

Investment Plan 2017 – 2019



Feed the world



Protect the future



Live well



**Lincoln
University**

Te Whare Wānaka o Aoraki
AOTEAROA • NEW ZEALAND

New Zealand's specialist
land-based university

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1. Introduction

Lincoln University is approaching its 140th anniversary. It was severely damaged in the 2010/2011 earthquakes, and the following years involved shaping the University as a specialist land-based university with the mission to provide knowledge and education to help 'feed the world, protect the future, live well'. A long-term trend of declining commencing student numbers was reversed with successive increases in 2015 and 2016.

The emergence of the Lincoln Hub and the appointment at the commencement of 2016 of a new Chancellor, Pro Chancellor and Vice-Chancellor, together with a reconfigured Council membership, provides optimism and energy to refresh the University. Staff and students of Lincoln University remain committed and passionate. The pending earthquake insurance settlement will provide the University with the opportunity to create a fit for purpose University, equipped to meet the modern world's land-based needs.

The purpose of this Investment Plan is to articulate Lincoln University's strategic direction and to contribute to meeting the Government's priorities for tertiary education in New Zealand. This plan provides the commentary that describes Lincoln's journey from what was committed in the 2015-2017 Investment Plan within the wider context of a new direction which supports the institutes Strategic Plan.

This Investment Plan is informed by the following sets of documents:

- Lincoln University's Strategic Plan 2014-2018
- Lincoln University's Research Strategy 2014-2018
- Lincoln University's Whenua Strategy 2013-2018
- AERU The Land and the Brand Research Report 2016
- The Tertiary Education Strategy 2014-2019
- The Gazette Notice relating to the Investment Plans (2016)
- The Plan Guidance for 2017-2018 issued by the Tertiary Education Commission (2016)
- Discussions with the Tertiary Education Commission's University Investment team.

This Investment Plan has been written to:

- Take into account the recommendations of the external reviews and subsequent discussions
- Reflect the direction signalled in the HUB development and 10-Year Plan that identifies Lincoln University will have more delivery at Level 8 and above and less at lower levels
- Remove the Level 3 and 4 delivery that is now part of the pilot competitive process. Irrespective of the outcome of the SAC 3 and 4 competitive funding, Lincoln remains committed to its flagship Diplomas in Agriculture, Farm Management and Horticultural Management
- Indicate a reframing of the Whenua Strategy to focus on Level 5 and above with sufficient foundation learning to ensure success for students
- Incorporate the work which has begun to review all organisational units and to reduce costs through the development of an internal economy model

2. Strategic Framework

Strategic framework	Lincoln University will provide high quality:	Service to our students and our clients
	<ul style="list-style-type: none"> • Education and training • Student assistance • Research and development • Knowledge and technology extension 	
	For:	Outcomes for countries
	<ul style="list-style-type: none"> • Biological primary industries • Tourism, sport and recreation • Landscape and urban environments • Nature conservation • Māori • Land-based professions and services • Pasifika and other Indigenous peoples 	
	Whilst being:	Development of our university
<ul style="list-style-type: none"> • Profitable • Located nationwide • Internationally focused 		

Strategic Plan 2014-2018

3. Mission and Role

It is predicted that by 2050 the world's population will reach 9.2 billion people: this will create challenges that need solutions. As the population grows, food supply and production will become key. So will sustaining the environment for future generations. As these two, potentially conflicting, concepts become increasingly pressing we will also want to individually and collectively live well, flourish and succeed in the places we inhabit and visit, participating in the activities and pursuits we value, through the land that supports what we do.

Lincoln University is a uniquely and deliberately specialised university finding solutions for these challenges. To achieve our mission, Lincoln is positioned to work alongside industry, the community and people from around the globe. The University's qualifications range from certificate level through to PhD – and our teaching and research covers all activity associated with the land-based sectors to meet the needs of not only New Zealand but also the world. Our size also makes for a different cost model – we have to look to less traditional sources for additional revenue.

We have qualifications from level 2 to level 10 – so we are spanning programmes in schools right the way through to PhD. While our largest cohort sit at the bachelor's degree level, we need to market to both ends and we need to live up to the expectations of the students who study at all levels. Our sub-degree programmes are *research-informed* as we have academic staff who operate at the top end of our research capabilities, who also teach into our diploma programmes. Our bachelor's degrees are *research-led*, teaching the latest findings to ensure graduates are equipped with the most up-to-date knowledge. Our postgraduate qualifications are *research-based*, founded in the quest for knowledge that can be applied to the land and the people. This vertical research thread runs through all our qualifications.

Lincoln University has very deliberately evolved. We started the process in 2013 with the qualifications reform and we continue to review and refine this plan, designing new facets of the University's programmes – all within our unique brand story. We are continuing to evolve to remain relevant to New Zealand.

This is Lincoln:

- *What* we are: New Zealand's specialist land-based university
- *Who* we are: For New Zealand, of New Zealand, world-class theory with strong practical skills
- *Why* we are: the global challenges of Feed the World, Protect the Future, Live Well.

We want our students to be proud to be part of Lincoln now, and to remain connected to the University through the alumni activities.

3.1 Proposed outcomes for the coming three years

Based on Ministry of Education demand forecasts (for Level 3+ EFTS) and demographic analysis of New Zealand population trends, there is unlikely to be significant growth in the overall volume (domestic, funded EFTS) enrolled in tertiary education over the coming decade. Current forecasts suggest, nationally, a decline in Level 3+ EFTS of 3.4% over the next 5 years. We know we cannot simply rely on a growing domestic student population to sustain the forecast growth (averaging 1.9% pa to 2024) of domestic (EFTS) enrolments.

Our strategy to increase domestic (EFTS) enrolments is therefore focused on attracting a *greater share* of enrolling students to its specialist qualifications. This in turn is linked to *growing demand* for skilled employees in land-based sectors. Our 10-year Financial Forecast therefore does assume strong growth in student volume and is a core element of Lincoln University's strategy. The forecast enrolment growth over the period indicates an average increase of 47 funded EFTS per annum over the 10 year period.

- Domestic (excluding Lincoln-Telford):
 - Undergraduate: average, annual cumulative increase of 3% (39 EFTS)
 - Postgraduate: average, annual cumulative increase of 4% (8 EFTS).
- International (excluding Lincoln-Telford):
 - Undergraduate: average, annual cumulative increase of 7% (44 EFTS)
 - Postgraduate: average, annual cumulative increase of 9% (33 EFTS).

3.2 Internal economy

From the beginning of 2017, Lincoln's Faculties, departments and operating units will operate on the basis of an 'Internal Economy' model. The key objective of this new model is to bring visibility and transparency to Faculty and research operations, and the contributions they generate to University overheads. It will also support the broader transformation process of the University. Faculty and service departments' activity will be planned, monitored and measured against sector benchmarks and service level statements to ensure appropriate levels of cost and activities.

4. Contribution to Government Priorities

4.1 Delivering skills for industry

Skills demand for New Zealand's land-based sectors

The Ministry of Primary Industries People Powered report¹ estimates the growth in employment and skills required for a range of primary sectors, to sustain current sector growth strategies.

Current employment in primary sectors, spanning production, processing and services, totals about 360,000 workers, with about 44% having post-school qualifications. Assuming an 'annual replacement rate' (i.e. the number of new workers required to replace those retiring or otherwise leaving the primary sector workforce) of 3%, this implies a need for about 4,800 tertiary-qualified workers entering the primary sector workforce each year.

Total employment in primary industries is forecast to increase by 45,000-50,000 workers by 2025. Over the same time the proportion of the primary sector workforce requiring a post-school qualification is forecast to increase from 44% to 62%. The net impact of this forecast requirement for employment growth and increased skills adds up to a requirement for an additional 2,400 tertiary-qualified workers each year.

Lincoln University's forecast for increasing domestic student enrolments (an average increase of 47 EFTS per year) is therefore realistic as it represents 2-3% of the forecast annual increased demand for tertiary-qualified workers for the primary sector.

