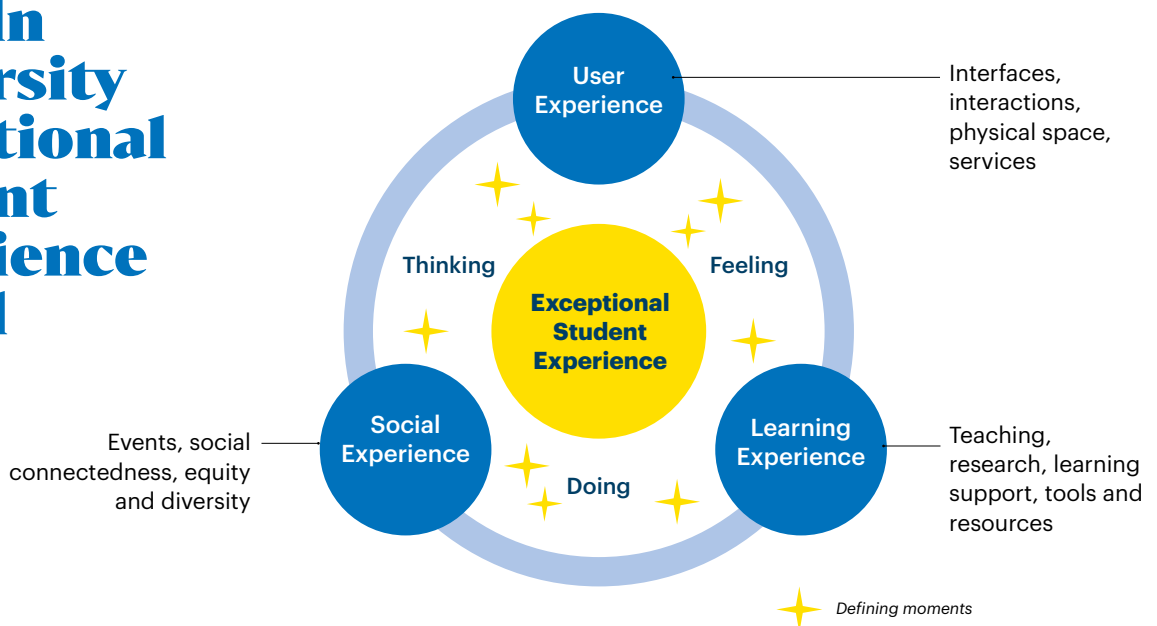
Student-centred design

Student-centred design workshops are held each semester with students representing different segments. Journey-mapping techniques are used to help the University assess student pain-points, identify needs for qualitative analysis and establish evidence-based opportunities for improvement.

A student experience professional development programme has been implemented to encourage staff adoption of a student-centred design approach.

Annual student experience operational plans are underpinned by the student-centred design findings and ensure the University takes a unified approach to enhancing student experience and engagement.

Lincoln University exceptional student experience model



Lincoln University Student Experience Journey

GUIDING PRINCIPLE

Our students' needs are anticipated through seamless, genuine, consistent and personalised experiences both on and off campus. They are given equal opportunities to have the best and distinctive end-to-end experience relevant to their needs and purposes and can easily and comfortably voice feedback during interactions with touch points throughout their journey. The student experience provides a strong foundation for life-long learning and prepares students well for the future, careers success and impact in the land-based sector.



STAGES

<ul style="list-style-type: none"> Attend events. Receive professional guidance (agents, teachers, advisors). Observe scholarship/advertising influencers. Search online. Visit campus. 	<ul style="list-style-type: none"> Decide qualification. Prepare personal docs. Create & submit application/s (academic, scholarship, accommodation). Respond to admission requests. Accept offer/s. Access online resources. 	<ul style="list-style-type: none"> Request more info. Visit campus or talk online. Receive academic advice. Compare choices. Discuss with influencers. Make decision with social networks. 	<ul style="list-style-type: none"> Sort finances & employment. Arrange travel/visas. Engage with online communities. Organise new home life. Buy orientation tickets. Register for orientation. 	<ul style="list-style-type: none"> Receive advice. Review course content. Select courses. Pay fees. Establish timetable. Join rec centre & health centre. Receive ID card. Access online learning tools and services. 	<ul style="list-style-type: none"> Adjust to new living environment. Be officially welcomed. Attend orientation activities. Explore campus, Lincoln, Christchurch. Make friends. Meet RAs, buddies and mentors. Attend first lecture! Join clubs & associations. Complete first term. 	<ul style="list-style-type: none"> Make use of campus facilities. Get support from service areas. Socialise. Build relationships. Grow personally. Discover new ways of learning. Gain knowledge. Attend lectures and tutorials. Receive academic and career guidance. Gain work experience 	<ul style="list-style-type: none"> Pass assessments. Review results. Track progress. Seek and receive help. Receive recognition for academic achievements. Complete practical work. Register for my eQuals. Gain employment. Apply to graduate. Re-enrol or re-apply. 	<ul style="list-style-type: none"> Receive recognition through awards and certificates. Celebrate achievements with friends and whānau. Share moments on social media. Join alumni community. 	<ul style="list-style-type: none"> Engage with content. Talk positively about Lincoln. Attend events. Recommend Lincoln to friends, colleagues and family. 	<ul style="list-style-type: none"> Give to campaigns. Volunteer time to support Lincoln initiatives. Become a graduate mentor. Provide professional expertise. Make a major donation. Support a scholarship. Make a bequest.
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DOING

"I can picture my future."	"That was easier than I expected."	"I am so pleased I've made a decision."	"I can't wait to make new friends."	"Being a student at Lincoln is going to be amazing."	"I did it! - it's great to finally be settled in."	"Lincoln has given me opportunities I never imagined."	"I'm confident about my future."	"This is my biggest achievement yet"	"Some of my fondest memories are of Lincoln Uni."	"I wouldn't be where I am today if it wasn't for Lincoln University."
INSPIRATION	ANTICIPATION	HAPPINESS	EXCITEMENT	CONFIDENCE	CONTENTMENT	ACCOMPLISHMENT	EMPOWERMENT	PRIDE	LOYALTY	GRATITUDE

THINKING

FEELING

Net Promoter Scores (NPS), Customer Satisfaction (CSAT), digital and in-person engagement analytics.	Retention and Progression Educational Performance Indicators (EPis), Graduate Outcomes, Employment Outcomes.	EFTS targets, Fundraising targets.
MEASURE	MEASURE	MEASURE

MEASURE

Graduate destination survey

Since Lincoln University reinstated the Graduation Destination Survey in 2017, it continues to achieve a higher-than-average response rate for externally distributed online surveys. The survey, conducted in 2019, collected data from 2018 graduates about:

- Post-Lincoln University employment and/or study situation
- Type of employment (e.g. job type, industry) and future employment plans
- Experiences of work-related opportunities and skill development at Lincoln University.



The 2019 survey (of 2018 graduates), known as the 2018 Graduate Destination Survey achieved a

49% response rate

Key findings were:

84%

of the survey respondents were in paid employment with 84% of these working full-time; 16% were not in paid employment

87%

of those in paid employment worked 30 hours or more a week

48%

(almost half) of respondents who were not in paid employment were not looking for employment, with half enrolled for further study

84%

of survey respondents who were in paid employment said it was either their ideal employment at this stage of their career (38%) or a step in the right direction (46%)

58%

of students who had enrolled to do further study, returned to Lincoln University.

4.4 Campus development



Key Changes

- Approved and implemented a full Campus Development Programme
- Undertook significant remedial and replacement work
- Settled insurance claim giving the University the financial capacity to undertake planned changes.



Key Targets

- Greater return on research and development
 - Increase in number of land-based sector graduates
 - Globally competitive agri-tech industry
 - Globally competitive land-based sector
 - Sustainable production and management of food, land, fibre and ecosystems
 - Improved ability to attract and grow talent
 - Delivery of better research outcomes for New Zealand through collaboration than could be achieved as a stand-alone institution
 - Improved financial outcomes
 - Increased stakeholder confidence and preference.
-

With a view to the future, Lincoln has embarked on a campus development programme with a vision to be the place of choice for students and researchers. A place where people will grow in their knowledge, an incubator of innovation and agribusiness, and a national hub for land based research.

The vision for the campus – with people at the core – draws on the University’s Māori strategy and focus on sustainability, while balancing respect for our heritage with an eye to the future. One of our goals is to provide an environment that allows our students and staff to reach their potential. Our desire is to create a campus that enhances connections and collaboration. A campus with a vibrant heart at the centre.

The Campus Development Programme² has been developed with a set of Master Planning principles informing a range of changes, from quick wins to long-term investments:

Master Planning principles

1

Leader

Be a leader, look like a leader, act like a leader, and walk the talk

2

Attractor

Be the place of choice for students, researchers, and business

3

Collaborator

Be the national hub of land-based science, education, design and commerce

4

Incubator

Be an incubator of innovation and agribusiness.

²Refer Appendix ** – Campus Development Programme

Recognising that achieving a fit-for-future campus, which is attractive to potential students and will support their retention, requires strategic decision-making around what and where to invest. Changes, therefore, involve improvement and enhancement, but also some rationalisation and consolidation.

The Lincoln University campus – which includes the land surrounding it – will act as an incubation site, hatching ideas, developing new products and hosting emerging businesses and like-minded partners.

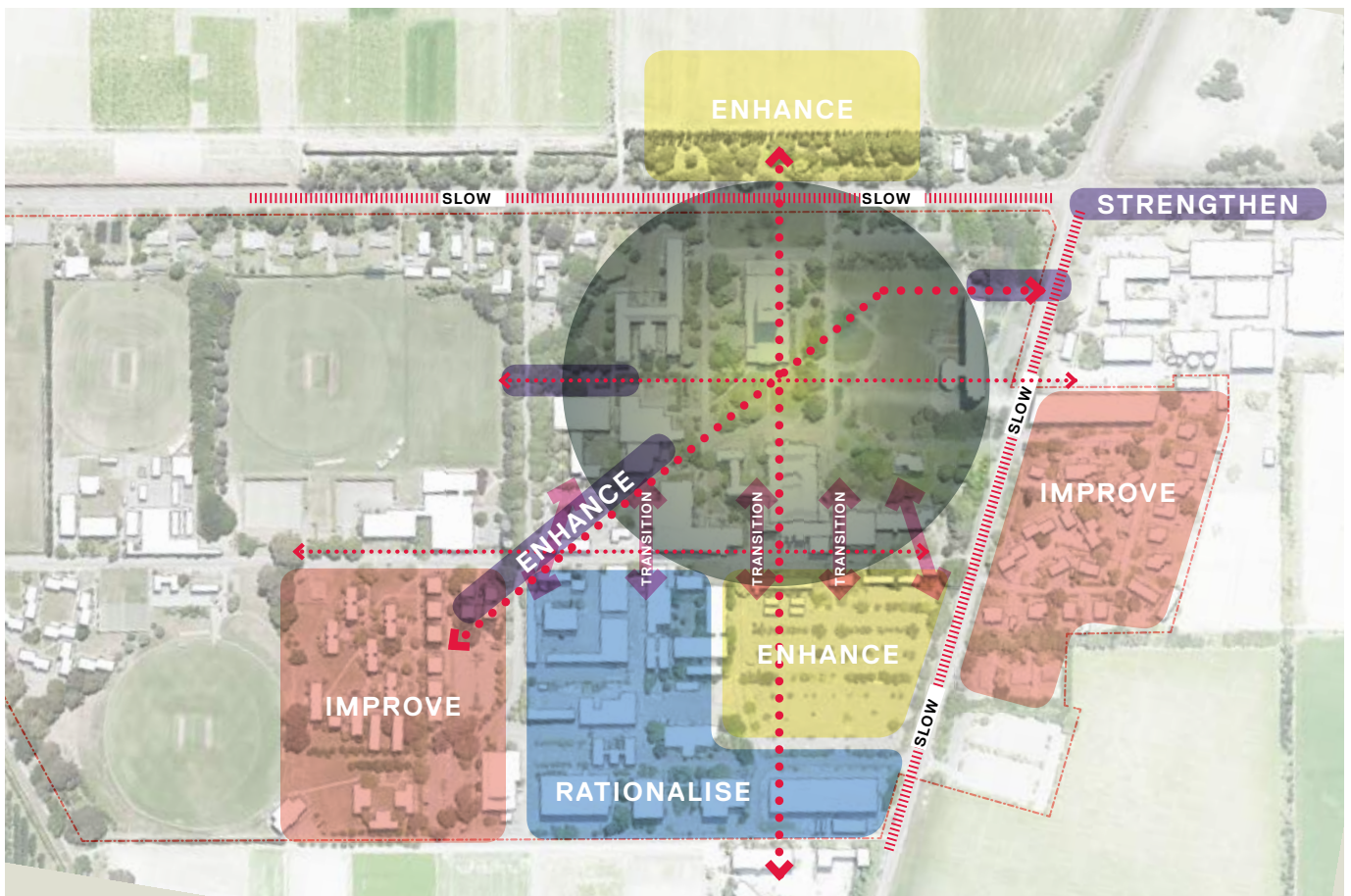
The overall investment, estimated at up to \$203.6m, is being undertaken over three main phases and a 10-year period (2019-2028).

In the work programme to date, the focus has been on ‘essential works’. Essential works include work needed to enable future development, urgent earthquake remediation, health and safety improvements, student experience spaces, and creation of decanting space to enable earthquake remediation works. The remaining funding is allocated to modernisation of learning facilities and learning technology.

Going forward the programme has been organised into three workstreams. These workstreams reflect the Strategic Goals of the University (Strategic Goals 1-3). The workstreams are:

1. World class teaching and research
2. Best end-to-end student experience
3. Improving assets – including BAU projects, earthquake repairs and demolition.

The diagram below provides a spatial overview of the fit-for-future campus and involves both development and rationalisation.



Key features of the Capital Development Programme

1

A focus on prioritisation of projects to achieve the best long-term campus solution whilst realising benefits quickly and in a well coordinated fashion

2

Minimising as far as is practicable the effects on 'business as usual' and the operations of the University

3

The establishment of a robust set of programme principles, policies and procedures that generate a consistent approach to the planning and delivery of projects in line with Government Procurement Rules

4

A carefully developed governance and management structure that supports the efficient delivery of the programme.

The phasing and prioritisation of the projects making up the programme has been established through a review of requirements against:

- Campus Masterplan
- Capital asset management plans and forecasts
- Affordability
- Procurement and delivery models
- Lincoln University Strategic Plan
- Decanting and business continuity requirements.

A number of projects are already complete or underway and are as follows:



The Junction, student accommodation.

