

Lincoln University Annual Report





Ka tipu, ka rea, ka whanake ake te rākau mātauraka Ko tōna pakiaka, he waewae haere Ko tōna kaupapa, he takata ora Nau mai, ki Te Whare Wānaka o Aoraki

Plant, nurture and grow the tree of knowledge Whose roots allow it to move freely Whose purpose is to support healthy people





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Chancellor's Greeting He mihi nā Te Tumuaki

As the Chancellor of Lincoln University, it gives me great pleasure to provide the opening statement to the 2019 Lincoln University Annual Report.

Lincoln is travelling at pace

In 2019 we continued to define an achievable and aspirational future for learning and research at Lincoln University and this process has consolidated into a defined and coordinated strategy for the institution. The decision of the board and shareholders of the Lincoln University AgResearch Joint Facility to wind up the collaborative building project in early February set the scene for a year of decisive action for us. By March, management had moved quickly and the council had approved the campus development priority projects for a capital programme spanning from 2019 to 2028. The prioritisation of the projects in this programme reaffirmed that an engaging and rewarding student experience, a modern, vibrant campus and world-class teaching and research facilities are vital to the future of the University, and deserve our immediate investment.

Related planning and approvals continued at pace throughout the year, and with our institutional processes maturing and expanding we welcomed new skills to drive the programme forward. The concurrent refinement of the University's business requirements saw asset rationalisation activity increase, with four notable divestments occurring in 2019.

Our subsidiaries contributed significant value to the group accounts and on the recommendation of the current Lincoln University Centennial Trust, the University agreed to establish a new foundation with a modernised deed to more effectively facilitate the application of donors' funds to the education and research needs of the University.

As 2019 drew to a close, the Lincoln University Council was pleased to be informed that the University finished the year having exceeded its enrolment targets¹, returned a financial surplus for a fourth successive year and maintained its low risk status on the Financial Monitoring Framework. With the improvement of financial and other metrics during 2019 and previous years, the Crown Monitoring regime established in September 2015 ended in September 2019.

We aspire to be ranked in the top five land-based universities in the world

With a renewed sense of stability and purpose, the council and University management have been able to consider what is needed to move us towards our aspirational goal of being one of the top five land-based universities in the world. The structured thinking and discussion around this culminated in the approval of the Lincoln University Strategy 2019 – 2028 by the council, allowing management to initiate operational planning in key areas of the University. The council intends to augment this with further strategic planning in 2020.

We value our collaborations, as they improve our reach and diversity of thought, and assist us to achieve more than on our own

As outlined in the Transformation Board Report of November 2017, we recognise we must collaborate widely with like-minded organisations to acquire the necessary academic, research and capital input to accelerate our development and ability to provide knowledge and skilled people to the land-based sectors. Building strong relationships and partnerships are key and an area of focus for our council and management, with examples noted below:

• We are respectful of, and grateful for, our relationship with Te Taumutu Rūnanga and we established a process to renew our Memorandum of Agreement between the two



The University finished the year having exceeded its enrolment targets, returned a financial surplus for a fourth successive year and maintained its low risk status on the Financial Monitoring Framework.



entities in 2019. I am personally committed to deepening this connection over the coming years to enable our institution to continue to grow its obligations within Te Tiriti O Waitangi and mature our institutional understanding of a bi-cultural approach to education that celebrates a diverse range of ethnicities and perspectives.

• Throughout 2019, management collaborated closely with Government officials to complete



business planning documentation that enabled the Crown and Lincoln University to sign a funding agreement in December 2019 for the co-development of world-class science facilities as part of our Campus Development Programme.

- Our long-term collaborative intent with our closest neighbour, AgResearch, was cemented in 2019 through the sale of a parcel of land on Te Waihora campus for its new building. This will sit alongside our yet-to-be built flagship science and teaching facility in the north-east corner of the campus.
- Deepening collaboration between governors and management with their counterparts at the University of Canterbury is providing a greater opportunity to deliver increased value to Canterbury and New Zealand².
- In a novel approach within our farm asset portfolio, management is implementing collaborative initiatives that aim to build on the special characteristics and value of each land holding, with a similar approach taken to improving standards of operational infrastructure on campus.

Council deliberations and changes in membership

The Lincoln University Council held 10 quorate meetings throughout 2019, convened Graduation in April and committees also met regularly. My thanks go to all its members for their dedication and thoughtful contributions to the discussions throughout the year. A special mention is due to Pro-Chancellor, Emeritus Professor James McWha, and the Chair of the Audit and Risk Management and the Capital Asset Committees, Janice Fredric, for their significant contributions to governance leadership.

I also wish to acknowledge the contribution of Kristy Havill, Lincoln University Students' Association President (LUSA) and Student Representative to Council during 2019, and on behalf of the council, wish her all the best in her pursuits. The council concluded 2019 with the appointment of incoming LUSA President Samuel Blackmore as its new Student Representative, and Robert Hewett as a council appointee from 1 February 2020. We also look forward to working with Minister of Education Chris Hipkins, and his office, to confirm two further ministerial appointments by July 2020.

Celebrating connections

I had many notable occasions to meet members of the wider Lincoln University community during 2019.

Graduation is always a special event for our graduates and their families and it was a further pleasure to award both Dr John Penno and John Tavendale Honorary Degrees in Commerce, Hugh Wilson an Honorary Degree in Natural Resources, Dr Allan Hewitt the Bledisloe Medal, Bruce Jefferies the Lincoln Alumni International Medal and Dr Lloyd Carpenter the Ngāti Moki Trophy for Māori Leadership. Later in the year I also presented Alanna Taylor and Jayne Smith with a well-deserved Lincoln University Medal, awarded in recognition of their significant contribution to the Lincoln University community.

I had the pleasure of hosting a Chancellor's Circle Lunch, where we were able to honour benefactor Gordon Holmes with a specimen Blue Atlas Cedar tree and plaque that will find a special home at Te Waihora once our campus development is complete. I wish to acknowledge the recently deceased Mr Holmes as a generous supporter of Lincoln University, both with his time for students and the gift of Argyle Farm to the University.

During the year, the council formally recognised the consolidation of interests that LUSA retained in the Union and other buildings on campus from its investment over the years. The University and LUSA continue to enjoy a productive working relationship, and we look forward to retaining that in years to come.

There were also the deplorable terrorist attacks of 15 March 2019, which led to an outpouring of grief and love amongst members of the Lincoln University whānau.

Here I borrow the salient and potent words of Kristy Havill, LUSA President in 2019, written as a response. "We are all one whānau, striving to learn more about the world and more about ourselves each and every day on our campus - the home away from home that we share". This was never more evident than when I stood to address staff and students gathered to acknowledge those who had suffered The sense of unity there on that day in the sun was striking, as was the sense of standing together as a nation and world against the attacks, and what it stood for. We remember the people connected with Lincoln University who died that day and their family and friends who remain.

To conclude, I wish to thank Acting Vice-Chancellor, Professor Bruce McKenzie, his management team and all Lincoln staff for their continued commitment to, and enthusiasm for, our specialist University and the aspirations we are pursuing together.



Bruce Gemmell Chancellor Lincoln University

Acting Vice-Chancellor's Overview He matapaki nā te Tumu Whakarae

Lincoln University ended 2019 in a strong growth trajectory.

With a clear direction and focused intent, we successfully positioned the University to become more responsive in identifying and capitalising on growth opportunities, while at the same time being more resilient in managing adverse events.

Our 'ambidextrous' strategic framework, initiated by our council and management in 2018, and discussed in the Chancellor's introduction, was further developed into our 2019-2028 Strategy document, with a sequence of six strategic goals identified to support the strategic approach of 'renewal' and 'shaping'.

Our purpose to provide world-class research and education will be delivered through:

- a distinctive Aotearoa New Zealand end-to-end student experience
- improved assets and sustainable operating models
- a stimulating and inspiring culture
- an optimised research and teaching precinct
- leveraging meaningful collaboration and partnerships
- facilitating growth.

This validated strategic framework affirms and underpins our newly articulated vision: 'to be a globally ranked, top five land-based university, unlocking the power of the land, to enhance lives and grow the future.'

Further highlighting Lincoln's growth trajectory, our student numbers increased in 2019 to 3305, the highest level since the earthquakes of 2010/11. Our international students come from a diverse 78 countries and comprise 48% of the student body, up 5% on 2018's figure.

Tauira (students) continue to be at the heart of our institution and it has been pleasing to see that 2019 concluded with our enrolment targets on track. LUSA continues to be an excellent advocacy and support organisation for tauira, and I thank Kristy Havill for her efforts as President in 2019.

Our performance in the research sector also continued to grow strongly in 2019, with the University achieving first position in the Performance-Based Research Fund (PBRF) measure of average quality scores of active researchers per postgraduate and final undergraduate students.

Lincoln University Professor of Plant Biosecurity Philip Hulme was named on the annual list of Highly Cited Researchers for the third year running. Every year, over 1000 scientific publications refer to his research.

Our total earthquake insurance claim was settled in 2019, and this, along with a planned portfolio of asset sales, provided the catalyst and capital investment for our Campus Development Programme.

As discussed by the Chancellor in his introduction, our campus development programme will deliver a suite of infrastructure assets that will position us to realise our vision to help shape a better future throughout the next decade. Our offering to students and stakeholders will encompass a spatially optimised campus with students at its heart, where world-leading academic and research pursuits thrive within an ecosystem of social wellbeing and environmental sustainability.

The Campus Development Programme is phased over 10 years, with work

Further highlighting Lincoln's growth trajectory, our student numbers increased in 2019 to 3305, the highest level since the earthquakes of 2010/11.



getting underway on phase one in late 2019. A programme delivery team is in place and a Project Approval Gateway model has been activated to manage stakeholder engagement.

Central to the successful achievement of our 2019-2028 Strategy, is the deepening collaboration we have with the University of Canterbury. During 2019, the Joint Working Group, comprising representatives from both institutions continued to meet and manage current joint projects as well as explore areas of mutual benefit.

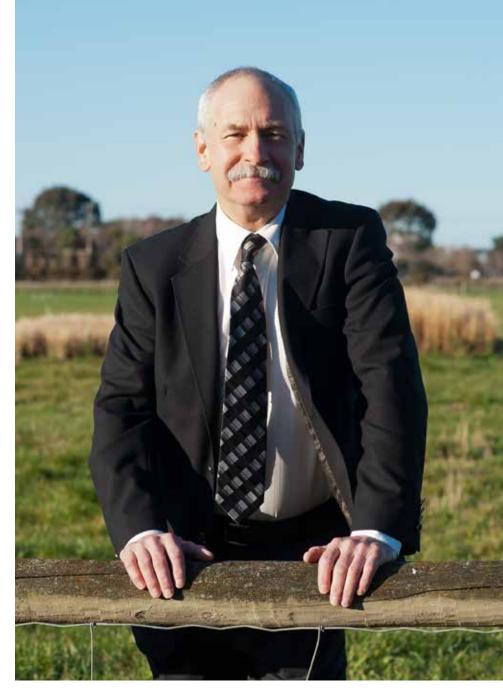
We have already launched a jointlytaught master's programme in precision agriculture, which has progressed through the academic boards of Lincoln University and the University of Canterbury, and is seeking approval from the Committee on University Academic Programmes (CUAP) before starting in 2020.

A partnership project with the University of Canterbury to build a landbased postgraduate school progressed during the year, with all Crown Research Institutes (CRIs) in the Lincoln area agreeing to participate in the school, which will significantly increase the supervision capacity and capability of both universities in the identified research themes.

Together with the University of Canterbury, and in partnership with the University of Adelaide, we are the first providers of the Children's University in New Zealand. This project also includes local stakeholders and iwi in an initiative which offers learning opportunities to school pupils outside of the classroom.

Lincoln remains committed to building collaborative partnerships with other universities and research providers, industry, private enterprises and iwi to achieve innovative solutions to some of the world's most pressing land-based challenges.

In November, we welcomed His Royal Highness The Prince of Wales to campus, where he gave a powerful keynote address on the state of the global environment to an audience of around 300 Lincoln students, staff and representatives from our partner organisations. During the Prince's visit, we took the opportunity to introduce him to several of our postgraduate and School of Landscape Architecture students who spoke about their



environmentally-related research and projects.

I had the honour of introducing His Royal Highness before his address, and I felt privileged to be able to advise him of our energy diversification project and the excellent progress we have made in moving the campus towards renewable energy sources.

His Royal Highness communicated his pleasure at being invited to speak at an institution that he described as one he had "long admired from afar".

I wish to thank all our Lincoln staff for their outstanding contributions in 2019. Their dedication and support drove our achievements in all areas of our University, and enabled our leadership team to cement our new strategic direction. I am extremely proud of the Lincoln Whānau, especially for the resilience and compassion shown during challenging times, and I continue to be humbled by their capability, generosity and commitment.

Bruce a Makengre

Professor Bruce McKenzie Acting Vice-Chancellor Lincoln University

University Governance Kā mana whakahaere o te whare wānaka

The Lincoln University Council Constitution, which has been in effect from December 2015, provides for a 12-member council. The council met monthly in 2019, with one of the meetings being the annual graduation event. Helena Parsons was Governance Director and Council Secretary during 2019.

Council membership changes

In 2019 the council welcomed ministerial appointee and Pro-Chancellor Bruce Gemmell into the role of Chancellor, and Professor Bruce McKenzie was appointed Acting Vice-Chancellor as of 1 January 2019. Emeritus Professor James McWha moved from his temporary role as Acting Vice-Chancellor in 2018 into the role of Pro-Chancellor for 2019. Kristy Havill was the Student Representative on council, with Samuel Blackmore appointed in December 2019 following LUSA elections earlier in the year.



Lincoln University Council

Photo taken 26 November 2019.

Back row (left to right): Mr A Macfarlane, Ms K Havill, Sir G Harrison, Ms P Morrison

Front row (left to right): Mrs P Parata-Goodall, Emeritus Professor J McWha (Pro-Chancellor), Mr B Gemmell (Chancellor), Professor B McKenzie (Acting Vice-Chancellor), Mrs J Fredric

Absent: Dr C Smith

Council appointments

Bruce Gemmell, Chancellor (Council appointment as of 12 July 2019) Emeritus Professor James McWha, Pro-Chancellor

Ngāi Tahu appointment

Puamiria Parata-Goodall

Ministerial appointments

Bruce Gemmell, Chancellor (*ministerial appointment until* 11 July 2019) Janice Fredric Sir Graeme Harrison Andrew Macfarlane

Staff appointments

Dr Carol Smith, elected by academic staff Paula Morrison, elected by general staff

Student appointments

Kristy Havill, LUSA President (*until 30 November 2019*) Sam Blackmore, LUSA President (*from 17 December 2019*)

Independent advisor

Jeremy Morley (attended council until 25 September 2019)

Composition of the Senior Management Group

Professor Bruce McKenzie, Acting Vice-Chancellor Emeritus Professor James McWha, Provost,

Professor Grant Edwards, Deputy Vice-Chancellor

- Dr Dione Payne, Assistant Vice-Chancellor; Māori and Pasifika Dr Lorraine Petelo, Assistant Vice-Chancellor; Learning and
- Teaching (from February 2019)

Phillip O'Callaghan, Chief Operating Officer

- Karen McEwen, Executive Director; People, Wellbeing and Culture
- Stuart Reilly, Executive Director; Campus Life (from April 2019)

Composition of Lincoln University boards

Lincoln Agritech Limited Board

Edward Rogers, Chair Dr John Hay Dr Dione Payne (to 28 May 2019) Bruce Gemmell (from 28 May 2019) Phillip O'Callaghan Alan Townsend Peter Barrowclough (CEO)

Lincoln University Property Joint Venture Limited Board

Edward Rogers, Chair Murray Frost Phillip O'Callaghan

Blinc Innovation Limited

Sue Suckling (until 30 November 2019) Nadine Tunley (until 30 November 2019) Steven Saunders (until 30 November 2019) Dr Paul Reynolds (until 30 November 2019) Emeritus Professor James McWha (until 3 June 2019) Andrew Macfarlane (4 June 2019 to 30 November 2019) Phillip O'Callaghan (from 1 December 2019)

Lincoln Hospitality Limited*

Howard Gant

LUAgR JF Limited Partnership Board (Lincoln University AgResearch Joint Facility)*

Phillip O'Callaghan Tony Hickmott

Note: all lists are as at 31 December 2019.

* The operations of these legal entities were discontinued during 2019 and they are in the process of being removed from the New Zealand Companies Register.

Our Vision, Purpose and Direction

Tō mātou tiro whakamua, kaupapa me te aro whakamua hoki



Vision

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



Purpose

To facilitate excellent research and education to grow the knowledge of our students, and help shape a world that benefits from a greater understanding of the relationships between land, food and ecosystems. Lincoln University updated its Strategy in 2019 for the period 2019-2028. The vision, purpose and direction incorporates our brand positioning of **"For the world. Protect the future. Live well".**



Strategy 2019-2028

Ambidextrous Approach - with six goals

Renewal Strategy

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

Shaping Strategy

4

3

- A world-class research and teaching precinct
- 5 An organisation focused on meaningful partnerships



Facilitating growth



Values and Core Competencies Kā uarataka o te whare wānaka

Our four core values, aligned to the Māori Strategy, reflect what is important to us as a university, give meaning to the our purpose, and help guide interactions with one another as staff members and with our students and stakeholders.

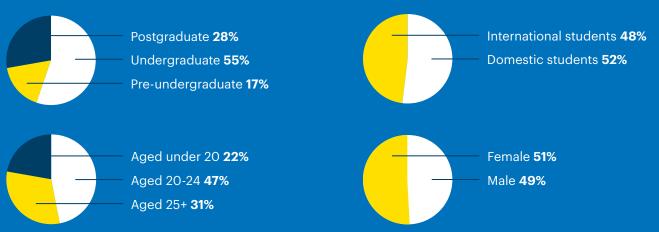
Manaakitaka — Looking After People.

We will pay respect to each other and to all others in accordance with our tikaka (customs).

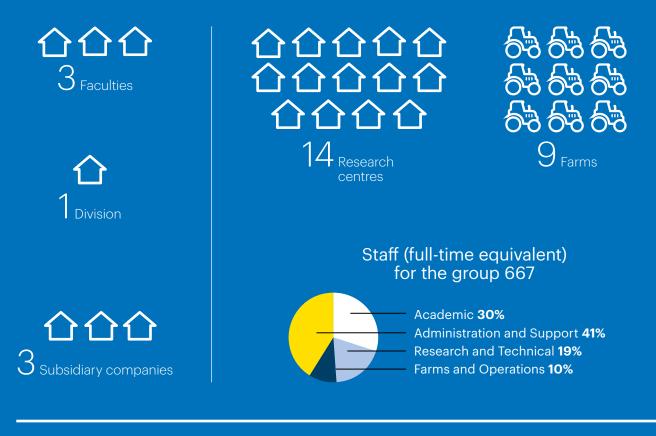


2019 At a glance Te tau 2019 — he matapaki





University Structure



Lincoln University – an Introduction Te Whare Wānaka o Aoraki – he kupu whakatau

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Established in 1878 as the Southern Hemisphere's first dedicated agricultural college, Lincoln University exists to enhance lives and grow the future.

Our purpose is to facilitate excellent research and education to grow the knowledge of our students and help shape a world that benefits from a greater understanding of the relationship between land, food and ecosystems. We provide an environment that enables students and researchers to grow into their potential, to become thought leaders who will grow the future and enhance and enrich the lives of others for generations to come. Lincoln has an environment that nurtures and facilitates growth in all areas of development: physical, emotional, intellectual, financial and societal.

Lincoln University facilitates great learning and growth through applied research, cultivation of deep industry relationships, world-class modern learning environments and teaching, global connections and collaborations, and by ensuring that what we teach is relevant today and tomorrow.

We have a global reach, belonging to the Global Challenges University Alliance (GCUA), which includes top universities on every continent and addresses issues relating to food security, bio-energy, sustainable urban development and climate change. This is in addition to a partnership agreement with the Euroleague for Life Sciences (ELLS), an exclusive network of seven leading European universities.



Our campus Tō mātou papa wānaka

Our Te Waihora campus is located in the South Island of New Zealand, 20 minutes south of Christchurch. The campus comprises of 58 hectares of picturesque and park-like grounds, surrounded by a further 447 hectares of commercial and research farmland that is used for education and research purposes. The campus has modern teaching facilities, a comprehensive library, information technology laboratories with 24-hour access and world-class sporting facilities.







Our teaching Ā mātou mahi whakaako

Lincoln University is made up of three faculties that deliver academic teaching and research: Agribusiness and Commerce, Agriculture and Life Sciences, and Environment, Society and Design.

Additionally, the University Studies and English Language Division caters to students who have narrowly missed out on gaining a tertiary entrance qualification, and to those who need to improve their English language and/or study skills.

Lincoln's academic teaching programmes equip graduates with the skills and practical knowledge to help improve productivity in the landbased industries such as agriculture, science, landscape architecture, tourism, finance and property.

Our research Ā mātou mahi rakahau

The practical nature of our activities are key to our strong ability to take research from the lab to the field. The University's research contributes to both local and international communities, helping shape and inform public policy and social development.

Lincoln University contributes to the development and commercialisation of goods and services, and engages with end users to ensure that research remains relevant to industry needs.

Our farms Ō mātou pāmu

Lincoln's farms are crucial to combining good education and training with first-hand farm experience for students. Our farms provide leading research and development for the primary sector, and practical scientific learnings and demonstration for farmers to apply to their own farms. They also provide scholarship support from the commercial profit of the farms.

The farms are positioned and managed to maintain institutional viability, improve the performance of Lincoln in teaching, research and demonstration, grow the performance of New Zealand's land-based industries and expand the global influence of New Zealand's land-based expertise. They play an important part in fostering the special link between the University, its academics, farmers and the broader rural community. The ownership and operation of the farms gives us credibility in the eyes of prospective students, employers, and education and research partners, both domestically and internationally.

Research Centres

Lincoln University contributes to the development and commercialisation of goods and services, and engages with end users to ensure that research remains relevant to industry needs.

Lincoln University has 14 research centres within its three faculties, and also hosts two stand-alone centres, the Bio-Protection Research Centre (a Centre of Research Excellence) and the Agribusiness and Economics Research Unit.

Research centres Lincoln University operates are:

Centre for Advanced Computational Solutions Centre for Food Research and Innovation Centre for Viticulture and Oenology Centre for Wildlife Management and Conservation Centre for Land, Environment and People Centre for Soil and Environmental Research Complex Systems, Big Data and Informatics Initiative Dryland Pastures Research Centre for International Development Seed Research Centre Waterways Centre for Freshwater Management

Lincoln University centres of excellence are:

Designing Future Productive Landscapes Sustainable Tourism Food for Future Consumers

Bio-Protection Research Centre (BPRC)

The Bio-Protection Research Centre, a Centre of Research Excellence (CoRE) based at Lincoln University, is unravelling some of the most difficult questions in plant protection.