Stakeholder Involvement and Professional Accreditation

Our stakeholders are essential for determining the viability of our programme offering. To this end, stakeholder input and/or support from accreditation bodies is expected to be gained as part of the initial evidence-gathering exercise when developing any new programmes.

All programme proposals encourage Māori and student scrutiny and input through membership on each Division/Faculty Teaching Committee, Academic Programmes Committee and Academic Board. The University's Whenua Strategy aims to inculcate a kaupapa Māori ethic and approach to course and programme design. These are assessed against Māori responsiveness criteria to ensure the curriculum content, delivery and overall pedagogy reflect Māori desires to study as Māori. The Academic Programmes Committee is developing a framework for Faculties and Divisions to apply the objectives, skills and values from the Whenua Strategy to the design of programmes and courses.

Programmes and majors with professional accreditation are subject to external reviews. The University holds the following accreditations:

Faculty of Agribusiness and Commerce:

- A range of courses are accredited with Chartered Accountants Australia and New Zealand and the Faculty is working towards accreditation in the same subject areas with the Association of Chartered Certified Accountants (ACCA), and Chartered Institute of Management Accountants (CIMA).
- Bachelor of Land and Property Management is accredited with the Valuers Registration Board (VRB) (through the New Zealand Institute of Valuers (NZIV)) and the Property Institute of New Zealand (PINZ), and Royal Institution of Chartered Surveyors (RICS).
- The Supply Chain Management and Global Business major is currently in the process of re-accreditation by the Chartered Institute of Purchasing and Supply (CIPS).

¹ Ministry of Primary Industries, 2014. People Powered: Building capabilities to keep New Zealand's primary industries internationally competitive.

Faculty of Environment, Society and Design:

- The Bachelor and Master of Landscape Architecture are accredited with the New Zealand Institute of Landscape Architects and are reviewed for accreditation once every five years.
- The Bachelor of Environmental Policy & Planning (Honours) and the Master of Planning are accredited with the New Zealand Planning Institute. These programmes are reviewed for accreditation once every five years. NZPI accreditation is recognised by the UK, Ireland and Australian professional planning bodies and so aids in international benchmarking of our programmes.

Industry Liaison

There is industry representation on liaison and advisory groups within Divisions, Faculties and departments. The representation ensures current needs and advice are identified in the design of courses and programmes.

The Qualifications Review² included gaining support from the University's industry stakeholders who were guided through the proposed new qualification framework by the then Vice-Chancellor and Deputy Vice-Chancellor (Business Development). Responses from the stakeholders confirmed both their support of and confidence in the proposed changes.

Faculty of Agriculture and Life Sciences

The Faculty of Agriculture and Life Sciences maintains strong relationships – through teaching and research – with DairyNZ, Foundation for Arable Research, PGG Wrightson, Pioneer, Ravensdown, AgResearch, Plant and Food Research, Landcare Research, regional authorities, and the Department of Conservation.

Active research programmes within the Faculty provide continuous interaction with research partners, which ensures Faculty staff are aware of trends in the sector and that the academic programmes deliver the required graduate attributes through research-led teaching.

All four departments in the Faculty liaise with a range of employers and stakeholders from land-based industries, regulatory authorities and research institutes, on a continuing basis. This includes representatives from CRIs, ECan, private irrigation companies, professional bodies, fertiliser companies, environmental consultants, seed companies, plant breeders, NZ winegrowers, etc. In particular, consultation with the Fertiliser Association is ongoing in support of accreditation of Soil Science courses for Nutrient Management certification. These interactions allow our students and staff to be informed of current trends in the industry and relevant graduate attributes; it also provides the Faculty with the opportunity to inform industry of current curriculum development.

The Faculty also maintains adjunct appointments with DairyNZ, Foundation for Arable Research, AgResearch, Plant and Food Research, Landcare Research, Department of Conservation, Canterbury Museum, ANZCO Foods, University of Otago, Cawthron Institute and Indigenz Ltd.

Faculty of Agribusiness and Commerce

The Faculty of Agribusiness and Commerce maintains strong industry relationships through OneFarm, the Centre of Excellence in Farm Business Management. This is a joint venture between Massey and Lincoln Universities, made possible with the support of DairyNZ, Beef+Lamb, NZIPIM and HortNZ. The two universities combine the capabilities of leading New Zealand researchers, industry experts and rural professionals in order to coordinate the supply of education, training and professional development.

² Qualifications Review: Between 2013 and 2015, Lincoln University reformed its portfolios of bachelor's, postgraduate and qualifications at levels 2-6 on the New Zealand Qualifications Framework to address the 'innovative and responsive curricula' objective in the Strategic Plan.

Through industry consultation OneFarm formulates annual research programmes that assist in addressing critical knowledge gaps and aim to improve current thinking in dairy farm business management and on-farm decision making. From the outcomes of the research programmes, OneFarm is developing an education and training infrastructure for industry growth in rural professional and farmer farm business capability.

[Faculty of Environment, Society and Design \(ESD\)](#)

ESD's Department of Environmental Management works with the Lincoln University Planning Advisory Board in understanding the educational, professional and research needs of professional planners. The membership of the Board represents a cross section of experienced professionals from planning and associated disciplines within the Canterbury region. Among its functions, it also provides advice to the Department on such matters as the quality of students graduating from the planning programme, how well the curriculum meets the needs of the planning profession and employers, and identifies new planning papers and courses the Advisory Board considers may be beneficial to develop.

ESD's Department of Informatics and Enabling Technologies works with a Computer Industry Liaison Group which ensures the department is informed of current industry needs and trends, and provides appropriate representatives for review and course development. The Department communicates its activities to industry. Membership is comprised of Christchurch and Selwyn technology businesses.

[Lincoln-Telford Division](#)

The Lincoln-Telford Programme Advisory Committees (PACs) are consulted on major changes to existing and developing qualifications. The PACs include industry, academic staff and student representatives.

The Lincoln University Wool Industry Advisory Committee, with a membership from the Lincoln-Telford Division, Faculty of Agriculture and Life Sciences and the Wool Industry Education Advisory Group has been formed to provide strategic advice and seek ways to maintain and improve the delivery of research, education and training in programmes in relation to the wool industry.

Students studying from the campus at Telford have the opportunity to work both on the Trust Board Farm and also with local farmers who provide students with practical placements. The feedback from these farmers informs the future content and structure of the Division's programmes.

[Lincoln University Seed Research Centre](#)

The Lincoln University Seed Research Centre has an Industry Advisory Board whose remit is to identify strategies to improve the Centre's performance in areas of external funding, industry involvement, research needs, commercialisation, knowledge uptake and training.

[Joint Management Committee](#)

The Faculties of Agribusiness & Commerce and Agriculture & Life Sciences are members of the Joint Management Committee of Lincoln University and DairyNZ.

[Lincoln Hub Programmes](#)

The Lincoln Hub is an innovation cluster. Its purpose is to be the research, development and talent creation engine behind the land-based sector. The Founding Partners are:

- Lincoln University
- AgResearch
- Landcare Research
- Plant & Food Research
- DairyNZ

Lincoln Hub Founding Partners are increasingly integrating their operations, through collaborative education, research and innovation projects, joint MBIE bidding, alignment to National Science Challenges, membership of a Centre of Research Excellence (CoRE) and secondments and adjunct appointments. The Lincoln Hub concept is intended to accelerate and intensify this integration.

Lincoln Hub partners are committed to organising into multiple clusters across the three areas critical to the international competitiveness and export growth of New Zealand's land-based sectors:

- Sustainable production – accelerating productivity gains, within defined limits, thereby ensuring long term sustainability
- Land, water and atmosphere – enabling land-use management in harmony with community expectations for environmental quality and customer expectations for product integrity and quality
- Bio-heritage – defining, monitoring and restoring New Zealand's unique biodiversity in natural and managed systems. This includes mitigation of bio-security threats from invasive pests, diseases and weeds.

This will support Priority 1 of the Tertiary Education Strategy, 'Delivering Skills for Industry' by creating an environment where science, industry and education can engage and work together to make sure the right capability is developed for the future. Through co-location the Lincoln Hub will enable land-based industry to be involved in developing qualification curriculum, postgraduate supervision, internships, scholarships and identifying research topics. This will ensure that the education, training and science programmes within the Hub are targeted specifically to meet land-based industry's needs.