Completed Projects

- **Replacement for Hilgendorf:**
A new science teaching block that replaced the now demolished Hilgendorf building
- **Te Kete Ika:**
Refurbishment of the University dining hall and food and beverage facilities
- **Forbes Building – Grounded:**
New student café and social space
- **Accommodation:**
Refurbishment of a number of accommodation buildings and the building of six, five-bedroom Keith Hay homes

- **Teaching spaces:**
Refurbishment of several buildings such as Fletcher House, Hudson's north and south wings, new teaching labs in the NRE workshop as well as four new stand-alone teaching spaces, four new growth rooms and a teaching laboratory in the Field Research Centre
- **Heritage buildings:**
Refurbishment of the Dairy, Ivey Hall, and resource consent and design completed for the Ivey and Memorial buildings which are ready for tender
- **Seismic upgrades:**
A number of buildings have had upgrades to bring them up to code
- **Other infrastructure:**
An upgrade of the lifts in George Forbes, Stewart air-handling project and upgrade of the water reticulation system.

Projects Underway

- **Student space and LUSA:**
Phase 2 refurbishment, and seismic strengthening of the Forbes building
- **Sports and recreation facility:**
Redevelopment of the University Recreation Centre to cater for increased demand and to replace outdated facilities
- **Postgraduate space (Library):**
New dedicated Postgraduate learning space
- **New science facilities:**
Development of plans for new science teaching and learning facilities.



The refurbished Dairy.

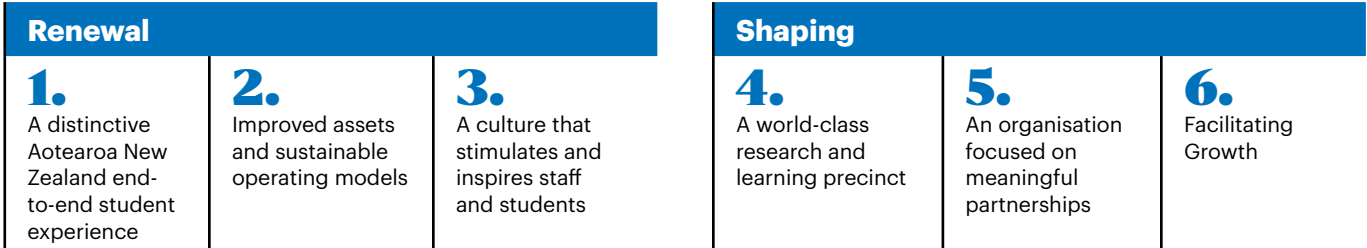


Grounded, a new student space.

Vision

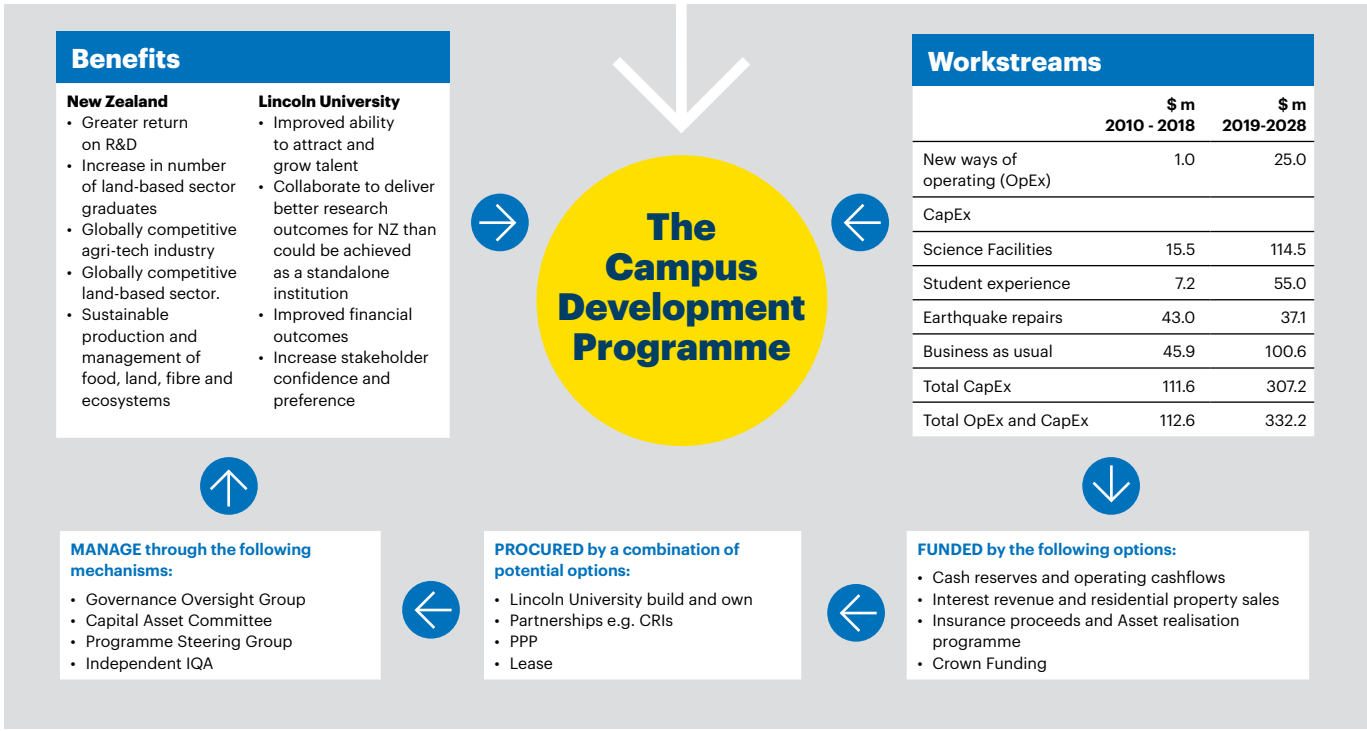
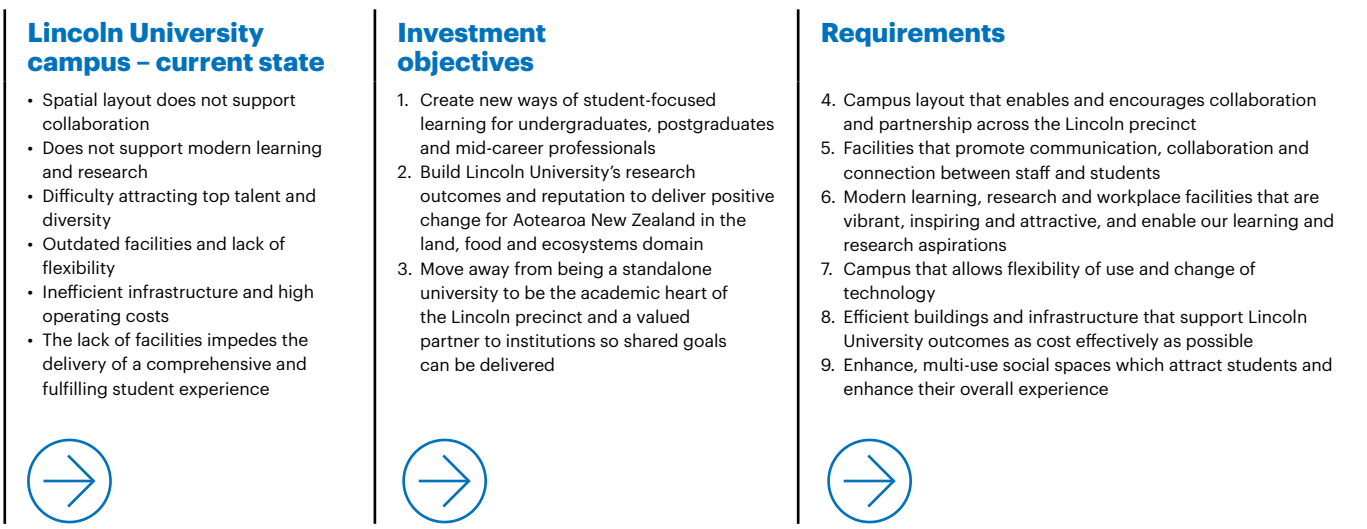
Unlocking the power of the land to enhance lives and grow the future

Strategic goals



→ Achieved by **Efficient ways of working**

→ Enabled by **Fit for future campus**



Vision

Unlocking the power of the land to enhance lives and grow the future



Strategic Plan

The Lincoln University Strategic Plan 2019-2028 defines the scope of services to be provided to achieve purpose and strategic goals



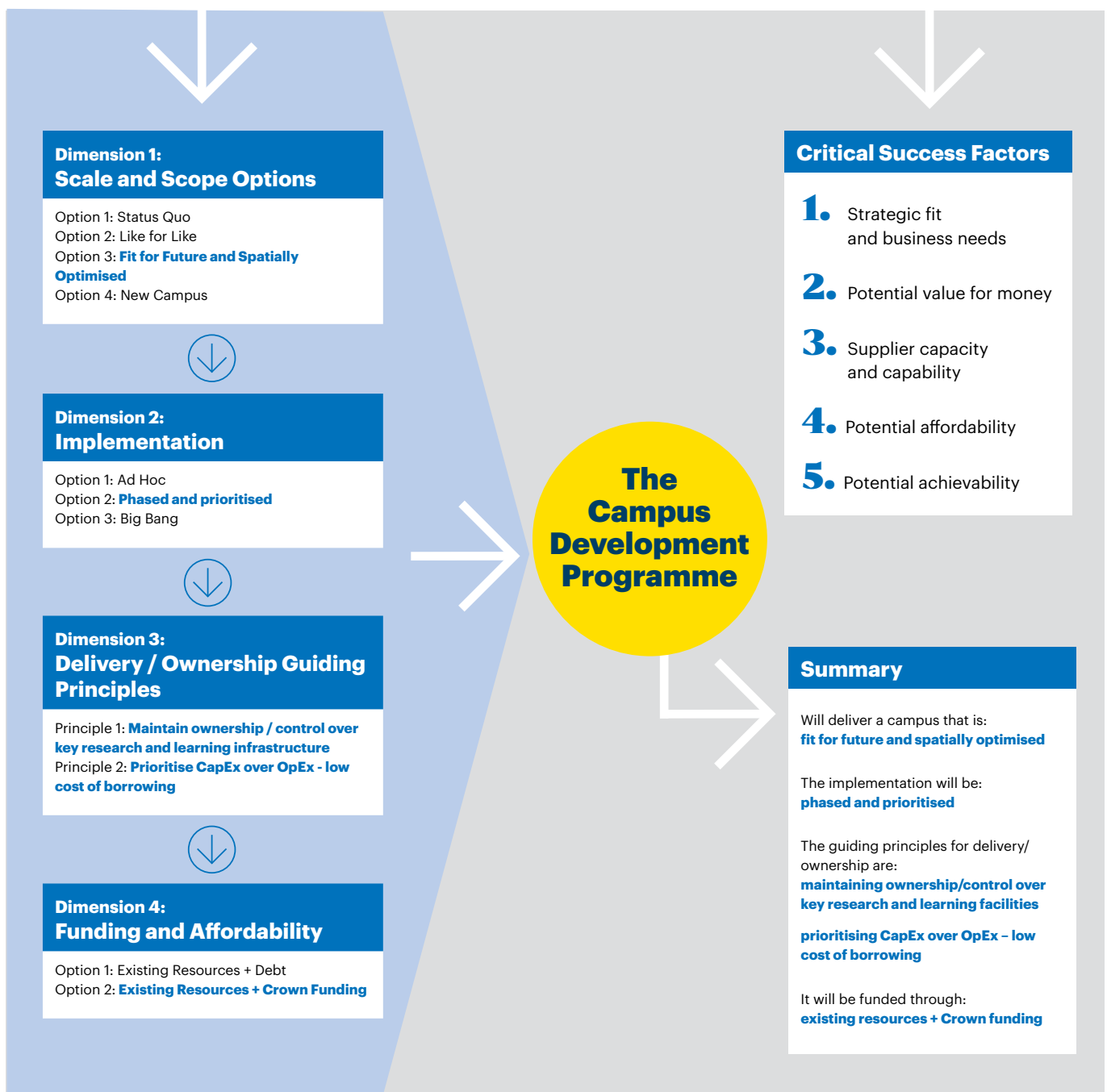
Fit for Future Campus

Enabled by:



The Programme Business and Economic Case

Assesses options and makes recommendation to how this is best achieved



4.5 Partnerships



Key Changes

- Partnership discussions with University of Canterbury
- Implemented the Children's University Canterbury Partnership with Canterbury University
- Partnership discussions with AgResearch
- Signed a memorandum of understanding with the Parks Agencies Managers Group as the preferred tertiary provider for parks programmes.



Key Targets

- Increase participation in university study by offering and promoting learning experiences and educational opportunities through the Children's University Canterbury Partnership
- Increase postgraduate supervisory capacity through partnering with AgResearch, and other CRI's, and the building of new science facilities.

University of Canterbury partnership

Lincoln University and the University of Canterbury (UC) announced the signing of a Memorandum of Understanding (MoU) in August 2018 to keep New Zealand at the forefront of leading-edge land-based science, commerce, management and design.

The agreement, signed by the Chancellors and Vice-Chancellors of the two universities, will allow the parties to explore partnership options to accelerate and enhance Lincoln's unique 140-year contribution to the land-based sector and wider economy, with a strong focus on meeting the sector's need for more highly-skilled staff through world-class teaching and research.

The signing of the MoU follows detailed discussions between Lincoln University and the Government about the constraints of achieving the step-change required for Lincoln to grow faster, and the support needed to meet the goals set out in the Transformation Board report.

In December, the Universities provided a partnership proposal to the Government for consideration. With Government support, the proposed partnership is expected to deliver more graduates with courses of study relevant to the land and food sector, and offers the opportunity to provide a pilot land and food sector micro-credential programme. The partnership will also provide a step change in future-focused land and food research with highly relevant national projects that have national and international application.

This partnership adds to a number of already-established collaborations between Lincoln University and other educational institutions, such as SIGNAL ICT Graduate School - a joint project with the University of Canterbury, Ara, Otago Polytechnic and the University of Otago.

Children's University

The Children's University Canterbury Partnership (CUCP) is a programme established between Lincoln University and the University of Canterbury in 2018 as part of the LU-UC partnership discussions. Lincoln University and The University of Canterbury are working in partnership to deliver the programme, which is the first of its kind in New Zealand, under a licencing agreement with the University of Adelaide (UOA).

Recruitment of students in the higher education sector is increasingly challenging. With a focus on growth in the sector, longer-term engagement programmes are becoming just as important as short-term targeting marketing campaigns. A key focus is to increase participation in university studies by offering, promoting and establishing pathways for different cohorts to access higher education. As part of promoting higher education, the Children's University aims to help primary and secondary students, and their parents, realise that learning opportunities can open doors to their future and that university study is possible, practicable and achievable. It aims to raise young people's aspirations for higher education and open their eyes to the world of possibility.

In particular, Children's University provides a practical pathway for engaging with people from areas of social and economic disadvantage and increasing their educational aspiration. The Children's University is an award-winning international concept with a long history of working with children, and evidence shows the promotion of continuous learning encourages participation and inspires independent learning.