Plant protection, which ranges from pre-border biosecurity to long-term management of intractable invertebrate pests, plant disease and weeds, has been of crucial importance to New Zealand's prosperity since crops have been grown here. The risks are arguably higher today than ever before, given increasing trade, decreasing pesticide availability, and effects of changing climate on pests, weeds and plant diseases. So, the need for fundamental research in plant protection to establish crosssector understanding is paramount.

BPRC's structure promotes that understanding – partners are not just universities, but also Crown Research Institutes (CRIs). The BPRC is a partnership of four universities (Lincoln University, Massey University, University of Canterbury and the University of Otago) and three CRIs (AgResearch, Plant & Food Research and Scion).

The research undertaken is identifying the fundamental science that can lead to real-world solutions. In 2019 BPRC worked on issues such as understanding why some organisms become invasive, how bacteria become pathogens, why biocontrol can fail, how endophytes colonise plants and how organism interaction affects pest occurrence and control.

Postgraduate students are central to that research. Our students are distributed across our partner organisations and form the backbone of research breakthroughs. In 2019 one of our PhD students researched ways of manipulating farm habitats to control wheat bug (Nyssius huttoni), a significant pest in commercial brassica crops. Several students are working on why a bacterium that can kill the New Zealand grass grub has nonpathogenic strains and how this affects biocontrol.

The development of the next generation of talented scientists is a cornerstone of CoRE. Their extremely accomplished students and young researchers represent the future of bioprotection in New Zealand.

Agribusiness and Economics Research Unit (AERU)

Since its foundation by Cabinet in 1962, the Agribusiness and Economics Research Unit (AERU) at Lincoln University has performed world-class research focused on sustainable wellbeing. Under the leadership of its current Director, Professor Caroline Saunders, the AERU applies sophisticated analytical tools to create knowledge for research partners that include domestic and overseas government departments, international agencies, New Zealand companies and local organisations.

Research by the AERU addresses significant issues affecting New Zealand's economic prosperity and social wellbeing. This includes large programmes financed by the Endeavour Fund and by two of the country's National Science Challenges. Its work also has international impact.

In April 2019, Professor Saunders gave the invited Presidential Address to the annual conference of the Agricultural Economics Society in the United Kingdom. Her topic was "Sustainable Agriculture – Life beyond Subsidies: Lessons from New Zealand". Her address later appeared in the highly ranked science journal, the Journal of Agricultural Economics.

Anita Wreford was a lead author for the IPCC Special Report on Climate Change and Land, published in August 2019 by the Intergovernmental Panel on Climate Change, and is a lead author for the Australasia chapter of the Sixth Assessment Report, due in 2022. She leads the Impacts and Implications Programme of the Deep South National Science Challenge.

John Saunders was lead author of Analysis of Long-term Challenges for Agricultural Markets, published by the Organisation for Economic Co-operation and Development in Paris. Paul Dalziel was an expert participant in a workshop on heritage and wellbeing convened by ICCROM, an intergovernmental organisation connected to UNESCO.

Peter Tait is the AERU's lead author of high-quality international journal articles based on science within the unit. An example of his leadership is the article on estimating wine consumer preferences for sustainability attributes, published in the Journal of Cleaner Production. He is also President of the NZ Association of Economists.

In June 2019, Tiffany McIntyre was a member of the New Zealand team which placed second in the Student Case Competition at the International Food and Agribusiness Management Association 29th World Conference in Hangzhou, China.

The Lincoln University Seed Research Centre

The Lincoln University Seed Research Centre (SRC) sits within the Bio-Protection Research Centre and provides seed research and training, as well as product development and commercialisation. The centre specialises in identifying and characterising new biological control agents from microbes and developing them into seed production, seed quality and post-harvest seed technologies.

It works closely with leading seed researchers and seed companies and is currently developing the following innovations:

- Microbial seed treatments
- Advanced seed production systems
- Seed coatings
- Seed-transmitted endophytes.

Professor John Hampton was a member of the seed industry working group that established the New Zealand Seed Industry Research Centre (SIRC), funded by voluntary levies paid by seed companies on every kilogram of seed sold. This provides a funding base for SIRC's activities which include seed research, education and extension. Lincoln University, through SRC, is a member of SIRC, and can access funded opportunities for summer scholars, honours students and postgraduate students to work on seed industry-related research.



LINCOLN UNIVERSITY CENTRES OF EXCELLENCE

Lincoln University has a suite of centres of excellence that intersect agriculture, food, conservation, environment, tourism, recreation and māturaka Māori. The centres are envelopes of activities aligned to address questions representing Lincoln University's contribution to a grand challenge confronting society. They are:

Designing Future Productive Landscapes

The main objective of this research is to conceptualise, 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, while building ecological, economic, health-related and social and cultural wealth. In 2019 the Centre presented at the 6th International Symposium on Farm Systems Design, and co-hosted, with the University of Canterbury, the Australasian Agri-Food Research Network, Agri-Food XXVI symposium. It has developed several key industry and scientific partnerships, and has commenced work on an open access book.

Sustainable Tourism

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

Food for Future Consumers

The Food for Future Consumers Centre of Excellence research aims to identify the unique value proposition for food from Aotearoa New Zealand in the future, and determine how this value can be captured for the benefit of producers, processors and the wider economy.



Our subsidiary companies and joint ventures

Ō mātou pākihi me kā rakapū

Lincoln Agritech Limited

is a research and development company that develops engineering and science technologies to support agriculture, industry and the environment.

Lincoln University Property Joint Venture Limited

is a partner company in a joint venture with Ngāi Tahu Property Joint Ventures Limited, developing former university land at Lincoln.

Blinc Innovation Limited

(formerly Lincoln Hub Limited) was originally established as a partnership with DairyNZ and CRIs AgResearch, Manaaki Whenua – Landcare Research and Plant and Food Research, with its focus to contribute to New Zealand's future through collaboration and innovation. On 30 November 2019, Lincoln University became its sole shareholder.



3 Te Whāriki, the joint property venture between Lincoln University and Ngāi Tahu Property Limited.







Lincoln Agritech

Lincoln Agritech Ltd (LAL) is a multidisciplinary research and development company owned by Lincoln University, delivering leadingedge science and engineering for the environment, agriculture and industry.

It continues to flourish and grow, in terms of staff numbers (with nine new hires in 2019 representing 15% of the work force), total revenue, and in advancing scientific knowledge. It was awarded almost \$8 million in Ministry of Business, Innovation and Employment (MBIE) funding for the braided rivers research programme in 2019. The programme will study and provide the first accurate information about how water exchanges between the groundwater and surface water in braided rivers. It will also quantify the environmental and economic benefits of different river management strategies.

Dr Richard Weld and his biotechnology team have been working on an MBIEfunded two-year grant to investigate the use of magnetotactic bacteria (MTB) to remove contaminants from manufacturing processes. Together with French collaborators, Dr Weld discovered a novel symbiosis between MTB and a marine Protista. These findings were published in the prestigious Nature Microbiology journal and featured in Science magazine and French national newspaper, Le Monde.

A number of technologies developed by LAL have successfully entered the market through commercialisation in 2019:

- Commissioned by Bluelab and designed by Lincoln Agritech, the Pulse Meter[™] achieved several industrial awards including 'Excellence in Innovation' at the 2019 New Zealand International Business Awards.
- LAL also licensed to TDRi Limited, a start-up company created by WNT Ventures, its patented technology on Time Domain Reflectometry (TDR) imaging for non-invasive moisture monitoring under roads. The working prototype has been successfully produced and tested with roading companies.

Lincoln University Property Joint Venture Limited - Te Whāriki

Te Whāriki was established in 2007 between Lincoln University and Ngāi Tahu Property Joint Ventures 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.

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 to establish a high-quality residential development that would create a unified, modern community and link the university with the township.

Te Whāriki, when complete, will comprise a community of 2700 people, 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.

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

Blinc Innovation

On 30 November, Lincoln University became the sole shareholder of Blinc Innovation Limited which continues to focus on contributing to New Zealand's future through collaboration and innovation. Based within the campus, Blinc works with leading organisations, start-ups, CRIs, growers and universities to address the topical challenges facing the food and agriculture industries.

Blinc runs five key event series aimed at encouraging a melting pot of conversations and sparking ideas across industries. These include:

Innovation Series – a monthly panel seminar where inspiring innovators from industry, science and farming share their narratives about the future of the food and fibre sector.

Big Challenge Series – a half-yearly event bringing courageous innovators and leaders together to focus on a big challenge or opportunity for New Zealand and to develop collaborative programmes.

New Wave – building the next generation of leaders and innovators, attracting them to the food and fibre industry through developing new thinking.

Vibe – engaging the local Lincoln precinct to highlight areas of common interest and potential collaboration opportunities, providing a chance to network in a casual environment.

Cultivate – offering support to entrepreneurs and SMEs by providing connections to industry professionals.

Blinc Innovation has underaken a minor rebrand to become B.linc Innovation Ltd.







Our faculties and division Ō mātou wāhaka

Faculty of Agriculture and Life Sciences

The Faculty of Agriculture and Life Sciences (AGLS) provides the foundation of knowledge for land-based sustainable production.

It 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, the Cawthron Institute, The Food Innovation Network, regional authorities and the Department of Conservation.

These relationships and associated research programmes ensure AGLS is informed of industry trends. They allow the faculty to incorporate industry insights into an ongoing programme of curriculum development and to deliver relevant graduate attributes through research-led teaching. This approach is exemplified by the Master of Science in Food Innovation, a programme which is very popular with international students. Newly-introduced programmes include the Master of Pest Management and the Master of Wine and Viticulture; in addition the Master of International Nature Conservation has been re-opened. A new major in the Bachelor of Science degree, Environmental Science, was launched in 2018.

Faculty of Environment, Society and Design

The Faculty of Environment, Society and Design is focused on how humanity takes care of the land, water and people, as encapsulated by the Māori concept of kaitiakitaka. This is achieved through designing, planning and managing, through consideration of activities that produce wellbeing, and above all, ensuring critical thinking about the impact of everything that society does.

The faculty has strong connections with a range of external stakeholders, particularly the New Zealand Planning Institute (NZPI) and New Zealand Institute of Landscape Architects (NZILA), which accredit several of the faculty degrees in planning and landscape architecture. Additionally, all the faculty's degrees draw on trained professionals for industry expertise from organisations such as the Department of Conservation, Tourism Industry Aotearoa, Recreation Aotearoa and the New Zealand Parks Agencies Managers' Group. The faculty also consults regularly with professionals through advisory boards working in natural disaster management, water management and computer science.

It has pioneered and maintained collaborative and innovative degrees through teaching partnerships that draw on the expertise of Lincoln University and partner universities (the University of Canterbury and the University of Natural Resources and Life Sciences, Vienna (BOKU)).

All the faculty's teaching programmes draw on ground-breaking and influential research which spans diverse disciplines including geography, sociology, psychology, exercise science, computer science, Māori studies and engineering, and have achieved international rankings in leisure and hospitality and sport science.





Faculty of Agribusiness and Commerce

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, sustainable and biophysical elements is a central theme in the faculty, as is a global outlook and reach.

The faculty has a strong national presence, drawing students from around New Zealand to its unique offering of degrees and courses. It also has a strong international presence, including a Joint Education Programme with Yunnan Agricultural University in China that involves Lincoln University staff teaching in China via both distance and onsite learning, with a final year on the Lincoln campus.

It is also engaged with the Australian horticulture industry through the HortAustralia-funded Global Master Class in Horticulture Business in collaboration with the University of Tasmania. In 2019, the faculty held five international summer school programmes in South Korea, China, Thailand, Indonesia and Brazil funded by the Prime Minister's Scholarships (PMS) programme managed by Education New Zealand. Hosted by partner universities in each country, students are introduced to culture, business and trade through the food chain resulting in the development of a new import or export idea between New Zealand and the host country.

Strong domestic industry relationships are maintained through research, job placement and interaction with students, particularly on field trips and tours to businesses. An example is an ongoing project to build teaching and research in the dairy futures market in collaboration with the commodity trading group at Fonterra and with NZX, leveraging the faculty's Bloomberg trading platform. Rural supplies and real estate company Farmlands, has also been a key part of a capstone course, providing the business problem that needs to be analysed and providing feedback on proposals. There are also collaborative research projects underway with AgResearch.

University Studies and English Language

The University Studies and English Language Division prepares students to succeed at Lincoln University.

The division collaborates with departments across the University to deliver customised programmes of short-term study for students from international universities with whom Lincoln University has a relationship. These programmes, which continue to grow, attract international students and institutions that are interested in an academic experience. They also build Lincoln University's profile and ability to attract future students.

Students enrol in English for Academic Purposes to fulfil English language admission requirements for Lincoln University qualifications, while participating in the student experience on campus. Students in the Graduate Certificate in Academic English develop their academic and research skills alongside their language learning for successful postgraduate study.

The division supports the pathways to undergraduate and postgraduate study for students from partner universities abroad, particularly through English language testing, the delivery of English for Academic Purposes and communication modules for students from Yunnan Agricultural University and Zhongkai University of Agriculture and Engineering.

The Certificate and Diploma in University Studies offer accelerated pathways to undergraduate study. With multiple academic entry levels, students enrol for as long as they need to successfully complete the first year of a degree. The retention of students from these programmes to a Lincoln University bachelor's degree is high – over 90%. Students are supported academically to the second year of degree study through the Skills for Success programme.

The Diploma in Organic Agri-Food Production is delivered in partnership with the faculties and the Biological Husbandry Unit and offers a sub-degree introduction to organics in the context of science, management and mātauraka Māori.



Our staff Ō mātou Kaimahi

Staff achievements and awards

Hutton Medal

Distinguished Professor Philip Hulme was awarded the Hutton Medal by the Royal Society Te Apārangi for his outstanding contributions to knowledge about plant invasions in New Zealand and internationally.

It was a particularly notable win in the medal's 108-year history, as it has traditionally been awarded for contributions to the knowledge of native fauna and flora. It was also the first time it has been awarded to a Lincoln University academic.

Professor Hulme has published over 200 papers in international journals and is the only New Zealand-based environmental scientist to be listed among the world's Highly Cited Researchers in each of the last five years, reflecting that his research outputs are often ranked among the top 1% most cited in his discipline.

He was elected a Fellow of Royal Society Te Apārangi in 2013 and in 2018 was awarded the Leonard Cockayne Lecture Award, and was granted the title of Distinguished Professor by Lincoln University.

National Animal Ethics Advisory Committee Service Award

Associate Professor Graham Barrell was the recipient of the National Animal Ethics Advisory Committee (NAEAC) Service Award for his contribution to animal ethics and welfare at Lincoln University.

New Zealand Aerospace Challenge 2019

Senior Lecturer in Agricultural Engineering, Dr Majeed Safa, and his team, were selected as one of eight finalists in the New Zealand Aerospace Challenge 2019 virtual incubator programme. A joint initiative between Airbus and ChristchurchNZ, the programme's objective is to use the brightest minds from around the country to develop a product or service that detects, monitors or measures water or soil pollution using the very latest satellite and unmanned aircraft (UA) technology data. Majeed and his team have been working since 2014 on developing an app to allow farmers to calculate how much fertiliser to apply to any given area of the farm, in real-time.

Geospatial Excellence Awards

A project co-led by the Department of Environmental Management's Dr Steve Urlich, Marlborough District Council (MDC) and Land Information New Zealand (LINZ), won the Environment and Sustainability Award at the New Zealand Geospatial Excellence Awards in October. Dr Urlich also co-led the development of an interactive MDC Smart Map that enables resource management professionals and the public to explore different bays and channels in many dimensions, and wrote the story map that accompanied it.

ClearTech

Through the research work of Professors Keith Cameron and Hong Di the ClearTech dairy effluent treatment system, developed in conjunction with Ravensdown, won several awards throughout the year. These were the Science and Research Award at the Primary Industries Awards, the Agri-Innovation Award at the South Island Agricultural Field Days and a Highly Commended Award at the Fieldays Innovation Awards.

Prestigious Australian Society for Sports History (ASSH)

Professor Greg Ryan was awarded a prestigious Australian Society for Sports History (ASSH) Fellowship. The award is presented to members and non-members who have made an outstanding contribution to the field of sports history, either in Australia or internationally. It is presented in recognition of the leading role that the recipient has played in developing and furthering the research interests of sports history. Greg is the ninth Fellow in the 36-year history of ASSH. 1 Staff Excellence Award winner Tracey Nelson, who managed the implementation of the SAFELU app, with Acting Vice-Chancellor, Professor Bruce McKenzie.

Teaching Excellence Award winners Professor Charles and Dr Margaret Brennan, left, Dr Maneesha Mohan, Dr Mohini Vidwans and Dr Suzanne Vallance with Acting Vice-Chancellor Professor Bruce McKenzie.

Fellowship of the New Zealand Institute of Landscape Architechts (NZILA)

Professor Jacky Bowring was awarded a Fellowship of the New Zealand Institute of Landscape Architects (NZILA). In announcing Jacky's fellowship, the NZILA noted her extraordinary contribution to landscape architecture in New Zealand and internationally.

Companion of the New Zealand Order of Merit

Charles Eason, Professor of Wildlife Management and Director for the Centre of Wildlife Management and Chief Executive Officer (CEO) of the Cawthron Institute, was made a companion of the New Zealand Order of Merit for services to science and wildlife conservation.

Innovation and Collaboration Award

The Department of Agriculture Sciences won the NZ Primary Industries Innovation and Collaboration Award for its Greener Pastures project Ecotain, a joint project with Massey University.

President of the New Zealand Institute of Agricultural and Horticultural Science (NZIAHS)

Professor Jon Hickford was reappointed President of the New Zealand Institute of Agricultural and Horticultural Science (NZIAHS). The NZIAHS represents over 500 members working in all aspects of the primary sector, including research and teaching in universities, Crown Research Institutes, private sector companies, management consultancy and tertiary study. Corporate members include leading companies in the sector.







Staff Excellence Awards

The Staff Excellence Awards recognise exemplary performance by individuals or teams who have been identified by their peers, as well as managers, students and alumni as having demonstrated excellence and contributed to the success of the University.

Staff Excellence Award winners were:

Tracey Nelson - Health, Safety and Compliance Manager – for one-off exceptional project implementing the SAFELU application.

Andrew Holyoake - Operations Manager, BioProtection Research Centre – for consistently excelling in his role, which was recognised and appreciated by his colleagues.

Critic and Conscience Award

Professor Paul Dalziel was awarded our new Critic and Conscience of Society Award, which formally recognises activities by staff members that contribute to the role of the University as the critic and conscience of society. The award acknowledges activities that provide the public or Government with independent, expert commentary on New Zealand or global issues affecting society and future generations. Activities could include raising an issue in the public realm (for example the news media) contributing to public debate and facilitating changes in government, organisational and/or business policy.

Excellence in Teaching Awards winners

The 2019 Lincoln University Excellence in Teaching Awards were awarded to:

Maneesha Mohan - Early Career Award Sylvia Nissen - Early Career Award Suzanne Vallance - Innovation in Teaching Mohini Vidwans - Innovation in Teaching Charles and Margaret Brennan - Excellence in Postgraduate Research Supervision

SafeLU app

In February 2019, Lincoln launched the SafeLU application for mobile phones or tablets. This app enables the University to quickly communicate the status of safety events on campus. With this app reaching staff, students, contractors and regular visitors to campus, management were able to communicate efficiently and effectively to a very wide audience throughout the tragic University lockdown on 15 March.

The app contains emergency contact information, emergency procedures, a campus map, a wide range of support resources for staff and students and the ability to report safety issues.



Our students Ō mātou Tauira

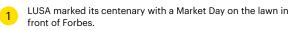
Students are at the core of Lincoln's values, and we demonstrate this commitment by putting the 'student experience' at the centre of everything we do. We provide excellent and inspirational learning, teaching and research experiences within an environment that helps ensure our students' academic and personal success while empowering and supporting them to make the right decisions.

Students design the student experience

Each year we involve more students in the design of great Lincoln student experiences. We do this by encouraging students to provide feedback on different elements of their journey and using human-centred design techniques to establish ideas for improving their experiences. For instance, second year Bachelor of Commerce student Maddie Emery helped us to better understand the emotive rollercoaster a new student experiences when preparing for university study. The outcome is a series of fun and informative videos produced by Maddie which are presented to new students as they prepare to arrive at Lincoln.

LUSA celebrates 100th birthday

LUSA celebrated its 100th birthday in July through a series of events for students, staff and alumni. These included a formal dinner with former student executive members, past presidents, senior university staff and former Chancellors. A Clubs and Market Day event was held on the day with stalls and picnic where the Acting VIce-Chancellor and vice-president of LUSA challenged each other in an obstacle-course race.



2 Global Challenge Scholars Darshil Varmora, Hugh Loughnan, Ryan Napper, Shea Lansdown and Max Lichtenstein at the official handover of their herb garden to the Lincoln University catering department.

3 Mohamad Odeh and Leonie Mollet claimed the prizes at the Lincoln University 2019 Three-Minute Thesis Competition, presenting their research thesis with the clock ticking last August. Mohamad won the master's section, while Leonie took the grand prize, discussing her work on people management and leadership.







Scholars grow living legacy on campus

Five Lincoln scholars worked together on a project in 2019 that will have lasting impact for the University. Cleaning up and rejuvenating an area behind the kitchen, they built planter boxes and created herb gardens for kitchen staff to use for all onsite cooking.

Career Fair

Our annual Career Fair was held in the Library during the first week of August. It was a resounding success, supported by positive feedback from students and all 32 businesses who exhibited. They included: Deloitte, Patoa Farms, Leech & Partners, Harrison Grierson Consultants, Oceania Dairy, Turley Farms, Constellation Brands NZ, Accor Hotels, CCUSA, Landpower, Wellington ICT Graduate School, Ultimate OE, Ruralco, PGG Wrightson, Online Distribution, AFFCO and South Pacific Meats, Trimble Forestry Logistics, WaterForce, AllGoods, AsureQuality, Combined Technologies, Mainfreight, **EIANZ Environment Institute Australia** and New Zealand, SIGNAL ICT Grad School, FAR, Synlait, EY, Norwood, CA ANZ Chartered Accountants Australia and New Zealand, FMG, BDO New Zealand and LINZ. Following on from this, a Volunteering Expo was held to encourage students to complement their studies with volunteer experience to boost their skill set and confidence, and to prepare for their professional careers.

Postgraduate Research Week

The inaugural Postgraduate Research Week took place in 2019 and was held in the week of 5 August. The week combined the Postgraduate Research Showcase and Three-Minute Thesis (3MT) competition, along with a range of staff-led networking workshops. It celebrated and showcased the outstanding efforts of our research students and the breadth of research occurring at Lincoln University. Staff and student researchers openly discussed the demands on them of a researcher, tips for balancing work and life commitments and methods for maintaining good mental and physical health. Future researchers were also given an opportunity to better understand the research capabilities and successes at Lincoln University, and how they could pathway into a research level programme.