From 2019, there will be a minimum of 900 scientists, researchers and academics working together. This figure includes a mix of public sector and private sector staff alongside postgraduate students.

There are four areas in which the Lincoln Hub will create growth strategies:

- Multinational Corporations (MNC). Targeting MNCs through current partner relationships to access supply-chain organisations offshore; plus approaches to organisations who are seen to be a good fit with the Lincoln Hub objectives
- New Zealand companies. Working with companies to understand and action opportunities to co-locate and co-create
- Accelerating extension to land-based businesses to enable them to become more efficient and profitable
- Growing start-up and SME's through incubator and accelerator services.

Stage 1 Lincoln Hub

Lincoln University and AgResearch plan to jointly invest in a new education and research facility, on the Lincoln University campus, as 'Stage 1' of the Lincoln Hub campus development to facilitate clusters organised around nationally critical areas. DairyNZ will be early tenants in the new facilities.

One key objective is to derive faster and greater value from current academic and research programmes and also attract and establish more programmes relevant to nationally critical areas (Sustainable Production; Our Land & Water; Biological Heritage). It will also ensure better utilisation of capital – both in terms of core infrastructure and specialist plant and equipment, increasing the cost-effectiveness and international competitiveness of programmes.

Implementation of the Lincoln Hub will lift awareness and attractiveness of Lincoln University's education programmes, at both undergraduate and postgraduate levels in New Zealand and internationally.

As the Lincoln Hub supports growth of the export value of land-based sectors, the national demand for tertiary-qualified workers is likely to focus more on Lincoln University, as the embedded tertiary education provider. This in turn should be a key factor driving growth of domestic undergraduate enrolments.

Lincoln Hub partners (especially CRIs) are also expected to drive more postgraduate students to enrol at Lincoln University. In particular, CRIs operating through the Lincoln Hub are expected to support more PhD fellowships in their externally-funded research programmes. Such students should benefit

from an enhanced learning and research environment resulting from University-CRI collaboration in science clusters.

'Taught Master's', a relatively new type of qualification to be offered by New Zealand universities, are likely to account for a substantial portion of the total expected increase in postgraduate student enrolments as they have internationally. Lincoln University can offer distinctive – and therefore domestically – and internationally – competitive – qualifications at this level, based on its specialist, land-based focus.

While the University will strengthen collaboration with the Lincoln Hub partners (AgResearch, Landcare Research, Plant & Food Research and DairyNZ), it will also continue to pursue the goals and objectives set out in its own Strategic Plan.

Our progress will be demonstrated in terms of:

- Proportion of new postgraduate research students with a non-Lincoln supervisor increases to 45% , over the period of this plan
- To guide investment in capital equipment and to guide prioritisation of postgraduate programmes with Lincoln Hub partners, the number of research priority areas identified based on research excellence, external funding and potential for development are concentrated and increase from 2-4 (per Faculty), over the period of this plan
- Student to Academic Staff ratios (FTEs) to increase (with increasing student volume while retaining total academic staff FTE), from 11.5 in 2016 to 15.0 in 2022³, and then remain at 15.0 as student volume continues to increase.

Practical Work and Industry Internships

Practical work in industry is viewed as an integral aspect of each student's course of study and provides for experiences in a broad range of careers in the discipline associated with the course of study. Any practical work needs to be in an area related to student disciplinary and professional interests. It is normally undertaken over summer breaks and is closely linked to lectures in the academic study programme. Along with the academic requirements, practical work is a requirement of over 20 qualifications offered here. Feedback provided to the University on the capability and skills of students is a valuable input to programme development.

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.

Employment outcomes

Lincoln University relies heavily on industry evidence to support our view of how effective and sought after our graduates are in the workforce. Early indicators from MOE draft Employment Outcome of Tertiary Education (EOTE) data reinforces our view of the strong connections between our programmes and the relevant industry, for example, the Farm Management and Agribusiness programmes show 95% of graduates who have stayed in NZ are employed.

However, we recognise the need to become more systematic in how we report this increasingly important performance indicator. We are currently reviewing the way we collect and measure this information with the intention to establish benchmarks and a baseline in order to identify key areas of improvement and these will be monitored through the institutional operating plan.

³ Figures based on Lincoln Hub Stage 1 Project Business case – 20 June 2016

1.2 Getting at-risk young people into a career

To provide the best possible environment for success there is a strong emphasis on pastoral care of all students on the Lincoln University Campus. The small campus is able to operate like a village, catering for the needs of those who live in the Halls of Residence and for the students who live off-campus but spend most of their weekdays at university.

Students value our smaller classes and the open-door policy of staff that mean any issues that arise as they progress in their studies are able to be addressed quickly/personally/in a targeted way.

These services are particularly valuable for at-risk young people who may be entering tertiary study for the first time.

Some details of specific initiatives to attract and retain at-risk young are described below:

Focus Area One: More 18 year olds achieve NCEA Level 2 or equivalent

Two programmes run by the Lincoln-Telford Division support the transition of secondary school students to further study:

- STAR (Secondary Tertiary Alignment Resource) provides the opportunity to undertake courses in Apiculture, Agriculture, Dairy, Equine and Horticulture.
- Taster Week: run over school holidays is a three-day, four-night programme with on-site accommodation, relevant theory and practical skills in subject areas related to agriculture, forestry, equine, dairy, and rural animal technicians. Specifically designed for students (16 years or older), this programme gives them the opportunity to make informed decisions about their career pathway.

The Division is contracted to provide course material (and/or tuition, and/or assessment services, including reporting to NZQA) for agricultural unit standards to the Secondary Tertiary programmes through the Trade Academies and the Youth Guarantee schemes. These are partnerships between schools, tertiary providers, local communities and employers to help young people achieve better education and employment opportunities. The schools involved include:

- Te Taitokerau Trades Academy (Northland College, Kamo High School)
- SIT Youth Guarantee: Hokonui Tertiary High School which is made up of St Peter's College (Gore), Gore High School, Menzies College (Wyndham), Blue Mountain College (Tapanui), Northern Southland College (Lumsden), Fiordland College (Te Anau), Tokomairiro High School (Milton), and South Otago High School (Balclutha).

Focus Area Two: more young people (under 25) achieve qualifications at level 4 and above

The University provides the following pathways for new students to transition to study:

- New Start programme – run by Lincoln Teaching and Learning (LTL) – is targeted towards mature students to assist with their transition into or back to academic study and university life. New Start consists of a two-part workshop providing the students with the opportunity to engage with others in similar situations, voice any concerns, attend an academic skills programme and participate in a campus tour.
- The University Studies and English Language Division (USEL) prepares domestic and international students for academic success through pre-degree programmes designed to transition students to undergraduate and postgraduate study. The Certificate and Diploma in University Studies schedules include a *Skills for Success Programme* which provides tailored and targeted learning and study skills and is taught concurrently.

1.3 Boosting achievement of Māori and Pasifika

Māori and Pasifika Engagement

Access to professionals and technical advice continue to be limiting factors for Māori and Pasifika communities wishing to utilize their land for agricultural purposes. Our teaching and research specializations in land and resource based production link to sound social, economic and environmental outcomes, providing critical opportunities for many of these communities. To ensure the maximum performance and growth of these communities' land-based assets, more trained and skilled thought leaders are needed. This will require higher participation rates of Māori in degree and postgraduate degree level programmes but also the creation of pathways from pre-degree to higher levels.

In 2013 we introduced the Whenua Strategy, Lincoln University's overall Māori Strategy that informs Lincoln's internal and external strategies for Māori education, research and relationships with Māori communities. A recent review of the progress against the Whenua Strategy has taken place and a three year implementation plan has been developed to ensure that the plan remains a priority. The responsibility and accountability for its implementation lies with all staff. This plan prioritises both structural and policy changes that support the diverse aspirations of Māori staff and scaffolds bicultural capacity building across Lincoln University's business, particularly at Faculty level with regard to teaching, learning and research. Three key kaupapa or principles have been chosen as strategic priorities for implementation and are drawn from the Māori Responsiveness Framework located within the Whenua Strategy.