Lincoln University and AgResearch

Work continued in 2018 on the planning of the Lincoln University AgResearch Joint Facility on the Lincoln campus, where the Hilgendorf building was previously located. Lincoln University and AgResearch formed a limited partnership to build the Joint Facility, to catalyse multi-disciplinary and multi-organisational collaboration on a significant scale, supporting scholarships and driving innovation.

Following the Government's decision not to endorse the Joint Facility Implementation Business Case, the partners have worked closely together to design complimentary buildings on the former Joint Facility site with a view to achieve the intended benefits. The partners are currently presenting business cases for their buildings to the Crown and working through the sale and purchase of underlying land.

Lincoln University and AgResearch are committed to partnering in a collaborative precinct to deliver significant benefits for New Zealand's agricultural and land-based sectors. Through this partnership we can increase our postgraduate supervisory capacity, opening up research and employment opportunities for postgraduate students attracted by the industry interaction, and vice-versa.

Blinc Innovation

Blinc innovation facilitates and connects across business, science and academia. It works alongside innovators to create new solutions, using the Naturetech ecosystem, in people, ideas, knowledge, resources, insights and experiences to create and innovate for tomorrow.

Formerly the Lincoln Hub, Blinc Innovation rebranded and moved onto the Lincoln University campus in May 2018. The Lincoln Hub innovation network and agri-research precinct

was made up of five partners: Lincoln University, AgResearch, DairyNZ, Manaaki Whenua - Landcare Research, and Plant and Food Research.

Blinc's campus 'Workshop', is a co-working space which caters for start-up teams and small agri-businesses looking for a place to connect, with permanent or semi-permanent desks, and space for meetings and workshops.

Throughout 2018 and 2019 Blinc has held events, collective collaborations and encouraged research and networking around a shared vision for the future of agrifood.

South Island Dairying Development Centre

Lincoln University partners with DairyNZ, Ravensdown, LIC, Plant & Food Research, AgResearch and SIDE (a network of South Island Dairy Farmers) in the South Island Dairying Development Centre (SIDDC).

Part of SIDDC's role is to manage Lincoln University's demonstration dairy farm (LUDF) on the outskirts of the University campus. This farm combines emerging research and the best available technology and systems to demonstrate sustainable, profitable dairy farm practices.

The farm has voluntarily sought to meet the future nutrient loss targets for the local catchment, while maintaining current profitability, to enable ongoing reinvestment into the farm.

Lincoln University Dairy Farm hosts a number of events to share the farm's successes and challenges with both dairy farmers and the wider community, through a range of school visits and public events.

Lincoln University Property Joint Venture Limited - Te Whariki

Te Whāriki was established in 2007 by Lincoln University and Ngāi Tahu Property Limited. The 118-hectares set aside for the subdivision was known as 'The Dairy Block', a site rich in agricultural history and of cultural significance to Ngāi Tahu. Prior to 2007 the land was owned by Lincoln University and used as a functioning educational dairy farm, training Lincoln University agricultural students and providing milk for the Christchurch town supply. At least 350,000 of New Zealand's dairy farmers were trained in dairying and animal husbandry on this property.

In the early 2000s, realising that the dairy block formed a wedge between the University and the existing town, Lincoln University purchased another dairy farm to the northwest of the town. When the dairy block became surplus to their needs, they joined forces with Ngāi Tahu Property with the aim of creating a high-quality residential development that would create a unified, modern community and link the University with the township.

Te Whāriki is located on the doorstep of the existing community of Lincoln, which features a number of sporting and leisure facilities; excellent educational institutions; a supermarket; and a growing array of restaurants, cafes, bars and retail stores. When complete, it will house a population of 2700.

The subdivision is a long-term investment for both parties who are passionate about creating a high-quality residential development that is responsive to the environment.

Working with Other Tertiary Providers

Christchurch Educated

Christchurch Educated Inc. is a group of education providers based in the city of Christchurch and the region of Canterbury, New Zealand. Members are all registered and approved by the New Zealand Government to host international students. They share a common set of values and goals for developing and growing the international education sector. Members regularly participate in international education fairs, jointly host visitors from around the world and work on innovative education solutions to meet the needs of international partners.

New Zealand College of Business

Lincoln University and the New Zealand College of Business have jointly introduced platforms for international students to pursue their studies toward bachelor's and master's degrees at Lincoln University. Under their Memorandum of Understanding, graduates of the NZCB Level 5 Diploma in Business Administration receive entry with credit into Lincoln University's bachelor's degrees. The NZCB Level 7 Diploma in Business Administration enables students to be admitted to Lincoln University's Master of Business qualifications.

SIGNAL

The TEC funded South Island ICT Graduate School (SIGNAL) is a collaboration between University of Otago, Ara, Lincoln University, Otago Polytechnic and the University of Canterbury. SIGNAL is a direct response to the rapid growth in IT roles across all sectors, where thousands of new jobs will be created over the next 10 years. SIGNAL offers work-ready education for aspiring IT professionals and work-based future-proofing for those who are already in the industry. Driven by industry and delivered in partnership with industry, SIGNAL's programmes offer a suite of new model teaching: studio-based projects, seminars, industry placements and projects, mentoring and work-based learning.

The Biological Husbandry Unit (BHU)

Established in 1976 by Bob Crowder, a Lincoln University academic, the BHU was re-launched in 2001 as a charitable trust and a joint venture between Lincoln University and the New Zealand organic sector. The trust aims to promote organics through education, research and extension work. Funding from the MAF Sustainable Farming Fund, and the Agricultural and Marketing Research and Development Trust has enabled research-based development and promotion techniques for commercial scale organic agriculture, workshops aimed mostly at small farmers and growers and the development of a

large published resource (both in print and online) of practical and technical information for commercial growers. Academic material has been developed for formal Lincoln University courses. The BHU employs and hosts summer students and overseas interns as well as working with the University and visiting researchers.

Parks Agencies Managers Group

The Faculty of Environment, Society and Design signed a Memorandum of Understanding with the Parks Agencies Managers Group as the preferred tertiary provider for parks programmes.



5. Contribution to Government priorities

5.1 Delivering skills for industry (Priority 1)



Key Changes

- Lincoln University became the only full partner outside of Europe with equal status within the Euroleague for Life Sciences (ELLS) network in 2018.



Key Targets

- Increase share of Year 13 cohort of school leavers through the commissioning of new science facilities in 2022
- Increase number of students enrolled in newly accredited Bachelor of Commerce (Agriculture and Professional Accounting), in 2019, by more than 50%.

Skills demand for New Zealand's land-based sectors

Lincoln University is committed to responding to future demand from the land-based sector for more skilled graduates. Using the primary sector workforce as a proxy, Lincoln University graduates completing Level 7+ qualifications represent about 10% of the 'replacement rate' (assuming 2.5% annual turnover) in the primary sector workforce.

Primary industry sectors have indicated³ they are seeking to both upskill and expand their workforces:

Upskilling: Increasing the proportion of their workforce with tertiary qualifications, from 44% to 62% (equating to ca. 64,000 additional tertiary-qualified workers), and

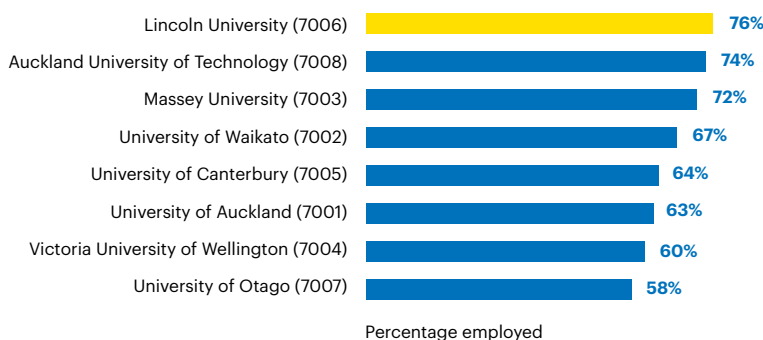
Expanding: Increasing the workforce by ca. 50,000 (or 31,000 that are tertiary qualified). Post Study Outcomes – Universities (study type - Degree and above)

With respect to market share for Level 7 programmes, the University expects to increase its current share (0.63%) of the Year 13 cohort of school-leavers, with new science facilities commissioned (in 2022), and a vastly enhanced learning experience offered. Subsequently, the targeted share of the Year 13 cohort has increased to 0.77% (pre-earthquake levels) over a five-year period.

Employable students

Employment outcomes are a key indicator of the University's success in meeting both the career aspirations of students and the needs of employers in the land-based sector. Lincoln University relies heavily on industry evidence to support its view of how effective and sought-after its graduates are in New Zealand and overseas, for their knowledge and their practical experience. This is strongly supported by the Tertiary Education Commission's Post-Study Outcomes data available through Nga Kete, which shows that Lincoln graduates are the most likely to find employment in New Zealand.

Percentage of graduates who find employment



³<https://www.mpi.govt.nz/dmsdocument/3892-people-powered-building-capabilities-to-keep-new-zealands-primary-industries-internationally-competitive>

Affiliations

Since Lincoln University's foundation, it has grown and developed to enjoy a national and international reputation. This is in part due to the University's affiliations and associations with industry and research partners who provide scholarships, work placements and employment for its graduates.

Lincoln University has formal industry accreditation with the following organisations, either as an organisation or through individual research and education offerings:

- New Zealand Institute of Valuers
- New Zealand Green Building Council
- New Zealand Planning Institute (NZPI)
- Pacific Rim Real Estate Society (PRRES)
- Property Council New Zealand
- Property Institute of New Zealand (PINZ)
- Royal Institution of Chartered Surveyors (RICS)
- Valuers Registration Board (VRB)
- New Zealand Institute of Landscape Architects (NZILA)
- International Federation of Landscape Architects (IFLA)
- Institute of Primary Industry Management (NZIPIM).

Accounting Accreditations

- Chartered Accountants Australia & New Zealand (CA ANZ)
- CPA Australia
- Association of Chartered Certified Accountants (ACCA).

Collaborations

Lincoln University and the Euroleague for Life Sciences (ELLS)

Lincoln University is the only full partner outside of Europe with equal status within the Euroleague for Life Sciences network. The ELLS partnership provides Lincoln University with a global focus and delivers a number of strategic benefits through enhanced international profile, student mobility and research collaborations. Further information on ELLS is outlined in section 5.4 International Linkages.

Domestic participation in accredited programmes:

2017 actual	2018 actual	2019 forecast	2020 target	2021 target	2022 target
227.6	235.9	259	260	259	271

The newly accredited Bachelor of Commerce (Agriculture and Professional Accounting) has started well with an expected increase of over 50% in 2019.

Agribusiness and Commerce staff at Lincoln University have been working with lead schools to write and implement the new agribusiness curriculum which is being taught in 48 New Zealand secondary schools, and will grow to 63 schools. Lincoln offers support in the form of resources, and access to University guest lecturers. University staff are extending this support and will host local schools at the Lincoln University Bloomberg Room, provide guest lectures, and help develop curriculum for local and national use, as well as assessments and case study/example content.

Practical work and industry internships

Practical work in industry is viewed as an integral aspect of each student's programme of study and provides for experiences in a broad range of careers in the discipline associated with the programme of study. Any practical work is in an area related to student disciplinary and professional interests. It is normally undertaken over summer breaks and is often prescribed in the student's degree or diploma programme. Along with the academic requirements, practical work is a requirement of over 20 qualifications offered at Lincoln University. Feedback provided to the University on the capability and skills of students is a valuable input to programme development. The 2017 Graduation Destination Survey revealed students found work experience or internship extremely useful and had high levels of participation.

Formal industry internships involve ongoing supervision from the University and a clearly defined purpose for the student. These more formal arrangements also provide two-way communication with industry that informs future programme development.

The percentage of qualifications completed that contain practical work remains at a high level of 38%.

Industry liaison and stakeholder engagement through faculties

Faculty of Agriculture and Life Sciences (AGLS)

The Faculty of Agriculture and Life Sciences (AGLS) maintains strong relationships with external stakeholders, including DairyNZ, the Foundation for Arable Research, PGG Wrightson, Pioneer, Ravensdown, AgResearch, Plant & Food Research, Manaaki Whenua - Landcare Research, ANZCO Foods, the Cawthron Institute, regional authorities, and the Department of Conservation.

These interactions and associated research programmes enable AGLS academic staff and students to be informed of industry trends and allow the Faculty to deliver relevant graduate attributes through research-led teaching. The interactions also give staff the opportunity to inform industry of current curriculum development.

In 2017, Lincoln University was incorporated as a research partner in the Seed Industry Research Centre, which aims to attract and train new human resources for seed research in New Zealand.

The Faculty liaises regularly with a range of employers and stakeholders from land-based industries, regulatory authorities and research institutes. These include representatives from CRIs, Environment Canterbury, private irrigation companies, professional bodies, fertiliser companies, environmental consultants, seed companies, plant breeders and New Zealand winegrowers. Ongoing consultation with the Fertiliser Association supports the accreditation of Soil Science courses for Nutrient Management certification. Facilities

from ANZCO Foods and Yili Dairy are embedded in the Faculty for research and development.

Faculty of Agribusiness and Commerce (AGCM)

In addition to accreditation, the Faculty of Agribusiness and Commerce (AGCM) maintains strong industry relationships through an extensive programme of field trips and tours to farms, processors, distributors, and property managers on both the North and South Islands. This is now extending internationally with recent tours funded by the Prime Minister's Scholarships to Asia, Latin America, China, Indonesia and Brazil. In 2019, tour groups will go to China, Thailand, Indonesia, Brazil and South Korea. As examples, the South Korea trip, organised in collaboration with Massey University, will visit the operations of Apple and Pear New Zealand and Zespri, while the Indonesia tour group will visit the local Fonterra office. The Faculty is also developing links with the commodity trading group at Fonterra, and with NZX to build dairy futures markets capability and research from the Bloomberg platform. This includes a series of dairy price risk workshops for farmers being run around New Zealand through FarmSource. Farmlands Cooperative is actively engaged with the Faculty through participation in student business development projects. There are also collaborative projects underway with AgResearch and DairyNZ, as well as work being undertaken with the hotel industry in New Zealand, and internationally, looking at hotel management practices.

The Faculty is engaged with the Australian horticulture industry through the Hort Australia funded Global Master Class in Horticulture Business. This project also includes the University of Tasmania and Wageningen University and Research.

The Faculty is also engaged with international NGO's, including World Vision in Myanmar, through a NZAID-funded programme to develop micro-finance in rural communities.

Faculty of Environment, Society and Design (ESD)

The Faculty of Environment, Society and Design's (ESD) Department of Environmental Management works with the Lincoln University Planning Advisory Board to understand the educational, professional and research needs of professional planners. The board members are experts from planning and associated disciplines in the Canterbury region and offer advice to the department on the quality of its planning programme, and how well the curriculum meets the needs of the planning profession. Similarly, the School of Landscape Architecture, widely recognised as one of the best programmes of its kind in the world, works very closely with the New Zealand Institute of Landscape Architects to ensure the relevance and quality of Lincoln University's undergraduate and postgraduate degrees, with a number of accredited landscape professionals regularly contributing to the teaching programme. Other degrees, especially the Bachelor of Sport and Recreation Management, also have close links to the sector and stakeholders regularly consult with the Department of Conservation and Sport New Zealand.