Student initiatives and events

Respectfully Lincoln

A joint team of LUSA students and Wellbeing and Accommodation staff implemented a programme called Respectfully Lincoln early in 2019 for students living in the Halls of Residence. Respectfully Lincoln is a compulsory workshop for all Halls of Residence students and is facilitated by students who have been trained in the areas of relationships, sex consent and preventing harmful sexual behaviour. After a series of consent and relationship workshops in 2018, the programme was adapted to make a robust, fun and challenging programme, with the method of delivery and content aligning with the teaching principles of youth education. These principles are based on modelling new thinking and behaviour within the natural social environment and driving discussion to positively change individual thinking and behaviour in those areas.

Community Day

The Community Day on 24 March had activities around campus for members of the public to experience and enjoy. These included a petting zoo, sheep shearing, food trucks, fun inflatables and many more. LUSA instigated this event to increase connections with the community and enable students to be more involved in the local community through volunteering. Lincoln University worked alongside LUSA in this successful collaboration, which looks likely to become an annual tradition.

Clubs and Markets Day

Twice a year at the beginning of each semester, LUSA runs a Clubs and Markets Day where a variety of stall holders have the opportunity to showcase their offerings to students at the start of the year. Stalls include food and beverage, hospitality, advisory and all the student clubs.

CultureFest 2019

In collaboration with the Selwyn District Council and the Christchurch Multicultural Council, LUSA hosted CultureFest 2019 on 29 September. The aim of CultureFest was to celebrate Selwyn's growing diversity. The event was run by students, staff and community members.



Our alumni

Lincoln University's Alumni and Development Office is dedicated to nurturing, managing and deriving value for the university from the relationship with alumni and, reciprocally, assisting alumni to establish and maintain a lifelong engagement with their university.

The office has a dedicated heritage function, attending to and looking after the University's historical records and memorabilia. Alumni make significant use of research services available through this area of the office's work. The office defines heritage as making use of the past for current and future purposes.

Throughout 2019, the office organised and supported reunions, social gatherings, formal university events, anniversary events, chapter gatherings, heritage events and donor events, both in New Zealand and Australia.

LincUp and Friends events

LincUp Alumni and Friends gatherings took place around the country and in Australia. These typically featured a guest speaker and a University update from a senior manager.

Graduates of the Last Decade (GOLD)

A newly introduced programme of GOLD (Graduates of the Last Decade) alumni events gathered momentum throughout 2019, with events in Ashburton, Christchurch and Amberley.

Class and year reunions

Four formal class and year reunions were held in 2019, facilitated by the Alumni and Development Office working with reunion committees from 1969 BAgrSc/BHortSc (March), 1989 BAgrSc/BHortSc (April), 1999 Halls of Residence (June), and 1969 DipVFM (October).

Alumni enjoy a GOLD event in Ashburton.

2 Current SoLA staff members and distinguished guests gather in front of the commemorative paved feature that was created to mark the school's 50th anniversary.

The 1969 BAgrSc/BHortSc reunion group at Ashley Dene hearing from Manager Willem Erasmus.







2019 SoLA 50 Reunion

Back in 1969, Aotearoa New Zealand's first programme in landscape architecture began in the Horticulture Department of the then Lincoln College. The first few decades had cohorts of around 15 students, and now, half a century later, the School of Landscape Architecture (SoLA) teaches over 100 undergraduate and postgraduate students from around the world. On 6 November an alumni reunion celebrating 50 years was held at Lincoln University, where they also connected with the opening of the NZILA Firth Conference in Christchurch.

Alumni in the news and making their mark

Matt Redmond, Bachelor of Commerce (Agriculture) 2015

Matt won the New Zealand Dairy Farm Manager of the Year title at the national Dairy Industry Awards in May 2019. Judges were impressed with Matt's allround ability and said that his 'financial capability and thorough understanding of his finances really set him apart'. Matt also won the Westpac Personal Planning and Financial Management merit award.

Craig Botting, Diploma in Agriculture 2014

Craig was named New Zealand's Young Vegetable Grower of the Year in 2019 in Pukekohe after an intensive series of practical and theoretical challenges. The two top competitors couldn't be separated, and eventually twin champions were announced: Craig and Austin Singh Purewal. Craig also won the individual award for best practical expertise.

Nicola Day, MSc (Hons) in Ecology & Conservation 2008

Nicola had the distinction in 2019 of being a co-author of a paper published as the cover story in the world's foremost international weekly scientific journal Nature. The paper *Increasing wildfires threaten historic carbon sink of boreal forest soils,* arose from her work as a postdoctoral fellow at Canada's Wilfrid Laurier University.



Alumna Hannah Leckie is conducting policy analysis around climate and the environment for the OECD Environment Directorate in Paris.

Nicola is now back in New Zealand on a Rutherford Postdoctoral Fellowship working on a project with Lincoln University's Dr Tim Curran and Associate Professor Hannah Buckley (a Lincoln University alumna) of Auckland University of Technology, on fire ecology and the flammability of New Zealand tussock grasslands.

Hannah Leckie, BSc (Hons) in Environmental Science 2008

Hannah is working at the frontline with one of the most influential international agencies in policy analysis around climate and the environment, the OECD Environment Directorate in Paris. After graduation from Lincoln, Hannah won a place at Oxford University for a Master of Science degree in water science, policy and management in the School of Geography and the Environment, Christ Church College.

James Ranstead, BSc in Conservation and Ecology 2018

James, a past President of the Lincoln University Students' Association and national President of the New Zealand Union of Students' Associations, took up his Rhodes Scholarship at Oxford University in September 2019. He is enrolled for a Master of Public Policy degree in one of Oxford's newest departments, the Blavatnik School of Government, opened in 2010.

Susanne Becken, PhD in Resource Management for Tourism 2003

Susanne's doctoral research at Lincoln University on energy use in the New Zealand tourism sector received international acclaim and led to invitations to present at a World Tourism Organisation (WTO) conference on tourism and climate change, and a workshop for the United Nations Environmental Programme (UNEP) in Paris. Susanne was also awarded the UNWTO Ulysses Award for her contributions to tourism science, research and education. The prize is awarded annually to a distinguished scholar for outstanding contributions to innovation and knowledge in tourism. In addition, Susanne won the Best Article of the Year Award for her paper Decarbonising tourism: mission impossible?

Campus Development Kā mahi whakahou ki te papa wānaka

The Campus Development Programme is so much more than just buildings and landscapes. It is about developing a more modern, vibrant and safe campus that provides a positive campus experience for our students and staff; and enabling the growth in our future as a world-class research, teaching and learning precinct.

With our earthquake insurance claim settled, Lincoln now has the financial capacity to undertake significant remedial and replacement work on campus buildings and infrastructure. Throughout 2019 a full campus development programme was established and implemented, including a team of in-house project management professionals to lead delivery of our development projects.

Our vision is to provide an environment that enables our students, staff and campus business partners to grow into their potential, by creating a campus that enhances connections and collaboration, and has a vibrant heart at its centre. With people at the core, our campus development programme draws on the University Strategy, and our four supporting plans, while balancing respect for our culture, heritage and environment.

As New Zealand's land-based university, we are taking the opportunity to ensure that our campus development addresses our approach to climate change and embraces our strategy to be carbon-zero as a campus by 2030. We are also addressing the multicultural nature of our campus through embodiment of the cultural narrative linked to Te Waihora through our building designs.

We recognise that achieving a fit-forfuture campus attractive to current and future students, and professional talent, and that supports their retention, requires strategic decisionmaking around what and where to invest. Changes, therefore, involve improvement and enhancement, but also include rationalisation and consolidation of unutilised, redundant and obsolete space. We are focused on the enhancement of our existing park-like campus, building on our natural habitats and native plantings.

The overall investment for the programme is estimated to be in excess of \$200m, over a 10-year period (2019-2028) in three phases. Phase 1 runs through to the end of 2022 and will see eight to nine projects commenced and well into design and construction by then. Lincoln University Chancellor, Bruce Gemmel, Selwyn District Council Mayor, Sam Broughton, Chief Operating Officer, Phil O'Callaghan, and Acting Vice-Chancellor, Bruce McKenzie plant natives in the biodiversity area.

- An aerial view of the Biodiversity Trail in its early stages of development.
- The planned Science North building, which replace the Burns Building.
- The redeveloped Recreation Centre will meet growing demand.





Throughout 2019 our focus has been on implementing "enabling and 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 focus is now on planning the modernisation of teaching, learning and research facilities (including our flagship science facilities), and the restoration of key heritage buildings, including Ivey Memorial Hall.

During 2019, enhancements to buildings and spaces around the University included:

Completed Projects

- Infrastructure: An upgrade of the lifts, and seismic strengthening of stairwells in George Forbes, and upgrade to our well head for our artesian water supply
- Sustainability: Installation of solar panels on Mrs O's cafe
- Landscaping: Creation of a biodiversity trail beside the Burns Building
- Teaching spaces: Refurbishment of several buildings such as Fletcher House and the Natural Resources Engineering (NRE) building, audio-visual(AV) upgrades in the Commerce building and the installation of air conditioning in Ivey Hall teaching and study spaces
- Accommodation: Installation of heat pumps in residential homes.

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Projects started in 2019

- Student space and LUSA Offices: Phase 2 refurbishment, and seismic strengthening of the Forbes building.
- **Recreation Centre**: Redevelopment of the University Recreation Centre to cater for increased demand and to replace outdated facilities.
- **Postgraduate space (Ivey Hall)**: Refurbished postgraduate learning space.
- New science facilities: Development of plans for new science teaching, learning and research and collaboration facilities.
- Union Building: Demolition, including Union Annex
- Hudson Hall: Planning for the removal of accommodation facilities, and replacement with a staff and student services administration hub.
- Student Flats: The construction of the first stage of new student accommodation on campus started at the end of 2019.
- **Postgraduate accommodation**: Master planning completed, and commencement of a strategy to redevelop.
- Infrastructure Repairs & Renewals: Initiation of an energy study and plan which will see the University changing the way we heat and cool our buildings in conjunction with our Climate Strategy.

Science facilities with AgResearch

Lincoln University and AgResearch are progressing to realise the benefits of collaboration through co-location in adjacent facilities on the Lincoln campus. Working together, both organisations are placed to make a valuable contribution to deliver on national aspirations for economic growth and prosperity, and finding solutions that will achieve environmentally and socially sustainable productivity improvements. Co-location represents the potential to achieve better outcomes for New Zealand in the land-based sector.

Our Sustainability Focus Tā mātou aroka ukauka

Lincoln University, as a specialist land-based university, has a strong focus on sustainability, especially for the environment and enabling healthy ecosystems.





National Science Challenges

The National Science Challenges were established in 2014 to tackle the biggest challenges and opportunities facing New Zealand, and bring together the country's top scientists to work collaboratively across disciplines, institutions and borders to achieve their objectives. These challenges address many of the United Nations' Sustainable Development Goals (SDGs).

In 2019, Lincoln University collaborated in the following challenges:

- Building Better Homes, Towns and Cities (which aligns with SDGs 3,11,12,15)
- New Zealand's Biological Heritage (which aligns with SDGs 14,15)
- Our Land and Water (which aligns with SDGs 2,12,14,15)
- Resilience to Nature's Challenges (which aligns to SDGs 9,11,13,15)
- Science for Technological Innovation (which aligns with SDGs 8,9).

Lincoln University also has staff working on the High-Value Nutrition Challenge (SDG 2) and The Deep South (SDG 13).



Solar array

In November 2019, Lincoln became the first New Zealand university to adopt commercial scale solar energy, and we also unveiled plans to eliminate our use of coal by 2023.

The University partnered with Meridian Energy to install a 102 kilowatthour solar array, the largest to be installed at a New Zealand university. The array will supply renewable energy direct to the University's network, with Meridian Energy planning additional arrays as part of Lincoln's \$8m investment into renewable energy.

Acting Vice-Chancellor, Professor Bruce McKenzie, said we have a responsibility to ensure that future generations are given the opportunity to grow and thrive. This means using our resources sustainably and partnering with energy and utility experts to move away from fossil fuels, improve our energy performance and achieve carbon neutrality by 2030.

The array was officially switched on by Selwyn MP, Hon Amy Adams.

Future Leaders focus on SDGs

A major focus for our Future Leader Scholars is awareness and promotion of the SDG's on campus and in our community. In October 2019, the Future Leader executive for 2020 was elected, and it decided its focus and theme for the coming year would be on the SDGs and how they can make a difference on campus and in the community.

VC's sustainability taskforce

Students from the Faculty of Environment, Society and Design proposed a Climate Action Plan which was presented to the Acting Vice-Chancellor in late 2019. The Acting Vice-Chancellor subsequently set up a Sustainability Taskforce to develop this Climate Action Plan further and to enforce the direction the University is taking to become carbon neutral by 2030.

Energy diversification programme

In preparation for redesigning its networks for a carbon neutral operation, Lincoln University invested in condition and functionality assessments. From these the development of a sustainable energy plan that looks out to 2030 has been commissioned. This plan will inform decisions that redesign the future configuration of our energy network. As part of the energy diversification programme, the University has embarked on an ambitious on-site solar energy generation programme in partnership with Meridian Energy that delivers affordable green energy and avoids high capital costs associated with such installations. Looking to the future, the partnership will deliver a further 500 kilowatts of roof-mounted solar generation over the next two years, with other significant ground-mounted options also under consideration.

Vision to unite the primary sector launched by Prime Minister

In December 2019, Lincoln University hosted Prime Minister Jacinda Ardern, and Agriculture Minister Damien O'Connor, who announced a bold new vision for the country's vital food and fibre sector, launching the Primary Sector Council's vision, "Fit for a better world". The vision acknowledges the central role that those who work our land and oceans will play in the future prosperity of New Zealand, and New Zealanders. International consumers want to know that the food we produce is climate friendly and sustainably produced, with high animal welfare standards and by a workforce that's treated with respect and paid fairly.

Climate Change Week

During September's Climate Change Week, the University was fully supportive of students and staff who stood in solidarity with the School Strike 4 Climate calling for meaningful action on the climate crisis, through taking part in a 22km hikoi from Lincoln to Christchurch city centre. Other activities during this week included a seminar from Victoria University's Professor James Renwick, an awardee of the Prime Minister's Science Prize for communication, and a live streaming on campus of the climate discussions between the Prime Ministers of New Zealand and the Netherlands at Auckland University.



Lincoln University Acting Vice-Chancellor, Professor Bruce McKenzie, with the students as they prepare to walk to Christchurch for the climate strike.

Staff and student groups

The Sustainability Action Group for the Environment (SAGE) is an active staff group with subcommittees that work collaboratively to improve sustainability outcomes and instigate and facilitate initiatives on sustainability. SAGE subcommittees include transport, native biodiversity, news, events and promotional material, energy and waste. SAGE supports the student clubs Lincoln Environmental Organisation (LEO), and the Lincoln University Climate Change Action Group.

Sustainability awards

Selwyn Responsible Business Awards

Lincoln University claimed four awards in October 2019 at the Selwyn Responsible Business Awards which recognise sustainable practice. Catering received a Platinum Award and won the overall award for the Lincoln area for its focus on reducing the amount of plastic used in the kitchen. The Recreation Centre received a Gold Award for supporting community health initiatives, reducing waste and managing energy, Facilities Management received a Platinum Award for providing support on a number of sustainable initiatives on campus, and the Lincoln University Early Childhood Centre received a Platinum Award for its continued focus on teaching the younger generation how to be eco-friendly and sustainable.

SAGE Sustainability Awards

The Lincoln University Climate Action Group took out the Student Club award category at the SAGE Sustainability Awards, held on campus in October. Chelsea Yeoman won the student section and Dr Catherine Elliot received the staff honour. Special awards for outstanding contributions to sustainability, both at the University and in the wider community, went to Dr Sue Jarvis, Dr Sally Price and Professor Ian Spellerberg.

Our Partnerships Ō mātou hoa rakapū

Lincoln University has a number of national and international partnerships to collaborate in education and research to ensure we remain relevant to industry. Examples of some of these partnerships are:

University of Canterbury partnership

A Memorandum of Understanding (MOU) between Lincoln University and the University of Canterbury was signed in 2018 to review ways of working together to engineer a step-change in the scale and quality of land-based tertiary education and research. Subsequently, a partnership proposal was submitted to the Government for consideration to keep New Zealand at the forefront of leading-edge land-based science, commerce, management and design. In August 2019 the decision was made to shelve the proposal for a formal partnership with the University of Canterbury, allowing Lincoln to continue collaboration efforts with the University of Canterbury and other organisations, while enjoying the benefits of independence.

The working group formed to develop joint programmes between the two universities has continued to work on collaborative projects, such as the Children's University Canterbury Partnership, a proposed postgraduate school and new joint qualifications such as the Master of Disaster and Risk and Resilience, and Master of Water Resource Management. The partnership adds to the collaborations Lincoln University has with other educational institutions such as in SIGNAL, the ICT graduate school created in collaboration with the University of Canterbury, Ara Institute of Canterbury, Otago Polytechnic and the University of Otago.

Kuehne + Nagel

Lincoln University's relationship with Kuehne + Nagel, the third-largest logistics company in the world, was formalised with the signing of a MOU in October. Under the leadership of Associate Professor in Supply Chain Management, Dr Mark Wilson, the University has been operating and growing this relationship for some time.

Kuehne + Nagel recruits Lincoln graduates directly for their New York and North American offices, and the University facilitates that process by running seminars for interested students on campus. The University's relationships with Kuehne + Nagel highlights the drive to build international partnerships with not only academic and research institutions, but also with businesses. Lincoln's Bachelor of Commerce degree majoring in Supply Chain Management is also a highly desirable programme in New Zealand as it focuses on relevant industry contexts and mixed delivery of learning, which produces work-ready graduates.



Precision Agriculture

Combining the expertise of the Agriculture and Life Sciences and Agribusiness and Commerce Faculties at Lincoln and the College of Science at the University of Canterbury, a partnership for the Precision Agriculture programme was progressed and opened for student enrolments for 2020.

The programme also draws on expertise from Lincoln Agritech Ltd, and teaches the essentials of using cutting-edge digital technologies to boost productivity and reduce environmental impacts in the primary industries. A number of precision agriculture companies in the area will benefit from the qualified students the programme will deliver.





Children's University

In 2019 Lincoln University and the University of Canterbury established the first Children's University in New Zealand. Children's University Canterbury Partnership encourages 7 to 18- year- olds to engage in exciting and innovative learning activities and experiences outside of the classroom. The aim of the programme is to raise young people's aspirations for higher education and encourage lifelong learning. Children are issued a Passport to Learning in which they record participation in quality-assured activities they take part in at validated Learning Destinations, during campus experiences and via online activities. Ninety Learning Destinations were validated in the Canterbury region including libraries, museums, galleries and sports clubs. Hours of learning accumulate in line with university qualifications and children graduate once they achieve set levels. More than 80% of the cohort graduated in a ceremony at the Christchurch Town Hall in November.

South Island Dairying Development Centre (SIDDC)

Lincoln University partners with DairyNZ, Ravensdown, Livestock Improvement Corporation (LIC), AgResearch and SIDE (a network of South Island Dairy Farmers) in the South Island Dairying Development Centre (SIDDC).

A key feature of the SIDDC partnership is the management of 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.

LUDF is an immensely successful demonstration farm with strong stakeholder engagement. It regularly presents data online and hosts events to share the farm's successes and challenges with both dairy farmers and the wider community, such as school visits and opening to the public. The farm strives to be an industry leader in social, cultural and environmental responsibility. Children's University students work on their drawings.

The first graduation ceremony for the Children's University was held in November at the Christchurch Town Hall.

Euroleague for Life Sciences (ELLS)

ELLS is an exclusive network of seven leading European universities established to promote educational collaborations in fields such as animal, agricultural, food and environmental science; ecological engineering; natural resources management; and landscape architecture and spatial planning, and Lincoln University was part of the first intake of partners in 2013.

Delivering Skills for Industry Whakatau pukeka ahumahi

Lincoln University has a focus on strengthening connections with industry to support innovation and enhance our contribution to the land-based sectors. These relationships also provide our students with the opportunity to form professional relationships during their tertiary education.

Affiliations

Kā pirika

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

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

- New Zealand Institute of Valuers
- New Zealand Green Building CouncilPacific Rim Real Estate Society
- (PRRES)
- Property Council New Zealand
- Royal Institution of Chartered
 Surveyors (RICS)
- Valuers Registration Board (VRB).
- Chartered Accountants Australia & New Zealand (CA ANZ)
- CPA Australia
- Association of Chartered Certified Accountants (ACCA)
- New Zealand Institute of Landscape Architects (NZILA)
- International Federation of Landscape Architects (IFLA)
- Institute of Primary Industry Management (NZIPIM)
- Property Institute of New Zealand (PINZ)
- Corenet Global
- Facilities Management Association of New Zealand (FMANZ).

Employable students

Kā tauira kua rite mō te mahi

Lincoln University enjoys the highest employment rates of all New Zealand universities and our own Graduate Destination Survey (GDS) of graduates from 2018 showed that of the 406 respondees (49%) who completed the survey, the majority (340 (84%)) were in paid employment. The survey results show both the broad array of Lincoln University qualifications and the translation of these into a wide range of employment positions as our graduates join the workforce.

Real-world learning is fundamental in delivering work-ready graduates, which is why practical work is an integral component of programmes through formal internships across a range of industries. The GDS shows that we are providing the majority of our students with that real-world experience and offer considerable assistance in transitioning into the workforce as well.

This is enabled through:

- 1. The formal industry accreditations that Lincoln University has with New Zealand organisations outlined in the "Our faculties" section of this report
- 2. The nationwide portfolio of farmland owned by Lincoln University for teaching/research and the sharing of best practice with the land-based sector
- 3. Lincoln University degrees having a high level of practical work experience.

There is currently strong market demand for skilled recruits in the primary industries in areassuch as agriculture, horticulture, accounting, rural accounting, land and property management, supply chain management and water resource management.

Working with other tertiary providers Kā mahitahi me kā wānaka

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 and offer high quality education for every need. 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.

SIGNAL

The South Island Graduate Network And Laboratory (SIGNAL) ICT Graduate School provides a unique learning experience that brings education and industry together to develop ICT practitioners who can drive growth and innovation in the ICT sector. SIGNAL is a collaboration between the University of Canterbury, the University of Otago, Lincoln University, Ara Institute of Canterbury and Otago Polytechnic. SIGNAL also provides more effective pathways for graduates from ICT education into employment. It will help grow New Zealand's ICT talent and knowledge to support business growth, innovation and productivity. This project and partnership is due to be completed by the end of 2020.