1. Kaitiakitanga (Stewardship)
2. Rangatiratanga (Leadership and Management)
3. Active Protection

To supplement the kaupapa, the following activities describe the responsiveness to Māori throughout Lincoln University core activities.

Whenua Arotake Akoranga - Academic Programmes

Poutama Whenua is Lincoln University's pathway for Māori students considering a Lincoln University qualification. Poutama Whenua aims to build a stronger Māori workforce and a new generation of Māori leaders by offering industry relevant, career orientated programmes ranging from certificates and diplomas (levels 3-5) all the way to undergraduate and postgraduate degrees (levels 7-9).

The initiative with the highest profile is the *Whenua Kura* – a partnership between Lincoln University, Ngāi Tahu Farming and Te Tapuae o Rēhua, which seeks to grow Māori leadership in agriculture. *Whenua Kura* provides a learning pathway, incorporating hands-on training on the Ngāi Tahu farms and in a Māori context, leading to Lincoln University qualifications at levels 3 to 6. It includes full-fee scholarship (for students aged 18-40) and work placements on Ngāi Tahu farms. At level 3 the fees scholarships are provided via Māori and Pasifika Trade Training (MPTT) funding. Students in the level 5 Diploma in Agriculture and level 6 Diploma in Farm Management are provided full-fee scholarships by the partners in the *Whenua Kura* consortium. The *Whenua Kura* consortium is planning to implement further scholarships and programme support leading to degree level study.

Whenua Kura has earned significant support from Ngāi Tahu. Student numbers have grown steadily over the 3 years, with students graduating from level 3, 5 and in 2016, level 6 programmes. The level 3 and 4 MPTT places are planned to expand from 25 in 2016 to 85 in 2017 and 100 in 2018. The planned MPTT expansion in 2017 has been strongly assisted by the development of a close working relationship between *Whenua Kura* and the FarmSkills Joint Venture with Te Tumu Paeroa. All students in the campus based *Whenua Kura* programmes (level 3 to 6) attend four noho marae throughout the academic year. The noho marae bring together the students from across the programmes and have assisted the students to build and maintain confidence in their academic abilities and set aspirational pathways for themselves.

Whenua Whānui - Regional delivery

This guides decision-making and projects for regional delivery of academic programmes: on-farm, agricultural and specialist land-based certificate and diploma programmes. Whenua Whānui will also extend to academic programmes across other disciplines and levels as demand within the Māori community increases. Examples include:

- Te Toka is led by a consortium of Te Runanganui o Ngati Porou, Eastern Institute of Technology and Lincoln University, working alongside private and public stakeholders to support employment opportunities in the local trades industries for Māori and Pasifika communities.
- The FarmSkills Joint Venture between Te Tumu Paeroa (the new Māori Trustee) and Lincoln delivery in 2015 and 2016 has focused on the existing level 3 and 4 delivery, however it is planned to expand to support blended regional delivery of the Lincoln Diploma in Horticulture (level 5) in 2017 and Lincoln Diploma in Agriculture (level 5) in 2018.
- Northland College education hub based at the college which supports the teaching of agriculture through the Agriculture and Forestry Trade Academy at the College. The flow on effect has increased enrolments in certificate, diploma and now degree programmes. Indications are that the students/whānau experiences will continue to increase enrolments from Northland in 2017 supported by the planned MPTT growth.

Whenua Rangahau - Research

Defines Māori research outcomes across the University, 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 responsiveness research and build Māori research capacity and capability.

A recent stocktake identified that there are currently 22 active Māori related research projects across Lincoln University, and further analysis will be undertaken to capture a true understanding of the quality of Māori responsiveness within the projects. The Te Mātāpuna Kaupapa Māori Unit is active in providing Māori mentoring and tutoring for research students.

Whenua Rangatira – Strategic relationships with iwi and Māori⁴

This guides the signalled shift in focus within the Whenua Strategy on delivering at Level 5 and above and how the University develops these important relationships with iwi and Māori, based around a whole-of-community, transformational approach, around education and training, research, professional development and/or commercial engagement.

Whenua Rangatira includes the current and future arrangements with Ngāi Tahu representative bodies and subsidiaries, and other Māori entities such as Ngāti Apa, Te Toka and Tai Wananga; Te Rūnanga o Te Rarawa (Kaitiaki), Te Tumu Paeroa; Te Tapuae o Rēhua, Te Taumutu Rūnanga, Te Aute/Hukarere Girls College, Wairoa College and EIT which are either current or developing.

Pasifika Strategy

While enrolments from the Pacific nations are not high, the University has a long established relationship with the international Pasifika community and it is in this area, and specifically through the NZAid programme, where we see we can have the most positive impact on growing the wider Pasifika community's capability and achievement. Targeted marketing and strong student feedback has seen a 44% increase in NZAid students from the Pacific nations in the last two years and this is where we will be concentrating our resources over the next 2- 3 years.

The University recognises it has potential to grow its New Zealand Pasifika student numbers and its future Pasifika Strategy will incorporate a model similar to the LincWantok Programme, which provided study and sponsorship opportunities for students in five Papua New Guinea provinces, and

⁴ Source: Mathews, B. 2016. *LU Strategic Relationships with Maori Organisations*. Lincoln University

will include targeted marketing to expand enrolments from the wider Pacific nations such as Samoa, Cook Islands, Fiji and the Solomon Islands. It will also include strategic initiatives to recruit and retain students from within the domestic market.

1.4 Improving adult literacy and numeracy

Lincoln University is not delivering Level 1 and Level 2 SAC funded qualifications in the period 2017-2019 but we recognise the best practice and acknowledge the value of using the Literacy and Numeracy for Adults Assessment Tool to measure the activities that are delivered to improve literacy and numeracy. Though not a requirement of funding it is our intention for the benefit of our students that all Level 3 campus based students will continue to use this to assess progress and target support. The investment plan has no distance delivery for Level 3 proposed.

The benefits of targeting on-campus students is that the online tool can be used, which is both more interactive and user friendly than the paper based version, as well as being administratively more efficient and has provided better student outcomes. Experience has shown that students who are either studying by distance, in a course that is of a shorter duration or where the location is remote (e.g. on a farm) has proven extremely difficult to engage with them and get them to take the assessment test.

We will be delivering Levels 3 and 4 under the MPTT programme and all students involved in this programme will be assessed using the assessment tool with the results informing their programme of study. We aim to have 95% of all on campus students complete an initial literacy assessment and reassess all those who do not meet Step 4.

In acknowledging best practice and the recognised outcomes a key driver to further enable success will be to formulate a strategy and monitoring framework that works toward targeting priority groups and building capability.

Furthermore, students enrolling in the sub-degree programmes of the University Studies and English Language Division are prepared for undergraduate and postgraduate study through the successful completion of programmes benchmarked to IELTS, the NZCEL and/or University Entrance.

The Certificate and Diploma in University Studies include compulsory courses in academic writing and communication whose learning outcomes are in total consistent with University Entrance-level literacy. Numeracy is embedded in three courses across these programmes also, with a focus on measurement, mathematics and statistics, which allows for progression for those students wishing to specialise in these areas in their academic preparation.

All programmes and courses in the USEL Division are designed to provide a staircase of academic and English-language literacy and/or numeracy development preparing completing students both for further study and for self-directed access to the support offered by Learning Advisors in Library, Teaching and Learning.

1.5 Strengthening research-based institutions

Lincoln University has a distinctive research profile, reflecting our specialist, land-based orientation. A key feature of our distinctive pedagogy is that our students are learning in a research-intensive environment and this in turn means that overall, research revenue per academic FTE is the highest amongst New Zealand's universities.

Research is central to the relevance and value of the University to the land-based industries to which we are aligned. Our demonstrated innovation adds value across many sectors, including agribusiness, land and water, food, beverage, and dairy. Delivering this type of research is possible because of the

University's highly skilled, professional academic and research staff who are able to find a healthy balance between discovery and application.