Ashley Dene

The Ashley Dene Research and Development Station, established in 2016, showed significant growth in the portfolio of research and development conducted at the station in 2017. In collaborative partnerships with Manaaki Whenua – Landcare Research, AgResearch, DairyNZ, and Otago University, large research programmes have been instigated examining environmental mitigation

of livestock farming; soil, plant and microbiomes; and livestock genetics and management. Key messages are delivered to external stakeholders including farmers, consultants and regional councils, through focus days run on the farm.

Joint Management Committee of Lincoln University and DairyNZ

The Faculties of Agribusiness and Commerce, and Agriculture and Life Sciences are members of the Joint Management Committee of Lincoln University and DairyNZ. This committee addresses collaboration arrangements in research and teaching between Lincoln University and DairyNZ, aiming to provide enhanced research output with strong stakeholder engagement and better utilisation of resources (including staff and facilities) for research.

5.2 Boosting achievement of Māori and Pasifika (Priority 3)



Key Changes

- Lincoln University has a greater understanding of its contribution to Māori and the Māori economy
- Māori Strategy has undergone a review with the intent to provide a revised strategy and accountability for its implementation across the University. This strategy also includes a focus on Te Taiao, Whenua and Mahika Kai
- Inclusion of Mātauraka Māori and Mahika Kai in the three new Centres of Research on campus demonstrates a commitment to ensure co-created and co-delivered research with Māori is being embedded in research methodology
- Pasifika scholarships (Fanua) for domestic students, and introduction of a Pasifika Graduation Ceremony
- Increased engagement level of Māori and Pasifika through developing trained and skilled thought leaders
- Sharp increase in the uptake of Māori Courses (MAST) since 2017.



Key Targets

- To have 10% of Māori and (domestic) Pasifika students in internships in Māori or Pasifika organisations in 2020, rising to 30% in 2021
 - To have 75% of Māori and (domestic) Pasifika students in internships within five years
 - Grow domestic student numbers from the Pacific nations for the next two to three years
 - To reduce the parity gap in the commencing year of diploma and degree programmes.
-

Ka tipu, ka rea, ka whanake ake te rākau mātauraka. Ko tōna pakiaka, he waewae haere. Ko tōna pakiaka, he takata ora.

Lincoln University is committed to increasing Māori and (domestic) Pasifika graduates, empowering communities and supporting their development aspirations.

The Māori and Pasifika communities are integral to New Zealand's culture and heritage. These communities are also well aligned to, and catered for by Lincoln's specialist land-based offerings. Land is at the heart of Māori and Pasifika cultures, and many Māori communities are developing innovative commercial opportunities that require specialist skills and knowledge. It is important to emphasise the goal is to increase graduates, which by extension involves growing student numbers and increasing recruitment. The focus will be to engage communities to support retention and progression, and to more fully support Pasifika, whānau, hapū, hāpori and iwi aspirations.

The Māori and draft Pasifika Strategies are supporting and directing the objectives that Lincoln University has set itself as part of the Cycle 6 Academic Audit Enhancement Theme (Access, outcomes and opportunities for Māori learners and Pasifika learners). The objectives include enhancing the Māori and Pasifika student experience and engagement through increasing academic and pastoral support, cultural affirmation, supporting pre-degree pathways, enhancing physical spaces and increasing opportunities to enable employment outcomes through relationships with communities.

Māori students at Lincoln University accounted for 9% of domestic students in 2018. Increasing Māori representation

forms part of Lincoln University's broader Māori Strategy, components of which are included in the section below. These describe Lincoln University's strategies for Māori engagement, covering student experience, education, research, and relationships with Māori communities, and the University is committed to eliminating the parity gap across all EPI measures in five years.

Māori and Pasifika Achievement Monitoring Programme (MPAMP)

Lincoln University is committed to supporting the achievement of Māori and Pasifika, implementing the Māori and Pasifika Achievement Monitoring Framework (MPAMP) in 2017. The framework seeks to provide a means to monitor and track the success and progression of its students. With its high employability rates, Lincoln University understands the value its graduates add to their respective fields. With greater demand for skilled advisors and researchers in land-related industries, Māori and Pasifika achievement at Lincoln University plays an important role in contributing to their respective economies.

The Government's focus on parity of participation seeks to ensure that Māori and Pasifika students are able, and supported, to achieve at the same rates as their peers. At Lincoln University parity rates for course completion for Māori exceeded non-Māori rates in Level 9 Master's. Pasifika are higher for all levels except Level 7 and 8.

Key focus areas are at Level 5, our entry level for diplomas, and Level 7, entry level for bachelor's degrees. The Māori

and Pasifika Achievement Monitoring programme targets these two levels for focused support. This programme has a framework that outlines a range of activities from enrolment to graduation. A key component of the framework is monitoring student engagement and attendance in courses, internal assessments and exams, identifying pastoral, cultural and academic support and ensuring timely interventions. For continuing students, achievement rates for Māori either exceed or are close to their non-Māori counterparts, while Pasifika students require more assistance and support.

A full student assessment of course completion, continuation and qualification progress is undertaken at the end of each semester, including work placement requirements and support to access relevant industry partners.

Engagement

Lincoln University has invested time and resources to ensure it is positioned to support Māori and Pasifika communities wishing to develop their assets. Teaching and research specialisations in land and resource-based production link to sound social, economic and environmental outcomes, providing critical opportunities for many of the commercial activities important to Māori and Pasifika. To support their development aspirations, Lincoln University sees one of its areas for engagement in the Māori and Pasifika space as developing trained and skilled thought leaders through its enrolment of Māori and Pasifika in degree and postgraduate degree level programmes, engagement in quality co-created matauraka Māori research, and co-development of joint commercial opportunities.

Māori strategy

Lincoln University's overall Māori Strategy has undergone a review with the intent to provide a revised strategy developed by all staff and accountability for its implementation across the University. This strategy also includes a focus on Te Taiao, Whenua and Mahika Kai as outlined in the Transformation Board's report of 2017. There are three pou:

Strategic relationships

Lincoln University has a range of current relationships with Ngāi Tahu representative bodies and subsidiaries, and other Māori entities. Lincoln University is focused on building deeper relationships through its Whanake Ake strategy, which seeks to engage strategic partners to support Māori students through internships and work experience placement. This will provide the access to professionals and technical advice needed for graduates to effectively engage in their respective subject areas.

Student experience and achievement

Māori Support Coordinators play a major role in supporting and monitoring student experience and achievement across the University. Ongoing engagement and strong relationships with Faculties and the Learning and Teaching department allow for coordinated monitoring of student outcomes and ensuring pastoral and academic support is delivered across the University.

The uptake of new Māori courses and support by Māori staff for general courses has had a positive impact for Māori and Pasifika as well as for international and general students. New Māori and Pasifika staff and more responsive teaching delivery mechanisms made a difference in 2018 with greater enthusiasm and support for Māori related content and collaboration with takata whenua.

MAST (Maori) Course enrolments

	2017 Actual	2018 Actual	2019 forecast
MAST	11.7	19.3	21.4

The uptake of Māori courses in the past three years have seen a sharp increase following a deliberate focus on articulating Lincoln University's relevance to supporting Māori land and economic development and ensuring the implementation of relevant Mātauraka Māori content and Kaupapa Māori methodologies as part of teaching, learning and research. This was particularly the case with the Mahika Kai course which included seven guest lecturers with expert knowledge in their respective fields and observations of traditional and contemporary mahika kai at Manaaki Whenua, Koukourarata, and the Biological Husbandry Unit (BHU). In Semester 2, this course will be extended to include guest lectures from Massey University and a tripartite Mahika Kai project with Manaaki Whenua, the BHU and Lincoln University.

Te Awhioraki is Lincoln University's Māori Student Association which leads student activity on campus and has representation on key committees to advocate for Māori student issues.

Māori Course Completion and Retention

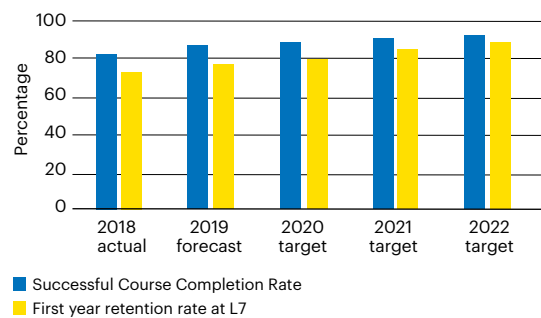


Chart indicates course completion for Maori at all levels (1-10), and first year retention for only L7

Pasifika Course Completion and Retention

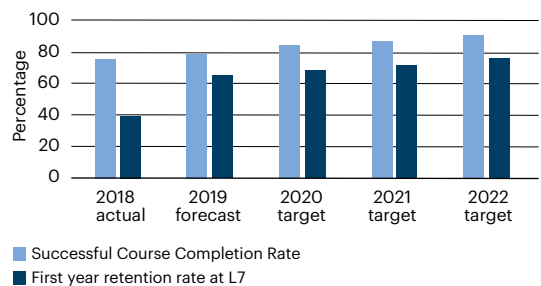


Chart indicates course completion for Maori at all levels (1-10), and first year retention for only L7

Knowledge and Research

Whanake Ake is the pathway for Māori students considering a Lincoln University qualification. Whanake Ake aims to build a stronger Māori workforce and a new generation of Māori leaders by offering industry relevant, career-oriented programmes ranging from diplomas (levels 5-6) through to undergraduate and postgraduate degrees (levels 7-9). A key component of Whanake Ake is the collaboration with Māori entities to provide internships and workplace experience throughout the student's educational journey to broaden skills and knowledge.

Lincoln University also has the ability to provide a number of Māori-specific courses that focus on policy and planning, resource management, landscape design, nga tikanga Māori, environmental management, Māori identity, Te Tiriti o Waitangi and Māori culture and society. In 2019, three new courses were delivered including the reintroduction of te reo Māori in both semesters and the first university Mahika Kai course in New Zealand. The reintroduction of te reo in 2019 has been a major accomplishment, given the last delivery of te reo on campus was in 2008. This course was also the impetus for holding the Waitaha Regional Ngā Manu Kōrero competition and will support the inclusion of te reo and bilingual signage across campus as part of our journey into developing a bicultural campus.

Mahika kai is also a key focus for mātauraka Māori at Lincoln University. With a sharpened focus on Lincoln University's unique advantage for teaching and research in the land-based area, mahika kai is being interwoven into a range of projects and initiatives on campus.

Lincoln University is also engaged in Māori research outcomes, both quantity and quality. This will lead to the development of institution-wide

faculty, division and other operational unit mechanisms and approaches to facilitate Māori responsive research and build Māori research capacity and capability. The inclusion of mātauraka Māori and mahika kai in the three new Centres of Research on campus demonstrates a commitment to ensure co-created and co-delivered research with Māori is embedded in our research methodology. This ensures that whānau, hapū, iwi and hapori aspirations are a key component of our research outcomes, which is evident in two MBIE Vision Mātauranga projects that were awarded in the 2019 round. Both projects were co-created and will be co-delivered with whānau and hapū and have a focus on mahika kai.

Lincoln University also hosts the Bio-Protection Research Centre and Agribusiness and Economics Research Unit, which have a number of research projects focused on Māori outcomes.

Draft Pasifika strategy

Enrolments from the Pacific nations are growing, particularly with Lincoln University's long-established relationship with the international Pasifika community through the MFAT scholars' programme. It is in this area specifically where the University foresees having the most positive impact on growing the wider Pasifika community's capability and achievement.

The University recognises it has the potential to grow its New Zealand Pasifika student numbers and has dedicated specific resources through the recruitment of a Pasifika Support Coordinator. This position oversees the Pasifika Achievement and Monitoring Framework which, like its Māori counterpart, provides focused monitoring of Pasifika achievement for those students in their first year of university study, and ensures key points of engagement and processes for intervention. In 2019, Lincoln University

offered its first dedicated Pasifika scholarship, the Lincoln University Fanua Scholarship, to assist with living costs for domestic Pasifika students. This is in addition to the Māori and Pasifika Accommodation Scholarships that have been offered since 2018.

Lincoln University has also shown a commitment to celebrating Pasifika languages throughout the year and will host the Papua New Guinea 44th Independence Celebration on campus. As with the Māori community, providing opportunities to celebrate the Pasifika community is a key component of the draft strategy.

The further development and implementation of the Pasifika Strategy is Lincoln University's commitment to its responsiveness to the cultural needs of Pasifika.

Pacific Island students Association

Lincoln University has a Pacific Island Student Association (LUPISA) to support Pasifika students. This association is supported by the Lincoln University Students' Association, which funds activities and outings and includes both domestic and international Pasifika students. Community groups that engage with LUPISA students include the Cook Islands Canterbury Students' Association, Samoan family and business organisations, and the Lincoln University chaplaincy (primarily Papua New Guinea students). Pasifika students also have a dedicated space to gather, hold meetings, eat and study on campus.

The Christchurch office of the Ministry of Pasifika Peoples has played an important role on campus, providing support, collegiality and network opportunities for our students.

Contribute to growing the wider Pasifika community's capability and achievement

Like Māori, Pasifika peoples place an importance on land, food security and environmental issues. Lincoln University sees a role in ensuring it remains supportive and committed to developing skilled leaders in these areas to help contribute to Pasifika aspirations. The high number of postgraduate students at Lincoln also demonstrates that it is able to support innovative research and think tanks to tackle areas of concern for its Pacific neighbours.

The University awards the Lincoln University Fanua Scholarship to domestic Pasifika students, and held the inaugural Pasifika Graduation Ceremony. This visibility of Pasifika related events and support on campus helps to demonstrate the University's commitment to the Pasifika community.

Growth and Development through involvement in the NZAid programme for Pasifika

Further growth and development of the University's involvement in the NZAid programme is reliant on Ministry of Foreign Affairs and Trade priorities, but it is expected the University maintains approximately 30% of Pasifika focus across a growing cohort.

MFAT students

	2017	2018	2019	2020 forecast
New Pasifika Students	8	16	7	12
Other new students	24	29	31	34
Continuing Pasifika Students	22	13	22	17
Other Continuing Students	53	44	49	54
Total Pasifika Students	30	29	29	29
Total Other Students	77	73	80	88
All MFAT Students	107	102	112	117
Percentage Pasifika	28.0%	28.4%	25.9%	24.8%

Note: These figures do not include Certificate of Proficiency EFTS.

5.3 Strengthening research-based institutions (Priority 5)



Key Changes

- Achieved a QE unit increase of 30% in PBRF rating in 2018
- Achieved a 97% success rate (graded outcome) on the number of portfolios submitted to TEC
- Increased Research CapEX from \$500,000 in FY17 to \$800,000 in FY19.