The Biological Husbandry Unit (BHU)

The BHU Organic Training College was established in 2007 to deliver handson programmes in partnership with Lincoln University. The BHU College is one arm of the BHU Organics Trust. The Biological Husbandry Unit Organics Trust (BHU) is a joint venture between Lincoln University and the New Zealand Organic Movement, dedicated to providing education, training and research in organic, ecological, permanent and related agricultures and horticultures. In 2019 the BHU delivered the Diploma of Organic Food Production whilst working with Lincoln to deliver the diploma online in the future. The BHU also contributes to Vision Matauranga research and other projects from the Bio-Protection Research Centre (BPRC).

Ashley Dene

The Ashley Dene Research and Development Station (ADRDS), established in 2016, showed significant growth in the portfolio of research and development conducted at the station in 2019. 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-farm. The goal of ADRDS is to conduct farm systems research to improve the profitability, environmental and welfare performance of dairy and livestock farming systems.

It is situated on 190 hectares(ha), with a milking platform effective area of approximately 180ha. ADRDS is a world-leading farms systems research facility comprising a suite of dairy farming systems, with close integration of the arable and livestock sector, that develops, quantifies and demonstrates the effect of new dairy and livestock farming systems on profitability, environmental and welfare performance. Since autumn 2017, ADRDS has had a split calving herd structure with 450 cows calved down in the spring and 75-80 cows calved down in the autumn. Infrastructure on the farm includes 54-bail rotary Waikato Milking Systems plant, with Afimilk Technology being used for our automation, and a feed pad and stand-off pad. While 145ha are irrigated, 35ha is dryland with some of this area planted in lucerne which is grazed mainly by the autumn herd.

Specific objectives of ADRDS are:

 To improve the performance and viability of existing dairy farms within New Zealand, and develop and test alternate dairy farming systems in Canterbury which meet and challenge nitrogen discharge limits on shallow stony free-draining 'leaky' soils;

- To develop systems based on new approaches to animals, forages, soils, and the management of low-cost infrastructure that reduces the environmental impact of dairy farm systems;
- To develop robust, low-cost wintering systems for dairy cows that meet profitability, welfare and environmental targets;
- To gain an improved understanding of the use of cow genetic information across farm systems varying in the level of feeding intensity, and how this affects milk production and composition;
- To develop and demonstrate approaches to applying the practice of kaitiakitaka appropriate to Māori and indigenous production contexts
- To provide high quality education facilities that enhance the quality and quantity of agricultural graduates and trained rural professionals;
- To provide shared resources for Lincoln's partners to conduct research into improving environmental outcomes, notably greenhouse gases, soil carbon and water quality.

Waterways Centre for Freshwater Management (WCFM)

The Waterways Centre for Freshwater Management (WCFM), an initiative between Lincoln University and the University of Canterbury focuses on improving knowledge-driven management of freshwater resources in Canterbury and New Zealand, celebrated its 10-year anniversary in 2019.

Waterways' achievements include the development of five Water Resource Management (WRM) undergraduate courses, and the WRM postgraduate diploma, master's and PhD qualifications. Graduates so far include 99 WRM postgraduates and five PhDs.

Its annual Postgraduate Student Conference on 19 November drew 160 people, its highest attendance ever.

Student Recruitment

Orientation

Orientation offers an ideal opportunity for staff to meet, support and welcome their new students. Faculty, departments, business units and LUSA work together on a series of administrative, social, cultural, pastoral and academic activities to help transition students successfully to university life. New students to the university are welcomed with a powhiri, and with a number of activities celebrating the beginning of the new academic year at O'Week. O'Week's itinerary included the clubs' market, a bingo night, a postgraduate afternoon tea and other social events such as a toga party and concert.

Rabobank FoodX 2019

Twenty seven students visited Lincoln University's Dairy Farm in April as part of the first Rabobank FoodX programme.

The four-day joint initiative between Rabobank, Lincoln University and NZ Young Farmers (NZYF) was designed to promote careers in the primary industries to urban students in Canterbury.

The students, from 13 high schools, visited a range of agri-businesses, including Synlait, Hellers, Gladfield Malt, Mt Peel Station and Rakaia Island, as well as the dairy farm.

Networking dinners for Canterbury schools

Senior management and council members hosted successful networking dinners for Canterbury school principals and careers advisors to raise our visibility and build on our relationship with them.

Information evenings

Nearly 150 people attended the inaugural Lincoln University Information Evening at the Aurora Centre on 28 May. It included specific undergraduate and postgraduate sessions, as well as an information expo where attendees had the opportunity to talk one-on-one with academics and support staff.

Recruitment campaign

Our nationwide end-of-year recruitment campaign was Growing the Future. It drew on the personal goals, interests and career aspirations of current students from each of our areas of specialisation, utilising multi-channel advertising including cinema, video, newspaper, outdoor, digital platforms, social media and radio.

See images on page 121.

Māori & Pasifika Engagement Te Ao Māori me te Ao Pasifika

Boosting achievement of Māori and Pasifika

Ka aroka, kā whaika whakakaha i te huka Māori me te huka Pasifika

Engagement

Lincoln University's teaching and research specialisations in land and resource-based production link to sound social, economic and environmental outcomes that can provide critical opportunities for Māori and Pasifika. A key strategic outcome for the University is our journey to become a bicultural campus. This outcome is to show our support and commitment to Māori while demonstrating manaakitaka to all cultures on campus. We are also committed to supporting the Māori economy by assisting to develop trained and skilled thought leaders to support maximum performance and growth of Māori assets. The University has degree and postgraduate programmes and an increasing participation and retention rate of Māori learners able to access pathways from pre-degree to higher levels.

Māori strategy

In the strategy there are five pou that contribute to the following four areas:

Strategic relationships

Lincoln University has a range of relationships with Ngāi Tahu representative bodies and subsidiaries, Māori entities, community groups and schools. The focus is on building deeper relationships through strategic partnerships that support our tauira through their course work, internships and work experience placements. This provides the necessary access to professionals and technical advice needed for graduates to effectively engage in Te Taiao, whenua and mahika kai.

A key strategic relationship is with our local and regional high schools. In 2019, Lincoln was honoured to host the Regional Manu Korero Speech competition which involved 28 high schools in Waitaha (Canterbury) and Te Tai Poutini (West Coast). This both broadened and deepened our engagement with high school students and provided an opportunity to provide ongoing sponsorship for highachieving Māori high school students from the region. This competition was the largest Māori event ever held on campus with over 1200 high school students, teachers, community groups and whānau attending.

Student experience and achievement

The Kaiarahi team 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 programme support is delivered to tauira. The Māori Achievement Framework was implemented in 2019 and continues to focus on monitoring of Māori achievement, particularly for students in their first year of university study. Key points of engagement and processes for intervention have been developed to ensure tauira are supported throughout their educational journey and Gradebook, an electronic monitoring system, tracks real time assessment outcomes.

Knowledge and research

Lincoln University has developed pathways for tauira that can assist to build a strong Māori workforce and a new generation of Māori leaders by offering industry-relevant, careeroriented programmes ranging from diplomas, to undergraduate and postgraduate degrees. A key component is collaboration with Māori entities to provide internships and workplace experience, teaching opportunities and course development collaboration.

The University is also engaged in Māori research outcomes, both in quantity and quality. This will lead to the development of institution-wide faculty, division and other operational unit mechanisms and approaches to facilitate kaupapa and mātauraka Māori research capacity and capability. A greater engagement in kaupapa and mātauraka Māori aligns with the importance Māori place on whenua, mahika kai and te taiao. Three projects in 2019 that encapsulate those outcomes are MBIE funded research projects with the Okarea Whānau Trust focused on redesigning whanau land to support hapū development and supporting Ōnuku Rūnanga with tourism development. The third

Māori and Pasifika highlights

Papua New Guinea celebrated its 44th Independence anniversary in September and to mark the occasion the Lincoln University Pacific Students' Association, together with the University, hosted a day of prayer, speeches and cultural dance. The event was attended by the country's High Commissioner. Papua New Guinea was the first Pacific nation to sign a Memorandum of Understanding (MOU) with Lincoln, in 2010.

In September, **International Night**, an event to celebrate the cultural diversity at Lincoln University, was held. Pacific Island dances were performed by the LUPISA group and international dishes were sampled by all who attended.

In November the end-of-year **LUPISA Dinner and Celebration** farewelled those moving on in 2019. Awards were presented for various achievements and participation.

research project was funded under the mātauraka Māori research theme involving a collaborative engagement with the Biological Husbandry Unit, Manaaki Whenua and Te Pa o Rakaihautu, that focused on revitalising traditional kumara cultivation in Waitaha.

Lincoln University also provides Māorispecific courses that complement land-based specialty programmes. These courses include Māori Planning and Development, Te Tiriti o Waitangi and introductory courses in Māori Culture and Society. In 2019, Mahika Kai was delivered for the first time as a compulsory course in the Diploma of Organic Agri-food Production, as well as an elective for all degree programmes. This course is the first mahika kai course taught in New Zealand universities. In addition, Te Reo Māori courses were reintroduced. Māori content is continuously becoming embedded in degree programmes, with an intent to have Māori content across all Lincoln University programmes.

Operational delivery of services

There is a range of operational services that are key to the delivery and support of services for boosting tauira achievement.

Human resource capability is the University's focus on providing staff and students with opportunities to engage in te reo me kā tikaka both on campus and in the community. Māori specific events to celebrate Te Wiki o te Reo, engagement in local and national community events and the hosting of the Hui Taumata Taiohi and Mahika Kai Conference have provided opportunities for staff and students to actively participate in te ao Māori.

Te Whare Whakakotahi and Ngā Kete e Toru are the two spaces dedicated to manaakitaka and kaitiakitaka. Te Whare Whakakotahi is the whare on campus where tauira gather, study, eat and have noho, during and between semesters. The spaces provide a fully functioning kitchen, dining room and wharenui that is available for students, staff and the community.

The Ngā Kete e Toru collection and study space in Te Wharepūrākau o Te



Whare Wānaka o Aoraki brings together core Māori material into one place to reflect the holistic nature of the Māori knowledge world. The collection provides a focus for Māori students to explore their own and the wider world, and provides a window into the Māori world for all students and staff.

Pasifika strategy

Enrolments from the Pacific nations are growing, particularly with Lincoln University's long- established relationship with the international Pasifika community through the Ministry of Foreign Affairs and Trade (MFAT) programme. This is the area in which the University foresees having the most positive impact on growing the wider Pasifika community's capability and achievement. Targeted marketing and strong student feedback saw an increase in MFAT scholarship students from the Pacific nations in the last two years, and this is where resources will continue to be concentrated over the next two-three years.

Recognising the potential to grow New Zealand Pasifika student numbers, Lincoln has dedicated specific resources through the recruitment of a Pasifika Support Coordinator. This position will oversee the Pasifika

Mahika Kai Conference

At the end of 2019, Lincoln University hosted the inaugural Mahika Kai Conference which was attended by national and international indigenous mahika kai practitioners, researchers and collaborative partners. Two taiohi groups also presented, showing the diversity and intergenerational importance of mātauraka mahika kai. During the conference, the Mahika Kai Journal was announced which will contain the conference proceedings and encourage the dissemination of indigenous knowledge and practice in the mahika kai area.

Achievement Framework which, like its Māori counterpart, will provide focused monitoring of Pasifika achievement for those students in their first year of university study and ensure key points of engagement and processes for intervention have been developed.

The further development and implementation of the Motu Strategy is Lincoln University's commitment to being able to respond to the cultural needs of Pasifika.

Pacific Island Students' Association (LUPISA)

The Pacific Island Students' Association (LUPISA) also supports Pasifika students. This association is supported by the Assistant Vice-Chancellor, Māori and Pasifika and the Lincoln University Students' Association, which funds activities and outings, and includes both domestic and international Pasifika students. Community groups which engage with LUPISA students include the Cook Islands Canterbury Student Association, and Samoan family and business organisations with Samoan students and Papua New Guinea students through the Lincoln University chaplaincy.

The Year in Highlight Ko tēnei tau — he matapaki

Prince Charles visits Lincoln

Lincoln University was privileged to welcome His Royal Highness, The Prince of Wales to campus in November, where he gave a powerful keynote address on the state of the global environment.

During his visit, the Prince also heard from several postgraduate and School of Landscape Architecture students about their environmentally related research and projects.

Around 300 people, including Lincoln students, staff and representatives from the University's partner organisations, were invited to the Stewart Building for the address.

His Royal Highness said he was touched to have been invited to speak at Lincoln and described the institution as one he had long admired.

In his address the Prince said the planet faced a climate and biodiversity emergency and it was clear that the crisis had reached a tipping point.

Big turnout for Finance Colloquium

Finance Minister Grant Robertson delivered the closing address of a successful 23rd New Zealand Finance Colloquium, held at Lincoln University for the first time in February.

The New Zealand Finance Colloquium is an annual event organised and held at universities throughout the country to promote the discussion, dissemination and development of finance-related research within New Zealand.

Minister Robertson talked about a goal of the Government being to create a modern, lowcarbon, sustainable economy. He also discussed the future of work and the use of wellness indicators, in addition to the traditional economic measure of Gross Domestic Product (GDP), to measure New Zealand's economic success.

With more than 90 participants, it was the biggest New Zealand Finance Colloquium since the event started in 1996.

Keynote speakers were Professor Paul Dalziel, Deputy Director of the Agribusiness and Economics Research Unit at Lincoln University and Professor Robert Faff, Professor of Finance and Director of Research at the University of Queensland Business School.

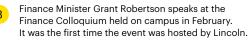




His Royal Highness, The Prince of Wales, during his keynote address at Lincoln University.



The Prince departs campus after a hugely successful visit.





NZ Ecological Society Conference

Almost 300 ecologists from across New Zealand and overseas came to Lincoln University in December for the annual New Zealand Ecological Society conference.

The theme of the conference was Ngā Koiora o Konei / Biodiversity Where We Are, recognising the state of biodiversity at global, national and local levels, and the pressing need to document, understand and conserve biodiversity where we live.

The conference was opened by Acting Vice-Chancellor, Professor Bruce McKenzie, while the first keynote address was given by Hon Eugenie Sage, Minister for Conservation, who described the state of biodiversity in New Zealand and the efforts underway to halt and reverse the decline in native species.

Other keynote speakers included: Dr Susan Walker, from Manaaki Whenua - Landcare Research, on how politics and conservation science meet in the Mackenzie Basin, Professor George Perry, from the University of Auckland, on using models to understand ecological change in NZ, and Professor David Bowman, from the University of Tasmania, on the current global fire crisis and how to solve it.

Nearly 200 presentations were delivered throughout the conference, on a wide range of topics, such as the ecology of braided rivers, impacts of myrtle rust, enhancing biodiversity in agroecosystems, invasive species ecology, fire ecology, and the ecology of mast seeding events.

The Mātauranga Māori symposium within the conference was accompanied by the launch of a special issue on this topic in the New Zealand Journal of Ecology.

Education rankings highlights

Kā rāraki mātauraka, he whakahirataka

Times Higher Education

Lincoln maintained its position in the top 600 of universities worldwide in the 2020 Times Higher Education (THE) rankings, increasing its scores in four of the five categories assessed. The University is ranked at fifth equal in New Zealand, along with Massey University, the University of Waikato and Victoria University of Wellington.

We gained in Citation scores from the previous year, while International Outlook, the proportion of faculty and students from overseas, continued to score highly, reflecting the diversity on campus. While the universities in the 501-600 bracket are not ranked individually, the improved scores indicate Lincoln will be rising in the bracket. The THE rankings include almost 1400 universities across 92 countries.

Lincoln was ranked in the 201-250 bracket for social science, the University's highest ever placing, scoring particularly highly in the internationalisation and citations categories. Lincoln placed in the 301+ bracket for Impact Rankings, which assess universities against the United Nations Sustainable Development Goals, comparing university performance across the variables of research, outreach and stewardship.

QS ranking

For 2019/20 Lincoln University's ranking was =356 in the Quacquarelli Symonds (QS) World University Rankings overall and in the top 100 in the subject area of Agriculture and Forestry.

PBRF results highlight Lincoln's research focus

Lincoln University again led in one of the leading national research quality measures in 2019. The Tertiary Education Commission's Performance-Based Research Fund (PBRF) results put Lincoln first in the measure of average quality scores of active researchers per postgraduate and final year undergraduate student.

This means Lincoln students have the highest probability in New Zealand of being taught or supervised by a high-ranking researcher. Lincoln also led that measure during the last PBRF assessment in 2012.

Overall, the quality evaluation score increased by 30%, 'A' scores by 23% and 'B' scores increased by 40%. This was due to researchers publishing in higher quality publications and having improved research impact.

The results also highlighted Lincoln's strengths in land-based disciplines.

Education Rankings Highlights

International Rankings



15th Ranked 15th in QS small university category.

6%

Ranked top 6% in the International Student Ratio section.

356=

Citations per faculty rose 50 places, to 327.

51–100 Ranked 51-100 in Agriculture & Forestry



501–600 Ranked 5= of the eight New Zealand universities.

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



14-8 Ranked 148 out of 780 universities from 80 countries.



201–300 Ranked in the top universities worldwide of Sport Science Schools and Departments.

Green Metrics

Lincoln University's commitment to environmental sustainability continued to receive global recognition, with an improved placing in the 2019 UI GreenMetric World University Rankings announced in December.

The University is now ranked 148th out of 780 universities worldwide, up 70 places from our 2018 ranking.

Lincoln ranked especially highly in the education category, reflecting our focus on sustainability in many of our courses, as well as in research and publications.

The University is dedicated to increasing its score in energy and climate change through our Campus Development Programme, which includes an energy diversification project that will transition the campus towards renewable energy sources, including solar. You can read more about our sustainability efforts in the section Our Sustainability Focus.

The University is also focusing on increasing our sustainability measures for transport, waste, water and green infrastructure through the acting Vice-Chancellor's Sustainability Taskforce that is using our students' Climate Action Plan as a basis for developing a Lincoln University Sustainability Plan.

Stakeholder engagement and collaboration events

FAR conference

The Foundation for Arable Research (FAR) held its conference on campus on 28 June. The conference, themed 'Research Leading Change', featured three formal sessions, an afternoon of field visits and a conference dinner. The sessions focused on Soil, Water and Nutrients, Crop Protection and Innovation and Technology.

Ngā Manu Kōrero speech competition

The University hosted the Waitaha Regional Ngā Manu Kōrero speech competition at the beginning of July.

Hosting the event was part of supporting Lincoln's focus on te reo Māori on campus, including the delivery of te reo Māori professional development workshops for staff, and Lincoln's journey into developing a strategy for a bicultural campus and our ongoing commitment to mātauraka Māori.

Attendees included the Mayor of Selwyn District, Sam Broughton; the MP for Te Tai Tonga, Rino Tirakatene; the Waitaha Kaiako Committee; and sponsors: TRoNT, Tahu FM, Kitahi Mano Kaika, TPK, Te Putahitanga, Whenua Kura, Kia Ora Hauora, and Hakari Rau Ltd.



A total of 151 young scholars received their certificates at the first graduation ceremony of the Children's University Canterbury Partnership.

Children's University graduation

Over 150 young scholars took part in the first-ever Children's University Canterbury Partnership graduation ceremony at the Christchurch Town Hall in November.

The Children's University Canterbury Partnership programme is the first of its kind in New Zealand and is a joint initiative between Lincoln University and the University of Canterbury. It has learning locations across Christchurch including the Canterbury Museum, Christchurch Art Gallery, Christchurch libraries and the campuses at the University of Canterbury and Lincoln University.

Modelled on the Children's University initiative launched in Adelaide, Australia in 2006, the programme aims to inspire young minds to try a variety of different activities, develop a positive attitude towards lifelong learning, and to start to think about their future pathway into tertiary education.

In 2019, the programme's first year, 192 Canterbury students from seven schools and one rūnanga enrolled in the Children's University. It plans to expand in 2020 to enrol 1000 students from 20-30 schools and rūnanga.



Over the year the Children's University team ran three Campus Experiences at Lincoln during the school holidays, with 51 children attending with their parents. The fun-packed events allowed children to explore the campus through a scavenger hunt, learn about what they could potentially study and where they could stay. The children also visited the Lincoln University Research Dairy Farm where they got to experience milking a cow using a rubber mock-up of a cow's udder, tasted different types of milk and cheeses, and learned the importance of worms and soil.

Primary Production Select Committee

Acting Vice-Chancellor, Professor Bruce McKenzie, briefed the Primary Production Select Committee in late June on vocational training in agriculture and horticulture. The committee includes members of the Labour, National and New Zealand First parties, and focuses on business related to agriculture, biosecurity, productive forestry and land.

Open access amplified

Data@Lincoln, Lincoln's new research tool, was launched by the Learning, Teaching and Library team on 12 July. Data@Lincoln is a platform where researchers can publish their data to meet funder and publisher requirements, while increasing the citations, visibility and impact of their research.

As New Zealand's first open access university, Lincoln's Open Access Policy ensures the research produced at the University is accessible and reusable by everyone. This is in keeping with Lincoln's ethical position that research paid for by the public should continue to benefit society after the studies are completed and the papers are published. Dissemination of data is at the core of Lincoln University's research and collaboration.

Hillary 100th anniversary

Lincoln celebrated the 100th anniversary of the birth of Sir Edmund Hillary in July, part of a series of events marking the occasion in New Zealand and Nepal. A number of distinguished guests attended, including Lisa Choegyal, New Zealand Honorary Consul to Nepal, Phurba Sona Sherpa, (widow of Mingma Norbu Sherpa, a notable Lincoln alumnus) the CEO of the Greater Himalayas Foundation, Livia Esterhazy, the CEO of WWF-New Zealand, Bruce Jefferies, recipient of the Alumni International Medal 2019, and Dr Lindsay and Diane Strang, of the Himalayan Trust, New Zealand.



1 Olympic Bronze Medal pole-vaulter Eliza McCartney was one of the sports stars at the Lincoln University Street Athletics Festival.

2 Dame Marilyn Waring with Acting Vice-Chancellor Professor Bruce McKenzie after presenting the 20th State of the Nation's Environment Address in September.

Athletics sponsorship

Lincoln University teamed up with Athletics New Zealand to bring the Lincoln University Street Athletics Festival to Christchurch in 2019. This was a free public event held in the Christchurch Casino car park in March, where prominent Olympians, polevaulter Eliza McCartney and shot putter Tom Walsh, were in action.

Lincoln University was also a supporting partner of the New Zealand Track and Field Championships at Nga Puna Wai, Christchurch's new sports hub for athletics, hockey, tennis and rugby league, which followed the festival.

Big Day Out

Lincoln University's Kaiarahi team hosted participants from Whenua Kura's Poutama Whenua Agritech Big Day Out on campus in August.