For Lincoln, helping the businesses and our communities that are connected with the land – from agribusiness to tourism – share in the brightest possible future is behind our core mission: to feed the world, protect the future and live well. To achieve this, our focus is on building productive partnerships with some of the country's leading agribusinesses. By sharing practical experience, leading-edge research and innovative techniques, we are helping New Zealand businesses to enjoy very real advantages in the global market.

At the same time, by placing sustainability at the centre of everything we do, we are also ensuring the successes our partners achieve come with long-term benefits to our wider community and our environment.

We have a key advantage in our 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 our ability to attract significant research funding from both the Government and private investors – we bring in \$22-24M of applied research funding on an annual basis. As we create new – and nurture existing – partnerships, we look forward to real successes as our research and experience directly contributes to growth, skills and opportunities for our region.

Feed the world

We are focused on the issues that are facing our farmers, our food production companies, and our exporters – from on-farm pest control and precision farming systems to the industrialisation of the US dairy industry; from the impacts of changes in India and China on New Zealand trade to the impact on the environment. We have the potential to establish New Zealand as one of the key global food baskets, not only by adding value and exceeding quality, but also by utilising our comprehensive knowledge base and innovation to create new flavours, textures, ingredients, products and markets. By understanding and reconfiguring our supply chains, we are also able to streamline that path to market, to better respond quickly to consumer demand.

Protect the future

We have more ecologists than any other university in New Zealand. This specialisation allows us to focus on the key issues impacting our future at a practical level, such as protecting and optimising crops and yields, managing water quality issues, and minimising biosecurity threats. In this way, we are helping make a tangible difference. Our focus on addressing some of the world's critical challenges takes our staff and alumni around the world. In doing so, they are working alongside the communities that can gain the most from their real-world expertise.

From providing advice on improving grassland production in sub-Saharan Africa to protecting seedlings for sustainable forestry plantations in Malaysia; from teaching planting design and management in Inner Mongolia to collaborating with leading agriculture experts in China and North Korea, Lincoln's knowledge and approach is being called on to support key developments in the global management of land, food and water.

Live well

Some of our research involves areas that people actively associate with enjoyment, such as viticulture, sports and tourism, but also sectors that protect and enhance our quality of life, including high quality food production, environmental protection and stewardship of the land. Our focus is on what we do best: addressing the critical and complex problems of land, water and food to meet the demands of the market and the changing needs of society.

We are building on our key capabilities to offer learning programmes that address the challenges faced by our communities. We are also creating more connections throughout the country and across the world, with scientists and researchers, businesses and governments, to share experience and identify new opportunities.

We recognise that New Zealand's strengths lie not just in growing productivity, but in a wide range of areas like highly specialised marketing, environmental management, community development and visitor experience and our work enriches the knowledge, expertise and real world application of our industry, our community and our country.

Strengthen and sustain a foundation of disciplinary excellence

The Lincoln University strategy includes a goal to increase the University's national ranking within the PBRF in 2018. This is now unlikely due to two key reasons 1) the tactical decision to reinvestment PBRF funds back into the general university funds rather than redirecting back to the researchers; 2) The papers we produce are not always PBRF valuable, but they do benefit our stakeholders.

Our focus for the next PBRF round will be to increase the score and this will be achieved through strategic reinvestment of PBRF funds to ensure project and group development and access to better equipment and resources. This will underpin the quality of undergraduate teaching, the capacity to attract postgraduate students, and the ongoing potential to attract external research funding.

Develop and promote thematic priorities for strengthening stakeholder engagement

To be effective we will ensure we have critical mass in key areas where it will make the biggest impact and create the most value for our stakeholders. Seven thematic priorities have been framed centrally and are being enabled by individual Faculties. This now means that we consciously decide on what to bid for and the process will further be refined under the proposed internal recovery financial methodology.

Nurture emerging researchers and teams

We recognise 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. For Lincoln University we recognise 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 trialled as part of the current PBRF round, and has been designed to extend to support researchers through the inter-census years. We have also restructured our Lincoln University Research Fund (LURF) to specifically support new researchers through the Early Career Researcher Award, and existing researchers through the Excellence Award.

Build clusters of interdisciplinary excellence

Improving outcomes for land-based stakeholders and sectors depends on our clustering capability to tackle complex and long-term challenges. These will require contributions from agricultural, environmental and social sciences as well as commerce and business management, for example, managing the interface between increased farm productivity, environmental quality and a 'social licence' to operate. The Lincoln Hub provides a platform to develop responses to funding opportunities such as with the National Science Challenges where multi-disciplinary teams are built across faculties, to share skills around the specific challenge.

Develop and strengthen strategic research partnerships

External research revenue, from sources other than PBRF, is dominated by a small number of contracts involving a small number of principal investors. Competition is intense, particularly with CRIs, however there remains significant scope to boost competitiveness, potentially in collaboration with CRI partners. The National Science Challenges (NSCs) provide an opportunity to reposition Lincoln University's strategic research partnerships. While stakeholder and industry partners will be more interested in the outcomes of research and their value to them, than in the research activity itself, international experience shows that stakeholder/industry groups often place a high value on basic research to ensure a pipeline of new options of potential relevance to them. We are working closely with key stakeholders to ensure we are well positioned to participate actively in selected NSCs. In

conjunction with this process, opportunities to expand the long-term scale and impact of research for these stakeholders is being explored.

1.6 Growing international linkages

Our international reputation is borne out by our world ranking – entering the top 500 in QS Rankings in 2014, and rising 70+ places in 2015. We add value to the degree through the standing of the University which, from a recruitment and retention perspective, is key. Over the next three years we will continue to improve in the areas described in this section.

Partnerships and overseas delivery

Partnerships with leading international universities and institutions are critical to enhancing our internationalization and in turn, enhance our rankings, which enable us to improve our attractiveness to the right international students.

The University offers two international jointly awarded Master's programmes in Europe and a Postgraduate Diploma in Malaysia. In addition it has received approval from the Chinese Ministry of Education to deliver a joint programme in Yunnan with the first cohort of students enrolling in September 2016. A further three joint pathway programmes have been established in China in 2015, two in Guangzhou and one in Tianjin.

Lincoln hosts over 30 government and partner institution delegations each year and over half of these visit our dairy farm.

ELLS – EuroLeague for Life Sciences

ELLS is a network of seven life science and land based universities where the focus is on 'joint teaching and learning, student and staff mobility, and quality assurance'.

Our participation as an international partner of the ELLS network is a key means of lifting the profile of our small institution internationally. The members of ELLS are similar in focus to Lincoln, and the intensive nature of the ELLS network enables us to achieve deeper results than engaging in broader networks.

GCUA – Global Challenges Universities Alliance

Lincoln is a core partner in the development of the Global Challenges Universities Alliance, a developing network of 25 top global universities dedicated to making a difference on the major global challenges facing the planet. Led by the Swedish Life University (SLU), this alliance will continue to develop Lincoln's global brand, and will support the domestic Global Challenges Programme.

The membership into this alliance drives directly to our international brand strategy for Lincoln. It is a collaborative membership that addresses the world's burgeoning population growth issues and all of the global issues we face around food security to feed 9 billion people.

Being a part of the group enables Lincoln to incrementally increase our global rankings by increasing its number of international partnerships and collaborations each year.

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 education.⁵ Education New Zealand anticipates that growth in international students could total 45-90% over the next 10 years. Their strategy includes a particular focus on doubling the number of postgraduate students, with a particular focus on postgraduate students outside PhD programmes.

Our forecasted growth of international students (an increase of about 90% over the next 10 years) is at the upper end of that forecast (by Education New Zealand) for the tertiary education sector overall.

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

Lincoln University's forecast is based on the expected attraction of its distinctive, specialist land-based qualifications.

We have seen steady growth in its established markets and have outgrown our pre-earthquake numbers as of 2016 enrolments. We are still in market development with other markets where we are seeing incremental growth especially in government partnerships.