Key Targets

- Increase the QE score for the 2024 PBRF round through strategic academic staff employment decisions and investment in the Centres of Excellence, early research career support and the investment of PBRF funds at the faculty/centre level.

Postgraduate growth (domestic and international)

	2018 actual	2019 forecast	2020 target	2021 target	2022 target
Bachelors with Honours	38.4	33.7	32.8	32.7	32.7
Postgrad Certs / Dips	45.9	65.8	64.0	63.9	63.9
Masters (taught)	181.8	285.9	390.1	438.3	533.2
Masters Research	70.4	101.7	101.7	101.7	101.7
PhD	259.6	247.1	237.4	233.0	235.9
TOTAL	596.1	734.2	826.0	869.6	967.5

Lincoln's research context

Research is at the core of Lincoln University's purpose, as it carries out explorations in the areas of land, food and ecosystems, with these forming natural foci for its studies. Given that New Zealand's economic success, social wellbeing and environmental sustainability is connected to the broader global context of food supply and sustainability challenges, now is the time for Lincoln's research capabilities to provide key thought leadership and science solutions to underpin the future.

Lincoln's research also informs students as future leaders, provides evidence for the development and uptake of new business practices and products, informs debate on policy and governance, and contributes to society as a careful curator of ideas and contributor to social discourse.

For Lincoln University, helping the businesses and our communities that are connected with the land share in the brightest possible future is behind its core purpose of unlocking the power of the land to enhance lives and grow the future. To achieve this, the focus is on building partnerships with some of the country's leading agribusinesses, along with CRI's and other universities. By sharing practical experience, leading-edge research and innovative techniques, Lincoln is helping New Zealand businesses enjoy very real advantages in the global market.

At the same time, by placing sustainability at the centre of everything the University does, including research, it also ensures the successes Lincoln's partners achieve come with long-term benefits to the wider community and environment.

Strengthen and sustain a foundation of disciplinary excellence

To provide the environment for this requires a number of approaches, ranging from a collaborative and engaging culture, through to individual and research-group ownership of plans to advance research areas; an openness to give and receive mentoring from within ones faculty and from appropriate support units; external investment in high-impact areas of research, and appropriate investment and access to research infrastructure.

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PBRF Quality Evaluation (QE)

Lincoln University achieved a QE unit increase of 30% despite approximately 12% fewer portfolios being submitted compared to the 2012 round. This was underpinned by an increase in 'A' graded scores of 23 percent and 'B' graded scores of 40 percent. Another insight into Lincoln University's performance comes from its grading success rate:

- In 2012 an 87% success rate (graded outcome) on the number of portfolios submitted to TEC (212 portfolios sent, 185 graded. FTE 200 sent, 174.5 graded).
- In 2018 a 97% success rate (graded outcome) on the number of portfolios submitted to TEC (191 portfolios sent, 185 graded. FTE 182.13, 176.53 graded).

Lincoln University achieved first position in AQS - the measure of average quality scores of active researchers per postgraduate and final undergraduate students. For students, this means that, by choosing to study at Lincoln, they will have the highest probability of being taught or supervised by a high-ranking researcher.

The University's focus on land-based sectors is also evident in the data reported. There is demonstrable continued strength in the areas of Agriculture and Primary Production, Biological Sciences, and Environment and Natural Sciences, well supported by Social Sciences, and Management and Marketing. Food and Health is also noted as a steadily growing domain for Lincoln.

Lincoln University 2012 versus 2018 PBRF QE Performance

PBRF QE Round	2012	2018	
PBRF Eligible Staff	215	197	
Portfolios submitted	212	191	
Portfolios graded	185 (87%)	185 (97%)	
QE Units	688.7	895.7	Up 30%

The Quality Evaluation is an assessment of the research performance of staff at participating tertiary education organisations (TEOs) by an expert peer review panel. It is the major component of the Performance-Based Research Fund (PBRF).

The focus for the 2024 PBRF round will be to increase the QE score through strategic academic staff employment decisions and investment in the Centres of Excellence, early research career support, and the investment of PBRF funds at the faculty/centre level to ensure key research activities are supported and encouraged. It is recognised that, in applied research, not only is the quality of research important, but the added-value for the client is vital as well. The University is initiating the development of a range of impact measures,

along with a simple measure of customer satisfaction, and developing systems to make its research even more visible. This research investment strategy will underpin the quality of undergraduate teaching, the capacity to attract postgraduate students, and the ongoing potential to attract external research funding.

Bibliometric outputs

Lincoln University continues to perform strongly in producing world-class publications, especially in peer reviewed journals. It is noted that, despite a decline in conference contributions, particularly in 2018, outputs in journals continue to be strongly supported in the data.

Reporting bibliometric data upon publication is an important lead indicator of reputational impact as there are multi-year time lags between research projects occurring and resultant manuscripts being accepted by a journal, before subsequently seeing any citation activity.

Develop and promote thematic priorities for strengthening research income and stakeholder engagement

Identifying priorities

To be effective, Lincoln will have to ensure it has critical mass in key areas where it will make the biggest research impact, as well as maximising value for stakeholders.

This now means what to bid for must be a truly conscious decision, with the process being refined further under the principles of the Internal Economy model.

Research priorities have been defined for each faculty, including how these priorities contribute to Lincoln University’s overall strategy, and are applied as key criteria for strategic decision-making including recruitment, capital investment, and internal research funding.

Number of priority areas identified per faculty, based on research excellence, external funding, and potential for development

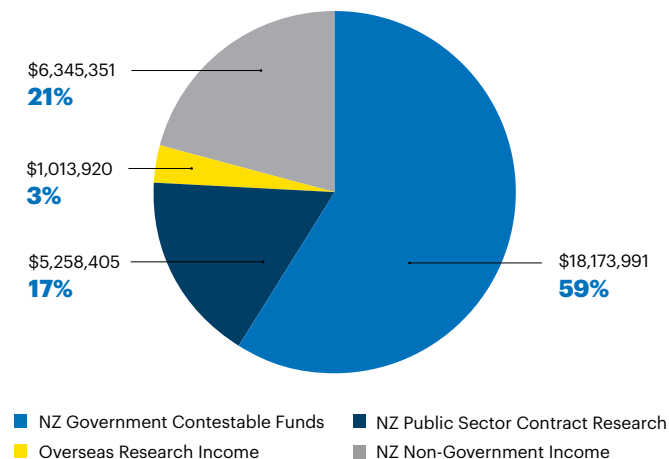
AGLS & BPRC	Foods ingredients and innovation Livestock-based production systems Protecting our indigenous and productive biological systems
FESD	Governance and practice for land and water Community resilience to environmental change
COMM	Agribusiness Sustainable business Rural development Social business

External research income as an enabler

Lincoln University has a key advantage in its ability to link research in commerce, as well as physical, biological and social sciences with technology to address national, and international, issues and needs. This is due to an ability to attract significant research funding from both the Government and private investors, with Lincoln University Group bringing in approximately \$31M of external research funding on an annual basis. As Lincoln creates new – and nurtures existing – partnerships, the University looks forward to real successes as our research and experience contributes directly to growth, skills and opportunities for its regions and the nation.

External Research Income

Lincoln University Total Revenue Group ERI 2019*



*includes LAL

Internal research investment

Internal Research Investments are a key enabler of research productivity and outcomes. PBRF income is fully returned to the generating faculty for the purposes set out in the PBRF scheme.

Operational support is currently provided at the faculty / centre level and was previously provided via a Competitive Internal Fund (LURF) with approximately \$500,000 deployed in 2015 under 'start-up', 'excellence', and 'writing' funds. Additionally, commencing in late 2018, three new Centres of Excellence were established with \$1,200,000 p.a. total cash underwriting to provide integration and focus within the University's multi-disciplinary endeavours.

Research CapEX has increased from \$500,000 to \$750,000 between FY17 and FY18, and will reach \$800,000 in FY19. Lincoln considers this a significant improvement to have moved beyond replacing older equipment and to be able to invest strategically in further research equipment both internally and with external partners.

Research Infrastructure and Facilities

Lincoln University continues to review options to own and access leading research facilities.

Research Farms

Lincoln's research continues to be supported by its varied farms, which focus on teaching and research. These provide valuable student experience, opportunities for field research and enhanced interactions with New Zealand's farmers in the dairy, beef and sheep, and cropping sectors. One of these is the Ashley Dene Research and Development Station (refer Section 5.1), a particularly noteworthy research farm due to its intensive level of monitoring instrumentation, which enables a

significant amount of New Zealand's dairy systems research, including environmental sustainability. And the university plans to establish a further two research farms over the next two years.

CT Scanner

Lincoln University, in partnership with Otago Medical School, has a recently had a new General Electric HD750 scanner installed at the Johnstone Memorial laboratory. This has already supported a range of diverse research projects, such as measuring the volume of the brain cavity in sheep, or measuring the proportions of muscle, fat and bone in breeding rams. The same equipment can also be used to non-destructively measure root growth in plants, or tuber development in root crops.

High Performance Computing (HPC)

Lincoln University has a project underway assessing its requirements for either future in-house investment or collaborative access to either locally installed infrastructure (server) or cloud-based infrastructure.

Enhancing our focus on research impact

Lincoln University is preparing a research impact strategy that addresses how it can design, plan, manage, measure, communicate and optimise research impact. The working group will examine examples and frameworks for these and make recommendations to the University Research Committee. There are certainly opportunities for the University, as demonstrated by the United Kingdom impact case studies which found that multidisciplinary work had wider impact and benefits than single disciplinary projects, and that smaller institutions make a disproportionate contribution in specialist areas⁴.

Commercialisation and Knowledge Transfer

Lincoln University has progressed a number of commercialisation projects over the last year. Commercialisation and active knowledge transfer are key agents for enhancing the impact of its science on society. Lincoln is an active partner within the Kiwi Innovation Network (KiwiNet) - New Zealand's network of public research organisations that are working together to transform scientific discoveries into marketable products and services.

Some notable projects have included:

- The assignment of the Cleartech technology to Ravensdown. This project is already seeing job creation occurring and data on environmental impacts continues to be positive at early installations.
- The licensing of patents for *Brevibacillus laterosporus* to the New Zealand biotech company Ecolibrium Biologicals. Ecolibrium has already signed a licence agreement with Chinese-based Beijing Coway BioWorks Biotech Co (CoBio) to make and sell the resultant biopesticide, Lateral. The market for biopesticides in China alone was estimated at \$US220 million in 2016 and is expected to grow rapidly.

⁴Cited from Kings 2015" 6-7

Case study: ClearTech

Lincoln University teamed up with fertiliser co-operative Ravensdown in May to unveil a breakthrough technology that could dramatically improve the dairy sector's water efficiency and reduce the risks associated with dairy effluent. In July 2019 this project won the Science and Research Award at the Primary Industries Awards, as well as the Fieldays Innovation Award.

The new system, known as ClearTech, was developed from research by Lincoln University Soil Science Professors Keith Cameron and Hong Di within the University's Centre for Soil and Environmental Research, and represents a \$1.5m investment by Ravensdown.

The technology aims to save billions of litres of freshwater a year by making existing effluent storage go further, with farmers able to separate effluent from dairy shed runoff and reuse the water. The leftover waste can then be turned into nutrient fertiliser for paddocks.



Mātauraka Māori

Lincoln incorporates the value and integrity of Mātauraka Māori in research, science and innovation by making sure that Māori Research conducted within their auspices utilises Kaupapa Māori methodologies or collaborative pathways that are co-designed and co-delivered with mana whenua. The incorporation of this in our recent research bids has led to two MBIE funded Vision Mātauranga projects in 2019, which focus on redesigning Māori productive landscapes and regional tourism founded on cultural narratives. Both projects were co-designed and will be co-delivered with local whānau and hapū.



Partnerships

Blinc Innovation - He Puna Karikari

Blinc Innovation, formerly known as Lincoln Hub, is located in the heart of the Lincoln University campus. It works with leading organisations, startups, researchers, growers, and universities, to solve the biggest challenges facing the food and agriculture industries. Its role is to connect, help facilitate and grow an innovation ecosystem in agriculture, food and technology.

Blinc Innovation builds on 140 years of research and education at Lincoln University and is aligned to the needs of New Zealand's land-based sector. Its role in this is to be a connector, helping facilitate and grow an exponential innovation ecosystem in agriculture, food and technology. It connects across the industry and beyond to land innovation for tomorrow's world.



The five founding partners behind Blinc Innovation are:



Manaaki Whenua
Landcare Research



Plant & Food Research



Lincoln University



AgResearch



Dairy NZ

Land-based sector Graduate school

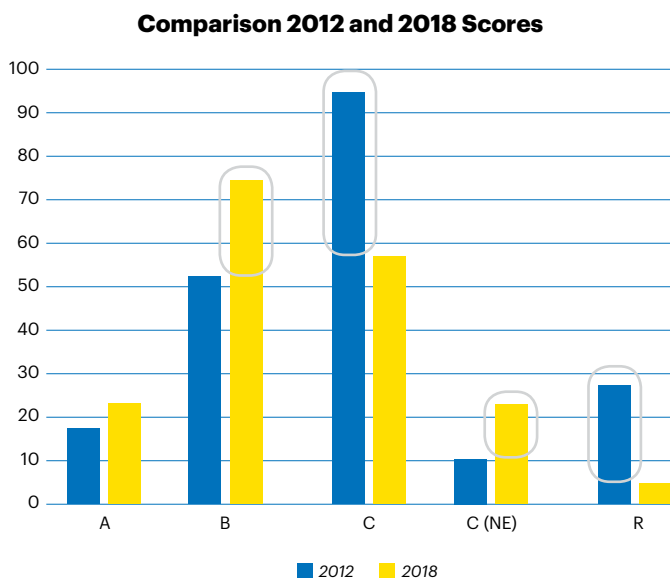
In collaboration with the University of Canterbury, a proposed new Graduate school for the land and food sector will aim to increase research postgraduate students. This will be run in collaboration with Crown Research Institutes (CRIs) and the two universities, and will attract graduates experienced in study and research who have also have worked and/or studied in the commercial world.

Nurture emerging researchers and teams

It is recognised that in New Zealand's competitive research funding environment, emerging researchers and teams often struggle to secure the funding needed to advance their respective research programmes and reputation. Lincoln University recognises the gap between the baseline provision for individual academics to carry out research, and the support required to develop the nature and scale of externally-recognised competence that is vital for securing external funding in the longer-term.

A Research Mentoring programme has been trialed as part of the current PBRF round, and will be reviewed and extended to support researchers through the inter-census years. Faculties are to consider further their facilitation of research via the appointment of post-doctoral research and teaching fellows to extend academic staff research portfolios.

Supporting Succession – PBRF QE data demonstrates succession planning is underway



The results from the 2018 PBRF round show an increase in scores at the A grade level to 23%. There has been a big shift from C grade to B grade, with C grade going down 43% and B grade going up 40%. Lincoln has also seen good growth in new and emerging (NE) researchers, and a big reduction in 'R' scores.