Developed in association with the Red Meat Profit Partnership (RMPP) and Lincoln University, the event was designed to support rangitahi to have



a positive, hands-on experience in the primary industries. Big Day Out connects students with employers and educators to share insights into the world of work, and the wide range of pathways within the sector.

State of the Nation's Environment

Dr Marilyn Waring presented the 20th State of the Nation's Environment Address in September.

Dr Waring is a feminist and activist for female human rights and environmental issues, a former politician, author and academic. During her talk, she described GDP measures as intrinsically harmful to the environment, and encouraged climate change activists to ignore deniers.

Graduation 2019

Te Whakapōtaetaka 2019

The Lincoln University Graduation Ceremony was held on 3 May at the Lincoln Event Centre, with 549 graduates receiving 573 awards.

Honorary Doctorates

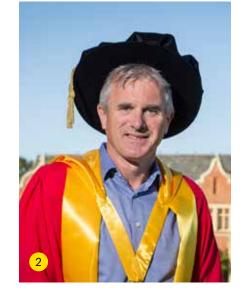
Farm advisor **John Tavendale ONZM**, Synlait co-founder **Dr John Penno** and naturalist **Hugh Wilson** all received Honorary Doctorates at the 2019 graduation ceremony.

John Tavendale's career as a farm advisor spans 50 years. His farm management work has been of considerable benefit to the agricultural sector and the economy, raising production and profitability, and he was awarded the New Zealand Order of Merit in the 2013 Queen's Birthday Honours, for services to agribusiness.

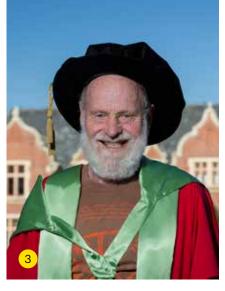
Dr John Penno is a primary sector business leader, co-founding the then dairy farming, and now dairy manufacturing, company Synlait Milk in 2000. He stood down as its CEO and Managing Director in August 2018 but remains on its Board. He was directly responsible for leading Synlait Milk's strategy development, business development and financial management. After completing an Agricultural Science degree at Lincoln University, he completed a PhD in animal science from Massev University. As a scientist and research programme leader he worked to enable New Zealand dairy farmers to increase productivity and profit, and was involved in early work measuring the impact of intensive dairy farming on the environment.

Hugh Wilson has a national and international reputation as a botanist, naturalist and innovator. For the last three decades as manager of the 1250ha Hinewai Reserve on Banks Peninsula, he has overseen the transformation of gorse-infested farmland back to a native flora and fauna reserve. Since 2015 he has also

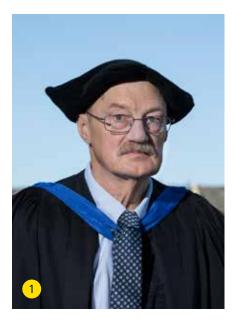




managed the adjacent 192ha Purple Peak Curry Reserve for the New Zealand Native Forest Restoration Trust. He has authored numerous botanical publications including scientific treatises and popular field guides on the plants of Aoraki Mt Cook National Park, Stewart Island and Banks Peninsula, as well as papers and articles for the New Zealand Journal of Botany, the Journal of the Canterbury Botanical Society and the Department of Conservation.



- John Tavendale ONZM was awarded an Honorary Doctorate in Commerce.
 Dr John Penno was awarded an Honorary Doctorate in Commerce.
- 3 Hugh Wilson was awarded an Honorary Doctorate in Natural Resources.



Bledisloe Medal

Dr Allan Hewitt, a pedologist, received the Bledisloe Medal, instituted in 1930 for outstanding services advancing New Zealand's interests.

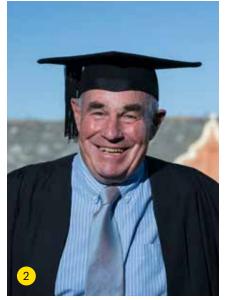
Dr Hewitt has made an outstanding scientific contribution to soil classification, land evaluation and soil mapping in New Zealand and overseas. He is the sole author of the New Zealand Soil Classification, the accepted source for naming, characterising, mapping, sampling and reporting for the national inventory of soils in New Zealand.

He is a past President of the New Zealand Soil Science Society and former Senior Pedologist and Research Leader at Landcare Research. After studying at Lincoln, he later completed a PhD in Agronomy at Cornell University.

Lincoln Alumni International Medal

Bruce Jefferies was awarded the Alumni International Medal, established in 2003 to acknowledge outstanding work in a country other than New Zealand.

Bruce is a globally recognised leader in Protected Areas Management. He has made an exceptional contribution to the conservation of the world's natural ecosystems, habitats and environments and, through that, to humankind.



He is a Senior World Heritage Advisor/ Assessor for the IUCN's World Commission on Protected Areas, the premier network of protected areas expertise.

Ngati Moki Trophy

The Ngāti Moki Trophy for Māori Leadership went to Senior Lecturer in Māori Studies at Lincoln University **Dr Lloyd Carpenter**. Dr Carpenter, who has a PhD in English, works to open his students' eyes to Aotearoa's history, and the significance and place of the Treaty of Waitangi and Māori culture. His passion for the topic has been responsible for igniting similar passions in his students.

Lincoln University Medals

Lincoln University Medals for 2019 were awarded to former staff member **Jayne Smith** and volunteer netball coach **Alanna Taylor** in November.

Jayne coordinated the Ways of Wellness (WOW) programme at Lincoln in 2014, organising walks and workshops, encouraging people to get up and move, or even do a stretch, and offering mindfulness to help deal with stress and promote relaxation for a busy campus staff.

Within the Recreation Centre, Jayne played a central role in the rehabilitation of many members of staff



- Dr Allan Hewitt, a pedologist, received the Bledisloe Meda.
- Bruce Jefferies was awarded the Alumni International Medal
- 3 Dr Lloyd Carpenter was awarded the Ngāti Moki Trophy.

as they recovered from car accidents, hip replacements and other debilitating conditions.

Alanna has coached netball at Lincoln since 2012, is involved in fundraising and devotes a large amount of her own time to getting student netballers on court.

Blues and Golds awards

Tae Kwon Do World Championship medallist **Calum Woodill** was named Sportsperson of the Year at the Lincoln University Blues and Golds awards in October. The awards, held on campus, recognise student sporting achievements (Blues), as well as their service to the community (Golds).

Sports Team of the Year went to the women's **3X3 basketball** side who have won the tertiary New Zealand title for the last three years, and qualified for the FISU University World Cup in China.



Lincoln Volunteer Fire Brigade member Ollie Rutland Sims was among the Gold winners, as was Ishakau Haruna, who has run a project in rural Nigeria since 2015 to improve the quality of education there. Barbera Forster, president of Thursdays in Black, a movement across tertiary campuses and society working towards a world without rape and violence, also won a Gold award.

Silver Fern and Lincoln alumna, Jane Watson, joined community healthcare advocates, doctors Dame Sue and Phillip Bagshaw, as special guests on stage interviewed by Master of Ceremonies Hillary Muir from the Breeze radio station. Jane was a member of the 2019 Netball World Cup winning New Zealand side, while Dame Sue established the 198 Youth Health Centre and her husband founded the Canterbury Charity Hospital.

Anniversaries marked

On 6 November the School of Landscape Architecture marked 50 years since the establishment of landscape architecture qualifications at Lincoln University, the first offered in Australasia.

Guest speakers at the opening ceremony were the Head of School Dr Gillian Lawson, Acting Vice-Chancellor Professor Bruce McKenzie, and the Acting Dean of the Faculty of Environment, Society and Design, Associate Professor Kevin Moore.

On 25 November Lincoln University Students' Association celebrated its 100th birthday with a campus dinner. Guests include former LUSA executive members, Alumni Association executive members and others associated with LUSA and the University.

The teaching of property studies at Lincoln also reached its 80th year, while the sport scholarship programme turned 20 in 2019.

Fellowship honour

Professor of Landscape Architecture Jacky Bowring was awarded a Fellowship of the New Zealand Institute of Landscape Archirtects in 2019. The honour acknowledges Professor Bowring's outstanding contribution to landscape architecture in New Zealand and internationally.

She has been a landscape architecture educator for over 20 years, and former Head of Lincoln University's School of Landscape Architecture. One of her specialist areas, for which she has an international reputation, is memorialisation. Among accolades in this field, Professor Bowring was a finalist (the only non-American) in the international design competition for a Pentagon Memorial following the 9/11 terrorist attacks in the USA.





- 4 Acting Vice-Chancellor Professor Bruce McKenzie and Calum Woodill with the Sportsperson of the Year award, recognising his martial arts achievements.
- 5 Gold Winner, Ishaku Haruna, initiated an education improvement project in rural Nigeria in 2015.
- Lincoln staff member, Jayne Smith, addresses the audience after receiving her LU Medal in November.

Our research highlights Kā whakahirataka rakahau

The many research projects undertaken span the University's key disciplines, contributing thoughtprovoking insights and far-reaching benefits for teaching programmes, industry, the environment and the wider academic and research communities.

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 ability of the University's highly skilled, academic and professional staff to find a healthy balance between discovery and application.

The University is involved in many National Science Challenges including:

Our Land and Water

- New Zealand's Biological Heritage
- Building Better Homes, Towns and Cities
- Resilience to Nature's Challenges
- Science for Technological Innovation.

Important new research projects and initiatives have been undertaken as strategic collaborations, highlighting our commitment to addressing some of New Zealand's most significant future challenges, particularly through our research centres.

Nitrate reductions research win

The collaborative six-year programme Forages for Reduced Nitrate Leaching (FRNL), researching how to reduce nitrate leaching on farm, won a Significant Achievement Award from the Canterbury Section of the New Zealand Institute of Agricultural and Horticultural Science in December. The University's expertise played a key role in the programme, helping farmers to improve their environmental management in collaboration with our partners from DairyNZ, the Foundation for Arable Research (FAR), AgResearch, Plant & Food Research, and Manaaki Whenua - Landcare Research.

Over 100 people and 10 commercial farms have been involved in the science, development and farm application of the programme, identifying pasture and crop options farmers can use to reduce nitrate leaching.

Research contract awarded

Dr Amber Parker's research reputation in the area of grapevine responses to temperature changes won significant endorsement with the award of a contract to develop a programme for the wine industry's Bragato Research Institute on climate change impacts.

The Blenheim-based institute, owned by New Zealand Winegrowers, the national organisation for the country's grape and wine sector, exists to support the value growth of New Zealand wine through research, innovation and extension.

At the New Zealand Winegrowers' Grape Days 2019 event in Cromwell, Central Otago, on 14 June, Dr Parker presented 'Challenges and opportunities for viticulture in response to climate change', co-authored by, Lincoln University's Dr Joanna Fountain, Dr Mike Trought of Vinovation and Dr Nick Cradock-Henry of Manaaki Whenua – Landcare Research.

Farmer intuition

Lincoln University research isolated the main characteristics of successful intuition use by farmers.

Dr Peter Nuthall said top intuitionusing farmers were compared with those using it least to make clear the most important differences. Attributes were put into broad groups such as Management Style, Experience and Technical Knowledge. Successful intuition users consulted with their families and communities, sought to enhance their knowledge, utilised feedback on their decisions and learned from their mistakes.

Myanmar project

Lincoln PhD students Randel Esnard and Jared Berends worked closely with over 1000 Myanmar farmers as part of the Myanmar Rural Income and Livelihoods Development Project, to help them out of poverty.

They talked to farmers and helped them identify agrifood chains, specifically in pig rearing and rice production, that can increase farmer incomes, then helped them set up structures to assist in implementation.

Each student has a different role in the project. Jared worked to develop models to identify the most effective value chain interventions, while Randel designed and established producer organisations to engage farmers to achieve these interventions.

Carbon footprints

In a New Zealand first, Lincoln University PhD Researcher Hafiz Muhammad Abrar Ilyas estimated and compared the carbon footprints (CO²) of pastoral (grass-based), and barn dairy systems based on their energy consumption.

The study was carried out on 50 conventional dairy farms in Canterbury - 43 pastoral and seven barn systems.

The difference between the two systems indicated that the barn system has an 18% higher carbon footprint than the pastoral system per hectare of farm area, and 11% higher footprint per tonne of milk solids.

Nanotechnology in agriculture

Applying nanotechnology to agriculture to increase productivity and reduce environmental impacts secured a Lincoln University team a million dollar grant from MBIE's Endeavour Fund.

Lincoln University Associate Professor Craig Bunt said his team would develop a groundbreaking nano-coating which could be applied to fertiliser to control its rate of release into soil, and to seeds to control their timing of germination.

He described the technology as a specific solution that increases sustainability, enhances productivity, and will help improve New Zealand's yield and export revenue.

Paying for the environment

Lincoln University economics lecturer Dr Wei Yang was a co-author of the paper 'Impact of delivering 'green' dairy products on-farm in New Zealand', produced as part of the Credence Attributes On-Farm research project, funded by Our Land and Water National Science Challenge and AgResearch.

A key element of this research was to find out whether consumers of New Zealand exports would pay more for carbon-neutral dairy products – and if so, would the price premium be enough to cover farmers' costs.

Dr Yang conducted a meta-analysis that combined the results of 32 existing studies to learn how much more consumers would be willing to pay for dairy products with 'feel-good' qualities related to the environment and animal welfare.

She found overseas consumers are willing to pay more for environmentallyfriendly dairy products – and this is increasing over time.

Scholarships Kā Karahipi

Tihi Kahuraki scholarship

This new scholarship was established in 2019 to support Māori students entering their first year of undergraduate study at Lincoln University and who show strong leadership and engagement in their whānau, hapū, marae or community.

Lincoln University Centennial Trust

Previously the Lincoln University Foundation, the Lincoln University Centennial Trust has developed into a more modern trust that manages donations and provides awards to Lincoln University students.

The trust gratefully receives donations and administers these on behalf of the Lincoln University recipients. It administers the Hogan Hurst Trust, Charles Upham Trust and the Ross Trust, and additional donations received in 2019 came from Selwyn and Mary Manning to encourage education and research in the field of seed science and seed technology.

The Lincoln University Centennial Trust provides awards to support many activities at the University during the year.

In 2019 awards presented were:

 Children's University – in support of its inaugural programme on the campus. The Children's University gives children the opportunity to experience a taste of University life and gain a valuable understanding of the important role Lincoln plays. Many may never contemplate going to university if not for the Children's University, and this experience has the potential to significantly change their life outcomes.

- Euroleague for Life Sciences (or ELLS) universities network. Lincoln is the only non-European university to have achieved full international partnership status with the network and it is a significant relationship for the Centennial Trust. The trust is keen to do what it can to help students seize the opportunities and the learnings that flow from participation in events like these. This awards programme enables students to undertake exchanges with other universities overseas and to gain immense benefits from the international exposure.
- Funding for PhD student Jesus Francisco Echaide Aquino for Arable Research.
- Jointly funding a PhD student with the Seed Industry Research Centre for Arable Research.
- Award to enable a student to taste postgraduate life.

Prime Minister's Scholarships

Lincoln students got a taste of how business works in markets around the world in 2019 by utilising Prime Minister's Scholarships for Asia and Latin America to travel to South Korea, Brazil and China as part of Summer School business courses. The students visited businesses and markets, met farmers and producers and identified business opportunities.

Lincoln University sport Kā hākinakina

3x3 Basketball

The Lincoln University women's side travelled to the 3x3 basketball Tertiary World Cup in China for the third consecutive year in October.

Hockey

Millie Calder, Georgie Mackay-Stewart, Natalie Austin and Jessie Anderson were all named in the Canterbury Hockey Women's U21 squad who became national champions.

Millie, Jessie and Georgie went on to make the New Zealand U21 side.

Louis Beckert made the national men's U21 squad that went to Malaysia to compete in the Sultan of Johor Cup, while Natalie Austin made the Canterbury Hockey Women's U18 team, who also won their national tournament.

Rugby

Lincoln University students, Cullen Grace (lock) and Fletcher Newell (prop) made the New Zealand U20 rugby team, playing in the 2019 World Rugby Under 20 Championship in Argentina.

Lincoln had a big representation in the Canterbury Mitre 10 rugby squad for 2019, with Brett Cameron, Sam Gilbert, Josh McKay, Rameka Poihipi, Ngane Punivai, Cullen Grace, and Ereatara Enari selected while a number of students also played Super Rugby for the Crusaders and other clubs, as well as representing New Zealand Universities.

Alumna Kendra Cocksedge, and Lincoln students Forne Burke and Grace Brooker were selected for the Black Ferns squad to play in the Super Series in San Diego.

The Lincoln University premier men's side again made the Christchurch Metro Club final, but were not able to add to their fourth consecutive title.

Netball

Former LU sports scholar Jane Watson became a world champion as part of the Silver Ferns, in the 2019 Netball World Cup (NWC) in Liverpool.

Pacific Games

Bachelor of Commerce student Emma Wilson represented New Zealand in the hammer at the Pacific Games in Samoa in July.

Ajiah Pepe represented the Cook Islands in women's basketball at the same event.

Lincoln University in the community Kai te hāpori

Lincoln Envirotown Trust (LET)

The MOU that Lincoln University has with Lincoln Envirotown Trust (LET) enables the trust to run several projects, events and initiatives throughout the year, providing a tangible connection between the community of Selwyn and the University.

Staff and students from the University were directly involved in many projects including:

- Kim Hill Hot Topic an annual panel discussion on a topical issue. In 2019 the topic was 'Peak Meat – a game changer for food production, the environment and health?'
- The Selwyn Responsible Business Awards – helping Selwyn businesses be more community and environmentally responsible.
- The Mahoe Reserve native plant revegetation project – used by University staff members for student research and teaching, student projects and volunteer working bees.
- LET Community Garden involvement in workshops including staff presentations.
- Kidsfest Holiday Programme University student volunteers play an important part in organising and running this annual community event and annual holiday programme for pre-school and primary age children. In 2019 there were 800 attendees.
- The trust also works with the Lincoln
 University student group, Lincoln
 Environmental Organisation (LEO)
 and staff group Sustainability Action

Group for the Environment (SAGE), encouraging active involvement in **LET projects**.

Future Leader Scholars

Future Leader Scholars act as ambassadors of Lincoln University, volunteering a total of 345 hours of service to Lincoln University and the community. Future Leaders are required to undertake a project as part of their scholarship that makes a difference to the campus or the wider community.

Some of their community projects in 2019 were:

Agriventures

A three-day programme that aims to offer Year 11 and 12 high school students, primarily from the South Island, an opportunity to explore and discover the extensive array of career opportunities within the agri-food/ agribusiness sectors that lead from Lincoln University degrees.

Bike to School Day

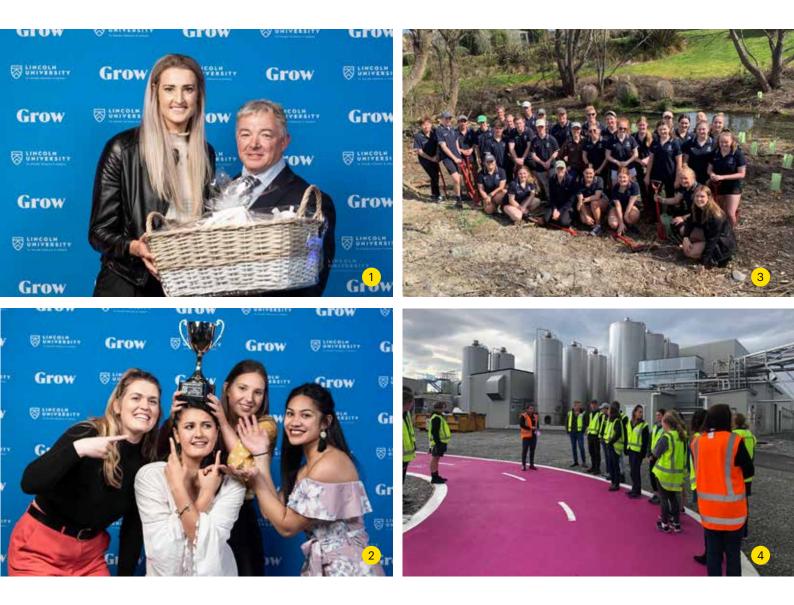
The day focused on increasing the cycle safety and awareness of primary school children in the Rolleston District. At the event bikes were safety-checked and fitted with bells. The children were supplied with breakfast and then all 124 children setoff cycling safely to school with a police escort.

Primary Focus

This wellbeing-initiative has become an annual event for the Future Leaders. Run in collaboration with Hororata Primary School, the event promotes wellbeing in the community through involving families in a fun day with an important message to spend time having fun with their children, even when things get very busy on the farm and at work.

Will to Live

A Will to Live fundraiser was held to support the work of this charitable foundation whose mission is to improve mental health awareness and wellbeing education for young people across the New Zealand rural sector, because this demographic represents the highest risk group in the national suicide rates.



Will to Live was established by Future Leader Elle Perriam.

Selwyn leadership day

School leaders from three Selwyn Schools (Lincoln High School, Darfield High School and Ellesmere College) joined Future Leaders for a daylong leadership workshop.

Lend a Hand

A tree planting event where the Future Leaders literally lent their hands and got them dirty doing riparian planting along the Liffey Stream next to Ararira Springs Primary in Lincoln.

Marae visit

Future Leaders visited Ngati Moki Marae, Te Rūnanga O Taumutu marae, on the shores of Lake Waihora. They learnt about the iwi's environmental plans and the importance to Māori around mahika kai. They discussed the various ways leadership presents itself, including in cultural contexts, and how important it is for Future Leaders to learn how to work with iwi and build relationships with local cultural leaders.

- 1 World champion netballer Jane Watson, pictured being thanked by Sport Scholarship and Recreation Centre Manager Pete Magson after speaking at the Blues and Golds in November.
- 2 Team of the Year at the Blues and Golds awards, the Lincoln University women's 3X3 basketball side of Connie Poletti, Rosalia Samia, Lucy Brown, and Aijah Pepe, celebrate their award.
- 3 Future Leader Scholars plant trees on the banks of the Liffey Stream as part of their Lend a Hand activity.
- Participants in the Agriventures programme visit the Synlait milk processing plant in Dunsandel.

Statement of Service Performance

This Statement of Service Performance (SSP) provides information on the University's achievements towards nonfinancial targets.

Measures included in the SSP include both those specified as performance commitments in the Lincoln University Investment Plan 2019-2021 and additional internal measures, to provide a balanced view of performance.

Commitments have been set by the University and reflect challenging targets, acknowledging that in some areas there are gaps. The goal is that if the commitment is not met, the gap needs to be narrowing as a result of intentional activities. The column 'Difference' has been added to reflect this focus, and to clearly indicate progress against the commitment. Where no commitment has been set, the Difference indicates change against the previous year's figures. Lincoln's purpose is to facilitate excellent research and high-quality education to grow the knowledge of our students, and help shape a world that benefits from a greater understanding of the relationship between land, food and ecosystems. The number of postgraduate and international students at Lincoln, as well as their educational performance, demonstrates our commitment to that aim, as well as its recognition around the globe. Our postgraduate students contribute significantly to the depth of current research in many different areas, from commerce to ecology and beyond, while our international students disseminate our message of the importance of the relationships between land, food and ecosystems around the globe as they return home or to new careers overseas.