An area of growth for the University are the numbers of international students applying to study through the University's Study Abroad Programmes. Study Abroad Survey results⁶ indicate 96% of respondents rated their overall experience at Lincoln University as positive and we will leverage this result to increase numbers. Being mindful of the reciprocity obligations, we see this as a benefit to the internationalization of our student cohort.

Although Australian students are treated as domestic enrolments in NZ, Australia is a strong market for Lincoln and we are increasing our numbers each year from students in regional Australia wishing to study in the land-based sector.

Postgraduate students outside PhD programmes

The demand for PhD places at Lincoln grows steadily each year. We are limited with a small base of academics with supervisory capacity. This allows us to accept only the best applications for Lincoln as demand is high. Until the Lincoln Hub comes on line after 2018, it also means that growth in the postgraduate area will most realistically be achieved in the taught Master's programmes. Examples of where we are focusing our resources are:

- Marketing Food Innovation and International Rural Development to countries where the future of food security is high on the government agenda and we have developed strong government relationships around the world for these programmes
- Marketing International Business in Global Management Masters to countries where New Zealanders do the most trade with, alongside industry
- The Master's in Tourism is growing in popularity for international students given New Zealand success in tourism.
- Pathway links to domestic providers both on and off campus.

Engagement

Lincoln's international engagement involves prospective students, agents, partner institutions and organisations, and foreign government agencies through a recently implemented sophisticated digital marketing tool which allows for direct and targeted campaigns for programmes within regions. We now engage with these individuals and groups electronically via email, social media and CRM campaigns, as well as face to face through in-country visits, workshops, seminars, interview sessions, national and regional trade missions and education fairs.

International Pricing and Scarcity

The University's international student price guarantee will be continued. We will carefully monitor pricing, comparing ourselves both to other New Zealand institutions and to comparable international universities, and will take currency exchange issues into account in setting international student fees. Special pricing will be offered to key partner institutions, such as other ELLS members, as these will support the wider strategy of raising our profile and rankings. We will continue to carefully monitor the proportion of international students in particular programmes and from particular markets to ensure we are not overly reliant on certain markets, and that the student experience (for both domestic and international students) is of high quality. Where necessary we may place limits on the numbers of international students in particular programmes.

⁶ From Semester 2, 2014

2. Our Programmes

Each of our Faculties supports the Lincoln University strategy, through their portfolio of programmes and research focused on 'feeding the world, protecting the future and living well' and through their delivery of undergraduate and postgraduate teaching programmes, postgraduate research, externally funded research and effective engagement with relevant industry and professional organisations.

5.1 Faculty of Agriculture and Life Sciences

The largest of the three Faculties delivers agriculture and food production related programmes that 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 top 51-100 in the QS rankings. In order to underpin the strategy and research aspirations, a number of changes were made as part of the qualifications reform, with the underlying ethos of providing clearly defined pathways for students in agriculture science related degrees, revision of majors in the BSc degree, as well as building research capability.

In undergraduate teaching, the Faculty of Agriculture and Life Sciences portfolio focus in three key areas:

- Agriculture (Bachelor of Agriculture, Bachelor of Agricultural Science)
- Science (Bachelor of Science, with majors in Agritech, Biosecurity and Bio-protection, Conservation and Ecology, Food Science and Land, Water, Environment)
- Viticulture (Bachelor of Viticulture and Oenology). The Faculty also contributes significant teaching of courses in the Bachelor of Commerce (Agriculture).

With common core courses across the degrees (e.g. LINC 101: Land, People and Economies), all students will graduate with a significant exposure to the interaction between land and environment, and the effect of this people and economies.

Research and postgraduate supervision in the Faculty of Agriculture and Life Sciences has strong focus on soils, ecology, plant science, animal science, farm systems and environmental management. The Faculty has strong research ethos with a research income of c. \$8m per annum in 2016. This is based on strong connections with industry stakeholders (Beef and Lamb NZ, DairyNZ, FAR, fertilizer companies) and effective collaborative partnerships with Crown Research Institutes and levy boards (e.g. Landcare Research, AgResearch, Plant & Food, DairyNZ). This strong research programme facilitates a large postgraduate programme, with 171 postgraduate research students within the Faculty in 2016.

The Faculty has developed professional development courses with Ravensdown and Fonterra in plant production and dairy production systems, respectively. The dairy production courses have been delivered successfully with Massey University at sites throughout New Zealand through the AgriOne programme.

The Faculty will be integral to the strategy to increase the number of postgraduate research students, with the right capability to meet future needs. A critical part of this will be to build on existing strong partnerships with Lincoln Hub partners, with a focus on growing supervisory capacity. This will include development of a register of supervisors alongside the development of strategy to manage the internal and external (Hub, CRI) supervisory process. Further, there will be the development of a formal supervision training programme to facilitate continuous development of all supervisors.

The Faculty will also progress professional development Master's courses directed toward staff already into the work force. There is an identified training need in a number of critical areas, including crop and plant physiology, and nutrient management. This need is proposed to be met through a

blended delivery approach of on-line material and short residential courses delivered at sites throughout New Zealand.

Postgraduate numbers in the Faculty are expected to show sustained growth during the next 3-5 years. This growth will be driven primarily by an increase of students within the 180 credit MSc degrees. For example the MSc in Food Innovation was the first 180 credit MSc to be offered by Lincoln University. This programme is particularly attractive to international students who comprise 95% of the cohort. Concerted collaborative discussions with selected partner organisation in China have been conducted during the last 3 years. These will also lead to significant growth in undergraduate and postgraduate numbers within the food science area in the next 3 years. Relationships have been entered into with three Chinese universities (Zhongkai University of Agriculture and Engineering, Guangzhou; Guangdong Ocean University, Guangdong; and Tianjin University of Commerce, Beijing) which offer articulation routes for BSc Food Science students within the Chinese universities to study at Lincoln University for 8-10 weeks English Language, one semester of undergraduate Food Science courses, and then progression to the MSc in Food Innovation.

5.2 Faculty of Agribusiness and Commerce

Delivers business-related programmes that focus on sustainable development and management of the natural, modified, and built environments. The Faculty of Agribusiness and Commerce has particular focus on all aspects of agribusiness and aspires to become the leading provider of agribusiness education and research in Australasia. In order to underpin the agribusiness teaching and research aspirations, a number of changes have been made. A key focus of the changes is to create an underlying ethos and capability in agribusiness teaching and research.

In teaching, part of the portfolio is explicitly agribusiness focused (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 portfolio is moving towards a much greater focus on agribusiness or land-based sectors 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 and Global Business, Marketing, and Information Technology. 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.

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. Research funding for 'business' has traditionally been difficult to find, the exception being Faculty involvement in the Centre of Excellence in Farm Business Management, a collaborative DairyNZ and PGP-funded project with Massey University. The Faculty is currently collaborating with Farmlands in the delivery of the BCom capstone course, with students developing a project concept based on interactions with the cooperative.

To underpin the required teaching and research capability that the Faculty requires, three professorial chairs have been filled (Professor of Farm Management, Professor of Agricultural Economics and Professor of International Trade), as well as positions in International Rural Development (Agribusiness) and Agribusiness Supply Chains. New positions in the Faculty are being focused on the ability to provide an agribusiness focus to underpin the teaching and research excellence the Faculty aspires to be known for.

The Faculty is heavily involved in developing long term international relationships in teaching and research. There is a close association with the New Zealand College of Business (NZCB), which has teaching facilities on campus. NZCB has facilitated a number of 3-way partnerships with universities

in China and Lincoln University that bring students from these universities through pathway programmes into undergraduate and postgraduate qualifications in the Faculty. In 2016 the Faculty also entered into a Chinese Ministry of Education approved Joint Education Programme (JEP) with Yunnan Agriculture University. The JEP has some courses being taught at YAU by Lincoln staff for the first 3 years, and then will bring a final year cohort to Lincoln University for their last year.