Develop and strengthen strategic research partnerships

Collaboration with CRI partners

Lincoln's focus on research-based education provides alignment but with a point of difference to the research mandate of CRIs. This complementarity supports collaboration with CRIs within the context of a contestable science funding system, and allows us to partner with the CRI's through joint supervision of research post graduate students.

Lincoln University has long collaborated in areas of research delivery and resourcing (such as hosting Plant and Food Research's research vineyards), but beyond this a better awareness of aligned research interests has been supported by active involvement with Blinc Innovation.

Lincoln University is also well positioned within the National Science Challenges (NSCs), and continued future involvement within Tranche 2 of the NSCs will provide an opportunity to broaden and strengthen the University's strategic research partnerships, and to build a platform for increased visibility of Lincoln University's contribution to science excellence and impact.

Collaboration with industry

Bragato Research Institute

Lincoln University has been assisting with the establishment of the NZ Winegrowers Research Centre (NZWRC), now operating as Bragato Research Institute. A Lincoln University staff member had been seconded to NZWRC as Head of Science, working with representatives of other universities and research institutes to shape the NZWRC science programme. A Research Officer from Lincoln, Dr Darrell Lizamore has now been appointed as the new Principal Research Scientist.

Department of Conservation (DOC)

A Lincoln University professor has been seconded as Chief Science Advisor to DOC, and DOC has committed to funding scholarships for students studying Parks and Outdoor Recreation until 2022. Since 2018, 24 students have enrolled in the new Major and 16 scholarships have been awarded. Five students are expected to graduate with the new Major in 2019.

Tourism industry

Lincoln University has a formal MOU with Tourism Industry Aotearoa which provides greater engagement with the Waitaki region. Lincoln's Centre of Excellence Sustainable Tourism for Regions Landscapes and Communities has joined in collaboration with the Waitaki District Council in support for their UNESCO geopark status. Lincoln is providing a strategic environmental assessment to inform the Geoparks' Masterplan.

New collaborative Centres of Excellence

Lincoln University's focus has continued to evolve alongside a broader national framework of economic and environmental goals. Lincoln's work responds directly to the sustainability goals for New Zealand's land-based sector; lifting high-value productivity, better biosecurity and food safety, smarter land-use planning, sustainable tourism, and stronger resource management and conservation – including freshwater quality and lower emissions.

As New Zealand implements these ongoing improvements in our farm production systems, they also need to be presented in a meaningful way to global consumers - requiring a deep understanding of varied consumer preferences and global supply chains.

Sustainable Tourism for Regions Landscapes and Communities

A multidisciplinary research centre hosted in the Faculty of Environment, Society and Design. Sustainable Tourism for Regions, Landscapes and Communities (CoEST) mission is to generate and support projects that will contribute to the development of a new blueprint for sustainable regional tourism in New Zealand and globally.

CoEST dedicates research to the conceptualisation, design and testing of innovations with the greatest potential to help grow the economic value of tourism and enrich the tourist experience, while simultaneously restoring, protecting and enhancing the integrity of landscapes and ecosystems, and the social and cultural values of destination communities.

CoEST is drawing on the expertise of researchers from across the University and partnering with institutions in tourism and areas as diverse as landscape design, sustainability, policy and planning, marketing, transport

futures, rural regeneration, parks and protected areas, resource economics, agribusiness and community resilience.

Designing Future Productive Landscapes

This centre's main objective is to conceptualize, design, create, implement and test alternative agroecosystems and other productive landscape systems that improve ecosystem-societal services, including timely implementation models that utilise mātauraka Māori to support and sustain te taiao, building ecological, economic, health social and cultural wealth.

Productive landscapes– te taiao - underpin cultures and prosperity of societies. Over the last century, continuous transformations and pressures have reshaped landscapes worldwide, diminishing biodiversity, reducing water and air quality, and accelerating loss of soil (amongst other factors). These transformations are proven to be unsustainable and degenerative, compromising ecosystem services and undermining resilience of landscapes. The current models of land-use limit not only landscapes resilience and the agroecosystems embedded within them, but also regeneration of land, water, air, health and thoughtscapes, as well as the kaupapa by which we engage with landscapes.

Given New Zealand's reliance on agricultural production and provenance, its global brand, and well-being are at risk. Land-users, policy makers and society are therefore calling for alternative land-use systems that enhance and restore ecosystem services through diversified, adaptive and integrative agroecosystems and landscape designs that operate across multiple 'scapes'.

Food for Future Consumers

Food for Future Consumers Centre of Excellence's vision is to be recognised as the international centre for research and ideas on all aspects of provenance associated with high-value food products from Aotearoa New Zealand.

The world of food is changing rapidly. Increasing consumer demand for more ethically produced, yet affordable foods, coupled with production systems under pressure to improve environmental performance, are creating considerable challenges for the agri-food sector in general, and for Aotearoa New Zealand specifically. Adapting to a future where market signals are acknowledged and interpreted requires initiatives that facilitate a whole-of-chain industry response. The opportunity exists to champion a production-driven to market-driven agri-food sector paradigm shift.

The Lincoln University Centre of Excellence, Food for Future Consumers has been established to focus on increasing the links between provenances such as land, agroecosystems, and food qualities such as production values, composition and preference. The benefit of the research to producers will be the potential to capture a greater proportion of the value embedded in their products. The benefit for consumers will be foods that meet individual standards and expectations, whether these be about nutrition and health, authenticity, or sustainability.

Research Centres

Research remains a significant element of Lincoln University's activities and, while external research income from sources other than PBRF remains reliant on the capabilities and relationships of a relatively small number of principal investors, Lincoln University has a key advantage in its ability to link land-based research to national and

international issues and needs, through a number of internationally renowned research centres. The following research centres are multi-faculty, working in collaboration with external partners and attracting researchers and postgraduate students.

Agribusiness and Economics Research Unit (AERU)

The AERU's mission is to exercise leadership in research for sustainable well-being, including cultural, economic, resource, environmental and social wellbeing. It employs its own research staff and also coordinates some of the external research undertaken by academic staff from other Lincoln University Faculties.

The AERU's research is focused on key areas – wellbeing economics, increasing the value of our exports, non-market valuation and sustainability assessment – with research clients including government departments (both within New Zealand and from overseas), international agencies, New Zealand companies and organisations, and individuals.

Lincoln Agritech Ltd (LAL)

Owned by Lincoln University, LAL is a multidisciplinary research and development company with an independent mandate and Board. The company delivers leading-edge innovative science and engineering knowledge and technologies into environmental, primary processing and new materials applications.

Lincoln Agritech also delivers research and development contracts both to the private sector and through research funded by the Government, primarily through contracts awarded through the Ministry of Business, Innovation and Employment (MBIE) contestable process, but also through the Ministry for Primary Industries (MPI) and the Royal Society of New Zealand.

Lincoln Agritech is a vibrant organisation with over 50 staff working

across its Lincoln and Hamilton sites. They work closely with industry, governments, iwi, and communities delivering fresh perspectives and knowledge to leave a lasting legacy of positive change.

Centre for Soil and Environmental Research

The Centre for Soil and Environmental Research (CSER) conducts scientific research designed to advance sustainable production and environmental protection. Innovation provides practical solutions to agricultural/environmental problems through multidisciplinary research programmes. The Centre is well resourced with modern scientific equipment, including the most advanced lysimeter laboratory facility in the Southern Hemisphere. Programmes support large, multicultural groups of highly motivated post-doctoral, PhD and MSc students, as well as technicians carrying out internationally-regarded research.

Lincoln University Centre for International Development (LUCID)

LUCID focuses on the management of agricultural and natural resources in developing and emerging economies so that poverty can be reduced through pro-poor and sustainable growth of the rural economy; rural livelihoods can be improved; the development of rural communities fostered; and the sustainable use of natural resources encouraged. Through LUCID, Lincoln University staff are involved in research-led development projects, and in short courses taught in New Zealand and at universities in the South East Asian and Pacific regions.

Centre for Land, Environment and People (LEaP)

LEaP aims to enhance the economic, environmental and social sustainability of societies. Based in the Faculty of Environment, Society and Design, it draws on the unique range of disciplines that combine scholarly

understanding, critique, creativity and problem solving.

The Centre for Viticulture and Oenology

The Centre acts as a focus for Aotearoa interdisciplinary research on wine, from soil to glass, with a strong emphasis on Pinot Noir. Lincoln University's geographical position is such that it is close to wine regions which appear to be best suited for Pinot Noir production in Aotearoa New Zealand.

Centre for Wildlife Management and Conservation

Research at the Centre provides new, effective and humane tools and techniques for reducing populations of invasive mammalian pest species and for monitoring biodiversity increase. Through collaboration with communities, Māori, pest control practitioners and research partners, it provides international leadership in the development of innovative pest management tools and strategies to enhance conservation efforts both within New Zealand and internationally. The multidisciplinary CWMC team and collaborators include experts in animal ecology, wildlife management, pharmacology, toxicology and design engineering.

Lincoln University Seed Research Centre

The Lincoln University Seed Research Centre provides research, product commercialisation, knowledge uptake and training in seed science and technology. At the heart of the New Zealand seed industry, the SRC has brought together New Zealand's leading seed researchers and industry partners to achieve its vision of ensuring excellence and relevance in seed science and technology research, product development and postgraduate studies for the land-based industries and nature conservation.

Centre for Advanced Computational Solutions

The Centre conducts research in computational and mathematical sciences relevant to environmental management, molecular biology, biophysical sciences and engineering (biotechnology). The Centre's aim is to embody the best aspects of both academic and industrial cultures, allowing the research students to uphold scientific ideals while at the same time demonstrating an awareness of real world constraints. It provides exciting opportunities for postgraduate students to formulate challenging research questions and answer them in a scientifically rigorous manner.

Centre of Food Research and Innovation

The Centre was established to promote innovation within the national and international food sector, and attracts internationally renowned researchers to use their theoretical knowledge of science to the applied benefit of the food industry.

5.4 Growing international linkages (Priority 6)



Key Changes

- Improvement in international pipeline partners and students
- Receiving students from new pipeline partners
- Diversification of markets for international students at undergraduate and postgraduate level
- Back to pre-earthquake levels for enrolments (all programmes)



Key Targets

- Increase the number of international EFTS to 1,434 by 2026
- Increase pipeline partnerships
- Improve international university rankings

Grow international student numbers

Lincoln University's goal to increase the number of fee-paying international students aligns to the Government's overall strategy for international education⁵. Education New Zealand anticipates that growth in international students could total 40-50% over the next 10 years. Its strategy includes a focus on doubling the number of postgraduate students, with a particular focus on postgraduate students outside PhD programmes.

Changes in direction, determined by the new Government, are unlikely to impact New Zealand universities' recruitment ability, and Lincoln remains confident of achieving growth in the international student baseline. Having already seen steady growth in established international markets (notably China, India, and Indonesia), and with international students exceeding pre-earthquake numbers as of 2016 enrolments, the University has committed to growing international student numbers from 38% of total EFTS in 2018 to 46.4% in 2026.

Projected International EFTS

	2018	2019	2020	2021	2022
International EFTS	954	1,131	1,221	1,260	1,328
% Total	38%	43.6%	45.4%	46.2%	46.4%

Partnerships and pathways

A core part of the international strategy centres on building partnerships. These provide channels through which to build student pathways, and grow awareness and credibility. This, in turn, can impact Lincoln University's international ranking, cyclically growing further partnership opportunities and generating student interest.

The following tables provides an overview of current and future key relationships in international target markets, and provides a view of the nature and purpose of these relationships.

⁵Education New Zealand: Statement of Intent – 2015-2019.

Articulations - Degree Pathways

Country	Institute	Nature of pathway	Courses/programme at Lincoln University	First year of receiving students
Germany	University of Gottingen	1.5+0.5 articulation	2nd Year Master of International Nature Conservation	2014
China	Guangdong Ocean University	3+1+1 articulation	4th year English for Academic Purposes (EAP) + 3 courses at 300 level 5th year Masters of Science in Food Innovation	2017
China	Tianjin University of Commerce	3+1+1 articulation	4th year English for Academic Purposes (EAP) + 3 courses at 300 level 5th Year Masters of Science in Food Innovation	2018
China	Yunnan Agricultural University	3+1 articulation	4th year Bachelor of Commerce (Food Economics)	2019
China	Zhongkai University of Agriculture and Engineering	3+1+1 articulation	4th year English for Academic Purposes (EAP) + 3 courses at 300 level 5th year Masters of Science in Food Innovation	2019
France	École Nationale Supérieure Agronomique de Toulouse	2+1 articulation (Diplôme Universitaire de Technologie National Diploma)	3rd Year Bachelor of Commerce - 8 courses	2012
Sri Lanka	Sri Lanka Institute of Technology	2+2 articulation	3rd and 4th Year Bachelor of Science (Agritech)	2020

Study Abroad Partnerships

Country	Institute	Nature of pathway	Year established
China	China Agricultural University	One semester study abroad	2017
China	Fujian Agriculture and Forestry University	Two semester study abroad	2017
China	Henan Agriculture University	One semester study abroad	2016
Indonesia	University of Brawijaya	One semester study abroad	2015
Norway	Norway University of Life Sciences	One semester study abroad	2008
USA	Colorado State University	One semester study abroad	1988

Developing Partnerships and Programmes

Country	Institute	Nature of pathway
China	Zhongkai University of Agriculture and Engineering	-Masters programme articulation -PhD joint supervision project
China	Tianhua College	3+1+1 bachelor and master programme articulation in Tourism Management
Germany	University of Gottingen	Study abroad
Germany	University of Hohenheim	Study abroad
Germany	Weihestephan-Triesdorf University of Applied Sciences	Study abroad
USA	University of Nebraska-Lincoln	Study abroad
USA	Virginia Tech University	Study abroad
USA	California Polytechnic State University	Study abroad

The University Studies and English Language (USEL) Division provides ongoing support and contribution to the various articulation agreements, for example the English for Academic Purposes programme within 3+1+1 articulations. The underlying aim is to ensure that international students are provided with academic study pathways that enable success, and the academic integrity of the University is renowned within its international community.

Lincoln University and the Euroleague for Life Sciences (ELLS)

The Euroleague for Life Sciences (ELLS) is an exclusive network of seven leading European universities established to promote postgraduate teaching and research collaborations in fields such as animal, agricultural, food, and environmental sciences. It includes two world-leading agriculture universities (Wageningen, and Swedish University of Agriculture Sciences). Only one university can be represented in the network from outside of Europe, and Lincoln University became a full partner with equal status in 2018. The ELLS partnership provides Lincoln University with a global focus and delivers a number of strategic benefits through enhanced international profile, student mobility and research collaborations.

Short programmes

USEL collaborates with a number of departments within Lincoln University to deliver boutique programmes of study for short-term groups. These programmes attract international students and institutions that are interested in an academic experience, and build Lincoln University's profile to attract future students.