Note: All financial information is expressed exclusive of GST unless indicated otherwise.

Educational Performance and Participation of Students

Kā mahi mātauraka me kā whiwhika tauira

Commencing Equivalent Full Time Students (EFTS) against the 10 year plan

	Notes	2017 31-Dec Actual	2018 31-Dec Actual	2019 31-Dec Actual	2019 31-Dec Target	Difference between Actual and Target
Commencing EFTS against 10-year plan		1120.3	1139.5	1,253.4	1,238.3	↑ 1.2%
Sub-degree	1	261.8	294.7	317.6	293.8	↑ 8.1%
Undergraduate	2	631.9	587.7	586.6	676.4	↓ 13.2%
Postgraduate (Levels 8-9)	3	191.6	213.1	321.8	218.4	↑ 47.3%
PhDs (Level 10)	4	35.0	44.1	27.4	49.7	↓ 44.9%

This table excludes students taught at the Telford campus that was was transferred to the Taratahi Agricultural Training Centre in 2017.

The 10-year model was established in 2014 and predicts EFTS growth over the next 10 years. The model forms the base information Lincoln University uses to report to TEC progress against enrolment targets. The model tracks funded domestic and international EFTS.

- Note 1: Sub-degree EFTS have shown a noticeable increase in the English Language Programme and Diploma in Horticulture, Diploma of Horticulture Management and University Studies programmes.
- Note 2: The reduction in the number of undergraduate domestic students has been driven by a low schoolleaver market share. Although the market share for 2019 was higher than that of 2018 (0.66% vs 0.65%) it was significantly below the previous three years where the share ranged from 0.76% to 0.82%. Overall undergraduate international numbers have increased compared to 2018, though the target was not reached. More detail is provided in Table 1.
- Note 3: Growth in postgraduate numbers is due to the growth in the international market for taught master's qualifications, this also flows into level 8 where students use the postgraduate diplomas to staircase into master's qualifications. More detail is provided in Table 2.
- Note 4: Domestic postgraduates at Level 10 exceeded the target, however international students are below target at this level, bringing the overall figure down. This is also reflected in the drop in students taking the Certificate of Proficiency (CoP) (Levels 8-9) as the CoP is a feeder and lead indicator into Level 10. More detail is provided in Table 3.

Tables 1-3 below provide further detail from the previous table, with a breakdown of domestic and international EFTS and at each level.

Table 1

		2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Undergraduate Commencing EFTS							
Undergraduate	Domestic	473.4	436.1	406.8	\downarrow 6.7%	472.9	↓ 14.0%
Undergraduate	International	158.5	151.6	179.8	↑ 18.6%	203.5	↓ 11.6%

Table 2

					Difference		Difference
		2017	2018	2019	between 2018 and	2019	between Actual and
_		Actual	Actual	Actual	2019 Actual	Commitment	Commitment
Postgraduate Commencing EFTS							
	Domestic	45.0	39.5	35.0	↓ 11.4%	40.4	↓ 13.4%
Level 8	International	39.6	37.6	55.6	↑ 47.9%	29.9	↑ 86.0%
	Domestic	23.8	40.0	43.2	↑ 8.0%	45.1	↓ 4.2%
Level 9	International	83.1	95.9	188.1	↑ 96.1%	103.0	↑ 82.6%

Table 3

					Difference between		Difference between
		2017	2018	2019	2018 and	2019	Actual and
		Actual	Actual	Actual	2019 Actual	Commitment	Commitment
Postgraduate Com	mencing EFTS						
Level 10	Domestic	4.4	8.9	5.5	↓ 38.2%	9.2	↓ 40.2%
Levenio	International	30.7	35.2	22.0	↓ 37.5%	40.5	↓ 45.7%

Participation

Participation is the proportion of students in each cohort as a percentage of the overall population. Lincoln University tracks this Tertiary Education Commission (TEC) measure to identify how effective the strategies are to increase the participation levels of Māori and Pasifika students.

Level	Notes	Ethnicity	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual Commitment	2019 Commitment	Difference between Actual and Commitment
Level 4 to 7 (non-degree)	1	Non-Māori & Non-Pasifika	88.8%	89.0%	88.7%	0.3%	↓ 87.0%	↑ 1.7%
		Māori	10.8%	8.9%	8.6%	0.3%	↓ 11.8%	↓ 3.2%
		Pasifika	1.0%	2.2%	4.0%	1.8%	↑ 1.2%	↑ 2.8%
Level 7 (degree)	2	Non-Māori & Non-Pasifika	90.0%	89.0%	88.2%	0.8%	↓ 88.7%	↓ 0.5%
		Māori	9.0%	9.6%	10.2%	0.6%	↑ 9.5%	↑ 0.7%
		Pasifika	1.2%	1.5%	1.7%	0.2%	↑ 1.8%	↓ 0.1%
Level 8 to 10	3	Non-Māori & Non-Pasifika	94.9%	94.9%	94.6%	0.3%	√94.0%	↑ 0.6%
		Māori	3.5%	3.9%	4.1%	0.2%	↑ 3.8%	↑ 0.3%
		Pasifika	1.6%	1.8%	1.7%	0.1%	↓ 2.2%	↓ 0.5%

The proportion of total SAC eligible EFTS

Participation ratios are calculated across the qualification level, for example the Level 4-7 Non-Māori and Non-Pasifika + Māori + Pasifika all add to 100%. This means it is not possible for all participation rates to be higher than target. When one cohort exceeds target, this will result in another cohort being below target.

- Note 1: SAC funded EFTS at level 4 7 (non-degree) has seen a reducing proportion of Māori students for 2019, these students are predominately involved in the Diploma of Agriculture programme. This has resulted in Pasifika students and Non-Māori and Non-Pasifika cohorts being ahead of the 2019 commitment. We have an increasing focus on Māori students enrolling directly in degree programmes to support the evolving nature of the Māori economy and aspirations of Māori.
- Note 2: A small movement in proportion ratios at level 7 (degree) has resulted in Māori being slightly ahead of 2019 commitments, and the remaining two cohorts slightly behind.
- Note 3: Again, a small movement in proportion ratios at level 8-10 has resulted in Māori and Non-Māori and Non-Pasifika cohorts being slightly ahead of 2019 commitments, and Pasifika students slightly below.

Student retention

First Year Retention

						Difference between		Difference
					2019	2018 and		between
			2017	2018	Actual	2019 Actual	2019	Actual and
Level	Notes	Ethnicity	Actual	Actual	Commitment	Commitment	Commitment	Commitment
Level 7 degree	1	Non-Māori & Non-Pasifika	81.4%	82.9%	85.5%	个 2.6%	85.0%	↑ 0.6%
		Māori	78.3%	73.1%	92.3%	↑ 19.2%	78.0%	↑ 14.3%
		Pasifika	70.0%	50.0%	66.7%	↑ 16.7%	72.0%	↓ 5.3%
Level 8 to 10	2	Non-Māori & Non- Pasifika	68.1%	66.7%	67.5%	↑ 0.8%	n/a	
		Māori	63.6%	40.05	57.1%	↑ 17.1%	n/a	
		Pasifika	87.5%	0.0%	100.0%	↑ 100.0%	n/a	

Student retention: the proportion of students in a cohort who enrol in a qualification at the same level in the year after they enter the cohort. First year retention rates are measured for students who are enrolled in a 2 EFTS or above qualification at level 4 and above.

Note 1: Māori student retention at level 7 has shown significant growth on 2018, and is substantially higher than commitment. The majority of programmes at this level recorded 100% retention. This positive increase can be attributed to ongoing support and the focus on supporting Māori and Pasifika students through the Māori and Pasifika Monitoring Framework and engagement with Te Awhioraki (Māori Student Association).

Pasifika student retention rates do fluctuate due to the small number of students enrolled.

Note 2: All cohorts at this level increased retention on 2018.

Contributing to Lincoln University's high retention rate is the high, and growing, proportion of students who engage with Academic and Career Skills through optional sessions or sessions offered by learning advisors within courses.

1360 students (43% of enrolled students) attended individual consultations or workshops, which is a significant number, given that these learning opportunities are additional to course requirements. These students represented the full range of programmes and Grade Point Average (GPA) achievement. The value they place on the sessions is clear in the feedback received with 100% reporting the advice was 'useful'.

International Student Linkages Kā honoka ki tāwahi

International students come from a diverse 78 countries and comprise 44% of the student body. The number of international students in 2019 increased by 21.4% compared with the previous year. Although China continues to be the major source market it is supported by strong growth from India, Indonesia, Sri Lanka and Vietnam. The most popular postgraduate degrees for international students include the Master of Business in Global Management and Marketing, Master of Business (Finance), Master of Science in Food Innovation and Post Graduate Diploma in Applied Science. Popular at the undergraduate level are Bachelor of Commerce, Bachelor of Science, Bachelor of Landscape Architecture, Graduate Diploma in Commerce and onesemester study abroad/exchange.

The strongest source markets for a one-semester study abroad or exchange experience to Lincoln University continue to be the United States of America and Europe (Norway, France and Germany). Lincoln University continues to actively deepen and build its ties with prestigious American and European universities such as Colorado State University, Purdue University, University of Gottingen, Norwegian University of Life Sciences and University of Natural Resources and Life Sciences, Vienna. Feedback from study abroad and exchange students about their time at Lincoln University is particularly positive. In addition to quality education and research, they outline highlights such as Lincoln's lifestyle and community spirit, student-focused staff and easy access to South Island locations. Lincoln hosts more than 35 governmental and institutional delegations each year with a view to deepening university partnerships and developing research and teaching linkages. Last year the University received its first cohort of undergraduate degree students from Yunnan Agricultural University and Zhongkai University of Agriculture and Engineering. These degree pathways are becoming increasingly important for the continued consolidation of the Chinese market. The University will continue to build its range of global partners. Lincoln's global connectivity is also strengthened through active participation in the Euroleague for Life Sciences Network (ELLS). The ELLS network ably supports international student mobility by providing financial support to:

- Lincoln students, allowing them to participate in its annual Student Conference (hosted in Europe), a showcase of student research
- Students from member universities to participate in summer school courses across Europe and at Lincoln University.

With a solid foundation in student recruitment, and a maturing internationalisation programme, Lincoln University can continue to aspire towards greater success in the global arena.

	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
The number of international students (excluding SAC funded students)	645.9	712.8	963.3	35.1%	730.7	↑ 24.1%

International Students

Learning and teaching excellence Ka tiketiketaka akoako

In order to maintain learning and teaching excellence, Lincoln University tracks the satisfaction of the students to ensure the quality of our teaching, and in providing some courses in a blended learning format, offers a variety of pedagogy that will reach our students effectively in different formats. The Academic and Career Skills (ACS) team provides teaching and advice in academic learning, careers and employment skills, and provides specialised support for students with short and long-term illnesses disabilities and injuries. Through working directly with students through workshops and individual consultations, we can develop and promote their academic skills to allow them greater independence.

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Associated performance indictors							
Proportion of students who respond to the item "Overall I was satisfied with the quality of the course" at one of the top two steps on a five-point scale	1	80%	82.2%	85%	↑ 2.8%	N/A	N/A
Proportion of students who respond to the item "Overall I was satisfied with the use of technology in the course" at one of the top two steps on a five-point scale	1	77%	82.5%	82%	↓ 0.5%	N/A	N/A
Blended Learning – number of courses converted into a blended delivery format	2	32	10	9	↓ 10.0%	8	↑ 12.5%

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Associated performance indictors							
Number of outbound exchange students (headcount)	3	18	13	7	↓ 46.2%	N/A	N/A
Number of individual students attending ACS*-based programmes	4	N/A	1360	1635	↑ 20.2%	N/A	N/A
Number of individual students attending optional or in-context teaching	5	N/A	2052	2305	↑ 12.3%	N/A	N/A
Percentage of graduates using opt- in services during degree	6	28%	46%	63%	↑ 17%	N/A	N/A
Attendance at ACS workshops	6	N/A	4368	4832	↑ 10.6%	N/A	N/A
Attendance at individual consultations	6	N/A	2409	2833	↑ 17.6%	N/A	N/A
Total attendance workshops % consultations	6	N/A	6777	7665	↑ 13.1%	N/A	N/A
Attendance of 1+ PASS sessions	7	413	485	507	↑ 4.5%	N/A	N/A

* ACS = Academic and Career Skills

- Note 1: Student surveys are conducted after each semester, and have been consolidated for an overall average score.
- Note 2: The commitment target for Blended Learning was set for eight grants. Nine applications came in and funding was found to be able to convert all nine courses to a blended learning format.
- Note 3: Outbound exchange students attended the following universities: University of California Davis (USA), Colorado State University (USA), University College, Dublin (Ireland), University of Guelph (Canada).
- Note 4: ACS-based programmes from the Academic and Career Skills team included face-to-face drop-ins, appointments and workshops to help develop learning for each individual.
- Note 5: Number of individual students attending ACS-based (i.e. optional) programmes and/or enrolled in coursebased programmes (i.e. in-context teaching) with the Academic and Career Skills team.

- Note 6: The Academic and Career Skills team provide a variety of services during a degree such as individual consultations, workshops both tailored and generic resources, and specialised resources and support for students with short and long-term illnesses, disabilities and injuries.
- Note 7: Formally Peer Assisted Study Sessions (PASS), a voluntary student-led programme consisting of weekly small group study sessions facilitated by senior students (usually second or third year). These sessions differ from tutorials: they do not re-teach material, but instead encourage discussion and activities that foster active and deep learning. PASS sessions were expanded in 2019 to cover 13 courses and are an established part of first year sub-degree and undergraduate programmes.

		2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Course Comp	etion						
All Levels	Non-Māori & Non-Pasifika	85.7%	87.9%	88.3%	↑ 0.4%	85.8%	↑ 2.5%
	Māori	78.5%	84.4%	83.2%	↓ 1.3%	78.5%	↑ 4.7%
	Pasifika	76.7%	82.8%	79.7%	↓ 3.1%	78.5%	↑ 1.2%

Successful course completion

The methodology for successful course completion is measured by the EFTS-weighted successful course completion rate (as a percentage).

NumeratorEFTS delivered for the total number of successfully completed course enrolments ending in year nDenominatorEFTS delivered for the total number of course enrolments ending in year n

Successful course completion measures the proportion of course enrolments ending in a given year that have been successfully completed.

All cohorts have exceeded commitments for 2019, with Pasifika and Māori students continuing to track positively towards parity with Non-Māori andNon-Pasifika students.

Qualification completion

Cohort-Based Qualification completion

Level	Notes	Ethnicity	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Level 4 to 7 (non degree)	1	Non-Māori & Non-Pasifika	52.4%	57.5%	60.0%	↑ 2.5%	n/a	n/a
		Māori	45.0%	40.9%	40.9%	0.0%	n/a	n/a
		Pasifika	35.7%	14.3%	25.0%	↑ 10.7%	n/a	n/a
Level 7 degree	2	Non-Māori & Non-Pasifika	67.4%	68.5%	65.9%	↓ 2.6%	n/a	n/a
		Māori	59.3%	43.6%	51.1%	↑ 7.5%	n/a	n/a
		Pasifika	37.5%	38.5%	47.4%	↑ 8.9%	n/a	n/a
Level 8 to 10	3	Non-Māori & Non-Pasifika	69.2%	62.6%	66.8%	↑ 4.2%	n/a	n/a
		Māori	57.1%	50.0%	25.0%	↓ 25.0%	n/a	n/a
		Pasifika	100.0%	100.0%	80.0%	↓ 20.0%	n/a	n/a

This measures the percentage of students in a starting cohort who go on to complete a qualification at the same level at Lincoln University. This is a new methodology adopted by TEC, and the University was not required to set commitments against this in our 2019-2021 Investment plan.

Pasifika cohort-based qualification completion rates fluctuate greatly due to the small number of students enrolled. For example, in a cohort of four students, one student not completing reduces the completion rate by 25%.

- Note 1: Level 4 to 7 (non-degree) has increased or maintained performance when compared to 2018. These results still include qualifications from when Telford was part of Lincoln University, as the 2019 results look at the cohort who started in 2016.
- Note 2: Level 7 qualification completion has seen an increase in the completion rate for Māori and Pasifika students. Non-Māori and Non-Pasifika student completion rate has declined when compared to 2018. This can be attributed to one programme (B.Commerce); if this programme was removed from the analysis the qualification completion rate would increase by 0.7% on 2018.
- Note 3: Level 8-10 Non-Māori and Non-Pasifika cohort has increased on 2018, though student numbers in the Māori and Pasifika cohorts are small at this level and consequently rates do fluctuate.

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment		
Associated performance indicators									
Graduate Destination Survey response rate	1	25%	39%	49%	↑ 10%	n/a	n/a		
Percentage of graduates in paid employment	1	84%	82%	84%	↑ 2%	n/a	n/a		
Percentage of graduates in ideal employment	2	56%	45%	38%	↓ 7%	n/a	n/a		

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Committment	Difference between Actual and Committment
Associated performance ind	icators						
Domestic participation in accredited programmes	3	227.6	235.9	263.0	11.5%	256.4	↑ 2.6%
Percentage of completed qualifications that contain practical work	4	37.2%	37.8%	32.6%	↓ 5.3%	38%	↓ 5.4%

- Note 1: The results collected from the Graduate Destination Survey shows the year reported, not the year of graduation, i.e., the class of 2018 results are in displayed in 2019 column when the survey was undertaken.
- Note 2: The percentage of graduates who reported that they were "in ideal employment at this stage of career". Although a drop at this level, 83.2% of respondents reported their employment to be "a step in the right direction".
- Note 3: Accredited programmes offer students the confidence their degree is industry-aligned and meets compulsory standards when seeking professional registration. Accredited programmes are regularly reviewed by the accrediting organisation to assure quality and industry standards. Accredited programmes at Lincoln University include:
 - Bachelor of Environmental Policy & Planning (Hons)
 - Bachelor of Commerce (Agriculture and Prof Acct)
 - Bachelor of Land & Property Management
 - Bachelor of Landscape Architecture
 - Master of Landscape Architecture
 - Master of Planning
 - Master of Professional Accounting.

Note 4: Sourced from qualification completion and linked to qualification practical work status.

Research Kā māhi rakahau

Lincoln University conducts world-class research which enriches the learning environment for our students and delivers new knowledge for society and business, in New Zealand and globally. The unique contribution to creating a greater understanding of the relationship between land, food and ecosystems. Lincoln University makes is intimately linked to the quality of our research programmes and their application to real-world problems. We track research progress through revenue generated, postgraduate participation and through the number of research projects undertaken.

		Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
	Revenue from PBRF (\$000)	1	\$10,143	\$10,351	\$10,209	↓ 1.4%	N/A	N/A
Input	Postgraduate research participation (EFTS)		293	306	279	↓ 8.8%	N/A	N/A
	External research income (\$000)		\$30,236	\$31,275	\$31,848	1.8%	\$32,335	↓ 1.5%

		Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Output	Existing Māori related research projects, currently approved	2	49	45	39	↓ 13.3%	30	↑ 30.0%
Output	The number of research degrees completed		84	80	83	↑ 3.75%	85	↓ 2.4%

			Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual
	Postgraduate successful course completion		97.3%	95.7%	96.6%	↑ 0.9%	
(Dutput	Postgraduate satisfaction with overall experience (%)	3	86%	87%	92.7%	↑ 5.7%
	Quality research publications	4	417	443	495	↑ 11.7%	

Note 1: Performance-based Research Fund (PBRF).

- Note 2: Approved Māori related research projects that were existing and active in 2019.
- Note 3: Information collected from the student satisfaction surveys collected at the end of each semester, and answers to the question "Overall, I was satisfied with the quality of this course". The survey is conducted

through an online survey tool (Qualtrix), and has had an average response rate of 47.6% for the past three years.

Note 4: Publications affiliated to Lincoln University in Scopus database include articles, reviews, conference papers, book chapters, letters, articles in Press, editorials, notes, books, erratum. Of these 495 publications, 143 (or 29%) were open access.

Resources Kā rauemi

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Associated performa	ance indicto	ors					
Capital Asset Management Review	1	58	63	63	N/A	74	↓ 14.9%
Energy sustainability – Renewables as % of total energy consumed	2	43.8%	43.6%	46.3%	↑ 2.7%	50%	↓ 3.7%
Graduating Year Reviews	3	3	13	22	↑ 69.2%	11	↑ 100%

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual
Associated performa	nce indicto	ors			
Access to Library digital services	4	521,783	521,881	682,799	↑ 30.8%
Activated copyright items	5	647	665	398	↓ 40.2%

- Note 1: Capital Asset Management reviews: In 2019 Lincoln University conducted its biennial independent Capital Asset Management (CAM) Audit for TEC. The audit found the university has continued to improve its level of CAM maturity and now is rated "intermediate". The CAM figure represents a rating score prescribed by Deloitte in their independent review. The 2018 figure was an internal review.
- Note 2: Sustainable energy: With a campus goal of becoming carbon-neutral by 2030, the campus development programme will follow the green star principles throughout construction, and new buildings will have clean energy installed. Source: Annual Tertiary Education Facilities Management Association (TEFMA) survey.
- Note 3: Graduating year review(s) (GYR): This is the moderation process directed by the Committee for University Academic Programmes (CUAP). All New Zealand universities are required to conduct a formal review of new qualifications generally within three years of the first cohort of students graduating. The review provides assurance to CUAP that the programmes are meeting both their original objectives and an acceptable standard of delivery. In 2019, five programmes deferred to 2020, and six were exempt from GYR as there had been no enrolments/completions.

Quality assurance

Whakatau kouka

Academic quality

Throughout 2019, the University has been steadily implementing its strategic initiatives toward achieving planned objectives for the Audit Enhancement Theme (to improve access, outcomes and opportunities for Māori students and Pasifika students). The Lincoln University Enhancement Steering Group was guided through this initiative by the Assistant Vice-Chancellor Māori and Pasifika. The final report for the Enhancement Theme was due to the Academic Quality Agency (AQA) on 2 March 2020.

- Note 4: Digital Services: The quantity of online downloads from digital resources we subscribe to is high and increasing, especially for article download. Digital services include combined book and serial usage. Not included are the digital collections of digital resources created at the university and made available through the Research@Lincoln repository, Living Heritage, Journals@Lincoln and the new Data@Lincoln site, which are also increasing steadily.
- Note 5: Copyright management: The University operates under the New Zealand Universities Copyright Licence. Activated copyright items are loaded into Equella to provide course access to resources under this licence.