5.3 Faculty of Environment Society and Design

The smallest of the three Faculties at Lincoln University, but the most diverse in terms of its teaching specialisations and areas of academic expertise, delivers programmes in landscape architecture, environmental management and planning, tourism, sport and recreation management, rural social science, GIS and land-focused technology and informatics. The Faculty delivers a number of courses on the Treaty of Waitangi, tikanga, and Māori and indigenous planning and development that support the Whenua Strategy. The Faculty also offers joint undergraduate and postgraduate programmes with the University of Canterbury in disaster, risk and resilience, and freshwater management. 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. Tourism staff within the Faculty prepare the annual state of the sector report for the Tourism Industry Association of New Zealand and we have the only tourism programmes in Australasia that are located within a social science rather than a commerce setting. Across the Faculty we have very strong connections with organisations such as Antarctica New Zealand and the Department of Conservation (DoC) and one of our professors is now seconded as Chief Science Advisor to DoC.

In teaching, the bachelor's and Master's degrees in landscape architecture are accredited by the New Zealand Institute of Landscape Architecture and those in environmental management and planning are accredited by the New Zealand Planning Institute. Landscape architecture draws on significant teaching and mentoring input from practitioners and similar connections are expanding in other programmes. 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 and research and consultancy opportunities for staff that strongly emphasise the 'live well' theme. The Faculty makes the largest contribution to the delivery of the University's common courses LINC 101: Land, People and Economies and LINC 201: Sustainable Futures. Work is currently underway to develop stronger degree programmes in the geospatial and informatics area and in the social science of land use to enhance teaching and research strengths in these areas within the overall mission of the University. A strategy is in place to render more explicit the variety of Māori content within programmes such as tourism and environmental management such that it is more accessible to students from across the University.

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 graduates. Recently we have refined our undergraduate practical work requirements in several degrees 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 two years the Faculty has developed a strong externally funded rural social science research programme via AgResearch and will

develop this further following the appointment of another academic position in rural social science to begin in 2017. There is much potential to develop research relationships with Landcare and DairyNZ among others. The Faculty is actively pursuing strategies to secure external research funds in a number of disciplines that have not traditionally been catered for within MBIE and other nationally funding rounds.

5.4 Lincoln-Telford Division

The Lincoln-Telford Division (LTD) delivers primary sector Level 3 to 6 certificates and diplomas. LTD is responsible for around 100 EFTS of residential based delivery at the Telford Campus, Balclutha which is situated on a 921-hectare commercial farm operated by the Telford farm board. The campus is home to approximately 100 students studying certificates and diplomas in practical land-based subjects – agriculture, equine, and rural veterinary technician skills. Academic staff from the Telford Campus provide STAR funded and Trade Academy funded programmes to school students in the region and by online and video conferencing delivery.

At the Lincoln Campus, LTD has responsibility for the delivery of over 100 EFTS in Lincoln's flagship Diplomas of Agriculture, Farm Management, Horticulture and Horticultural Management. These programmes have continued to have strong demand from students, and achieve excellent employment outcomes.

LTD also delivers programmes nationwide, via distance and blended learning, of approximately 400 EFTS at Level 3 and 4. Concurrently with the preparation of the Investment Plan, Lincoln University has submitted a bid for SAC 3 and 4 through the competitive funding pilot. The Level 3 and 4 programmes provide a foundation of learning for people in the industry, and irrespective of the outcome of the bid process it will remain vital that Lincoln University works with providers at this level so students have potential pathways to higher level study.

LTD has established strong partnerships with Iwi and Māori organisations through the Whenua Kura delivery at levels 3 to 6, with Te Tumu Paeroa (the New Māori Trustee) through the FarmSkills Joint Venture and with Te Rarawa and Nga Puhi through the Apiculture programme in Kaitaia and Trade Academy delivery on the Northland College Farm. These initiatives have increased Māori student numbers and success rates of Māori learners at Lincoln.

5.5 University Studies and English Language Division

The University Studies and English Language (USEL) Division's role in the university is to prepare domestic and international students for academic success through programmes that transition students to undergraduate and postgraduate study and that support student recruitment and retention for the university.

USEL is responsible for the following programmes:

1. *The Certificate in University Studies*. This is a CUAP approved one semester programme designed for domestic and international students who have not met the academic entry requirements for undergraduate study at a New Zealand university. It prepares students for further study, and usually leads to the Diploma in University Studies.
2. *The Diploma in University Studies*. This is a CUAP approved two or three semester programme designed for domestic and international students who have not met the requirements for undergraduate study at a New Zealand university, and which will take a student from pre-degree through to entry into the second year of a bachelor's degree.
3. *The Graduate Certificate in Academic English*. This is a CUAP approved 16 week non-IELTS programme designed for students who need to meet the English Language requirement for postgraduate study.

4. *English for Academic Purposes*. This non-IELTS programme provides non-English speaking background students with English Language proficiency for the Certificate or Diploma in University Studies, undergraduate or postgraduate study.
5. *General English*. This lower level programme allows students to study general English content in order to develop their core knowledge and skills in English language.
6. *English for other Specific Purposes*. Various courses are offered to enable students to complete a shorter and targeted programme of study, and may include: study abroad for credit, English Language and Rugby, groups for short term English Language study.

5.6 Library, Teaching and Learning

Lincoln University has joined together its library and learning and teaching services to provide an integrated support service for its staff and students. Library, Teaching and Learning (LTL) provides students with academic skills and strategies to develop as independent learners through their Learning Advisors. Services include subject-specific help, online activities, report and review writing, annotating a bibliography, editing and formatting. Interactive online Library Tutorials assist students to conduct research for assignments and literature reviews.

Specialising in areas such as careers, employment and information literacy, interactive online Library Tutorials assist students to conduct research for assignments and literature reviews. University regulations require all undergraduate students to complete a library orientation programme by the end of their first semester of study. Dedicated sessions for dyslexic students are run in conjunction with staff from Inclusive Education. Learning Advisors provide specialist support and developmental services in the areas of written and oral academic communication, effective learning skills, mathematics and statistics and a range of other literacies.

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.

To transform the overall student learning experience Lincoln University is implementing a blended approach to teaching and learning. Our key focus in creating a modern blended approach environment is to increase student success. Lincoln University's courses and programmes will go through a renewal process and will bring its academic staff together with educational designers and technology specialists. These partnerships will bring a new level of quality education to our students that is central to what it means to be a Lincoln graduate. This transformation will see our academic staff explore new teaching approaches, greater use of technology and improved usage of learning and teaching systems; all of which will lead to greater student engagement and deeper learning, along with improved learning analytics and metrics for student engagement and course evaluation. The blended approach will start with our high value programmes with courses at 100 and 600 level (i.e. first year courses in both our undergraduate and taught 180 postgraduate programmes). Each subsequent year will see the next level of courses (e.g 200 level courses) redesigned for the continued rollout. Extended use of analytics will allow constant improvements/enhancements to courses/teaching practice. Other benefits in moving to a blended approach will be that it will strengthen our reputation and attractiveness to students due to improved learner engagement and improved quality of teaching; and it is also expected to expand our student market as students no longer have to live close to Lincoln and Telford campuses.

6. Managing Resources

6.1 Financial Performance

Group Summary	2014 Full Year Actuals (000s)	2015 Full Year Actuals (000s)	2016 Full Year Forecast (000s)
Total Revenue	112,538	109,653	116,800
Total Direct Expenditure	109,555	109,534	114,664
EBITDA	2,983	119	2,135
Depreciation & Amortisation	7,984	7,791	8,186
EBIT	-5,001	-7,672	-6,050
Net Interest Income	1,543	1,391	1,267
Other non-operating activities	3,348	1,112	-2,878
Operating Surplus/(Deficit)	-110	-5,169	-1,611
Non-Operating Revenue And Costs	-1,560	23,019	-2,367
Surplus/(Deficit)	-1,670	17,850	-3,979
Total Assets	244,869	259,856	258,514
Total Equity	196,102	213,940	211,511
Group Financial ratios			
- Operating Surplus (Deficit) as % revenue Operating Surplus(Deficit)/Revenue %	-0.10%	-4.71%	-1.38%
- Cash cover Cash/Total Operating Cash Inflows	14.1%	27.5%	17.8%
- Asset productivity Revenue/Property, Plant & Equipment %	67.30%	82.23%	63.03%
- Return on total assets Surplus(Deficit)/Total Assets %	-0.68%	6.87%	-1.54%

6.2 Infrastructure

Lincoln University is in transition and redevelopment with respect to learning, teaching and research spaces and facilities. The current stock of teaching and learning spaces falls into three categories:

- Dated facilities that are not flexible and have limited uses.
- Modern teaching spaces, specifically the designed studio teaching spaces for landscape architecture.
- Temporary, earthquake recovery teaching spaces which, while they meet modern teaching space standards in terms of layout and functionality, are not in the best locations for students or staff.