- Short-Course English. This programme provides non-English speaking background students with the opportunity to study academic English in a university environment for periods of two to 16 weeks.
- English for other Specific Purposes (English +). Various courses are offered to enable students to complete a shorter programme of study that involves English Language and subject-specific content, and may include: study abroad for credit, English plus rugby, English plus agribusiness, and English plus wine science.

There has been an increase in revenue from short term-cohorts, and the intention is to increase the number of these relationships, particularly in China, Japan, Thailand and Korea.

International Reputation

International partnerships and rankings help to build Lincoln's global reputation. An enhanced reputation helps to attract international students, research partners and key staff. Over the next three years, the University expects to continue to build its international reputation.

International Rankings



18th

18th out of all the small universities ranked in QS.

4%

Ranked top 4% in the International Student Ratio section.

356=

Ranked out of 1000+

51-100

Ranked 51-100 in Agriculture & Forestry



101-110

Ranked between 101-110 amongst 320 universities in the Asia Pacific University rankings region.



218

Ranked 218 out of 719 universities from 76 countries.



201-300

Ranked in the top universities worldwide of Sport Science Schools and Departments.

Green Metrics

Lincoln University performed well in the UI Green Metric World University Rankings, announced in December, which measure sustainability. The University's highest score came in the 'education' category, putting it at 111 globally, while sitting at 218 overall. Our ratio of sustainability courses to total courses, and sustainability related publications and events, earned top scores.

QS Ranking

For 2019/20 Lincoln University's ranking was 356= in the Quacquarelli Symonds (QS) World University Rankings overall.

6. Our programmes



Key Changes

- Two new courses were introduced within the Diploma of Organic AgriFood Production: Te-Tū-ā-Ūri: Introduction to Māori Culture and Society, and Mahika Kai to support the two year waiting list for te reo Māori courses in Christchurch
- Back to pre-earthquake levels for enrolments (all programmes)
- Providing some online delivery with Tasmania and Wageningen curriculum

Each of our faculties supports the Lincoln University strategy, through its portfolio of programmes and research and through delivery of undergraduate and postgraduate teaching programmes, postgraduate research, externally funded research and effective engagement with relevant industry and professional organisations.

6.1 Faculty of Agriculture and Life Sciences (AGLS)

The Faculty of Agriculture and Life Sciences is the largest of the three faculties and undertakes teaching and research in sciences related to land, food and ecosystems. Specifically, AGLS programmes focus on the sustainable management of land-based resources to achieve productivity and profitability targets in the land-based sector, and to support the forecast requirement for employment growth in primary industries.

The Faculty of Agriculture and Life Sciences has a particular focus on all aspects of soil, plants and animals, and aspires to become the leading provider of agricultural research in Australasia. It is presently ranked in the 51-100 group of the QS Rankings subject areas of Agriculture and Forestry. In order to underpin the strategy and research aspirations, a number of changes were made as part of a qualifications reform, with the underlying ethos of providing clearly defined pathways for students in agriculture and science-related degrees, revision of majors in the BSc degree, as well as building research capability.

In undergraduate teaching, the Faculty's portfolio focuses on three key areas:

- **Agriculture** (Bachelor of Agriculture, Bachelor of Agricultural Science)
- **Science** (Bachelor of Science, with majors in Conservation and Ecology, Environmental Science, and Food Science)
- **Viticulture** (Bachelor of Viticulture and Oenology).

The faculty also contributes significant teaching of courses in the Bachelor of Agribusiness and Food Marketing, the Bachelor of Commerce (Agriculture), and the Bachelor of Environmental Management.

In addition to its undergraduate programmes, it is implementing

a strategy to meet the globally recognised need for agri-food education that increases the technological absorptive capacity of producers and agri-food professionals to bring about greater innovation in agri-food production systems. The successful implementation of this strategy will increase the number of postgraduate students in both taught and research programmes. A critical part of this will be to build on existing strong partnerships with industry and other organisations in the education and research sectors, in order to improve relevance and grow supervisory capacity.

The development of the postgraduate teaching portfolio has resulted in the introduction of a number of new 180-credit Master's degrees:

- The MSc. in Food Innovation was the first 180-credit MSc to be offered by Lincoln University and has proved to be very popular, particularly with international students
- In 2019, two new 180-credit programmes (Master of Pest Management, and Master of Wine and Viticulture) were introduced.

Concerted collaborative discussions with selected partner organisations in China have been conducted over the last three years. Lincoln has entered into relationships with three Chinese universities (Zhongkai University of Agriculture and Engineering, Guangzhou; Guangdong Ocean University, Guangdong; and Tianjin University of Commerce, Beijing). These universities now offer articulation routes for Bachelor of Science (Food Science) students within the Chinese universities to study (in English) at Lincoln for 12-16 weeks - one semester of undergraduate Food Science courses, and then progression to the MSc. in Food Innovation. The first cohort from Zhongkai University of Agriculture and Engineering arrived at Lincoln University in semester two, 2019.

Research and postgraduate supervision in the Faculty of Agriculture and Life Sciences has a strong focus on soils, ecology, plant science, animal science, food science, farm systems, environmental management and computational systems biology. The faculty has a strong research ethos with a research income of approximately \$6.7m per annum in 2019. This is based on strong connections with industry stakeholders (Beef + Lamb NZ, DairyNZ, FAR, fertiliser companies, New Zealand Winegrowers) and effective collaborative partnerships with CRI's and levy boards (e.g. Landcare Research, AgResearch, Plant & Food, and DairyNZ). This strong research programme facilitates a large postgraduate programme, with 183 postgraduate research students currently within the faculty, many of whom are embedded within externally-funded research programmes.

6.2 Faculty of Agribusiness and Commerce (AGCM)

The Faculty of Agribusiness and Commerce aspires to be Australasia's premier provider of agribusiness research and education, supporting the value chains that underpin the New Zealand economy. Linking people, businesses and economies through an interdisciplinary approach where business studies encompass economic, social and biophysical elements is a central theme in the faculty, as is a global outlook and reach.

To support the faculty's aspirations, the teaching portfolio has two directions. One is explicitly agribusiness-focused, including the Bachelor of Commerce (Agriculture), Bachelor of Agribusiness and Food Marketing, Master of Management (Agricultural Systems), Master of Management (Agribusiness), Master of International Rural Development (Agribusiness) and the rural valuation major in the Bachelor of Land and Property Management.

The rest of the business degree portfolio is moving towards a much greater focus on agribusiness through a 'Commerce-Plus' model that will have a large part of the teaching context embedded with primary-sector examples and context. At the undergraduate level, this includes the Bachelor of Commerce (BCom) majors in Accounting and Finance, Food and Resource Economics, Supply Chain Management, Global Business, and Marketing. Commerce-Plus means a student undertaking a BCom major will still graduate with a significant exposure to, and capability in, agribusiness at a number of levels.

The faculty also has a BCom major in Hotel and Tourism Management to provide for what is emerging as one of New Zealand's largest export earners. In doing this, it is now able to support both the service and goods sectors that underpin the New Zealand economy. The faculty has also entered the online/distance education space with a joint degree in Food and Resource Economics being offered with Yunnan Agricultural University through a mixture of online content, streamed lectures and face-to-face delivery; collaboration with the University of Tasmania in an online Global Master Class in Horticulture Business; and for 2020, the Master of Professional Accounting.

Research and postgraduate supervision in the Faculty of Agribusiness and Commerce has traditionally had a strong focus on agribusiness and resource management. However, most of this is in the context of postgraduate supervision, rather than externally-funded research. Some staff have developed research opportunities in the National Science Challenges, particularly collaborating with AgResearch. The faculty is also currently collaborating with industry in the delivery of the BCom capstone course, with students developing a project concept based on interactions

with a particular business. For the last two years this has been the Farmlands cooperative. Staff in the Faculty are currently involved with World Vision in a \$4 million multi-year MFAT-funded project in Myanmar. A recent development is building dairy futures markets capability and research in collaboration with the commodity trading group at Fonterra and NZX, and leveraging the faculty's Bloomberg trading platform. There are also collaborative research projects under way with AgResearch and DairyNZ.

The faculty is heavily involved in developing long-term international relationships in teaching and research. In addition to the programmes with Yunnan Agricultural University (YAU) and the University of Tasmania, it has developed an Agribusiness Summer School programme which collaborates with overseas universities to offer four to six-week programmes that introduce students to culture, business and food, and develop new import or export ideas for New Zealand. In previous years, tours have gone to China, Indonesia and Brazil, and in 2019 will be going to Thailand and South Korea as well. These types of programmes help to underpin the strong growth in international student numbers at Lincoln.

6.3 Faculty of Environment, Society and Design (ESD)

This is the smallest of the three faculties at Lincoln University, but the most diverse in terms of its teaching specialisations and areas of academic expertise. It delivers programmes in landscape architecture, environmental management and planning, tourism, sport and recreation management, rural social science, GIS and land-focused technology.

The faculty delivers a number of courses on the Treaty of Waitangi, tikanga, and Māori, and indigenous planning and development that

support the Māori Strategy. In 2019, new courses were also introduced in Te Reo and Mahika Kai. The faculty also offers joint undergraduate and postgraduate programmes with the University of Canterbury in disaster, risk and resilience, and freshwater management. It also leads the Lincoln University contribution to SIGNAL - the South Island ICT Graduate School. These offerings are underpinned by a strong tradition of inter-disciplinary postgraduate supervision; nationally and internationally recognised research; and longstanding engagement with a range of industry, sector and professional organisations.

The particular strengths of the faculty are in broadening the conventional conception of 'land-based' to include a focus on urban space, the urban-rural interface, and a wide range of interactions between people and places. The School of Landscape Architecture is the oldest and most prestigious of its kind in New Zealand and has been extensively involved with post-earthquake rebuild and resilience in Christchurch. The faculty has the only tourism programmes in Australasia that are located within a social science, rather than a commerce setting. It has very strong connections with organisations such as Antarctica New Zealand, Recreation Aotearoa, Tourism Industry Aotearoa, Parks Agencies Managers Group and the Department of Conservation (DOC). A faculty professor is now seconded as Chief Science Advisor to DOC, and DOC has committed to funding scholarships for students studying Parks and Outdoor Recreation until 2022.

In teaching, the bachelor's and master's degrees in landscape architecture are accredited by the New Zealand Institute of Landscape Architects and those in environmental management and planning are accredited by the New Zealand Planning Institute. In 2019, the faculty also plans

to accredit their environmental management programmes with the Environment Institute of Australia and New Zealand Inc.

Landscape architecture draws on significant teaching and mentoring input from practitioners, and similar connections are expanding in other programmes. One of its professors was made a Fellow of the New Zealand Institute of Landscape Architects in 2019. Through its offerings in sport and recreation management, the faculty is closely involved with a variety of local and national sporting bodies and is able to facilitate training and employment opportunities for students. The recently introduced recreation internship programme has resulted in students being in high demand across the recreation and parks sector.

A strategy is in place to render more explicit the variety of Māori content within programmes such as tourism and environmental management so that it is more accessible to students from across the University. In late 2017 the faculty developed a range of transferable majors that can be taken with any Lincoln University degree – Environmental Management, Event Management, Parks and Outdoor Recreation, Tourism Management and Water Management.

The faculty has a long history of inter-disciplinary postgraduate supervision and this is especially so with students from developing countries. For example, the key recreation, tourism and parks management authorities in Nepal are almost exclusively directed by Lincoln University graduates. Recently, undergraduate practical work requirements in several degrees have been refined towards more specific research-focused internships and project work. These are strengthening a longstanding pattern of research and publication between staff and students.

The faculty has a strong research ethos and a mutually agreed cross-faculty research strategy emphasising priority themes in 'Engaging People with Place', 'Innovating Governance and Practice for Land and Water' and 'Growing Community Resilience'. Over the last four years the faculty has developed a strong, externally-funded, rural social science research programme via AgResearch and in conjunction with a recent academic appointment in rural social science. It is also strongly engaged in the National Science Challenges – especially NSC 10: Resilience to Nature's Challenges and NSC 11: Building Better Homes, Towns and Cities. There is much potential to develop research relationships with Landcare and DairyNZ among others. The faculty also houses the largest group of academics with expertise in science and technology studies of any University in the country.

6.4 University Studies and English Language Division (USEL)

The University Studies and English Language (USEL) Division's role is to prepare domestic and international students for academic success through programmes that:

- facilitate student transition to undergraduate and postgraduate study, and
- support student recruitment and retention for the University

Programmes

The division's sub-degree teaching portfolio includes the following specialist areas:

- The Certificate and Diploma in University Studies (academic preparation for degree study with an emphasis on core academic skills)
- The Diploma in Organic Agri-Food Production (organic production systems in the context of science, tikanga and mahika kai)
- The Graduate Certificate in Academic English (academic English and skills preparation for postgraduate study for students with a bachelor degree)
- English for Academic Purposes (academic English preparation for certificate, diploma and degree study).

New projects and pathways for students

Since 2019 the division has included in its focus the development and utilisation of new and existing pathways to encourage the recruitment of additional domestic students, especially Māori and Pasifika students, as well as more mature students or those currently in the work force. In 2018-19 two new courses were introduced within the Diploma of Organic AgriFood Production: Te-Tū-ā-Ūri: Introduction to Māori Culture and Society, and Mahika Kai. The latter is taught within the Faculty of Environment, Society and Design and is accessible to all undergraduate students. The former is also available to students enrolled in the Diploma in University Studies (three-semester pathway). The first cohort of students for the new Diploma in Organic Agri-Food production were enrolled in the second semester 2018, and international students have been accepted into this programme from February 2019. Further options for increasing access to this programme through blended learning and online delivery are being explored for 2020-2021.

Two te reo Māori courses were also offered in 2019 within the faculty of Environmental Society and Design after a 10-year hiatus, to support the two-year waiting list for te reo Māori courses in Christchurch. These courses target both existing students and community enrolments, and make up the University's first offering of after-hours classes on campus.

Other initiatives to help address parity and equity of access via programmes offered by the division, and support of the University's wider aims include: the implementation of blended delivery options; the development of online delivery; and courses offered over differing time-frames. The division

continues to build links with the faculties and partner institutions through its delivery of English language, including short programmes, for students enrolled in Study Abroad and those who enter Lincoln University through international articulation agreements.

The success of the above initiatives will continue to be measurable through increased enrolments, successful completions of courses and programmes, student evaluations and retention into further academic study at Lincoln.

6.5 Learning and Teaching, and Library (LTL)

Lincoln University's joint learning and teaching, and library services provides an integrated support service for its staff and students. LTL gives students academic skills and strategies to develop as independent learners. The Learning Advisors in the Academic and Career Skills team provide specialist support and developmental services in written and oral academic communication; effective learning skills; mathematics and statistics; information discovery and management; and careers and employment.