Community, Industry and Partner Linkages Hāpori, ahumahi me kā honoka hoa mai

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual	2019 Commitment	Difference between Actual and Commitment
Associated performan	ice indicat	ors					
Community engagement publications and presentations (extension and popular press)	1	106	106	170	↑ 60.4%	104	↑ 63.5%

	Notes	2017 Actual	2018 Actual	2019 Actual	Difference between 2018 and 2019 Actual		
Associated performance	ce indica	tors					
Revenue from consultancy activities		\$78,735	\$145,813	\$64,035	↓ 56%		
Number of alumni with current addresses (NZ/ Australia ONLY)	2	11,865	12,647	12,440	↓ 1.6%		
Hosted/organised alumni events		69	45	51	↑ 13.3%		

Note 1: Community engagement publications and presentations is the number of Press Releases written and prepared by Lincoln University for media.

Note 2: Alumni figures includes Telford in 2017. NZ/Australia numbers are confirmed and this does not extend to further than Australasia as confirmation of accuracy has not been completed for physical street addresses.

Equity of Opportunity in Education and Employment He tauritetaka mātauraka me te whiwhi mahi

Lincoln University Commitment

Lincoln University is committed to equal opportunity in the provision of education and employment. We seek to provide equal access and encouragement to prospective and existing students in areas of recruitment and enrolment by:

- Enhancing the participation and supporting the progress of disadvantaged students or students from community groups that are traditionally under-represented in the student body;
- Ensuring the University provides equal access and encouragement to students regardless of race, gender, marital or parental status, age, religious or political belief, country of origin, disability or sexual orientation;
- Ensuring the university identifies and develops strategies to overcome institutional barriers affecting equal access and employment;
- Monitoring the progress towards realising equal opportunity goals.

The student voice

Lincoln University has consistently maintained a strong relationship with LUSA – which represents the common and collective concerns of students. We actively embrace student participation on university committees, boards, and the Council.

Enabling success He pikika akitūtaka

Support for literacy and numeracy

Literacy and numeracy provision in Student Achievement Componentfunded provision at Lincoln University is confined to the sub-degree portfolio of programmes. Students enrolling in subdegree programmes are prepared for undergraduate and postgraduate study through the successful completion of programmes benchmarked to IELTS, the NZCEL, and/or University Entrance.

The programmes and courses in the University Studies and English Language (USEL) division provide a staircase for academic and Englishlanguage literacy and/or numeracy development. They prepare students for further study and are complemented by self-directed access to the support offered by learning advisors in Learning, Teaching and Library.

Lincoln University's Certificate and Diploma in University Studies, and Diploma in Organic Agri-Food Production incorporate compulsory courses in academic writing and communication and the Skills for Success programme in language, literacy, numeracy and study skills. The learning outcomes of these qualifications are consistent with University Entrance-level literacy. Similarly, numeracy is embedded in courses across the programmes, with a focus on measurement, mathematics and statistics. This ensures students have a basic competence in numeracy and at the same time, builds a solid foundation for students to specialise in these areas in their academic preparation.

Educational support He toko i te mātauraka

Learning advisors provide transformational and developmental advice and support to students throughout their learning journey at Lincoln University. Our students come from diverse backgrounds and begin their study along a continuum of differing knowledge levels and abilities. However, they all share in the need to develop new skills, strategies, and approaches as they transition into tertiary education, new ways of academic learning, and furthering their careers. Learning advisors help students gain not only the confidence required when encountering difficulties or problems, but also the prerequisite skills to succeed in their studies. By doing so, they contribute directly to student completion and retention.

Academic and career skills courses and advice

The Academic and Career Skills (ACS) team provide teaching and advice in academic learning and language skills, mathematics and statistics, information searching and evaluation, careers and employment skills, and specialised support for students with short and long-term illnesses, disabilities and injuries. This team connects students with employers and employment opportunities as well as employers to student and graduate talent through a variety of events and communications.

Teaching and advice is provided in a variety of ways:

- Working directly with students to develop academic and employment skills. This takes place in generic workshops as well as within the context of their discipline of study (in scheduled course teaching time, supplementary workshops, and individual consultations)
- Developing and promoting academic skills resources for independent use (both generic and tailored to courses).

- Providing specialised resources and support for students with short and long-term illnesses disabilities and injuries
- Advising teaching staff on ways to assist students develop academic skills. This includes consulting faculty teaching staff on embedding academic literacy skills into courses, providing face-to-face teaching and provision of learning resources, and advising on questions related to assessment design, information availability and research supervision.

In addition to providing generic skills teaching that complements the learning and teaching in courses, specific programmes are provided:

- Orientation and transition sessions, including cross-campus orientation activities and individual faculty orientations for both undergraduate and postgraduate students.
- Academic skills preparation sessions are more intensive, tailored sessions for Halls Residential Assistants, Sports Scholars, international students, mature students, NZ Aid scholars.
- Learning and information Skills, is an on-line module compulsory for all first-year undergraduate students.
- Peer Assisted Study Sessions (PASS) provides students with the opportunity to work collaboratively on study material with their peers. Trained peer leaders facilitate pair, group and whole class activities, with the students working together to reinforce key concepts and develop effective study strategies. PASS Coordinators monitor and support the peer leaders in their role.
- Inclusive Education provides support and assistance to students with longterm and short-term impairments, injuries or illness. Support services include alternative examination arrangements (e.g. reader/writer support), note-taking, transcription, support for field trips, and provision of specialist equipment and advocacy.

Pastoral support Kā mahi tautoko tauira

Lincoln University is committed to providing a wide range of support for all students, including those who are experiencing psychological distress or mental health issues. This involves working together with staff, students and LUSA to ensure that support services are robust and effective. We takes a holistic approach to mental health, looking at all parts of a student's health and well-being, including academic, mental and emotional, cultural, spiritual, social and physical.

Front-line staff support

- Many staff members across campus, from lecturers to librarians, are trained in psychological first aid and act as the first point of contact for students.
- Accommodation staff (including Residential Assistants) also receive psychological first aid training, as they play a key role in identifying mental health concerns in students who live on campus.
- Front line staff members will connect students with the appropriate services, such as Student Health and Support (an on-campus medical centre that provides free confidential mental health support and counselling for all students) or to the Wellbeing Manager and Sexual Harm Response and Prevention coordinator, Dr Jackie Blunt (who is also a general practioner).
- In terms of academic support, students with mental health issues who have referrals from counsellors or medical clinicians are assisted by the Inclusive Education Department with sitting examinations and tests and obtaining important information from lecturers.
- A Student Support Network is also being developed, which involves the Student Health and Support

Centre, representatives from LUSA, the university Chaplaincy and staff members from accommodation, pastoral care and Inclusive Education departments. This will be a centralised system focusing on early intervention.

Student support

- Some Lincoln students act as wellbeing assistants and work as part of a campus wellbeing mentor group known as WELLU. These students have been trained in the general support of their peers and act as alternative points of contact for distressed fellow students who would prefer to speak to a peer rather than a staff member
- The student mentors can offer basic advice and refer students to the correct support services on campus. In 2020, further groups of students will receive psychological first aid training
- Support is also available through the LUSA advocacy service, which operates independently from the university.

Workshop for first year students

- To encourage wellbeing and mental fitness, and to decrease the mental trauma caused by sexual harm, most first-year Lincoln students from 2019 onwards participate in a workshop known as Respectfully Lincoln.
- The two-hour session focuses on wellbeing, relationships, consent and preventing harmful sexual behaviour. University support services are introduced and discussed, with appropriate contact details distributed, so students know where to find help when they need it.
- Students help to create the workshop sessions and become expert facilitators, leading these peer-led student-to-student events with the help of the Wellbeing and Sexual Harm Prevention and Response Coordinator.

Health and Safety app

In February 2019, we introduced the SafeLU application for mobile phones or tablets. The app links with the University safety and security systems and sends important safety alerts, as well as providing instant access to campus safety resources and emergency contacts such as the Mental Health Crises Helpline and Suicide Crises Helpline. SAFELU also provides counselling contacts, including Text Need To Talk and Call Crises Resolution (CR).

With this app reaching staff, students, contractors and regular visitors to campus, University management were able to communicate efficiently and effectively to a very wide audience throughout the lockdown of the University on March 15.

Other methods used to help students become aware of support services include transitioning them to orientation events, emails sent throughout the year, campus-wide diversity and mental health events like Mental Health Week, group talks on self-care and campus-wide promotions in digital and print formats.

Respectfully Lincoln

The roll-out of the Respectfully Lincoln programme for first-year students launched in August. Initially piloted in March, Respectfully Lincoln is a newly developed sexual awareness programme for students. It includes focused sessions on harmful sexual behaviour, consent and no consent. and being an upstander, rather than a bystander, in situations when things are going wrong especially regarding safety and consent. The workshops are compulsory for first-year students and supported by a process involving the Proctor, LUSA and the wellbeing team. The team is committed to working with faculty staff to ensure a seamless and smooth delivery of the programme.

Thursdays in Black

The Thursdays in Black New Zealand (TIBNZ) movement is coordinated by the New Zealand Universities Students' Association (NZUSA) and the Lincoln student club has been very active in discussions around moving towards a world without sexual violence and abuse. Information tables are regularly set up in the library foyer and students volunteer their time to be there, share information, and raise awareness and provide support. Students from this group have been particularly instrumental in setting up and facilitating the Respectfully Lincoln programme.

WELLU initiative

This programme, overseen by one of the on-campus doctors – herself a practicing GP and wellbeing coach – provides the opportunity for student volunteers to be trained as wellbeing leaders and mentors, and supports them in a variety of activities, projects and wellbeing events. The Wellbeing Student Volunteers provide a pathway between students and support services such as counsellors. The training that the mentor leaders receive is in personal wellbeing, communication skills and diversity and inclusiveness.

Wellness, fitness and lifestyle

Lincoln University Recreation Centre has a focus to improve the health and wellbeing of our community on campus, by providing opportunities for us all to Live Well. Social connections in a safe and fun environment embracing autonomy and encouraging collaborations that reflect cultural diversity across the campus, is the goal of this team. In addition to regular meditation, yoga activities, casual sport teams and gym classes, some of the events in 2019 were:

Exercise is medicine

Exercise is medicine is a collaborative programme between the health centre and the recreation centre. Students are identified and recommended to come and work with a personal trainer for 12 weeks once a week for half an hour. These students are often highly stressed, struggling with workload, personal life, or have injuries and require rehabilitation. The regular contact, socialising and exercise are all positive mechanisms for assisting students navigate and manage university life.

Gumboot Friday

This event was to recognise that for many, having depression is like walking through mud every day, and to encourage staff and students to walk in 'their' shoes for a day and wear gumboots. The gold coin donation went towards providing free counselling to any child in need.

Recreation Centre staff membership offer

A new recreation centre staff membership offer of \$10.00 per week was launched in 2019. The objective was to encourage staff to look after their health and wellbeing by getting active with multiple options including a fitness studio, a boxing studio, group exercise programmes, stadium, squash courts, tennis courts and an outdoor fitness track.

Mental health in farming

Resilient farmer Doug Avery presented to students at the end of May. Hosted by Victoria Westbrooke, Senior Lecturer in Agricultural Management and Agribusiness, Doug spoke to students from the Farm Management and Diploma of Agriculture classes about mental resilience and the importance of looking after their mental health. A group of host farmers, who in the past have opened their farms for student field trips, also attended.

Response to the events of March 15

After the traumatic mosque shooting events of March 15, many wellness activities were held and made available to Lincoln students and staff. A wellbeing drop-in centre ran for several weeks and members of student health, university support staff, community volunteers, and the chaplains were available. Staff and students were also able to book a clinical psychologist or counsellor.

International student support

Lincoln University has two dedicated international student support officers and provides support services and strategies consistent with the New Zealand Code of Practice for the Pastoral Care of International Students.

In early June LUSA hosted a Cultural Showcase event, highlighting the diversity of our international students on campus. The university has students from 78 countries, and students represented their countries by setting up stalls and cooking a meal at the event.

Childcare facilities

Lincoln University Childcare and Preschool provides quality educational care for the tamariki families/parents/ whānau of Lincoln University staff and students, research groups and the community. The Lincoln University Early Childhood Centre reflects four key values: whanaukataka, manaakitaka (reflecting bicultural values), intentionality and responsiveness (reflecting professional practice as teachers).

Equal employment opportunity

He whakaōrite whiwhika mahi

Lincoln University provides equal opportunity to all staff and prospective staff without regard to a person's gender, marital status, religious belief, ethical belief, colour, race, ethnic or national origins, disability, age, political opinion, employment status, family status or sexual orientation. The University complies with sections 77A and 77D of the State Sector Act 1988 and section 220 of the Education Act 1989 by maintaining and developing equal employment opportunities policies and programmes.

Specific activities and approaches undertaken as part of that programme during 2019 included:

- The University's annual performance appraisal, salary review and promotion processes ensured all staff participated in the performance appraisal and development process.
- Flexible work arrangements to assist staff to balance their work with the other important things in their lives, for example caring for children or older parents; working in the community; playing sport. These are in line with the Employment Relations (Flexible Working Arrangements) Amendment Act 2007 and include providing staff with the opportunity to make changes where practicable to the number of hours worked, time of work or place of work.
- Lincoln University's Parental Leave Policy, which contains provisions more favourable than the legislated minimum. For example, the policy allows staff to take shorter periods of leave over a longer time period, and encompasses a longer period of paid leave than the statutory provision. This provision, in conjunction with flexible work arrangements, has encouraged a more family-friendly approach.
- The Employee Assistance Programme (EAP) provides confidential, short-term counselling

at no cost to the individual. EAP continues to be promoted and used widely by staff and their immediate family members. Counsellors from EAP were present on campus for regular periods following the Christchurch mosque shootings in March 2019 and managers were asked to encourage their staff to use EAP for themselves or their family members in the wake of the tragedy. The trends and usage of EAP services are monitored on a regular basis.

- The university appointed a Wellbeing Manager in February 2019 to develop and lead the wellbeing programme and implement an annual plan for Lincoln University staff and students. The appointee immediately developed internal and external networks to identify and support staff and students who needed assistance.
- The University supports the New Zealand Women in Leadership Programme by seeking and reviewing nominations from academic and professional staff members to attend the five-day, residential programme.
- The University hosted a celebration on International Women's Day where inspirational women staff members and alumni spoke to an audience of staff and students.
- Equal employment guidelines and opportunities are promoted to managers to:
 - Remove barriers so that all staff have the chance to perform to their best
 - Ensure fair treatment of all staff members
 - Ensure that the best person or team is recruited for specific jobs
 - Motivate staff to be loyal and committed to Lincoln University
 - Promote understanding between their staff, supporting a stronger and more focused team.

Group Financial Statements

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Lincoln University PO Box 85084, Lincoln University, Lincoln 7647, New Zealand

28 April 2020

The Council and management of Lincoln University accept responsibility for the preparation of the Group financial statements and statement of service performance and the judgements used in them.

The Council and management of Lincoln University accept responsibility for establishing and maintaining a system of internal control designed to provide reasonable assurance as to the integrity and reliability of financial reporting.

In the opinion of the Council and management of Lincoln University, the Group financial statements and statement of service performance for the year ended 31 December 2019 fairly reflect the financial position and operations of Lincoln University and its subsidiaries.

Bruce Gemmell Chancellor

Bruce a MKenyie

Professor Bruce McKenzie Acting Vice-Chancellor

Howard Gant Finance Director

Lincoln University Statement of Comprehensive Revenue and Expense

For the Year Ended 31 December 2019

			Group			Parent	
		Budget	Actual	Actual	Budget	Actual	Actual
		31 Dec 2019	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2019	31 Dec 2018
Revenue	Notes	\$000	\$000	\$000	\$000	\$000	\$000
Tertiary Education Commission Grant funding	31	23,967	22,432	24,298	23,967	22,432	24,298
Tertiary Education Commission PBRF funding		10,481	10,209	10,351	10,481	10,209	10,351
Tertiary Education Commission Fees Free funding		2,019	2,074	2,018	2,019	2,074	2,018
Domestic tuition fees		6,828	6,381	6,703	6,828	6,381	6,703
International tuition fees		18,445	22,185	16,488	18,445	22,185	16,488
Research contracts		32,203	31,848	31,275	20,084	19,004	19,393
Trading income		25,883	23,536	22,236	24,995	23,439	16,228
Trusts/scholarships income		854	864	1,009	854	864	1,009
Other revenue		3,046	7,347	4,232	1,563	5,631	1,797
Total revenue	2	123,725	126,876	118,610	109,235	112,219	98,285
Expenditure							
Personnel expenses	6	63,639	63,225	61,671	58,327	57,394	51,576
Operating expenses	3	46,113	45,388	42,949	39,463	39,349	34,657
Depreciation	13	8,106	8,787	7,571	7,912	8,524	7,340
Amortisation of intangible assets	15	800	896	802	715	744	714
Trusts/scholarships expenses		1,015	1,073	1,168	1,015	1,073	1,168
Other expenditure		0	139	335	0	28	0
Total expenditure		119,673	119,508	114,496	107,432	107,112	95,455
Operating surplus (deficit) for the year from continuing operations and before the impact of abnormal items		4,052	7,368	4,114	1,803	5,107	2,830
Operating surplus (deficit) for the year from discontinued operations	33	0	(26)	0	0	0	0
Abnormal revenue and expenses related to Earthquakes, Hub project, Transformation and Discontinued operations							
Insurance recoveries	32	20,000	0	45,000	20,000	0	45,000
Building demolition expenses	17	0	(5,561)	0	0	(5,561)	0
Hub project expenses		(552)	(320)	(1,133)	(552)	(320)	(1,133)
LUAgRJF LP project impairment	35	0	(178)	(15,190)	0	(178)	(15,190)
Earthquake costs	32	(2,000)	(1,080)	(1,767)	(2,000)	(1,080)	(1,767)
Transformation costs		(1,000)	0	(826)	(1,000)	0	(826)
Discontinued entities abnormal costs	33	0	(31)	0	0	0	0
Surplus (deficit) for the year after abnormal items		20,500	172	30,198	18,251	(2,032)	28,914
Other comprehensive revenue and expense							
Impairment of buildings	13,32	0	(4,464)	6,250	0	(4,464)	6,250
Investment revaluations		0	(263)	(902)	0	(263)	(902)

0

20,500

33,089

28,534

0

35,546

0

18,251

33,089

26,330

0

34,262

The financial statements are to be read in conjunction with the accompanying notes.

Total comprehensive revenue and expense for the

Fixed asset revaluations

year

Lincoln University Statement of Changes in Equity

For the Year Ended 31 December 2019

Group equity	Notes	Accumulated Funds \$000	Asset Revaluation Reserves \$000	Fair Value Through Other Comprehensive Income Reserves \$000	Trusts \$000	Total Equity \$000
Balances at 1 January 2018		122,104	86,042	1,161	20,212	229,519
Surplus/(Deficit) 2018		30,198	0	0	0	30,198
Other Comprehensive Income		0	6,250	(889)	(13)	5,348
Total Comprehensive Income for 2018		30,198	6,250	(889)	(13)	35,546
Non Comprehensive items:						
Share of surplus/(deficit) to Trusts		(593)	0	0	593	0
SIDE Trust Distribution		0	0	0	(273)	(273)
Group balances at 31 December 2018		151,710	92,292	272	20,519	264,793
Surplus/(Deficit) 2019		172	0	0	0	172
Other Comprehensive Income		(4,464)	32,372	(272)	726	28,362
Total Comprehensive Income for 2019		(4,292)	32,372	(272)	726	28,534
Non Comprehensive items:						
Share of surplus/(deficit) to Trusts		(490)	0	0	490	0
Argyle Trust distributed to LU		3,498	0	0	(3,498)	0
SIDDC Partner Distribution		3	0	0	0	3
Blinc Investment		113	0	0	0	113
Revaluation Reserves transferred on disposal of fixed assets		0	0	0	0	0
Group balances at 31 December 2019	19	150,543	124,664	0	18,237	293,444

Parent equity	Notes	Accumulated Funds \$000	Asset Revaluation Reserves \$000	Fair Value Through Other Comprehensive Income Reserves \$000	Trusts \$000	Total Equity \$000
Parent balances at 1 January 2018		114,676	86,042	1,161	19,689	221,568
Surplus/(Deficit) 2018		28,914	0	0		28,914
Other Comprehensive Income		0	6,250	(889)	(13)	5,348
Total Comprehensive Income for 2018		28,914	6,250	(889)	(13)	34,262
Non Comprehensive items:						
Share of surplus/(deficit) to Trusts		(575)	0		575	0
SIDE Trust Distribution		0	0	0	(273)	(273)
Parent balances at 31 December 2018		143,014	92,292	272	19,979	255,557
Surplus/(Deficit) 2019		(2,032)	0	0	0	(2,032)
Other Comprehensive Income		(4,464)	32,372	(272)	726	28,362
Total Comprehensive Income for 2019		(6,496)	32,372	(272)	726	26,330
Non Comprehensive items:						
Share of surplus/(deficit) to Trusts		(473)	0	0	473	0
Argyle Trust distributed to LU		3,498	0	0	(3,498)	0
Revaluation Reserves transferred on disposal of fixed assets		0	0	0	0	0
Parent balances at 31 December 2019	19	139,546	124,664	0	17,679	281,889

The financial statements are to be read in conjunction with the accompanying notes. www.lincoln.ac.nz $% \left(\frac{1}{2}\right) =0$

Lincoln University Statement of Financial Position

For the Year Ended 31 December 2019

			Group			Parent	
		Budget	Actual	Actual	Budget	Actual	Actual
		31 Dec 2019	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2019	31 Dec 2018
Current assets	Notes	\$000	\$000	\$000	\$000	\$000	\$000
Cash and cash equivalents	7,22	47,143	4,747	12,107	33,927	847	5,451
Bank deposits for over 3 months	22	0	70,007	18,750	0	67,507	16,500
Trust term deposits	22	16,563	16,579	16,403	16,563	16,027	15,874
Trade and other receivables	8	12,549	16,966	57,866	20,173	28,271	69,106
Prepaid expenses		2,827	3,376	2,713	2,384	3,269	2,566
Agricultural assets	16	2,924	3,671	3,326	2,924	3,671	3,326
Inventories	9	1,006	1,021	1,852	887	972	781
Inventory - land held for sale	10	12,719	7,292	4,496	0	0	0
Trust non-current assets to be transferred	34	8,025	0	8,025	0	0	0
Non-current assets held for sale	12	0	696	3,368	0	696	3,368
Total current assets		103,755	124,355	128,906	76,858	121,260	116,972
Non-current assets							
Investments	11	2,821	2,492	2,821	2,821	2,835	4,618
Inventory - land held for sale	10	0	5,951	6,857	0	0	0
Intangible assets	15	875	1,830	1,727	875	1,364	1,552
Property, plant and equipment	13	181,301	196,161	170,713	177,926	194,141	169,336
Assets under construction	14	6,127	12,242	6,027	6,127	12,242	6,027
Total non-current assets		191,124	218,676	188,145	187,749	210,582	181,533
Total assets		294,879	343,031	317,051	264,606	331,842	298,505
Liabilities							
Current liabilities							
Trade and other payables	17	15,909	16,519	17,059	14,288	19,427	18,085
Revenue in advance	18	15,765	16,494	16,357	15,200	14,710	15,330
Employee liabilities	17	4,957	5,271	5,246	4,371	4,665	4,322
Loans and borrowing associated with Trust assets to be transferred	28,34	8,017	0	8,017	0	0	0
Total current liabilities		44,648	38,284	46,679	33,859	38,802	37,737
Long term liabilities							
Employee liabilities	17	5,246	6,103	5,579	4,940	5,951	5,211
Provisions	17	0	5,200	0	0	5,200	0
Total long term liabilities		5,246	11,303	5,579	4,940	11,151	5,211
Total liabilities		49,894	49,587	52,258	38,799	49,953	42,948
Net assets		244,986	293,444	264,793	225,807	281,889	255,557
Equity							
Accumulated funds		130,583	150,543	151,710	111,812	139,546	143,014
Revaluation reserves		92,292	124,664	92,292	92,292	124,664	92,292
Other reserves		1,392	0	272	984	0	272
Trust funds		20,719	18,237	20,519	20,719	17,679	19,979

The financial statements are to be read in conjunction with the accompanying notes.