Plans for new, modern spaces have been set out in the Better Business Cases for the rebuild of the science facilities and the development of the Lincoln Hub. The new facilities will include flat floor multi-purpose/flexible teaching spaces designed with retractable walls to provide the desired flexibility. The new buildings also include the provision of teaching laboratories, together with associated technician/prep spaces. Once the new facilities are operational, the out of date and temporary teaching spaces, spread across the campus, will be closed.

At the time of writing we are awaiting settlement with the Insurers that will determine future facilities developments.

Projects - Completed

Major building projects have been completed on the Te Waihora campus since the earthquakes:

- Te Kete Ika: the University's new food and function centre, opened in June 2014
- The Workshop: a multi-functional and fit for purpose student space, opened in February 2016
- The temporary replacement for the Hilgendorf science building – RFH - was opened for use early in 2013
- Two temporary teaching labs were fitted-out for use.

The University has recently upgraded its wireless network to provide coverage to all teaching spaces. Additionally, the Teaching Media Liaison Group has developed a set of minimum technology requirements that will be standard across all teaching spaces.

6.3 Quality Assurance Reviews

Academic Audit Cycle 5 has been conducted and the final Audit Report will be made publicly available later this year (2016). It is normal practice for the panel's report to include commendations for things well done, affirmations for those things the university has identified to either be addressed or is already addressing, and recommendations for future improvements. These will inform the next phase of the qualification review cycle.

Following the review of the programme portfolios during 2013 – 2014, the University programme review schedule, the programme review policy and procedures are undergoing a review process. The coherence of the portfolio is important to the University and it recognises programme reviews need to ensure that coherence is maintained. In 2016 the University will commence an academic review of the PhD and thereafter anticipates initiating a 7-year qualification review cycle centered on Faculties and Divisions.

Preliminary qualification review cycle:

- 2016 Review of the PhD and completion of the Diploma review
- 2017 Review of programmes in the Faculty of Agribusiness and Commerce
- 2018 Review of programmes in the Faculty of Agriculture and Life Sciences
- 2019 Review of programmes in the Faculty of Environment, Society and Design
- 2020 Review of programmes in the University Studies and English Language Division
- 2022 Pan-University review of programme portfolio
- Review of the Lincoln-Telford portfolio will be aligned to related programmes in each Faculty.

7. Summary of Activity

7.1 Mix of Provision

The full Mix of Provision has been submitted via Workspace2

Course Classification	2017 MoP EFTS	2017 MoP Value of SAC Delivery	2018 MoP EFTS	2018 MoP Value of SAC Delivery
Agriculture, Horticulture	711	\$ 12,377,971.82	758	\$ 12,853,530.30
Architecture; Quantity Surveying	22	\$ 246,501.53	25	\$ 279,277.55
Arts; Advanced Studies for Teachers; Health Therapies; Humanities; Languages; Social Sciences	202	\$ 1,263,411.65	212	\$ 1,328,071.03
Business; Accountancy; Office Systems/Secretarial: Management	558	\$ 3,594,186.05	561	\$ 3,609,665.50
Computer Science	22	\$ 255,211.32	22	\$ 257,507.31
Engineering; Technology	27	\$ 301,692.05	32	\$ 361,807.13
Fine Arts; Design	1	\$ 7,324.34	1	\$ 10,310.72
Health Sciences (excluding classifications #07, #15, and #17)	2	\$ 18,912.19	2	\$ 23,394.98
Science	416	\$ 6,034,840.83	417	\$ 6,048,929.80
Specialist Large Animal Science	61	\$ 1,374,320.57	60	\$ 1,324,844.72
Total	2020	\$ 25,474,372.35	2090	\$26,097,339.04

7.2 Volume of EFTS by NZQF Level

NZQF Level	2014 Delivered EFTS	2015 Delivered EFTS	2016 Planned ⁷ EFTS (Funded)	2017 Planned EFTS (Funded)	2018 Planned EFTS (Funded)
L03	439	361	380	85	100
L04	52	66	88	7	8
L05	166	185	181	242	278
L06	26	27	37	37	38
L07	1236	1163	1227	1239	1246
L08	60	62	62	67	71
L09	97	98	117	109	118
L10	179	205	222	234	230
Total	2256	2166	2314	2020⁸	2090

⁷ Planned EFTS are derived from previous years growth between the August and December SDR returns.

⁸ The drop in EFTS is due to the removal of L3 and 4 EFTS associated with the competitive bid process.

7.3 Performance Commitments

SAC Eligible EFTS

			2014 Actuals	2015 Actuals	2016 Commitments	2017 Commitments	2018 Commitments
Participation			%	%	%	%	%
The proportion of EFTS who are:	Māori	L4 and above	5.0%	5.9%	6.0%	6.0%	6.0%
		L8 and above	0.3%	0.3%	0.7%	0.5%	0.5%
	Pasifika	L4 and above	1.0%	0.8%	1.2%	1.0%	1.0%
		L8 and above	0.1%	0.1%	0.1%	0.1%	0.1%
	Under 25	L4 and above	60.8%	61.9%	57.0%	61.0%	61.0%
		L8 and above	4.1%	4.6%	4.0%	4.5%	4.5%
The successful course completion rate for:	All	L4 and above	87.5%	88.5%	88.0%	88.5%	88.5%
		L8 and above	94.5%	94.6%	95.0%	95.0%	95.0%
	Māori	L4 and above	78.2%	82.2%	81.0%	82.0%	82.0%
		L8 and above	74.2%	94.0%	95.0%	95.0%	95.0%
	Pasifika	L4 and above	70.4%	71.8%	67.0%	72.0%	72.0%
		L8 and above	100.0%	66.7%	50.0%	65.0%	65.0%
	Under 25	L4 and above	88.1%	88.6%	88.0%	89.0%	89.0%
		L8 and above	98.8%	96.3%	95.0%	96.0%	96.0%

			2014 Actuals	2015 Actuals	2016 Commitments	2017 Commitments	2018 Commitments
The qualification completion rate for:	All	L4 and above	90.3%	86.3%	82.0%	86.0%	86.0%
		L8 and above	107.6%	100.5%	90.0%	90.0%	90.0%
	Māori	L4 and above	59.7%	64.4%	65.0%	65.0%	65.0%
		L8 and above	134.7%	96.6%	65.0%	80.0%	80.0%
	Pasifika	L4 and above	75.3%	105.2%	55.0%	80.0%	80.0%
		L8 and above	139.5%	184.6%	78.0%	80.0%	80.0%
	Under 25	L4 and above	81.6%	82.8%	73.0%	83.0%	83.0%
		L8 and above	135.3%	154.9%	90.0%	90.0%	90.0%
The student retention rate for:	All	L3 and above	64.8%	57.4%	60.0%	60.0%	60.0%
	Māori	L3 and above	44.0%	38.0%	52.0%	50.0%	50.0%
	Pasifika	L3 and above	41.7%	41.1%	47.0%	47.0%	47.0%

			2014 Actuals	2015 Actuals	2016 Commitments	2017 Commitments	2018 Commitments
The number of international student EFTS	All students	All levels	504.88	522.81	596.00	639.10	685.50
The amount of External Research Income earned	All students	All levels	\$ 26,655,850	\$ 24,281,480	\$ 23,517,000	\$ 28,002,000	\$ 28,608,000
The number of Research Degrees completed	All students	All levels	72	71	73	76	76