In May 2018, the Inclusive Education team joined Academic and Career Skills. Lincoln University is the only university in the country to have an academic skills team that fully integrates services related to study skills, academic literacy and numeracy, information skills, and career development. While many services co-locate some of these functions, our team operates in a fully integrated manner. The team provides an integrated, 'wrap around' service for students, with each team member able to provide a baseline of service related to all functions, and a high degree of collaborative development and delivery of teaching. With the addition of Inclusive Education, the team has an opportunity to provide an even more seamless service to students and staff, and to further explore ways of integrating services.

Academic and Career Skills services include small group workshops, subject-specific sessions offered within courses, interactive online activities, individual consultations, and print resources. A variety of orientation programmes are offered, including New Start, which is targeted towards mature students to assist with their transition to academic study and university life; an orientation programme for new NZAid students; orientation sessions for new international students; and a range of programme-specific orientations. In addition, University regulations require all undergraduate students to complete a library orientation programme by the end of their first semester of study.

At the undergraduate level, LTL also provides a Peer Assisted Study Sessions (PASS) programme. PASS is a course-based programme that provides students with transferable study skills that will support their success later in their programmes. PASS is offered in each faculty in semesters one and two, in (usually, large) first-year courses that are identified as benefiting from additional peer-led sessions. PASS has been positively received by students, with overall attendance at 50%, and observable impact to their course marks. The analysis shows that students attending PASS sessions regularly gain higher mean marks than students attending no

sessions. In 2018 the programme was significantly expanded to support 11 courses, five more than in 2017. The overall participation rate of 43% was less than in previous years (e.g. 51% in 2017), which was expected since it takes several semesters to build participation levels in new courses. In 2018, 61% of all students enrolled in a 000 or 100 level course had access to PASS in at least one course; the goal is to increase that to 70% by 2021.

Attendance of 1+ PASS sessions

2018 actual	2019 forecast	2020 target	2021 target	2020 target
43%	50%	52%	55%	60%

At the postgraduate level, LTL provides an extensive research and writing workshop programme. The majority of sessions are delivered by LTL staff, but the programme also includes specialists from other parts of the University (for example, Human Ethics Committee Chair, mental health specialists).

LTL is responsible for purchasing and maintaining collections and resources that fulfil the information and research needs of the academics and students at Lincoln University. Academics are consulted widely on the quality of the collections in their research and teaching areas. Every effort is made to purchase information resources that improve the learning outcomes for students. LTL has been the leader in New Zealand in championing Open Access. Significant work has been carried out in developing policies and procedures supporting the move to Open Access for research outputs. LTL provides online access to the academic and professional output of Lincoln University staff and students for learning, teaching and research. The goal is to develop durable digital collections that mitigate the risk of asset loss while raising the visibility, rankings, and profile of the organisation, its staff, students and alumni.

Library, Teaching and Learning Targets

1

Implement blended learning approaches to courses in undergraduate and postgraduate programmes. Thirty-three courses were converted to blended learning in 2017, 15 in 2018 and 11 in 2019. The premise is to continue with a steady conversion of 10-15 courses per year

2

Implement grade collation within the LMS to provide students with timely learning progression information and feedback

3

Implement learner-centred approaches and activities in courses

4

Transition the functionality of selected learning spaces for greater flexibility of learning approaches

5

In 2018, students took up in excess of 1500 hours through drop-in sessions, bookable appointments, workshops, in-context teaching, group sessions and one-on-one sessions

6

Support course-related literacy and numeracy components within academic programmes



7. Managing resources



Key Changes

- Maintained 'Low Risk' under the TEC's Financial Monitoring Framework
- Established an Enhancement Theme Steering Group which reports quarterly to the national group as part of the cycle 6 Academic Audit.



Key Targets

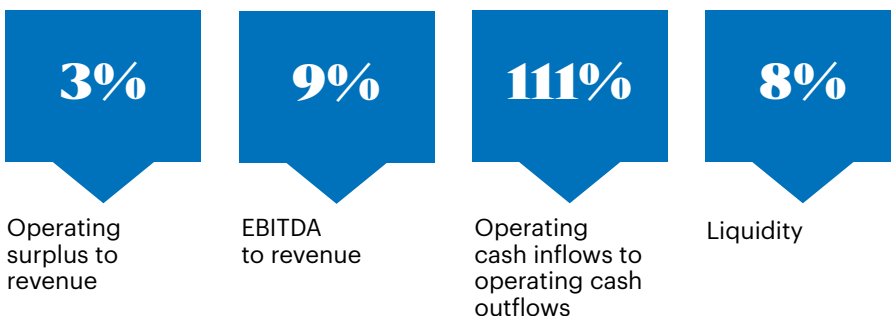
- Continue to maintain low risk
- Achieve revenue growth targets.

7.1 Financial performance

Improved financial performance

The University is now consistently 'Low Risk' under the TEC's Financial Monitoring Framework

Through initiatives that commenced in 2016, the University moved from 'high risk' to 'low risk' at the end of 2017, and continued to be 'low risk' to end 2018. A new financial management model called the Internal Economy has restructured budgeting activities and introduced new tools working towards the following financial performance standards:



The last three years has seen a significant improvement in the University's financial performance and financial position, with Lincoln University now performing in line with the 'low risk' FMF targets alongside other New Zealand universities.

Financial Performance and Position

	2018 Full Year Actual \$000	2017 Full Year Actuals \$000	2016 Full Year Actuals \$000	2015 Full Year Actuals \$000
Group Revenue	\$118,610	\$116,386	\$123,332	\$111,145
Group Expenditure	\$114,496	\$109,324	\$122,839	\$118,133
Group Operating Surplus/(Deficit)	\$4,114	\$7,062	\$493	(\$6,988)
Group Total Assets	\$317,051	\$274,882	\$288,400	\$259,856
Group Total Liabilities	\$52,258	\$45,363	\$50,230	\$47,735
Group Equity/Net Assets	\$264,793	\$229,519	\$238,170	\$212,121
Group Financial Ratios				
- Operating Surplus (Deficit) to % revenue <i>Operating Surplus(Deficit)/Revenue (excl Insurance Revenue)%</i>	3.5%	6.1%	0.4%	(6.3%)
- EBITDA to % revenue <i>EBITDA/Revenue (excl Insurance Revenue) %</i>	9.0%	13.6%	4.0%	-0.3%
- Operating Cashflows <i>Operating Cash inflows/Operating Cash outflows %</i>	110.6%	101.5%	100.1%	97.1%
- Liquidity <i>Liquid funds/Operating cash outflows %</i>	20.9%	23.2%	35.2%	26.4%

7.2 Quality assurance reviews

Academic Audit (External)

The Academic Quality Agency (AQA) undertakes external quality assurance for New Zealand universities. At the beginning of 2018 the AQA affirmed that the University had demonstrated its commitment to, and implementation of, high standard academic quality processes, procedures and academic practices in learning, teaching and research as per the requirements of the Cycle 5 Academic Audit.

Since mid-2018 Lincoln University has been working on the first part of the Cycle 6 Academic Audit, namely an Enhancement Theme for all universities to address collectively, which is of national significance. The topic for the Cycle 6 Enhancement Theme is 'Access, outcomes and opportunities for Māori students and Pasifika students'. Lincoln has established an Enhancement Theme Steering Group which is led by the Assistant Vice-Chancellor Māori and Pasifika and the Assistant Vice-Chancellor Teaching and Learning. This group reports quarterly to the national Enhancement Theme Steering Group on the progress of its

strategic initiatives and objectives. The final report is due in March 2020. Work is also progressing on the second part of the Cycle 6 Academic Audit, which is due for submission in June 2023.

Internal reviews

Annual Academic Programme Review: all bachelor's and master's degrees are reviewed annually to examine enrolment numbers and student demographics, identify issues and recommend actions, ensure the graduate profile continues to be fit for purpose, and ensure feedback from students is heard.

External Academic Programme Review: this review evaluates a programme's academic quality, structure, curriculum, teaching, learning, assessment, delivery, student outcomes, and the ability of graduates to meet the graduate profile. The review includes both internal and external review panels. The results of an External Academic Programme Review can be used to provide assurance of quality for students, staff, faculties, stakeholders, and the wider university community. A review schedule has been established through to 2021.

8. Statement of service performance

The below Educational Performance Indicators are based on SAC funded EFTS.

	Intended qualification (Cohort Group)	2017 actual	2018 actual	2019 forecast	2020 target	2021	2022
Participation							
Non Māori and non-Pasifika	Level 4 to 7 (non degree)	88.78%	88.96%	86.8	83.9%	81.03%	78.13%
	Level 7 degree	90.03%	89.05%	88.1%	86.1%	86.1%	85.2%
	Level 8 to 10	94.89%	94.86%	92.8%	93.8%	92.8%	90.2%
Māori	Level 4 to 7 (non degree)	10.76%	8.88%	11.0%	12.05%	13.07%	14.11%
	Level 7 degree	8.98%	9.56%	10.1%	10.8%	11.4%	12.2%
	Level 8 to 10	3.51%	3.90%	4.3%	4.7%	5.0%	7.1%
Pasifika	Level 4 to 7 (non degree)	0.97%	2.16%	2.2%	4.05%	5.9%	7.76%
	Level 7 degree	1.18%	1.49%	1.8%	2.1%	2.4%	2.7%
	Level 8 to 10	1.61%	1.76%	1.0%	2.1%	2.2%	2.8%
1st Year Retention							
Non-Māori and non-Pasifika	Level 4 to 7 (non degree)	n/a	n/a	n/a	n/a	n/a	n/a
	Level 7 degree	83.57%	82.38%	83.6%	84.8%	86.0%	87.1%
Māori	Level 4 to 7 (non degree)	n/a	n/a	n/a	n/a	n/a	n/a
	Level 7 degree	78.26%	73.08%	76.7%	80.2%	84.8%	88.4%
Pasifika	Level 4 to 7 (non degree)	n/a	n/a	n/a	n/a	n/a	n/a
	Level 7 degree	66.67%	40.00%	65.8%	69.3%	72.8%	76.3%
Course Completion							
Non-Māori and non-Pasifika	All	86.2%	88.4%	88.7%	90.0%	91.3%	92.5%
Māori	All	78.05%	84.5%	86.9%	88.2%	90.8%	91.4%
Pasifika	All	64.20%	76.30%	80%	83.7%	87.4%	91.1%
QC Rate							
Non-Māori and non-Pasifika	All	57.2%	62.6%	64.2%	65.8%	67.3%	68.8%
Māori	All	45.7%	45.74%	47.8%	49.9%	52%	54.1%
Pasifika	All	47.6%	35.3%	38.0%	40.7%	43.4%	46.1%
The amount of external research income earned	All		\$31,700,904	\$32,334,922	\$33,304,970	\$34,970,218	\$36,019,324
The number of international student EFTS	All	645.9	712.8	848.40	927	964	1,019
The number of Research Degrees completed	All	84	80	85	85	85	85



Appendices (internal only)



Education Performance Indicators (EPI's)

Commencing student numbers

Satisfaction

Research

Resources

Community, Industry and Partner Linkages

The following Education Performance Indicators (EPI's) are used for reporting Lincoln University's performance.

Commencing student numbers

These performance measures include new enrolments to the institution and focus on growing EFTS in key areas aligned with the University's growth strategy.

Commencing students numbers

	2017 actual	2018 actual	2019 forecast	2020 target	2021 target	2022 target
	31-Dec	31-Dec				
Commencing EFTS	1120.3	1139.5	1220.7	1258.9	1293.7	1401.9
Sub-degree	261.8	294.7	294.1	295.2	298.1	303.6
Undergraduate	631.9	587.7	574.6	577	587.7	617.6
Postgraduate	191.6	213.1	313.2	335.3	354.8	425.9
PhD's	35.0	44.1	38.8	51.4	53.1	54.8

Undergraduate Commencing EFTS

	2017 actual	2018 actual	2019 forecast	2020 target	2021 target	2022 target
Undergraduate Domestic	473.4	436.1	406.5	407.2	416.2	444.3
Undergraduate International	158.5	151.6	168.1	169.8	171.5	173.2

Postgraduate Commencing EFTS

	2017 actual	2018 actual	2019 forecast	2020 target	2021 target	2022 target
Level 8 Domestic	45.0	39.5	37.6	37.6	37.6	37.6
Level 8 International	39.6	37.6	53.9	53.9	53.9	53.9
Level 9 Domestic	23.8	40.0	44.1	48.5	58.2	83.1
Level 9 International	83.1	95.9	177.6	195.4	205.2	251.3

Postgraduate Commencing EFTS

	2017 actual	2018 actual	2019 forecast	2020 target	2021 target	2022 target
Domestic	4.4	8.9	7.64	11.31	11.97	12.31
International	30.7	35.2	31.13	40.13	41.13	42.46

Satisfaction

Improving the student experience is a top strategic objective of the University. Student satisfaction is measured primarily through surveys conducted during the year, and measures the extent to which students are satisfied with any pre-determined deliverables or outcomes.

Student satisfaction measures

	2017 Actual	2018 Actual	2019 Forecast	2020 Target
Students who are satisfied with LU	NA	87%	87%	88%
LU meets or exceeds their expectations	NA	82%	82%	83%
Students who are likely to recommend LU to their friends or colleagues	NA	83%	83%	84%
Students who have already recommended LU as a place to study	NA	72%	72%	73%

Research

Input

	2017 actual	2018 actual	2019 forecast	2020 target
Revenue from PBRF (\$000's)	10,143	10,351	10,213	10,444
Postgraduate research participation EFTS	293	306	293	283
External Research Income (\$000s)	30,236	31,275	31,813	31,208

Output

	2017 actual	2018 actual	2019 forecast	2020 target
Existing Māori related research projects, currently approved	49	60	NA	NA
The number of Research Degrees completed	84	80	85	86
Postgraduate successful course completion	97.3%	95.7%	97%	98%
Postgraduate satisfaction with overall experience (%)	86%	87%	88%	90%
Quality research publications	417	443	450	465

Resources

Associated performance indicators

	2017 actual	2018 actual	2019 forecast	2020 target
Capital Asset Management Review	58	63	NA	NA
Energy sustainability – Renewables as % of total energy consumed	46%	43%	50%	60%
Graduating Year Reviews	3	13	16	NA
Health and Safety (LTIF)	4.4	2.94	4	4

Associated performance indicators

	2017 actual	2018 actual	2019 forecast	2020 target
Access to Library digital services	521,783	521,881	522,000	522,200
Activated copyright items	647	665	690	720

Community, Industry and Partner Linkages

Associated performance indicators

	2017 actual	2018 actual	2019 forecast	2020 target
Community engagement publications and presentations (extension and popular press)	106	106	110	115

Associated performance indicators

	2017 actual	2018 actual	2019 forecast	2020 target
Revenue from consultancy activities	\$78,735	\$145,813	100,000	100,000
Number of Alumni with current addresses (NZ/Australia ONLY)	11,865	12,647	13,532	14,209
Hosted/Organised Alumni events	69	45	50	55



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