19

244,986

293,444

264,793

225,807

281,889

255,557

Total equity

Lincoln University Statement of Cash Flows

For the Year Ended 31 December 2019

			Group			Parent	
		Budget	Actual	Actual	Budget	Actual	Actual
		31 Dec					
Cash flows from operating activities	Notes	2019 \$000	2019 \$000	2018 \$000	2019 \$000	2019 \$000	2018 \$000
Cash was provided from:							
Tertiary Education Commission Grant		23,967	21,717	25,459	23,967	21,717	25,459
funding							
Tertiary Education Commission PBRF funding		10,480	10,209	10,351	10,480	10,209	10,351
Tertiary Education Fees Free funding		2,019	2,434	2,982	2,019	2,434	2,982
Tuition fees		25,273	28,628	24,603	25,273	29,004	24,603
Revenue from trade and services		59,272	58,121	55,546	40,774	46,009	38,365
Interest and dividends		1,781	1,901	1,838	1,334	1,560	1,477
		122,792	123,010	120,779	103,847	110,933	103,237
Cash was applied to:							
Employees and suppliers		111,751	110,843	106,093	92,501	99,036	88,466
Interest expense		0	183	249	0	0	0
Building demolition expenses		0	361	0	0	361	0
Earthquake costs		2,000	1,388	1,767	2,000	1,388	1,767
Hub project expenses		552	320	1,133	552	320	1,133
Transformation costs		1,000	0	826	1,000	0	826
Net GST paid (received) (*)		0	28	(817)	0	584	(538)
		115,303	113,123	109,251	96,053	101,689	91,654
Net cash flows from operating activities	21	7,489	9,887	11,528	7,794	9,244	11,583
Cash flows from investing activities							
Cash was provided from:							
Term deposits matured		0	0	8,050	0	0	8,500
Sale of investments		0	0	0	0	1,266	0
Sale of sections		6,325	5,173	6,563	0	0	0
Sales of fixed assets		13,450	5,085	20	13,450	5,085	20
Insurance recoveries		20,000	45,000	0	20,000	45,000	0
		39,775	55,258	14,633	33,450	51,351	8,520
Cash was applied to:							
Increase in term deposits		0	51,257	0	0	51,007	0
Increase in Trust deposits		160	176	377	160	154	368
Development of land		6,459	5,407	4,039	0	0	0
Purchase of investments		0	94	93	0	43	7,094
Purchase of intangible assets		0	1,924	973	0	1,480	969
Purchases of fixed assets		24,735	13,710	16,762	24,456	12,537	10,375
		31,354	72,568	22,244	24,616	65,221	18,806
Net cash flows from investing activities		8,421	(17,310)	(7,611)	8,834	(13,870)	(10,286)

The financial statements are to be read in conjunction with the accompanying notes.

		Group			Parent	
Cash flows from financing	Budget 31 Dec 2019 \$000	Actual 31 Dec 2019 \$000	Actual 31 Dec 2018 \$000	Budget 31 Dec 2019 \$000	Actual 31 Dec 2019 \$000	Actual 31 Dec 2018 \$000
Cash was provided from:						
Other financing cash flows	1,320	41	0	1,320	0	0
	1,320	41	0	1,320	0	0
Cash was applied to:						
Other financing cash flows	0	0	15	374	0	0
	0	0	15	374	0	0
Net cash flows from financing activities	1,320	41	(15)	946	0	0
Total cash flows	17,230	(7,382)	3,902	17,574	(4,626)	1,297
Plus opening balances	29,913	12,107	8,170	16,353	5,451	4,119
Effects of exchange rate changes on the balance of cash held in foreign currencies	0	22	35	0	22	35
Closing cash balances and short term bank deposits	47,143	4,747	12,107	33,927	847	5,451

(*) The GST (net) component of operating activities reflects the net GST paid and received with the Inland Revenue Department. The GST (net) component has been presented on a net basis as the gross amounts do not provide meaningful information for financial reporting purposes.

The financial statements are to be read in conjunction with the accompanying notes.

Notes to the Financial Statements

1. Statement of Accounting Policies

Lincoln University is a Tertiary Educational Institute domiciled in New Zealand and is governed by the Crown Entities Act 2004 and the Education Act 1989.

The Lincoln University Group (the Group) consists of Lincoln University, its wholly controlled subsidiaries Lincoln University Property Joint Venture Limited, Blinc Innovation Limited (previously 20% owned), Lincoln Agritech Limited, Ivey Hall and Memorial Hall 125th Anniversary Appeal Gifting Trust and Ivey Hall and Memorial Hall 125th Anniversary Appeal Taxable Activity Trust. The Group includes the following jointly controlled entities: the Massey-Lincoln and Agricultural Industry Trust (50%) and South Island Dairy Development Centre (20%). During 2019, the following entities were discontinued and wound up: the Lincoln University AgResearch Joint Facility Limited Partnership (LUAgR JF LP), with Lincoln University owning 60.5% and AgResearch owing 39.5%; and Lincoln Hospitality Limited. All subsidiaries, associates, and jointly controlled entities are incorporated and domiciled in New Zealand.

The primary objective of the University is to provide educational and research services for the benefit of the community rather than making a financial return. Accordingly, the University has designated itself and the Group as public benefit entities (PBE) for financial reporting purposes.

The financial statements of the University and Group are for the year ended 31 December 2019.

The financial statements were authorised by the Council of the University on 28 April 2020.

Basis of Preparation

The financial statements have been prepared on a going concern basis and the accounting policies have been applied consistently throughout the period.

Statement of Compliance

The financial statements of the Lincoln University Group have been prepared in accordance with the requirements of the Crown Entities Act 2004 and the Education Act 1989 which includes the requirement to comply with New Zealand generally accepted accounting practices (NZ GAAP).

The financial statements have been prepared in accordance with Tier 1 PBE accounting standards. These financial statements comply with the PBE accounting standards.

Accounting policies are selected and applied in a manner which ensures that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events is reported.

Measurement Basis

The financial statements have been prepared on the historical cost basis. modified by the revaluation of land and buildings (except for certain infrastructural assets), artworks, biological assets and financial instruments (including derivative instruments). The preparation of financial statements in conformity with Public Benefit Accounting Standards requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities. revenue and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. The critical estimates and assumptions in these financial statements are set out at the end of these accounting policies.

Functional and Presentation Currency

The financial statements are presented in New Zealand dollars and all values are rounded to the nearest thousand dollars (\$000). The functional currency of the University is New Zealand dollars (NZ\$).

Standards issued and not yet effective and not early adopted

Standards and amendments, issued but not yet effective, that have not been early adopted and are possibly relevant to the University are:

PBE IPSAS 41 Financial Instruments

PBE IPSAS 41 replaces PBE IPSAS 29 Financial Instruments: Recognition and Measurement and PBE IFRS 9 Financial Instruments, and is effective on or after 1 January 2022, with early adoption permitted.

The initial assessment has indicated that the impact of this new statement on the University's financial statements is unlikely to be material.

The University intends to adopt PBE IPSAS 41 for the year ended 31 December 2022.

PBE IPSAS 2 Statement of Cash Flows

PBE IPSAS 2 requires additional disclosures to enable financial statement users to evaluate change in liabilities from financial activities, including changes arising from cash flows and non-cash flows. This amendment is effective for periods beginning on or after 1 January 2021, with early adoption permitted. The University does not intend to early adopt this amendment.

PBE FRS 48 Service Performance Reporting

PBE FRS 48 replaces the service performance reporting requirements of PBE IPSAS 1 and is effective for reporting periods beginning on or after 1 January 2021. The University has not yet determined how the application of PBE FRS 48 will affect the statement of service performance.

Other amendments

While there are other amendments issued and not yet effective, the University and Group does not consider these to be relevant and therefore no information has been disclosed about these amendments.

Summary of Significant Accounting Policies

Significant accounting policies are included in the notes to which they relate.

Significant accounting policies that do not relate to a specific note are outlined below.

Basis of Consolidation

The Group financial statements are prepared by adding together like items of assets, liabilities, equity, income, expenses and cash flows on a line-by-line basis. All significant intragroup balances, transactions, income and expenses are eliminated on consolidation.

The Group financial statements are prepared using uniform accounting policies for like transaction and other events in similar circumstances. The consolidation of an entity begins from the date the University obtains control of the entity and ceases when the University loses control of the entity.

During 2019 the Group adopted PBE IPSAS 34 to IPSAS 38, for consolidated financial statements, joint ventures and arrangements and controlled entities, which has not resulted in any changes to the financial reproting in the Group or Parent financial statements.

Foreign Currency Transactions

Foreign currency transactions (including those for which forward foreign exchange contracts are held) are translated into New Zealand dollars (the functional currency) using the spot exchange rate prevailing at the date of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end rates of monetary assets and liabilities denominated in foreign currencies are recognised in the surplus or deficit.

Financial Assets and Liabilities

Financial assets comprise investments in equity and debt securities, trade and other receivables, cash and cash equivalents, loans and borrowings and trade and other payables.

Financial assets are initially recognised at fair value plus transaction costs, unless they are carried at fair value through surplus or deficit, in which case the transaction costs are recognised in the surplus or deficit. Purchases and sales of financial assets are recognised on trade-date, the date on which the University or Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the University or Group has transferred substantially all risks and rewards of ownership.

Loans and receivables are nonderivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after balance date, which are included in non-current assets. After initial recognition, loans and receivables are measured at amortised cost using the effective interest method, less any provision for impairment. Where an asset is impaired or no longer recognised, the loss is recognised in surplus or deficit.

Financial liabilities are de-recognised if the Group's obligations specified in the contract expire or are discharged or cancelled.

Fair Value Through Other Comprehensive Revenue and Expense Financial Assets

The Group's investments in equity securities, with the exception of investments in equity securities of subsidiaries which are measured at cost in the separate financial statements of the University, and certain debt securities are classified at fair value through other comprehensive revenue and expense financial assets. Subsequent to initial recognition, they are measured at fair value and changes, other than impairment losses, are recognised through other comprehensive revenue and expense. When an asset is de-recognised, the cumulative gain or loss in equity is transferred to surplus or deficit. The fair value of equity investments classified at fair value through other comprehensive revenue and expense is the market value at the balance sheet date.

Impairment of Financial Assets

Financial assets are assessed for evidence of impairment at each balance date. Impairment losses are recognised in surplus or deficit.

Loans and Receivables (including cash and cash equivalents and other receivables)

Impairment of a loan or a receivable is established when there is objective evidence that the University or Group will not be able to collect amounts due according to the original terms of the loan or receivable. Significant financial difficulties of the debtor, and probability that the debtor will enter insolvency, receivership or liquidation, and default in payments are considered indicators that the asset is impaired. The amount of impairment is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted using the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of loss is recognised in the surplus or deficit. When the receivable is uncollectible, it is written off against the allowance account. Overdue receivables that have been renegotiated are reclassified as current (that is, not past due).

Financial assets at fair value through other comprehensive revenue and expense

For equity investments, a significant or prolonged decline in the fair value of the investment below its cost is considered to be objective evidence of impairment.

For debt instruments, significant financial difficulties of the debtor, probability that the debtor will enter into receivership or liquidation, and default in payments are considered to be objective indicators that the asset is impaired.

If impairment exists for investments at fair value through other comprehensive revenue or expense, the cumulative loss (measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in the surplus or deficit) recognised in other comprehensive revenue or expense is reclassified from equity to the surplus or deficit.

Equity instrument impairment losses recognised in the surplus or deficit are not reversed through surplus or deficit.

If in a subsequent period the fair value of a debt instrument increases and the increase can be objectively related to an event after the impairment loss was recognised, the impairment loss is reversed in the surplus or deficit.

Goods and Services Tax (GST)

GST is excluded from the financial statements except for Accounts Receivable and Trade Payables which are stated inclusive of GST. Where GST is not recoverable as input tax, it is recognised as part of the related asset or expense. The balance of GST payable to the Inland Revenue Department (IRD) is included in Trade and Other Payables.

The net GST paid to or received from the IRD, including GST relating to investing or financing activities, is classified as a net operating cash flow in the statement of cash flows.

Commitments and contingencies are disclosed exclusive of GST.

Income Tax

The University and its subsidiaries are exempt from income tax. Accordingly, there is no provision for income tax.

Budget Figures

The budget figures for the University and for the Group are those approved by the Council. The budget figures have been prepared in accordance with NZ GAAP, using accounting policies that are consistent with those adopted by the Council in preparing these financial statements.

Critical Accounting Estimates and Assumptions

In preparing these financial statements, the Group has made estimates and assumptions concerning future events. Consequently, these assumptions may differ from the actual results. Estimates and judgements are continually evaluated and are based upon historical experience including expectations of future events which are believed to be reasonable under the circumstances.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

- Estimates made regarding the remaining useful lives of Property, Plant and Equipment Refer to Note 13.
- Valuation assumptions and impairment assessments regarding Land and Buildings impacted by the Canterbury earthquakes – Refer to Notes 13 and 32.
- Assumptions made impacting the valuation of the non-vesting long service and retirement leave employee entitlements – Refer to Note 17.

Critical Judgements in Applying Accounting Policies

Management has exercised critical judgements in applying accounting policies for the year ended 31 December 2019 as follows:

- Distinction between revenue and capital contributions Refer to Note 2.
- Distinction between research revenue from exchange and nonexchange transactions – Refer to Note 2.
- LUAgR JF LP impairment assessment – Refer to Note 35.

2. Revenue

Accounting Policy

Revenue

Revenue is measured at fair value. Specific accounting policies for significant revenue items are noted below.

SAC Grant Funding

Student Achievement Component (SAC) funding is the University's main source of operational funding from the Tertiary Education Commission (TEC).

The University considers SAC funding to be non-exchange, which is recognised when the course withdrawal date has passed and is based the number of eligible students enrolled at that date and the value of the courses.

The University has a guaranteed amount of SAC funding agreed with TEC. The University's SAC funding is specifically identified by the TEC as being for a funding period as required by section 159YA of the Education Act 1989. The University recognises its SAC funding at the commencement of the specified funding period, which is the same as the University's financial year.

Performance-Based Research Fund (PBRF)

The University considers PBRF funding to be non-exchange in nature. PBRF funding is specifically identified by the TEC as being for a funding period as required by section 159YA of the Education Act 1989. The University recognises its confirmed allocation of PBRF funding at the commencement of the specified funding period, which is the same as the University financial year. PBRF revenue is measured based on the University's funding entitlement adjusted for any expected adjustments as part of the final wash-up process. Indicative funding for future periods is not recognised until confirmed for that future period.

Fees Free Funding

The University considers Fees Free funding received from the TEC in respect of eligible enrolled students to be non-exchange, which is recognised in revenue on the same basis as domestic student tuition fees.

Other Grants Received

Other grants are recognised as revenue when they become receivable unless there is an obligation in substance to return the funds if conditions of the grant are not met. If there is such an obligation, the grants are initially recorded as grants received in advance when received and recognised as revenue when the conditions of the grant are satisfied.

Grants received from subsidiaries are treated as non-exchange and recognised as revenue on receipt.

Student Tuition fees

Domestic student tuition fees are subsidised by government funding and are considered non-exchange. Revenue is recognised when the course withdrawal date has passed, which is when a student is no longer entitled to a refund for withdrawing from the course.

International student tuition fees are accounted for as exchange transactions and recognised as revenue on a course percentage of completion basis.

The percentage of completion is measured by reference to the days of the course completed as a proportion of the total course days.

Research revenue

The Group exercises its judgement in determining whether funding received under a research contract is received in an exchange or a non-exchange transaction. Refer to the Critical Judgements section of this accounting policies note for factors considered.

For an exchange research contract, revenue is recognised on a percentage completion basis. The percentage of completion is measured by reference to the actual research expenditure incurred as a proportion to total expenditure expected to be incurred.

For a non-exchange research contract, the total funding receivable under the contract is recognised as revenue immediately, unless there are substantive conditions in the contract, in which case the revenue is then recognised when the conditions are satisfied. A condition could include the requirement to complete research to the satisfaction of the funder to retain funding or return unspent funds. Revenue for future periods is not recognised where the contract contains substantive termination/ return provisions for failure to comply with the requirements of the contract. Conditions and termination/return provisions need to be substantive, which is assessed by considering factors such as contract monitoring mechanisms of the funder and the past practice of the funder.

Judgement is often required in determining the timing of revenue recognition for contracts that span a balance date or are multi-year research contracts.

Goods Sold

Revenue from the sale of goods is measured at the fair value of the consideration received or receivable net of returns and allowances, discounts and rebates. Revenue is recognised when the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable and there is no continuing management involvement with the goods.

Services Performed

Revenue from services performed is recognised in the surplus or deficit in proportion to the stage of completion of the transaction or the percentage of delivery of the services at the reporting date.

Principal services undertaken include tuition, consulting, research, accommodation, catering and student support services.

Childcare Grants and Fees

The Ministry of Education childcare grants received are considered non-exchange, are dependent on the number of and attendance of eligible children, and are recognised as revenue when the service has been provided. Childcare fees are subsidised by government funding and are therefore considered non-exchange. They are recognised as revenue when they become receivable.

Commissions

When the Group acts in the capacity as an agent rather than as a principal in a transaction, the revenue recognised is the net amount of commission received by the Group.

Donations and Bequests

Unrestricted donations are recognised as revenue upon entitlement. When the University receives a donation with obligations, a liability is recognised.

Once the obligation is discharged, the donation is recognised as revenue.

Donated assets are recognised at fair value.

Finance Revenue

Finance revenue comprises interest revenue on funds invested, dividend revenue, gains on the disposal of financial assets and foreign currency gains.

Interest revenue is recognised as it accrues using the effective interest method. Dividend revenue is recognised when received.

Critical Judgements in Applying Accounting Policies

Distinction between revenue and capital contributions

Most Crown funding received is operational in nature and is provided by the Crown under the authority of an expense appropriation and is recognised as revenue. Where funding is received from the Crown under the authority of a capital appropriation, the University and Group accounts for the funding as a capital contribution directly in equity. Information about capital contributions in equity is disclosed in Note 19.

Research revenue

Management exercises its judgement in determining whether funding received under a research contract is received in an exchange or non-exchange transaction. In determining whether a research contract is exchange or nonexchange, the Group considers factors such as:

- Whether the funder has substantive rights to the research output. This is a persuasive indicator of exchange or non-exchange.
- How the research funds were obtained. For example, whether through a commercial tender

process for specified work or from applying to a more general research funding pool.

- Nature of the funder.
- Specificity of the research brief or contract.

Refer to the Research Revenue accounting policy note for the accounting policy applied for exchange and non-exchange research revenue transactions.

	Group		Parent	
Revenue	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Revenue from the sale of goods	6,277	6,119	6,277	6,119
Revenue from the rendering of services	113,248	108,248	100,307	90,358
Donations	4	11	4	11
Other Revenue:				
- Interest	2,576	1,758	2,230	1,397
- Dividends	10	56	10	56
- Gain on sale of developed land	1,370	2,074	0	0
- Gain on disposal of fixed assets	3,004	1	3,004	1
- Gain from movements in exchange rates	22	35	22	35
- Gain in fair value of livestock	365	308	365	308
Total revenue - attributable to continuing operations	126,876	118,610	112,219	98,285

3. Operating Expenses

Accounting Policy

Finance Expenses

Financial expenses comprise interest expense on borrowings, foreign currency losses, impairment losses recognised on financial assets (except trade receivables), and losses on the disposal of available-for-sale financial assets. All borrowing costs are recognised in the surplus or deficit using the effective interest rate method.

Scholarships

Scholarships awarded by the University that reduce the amount of tuition fees payable by the student are accounted for as an expense and not offset against student tuition fees revenue.

Lease Payments

Payments made under operating leases are recognised in surplus or deficit on a straight line basis over the term of the lease.

	Gro	Group		ent
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Operating expenses (*) include:				
Repairs & maintenance	2,947	2,571	2,922	2,166
Occupation costs	3,875	3,633	3,790	2,477
Insurances	1,563	1,314	1,538	1,059
Scholarships	3,761	3,177	3,761	3,177
Research sub-contracts	7,587	7,910	4,244	4,817
Contracted services	4,606	4,383	4,328	3,334
Inventories consumed	2,044	3,978	1,991	2,156
Operating lease rental expenses	670	681	222	222
Other expenditure - interest	183	249	0	0

* For Continuing Operations

4. Key Management Personnel Compensation

	Parent			
	2019 \$000	2018 \$000		
	\$000	\$000		
Council members - honoria	153	158		
Senior management team, including the Acting Vice-Chancellor	2,230	2,472		
Total key management personnel compensation	2,383	2,630		
Council members at year end (head count)*	10	12		
Senior management team, including the Acting Vice-Chancellor:				
Full time equivalent members	10	10		

*Due to the wide variability of time spent by Council members in preparation for Council and associated meetings, it is difficult to determine an accurate full-time equivalent value. The Council Constitution provides for up to 12 members.

Councillors' Fees

The following fees were paid to members of the University Council during the year. The University Council is part of the key management personnel.

	Parent			
	2019 \$000	2018 \$000		
S Blackmore	2	0		
J Fredric	20	20		
B Gemmell	40	23		
G Harrison ⁽¹⁾	0	0		
B Jordan	0	2		
K Havill	17	3		
A Macfarlane ⁽²⁾	0	12		
J McWha	25	6		
P Morrison	17	9		
P Parata-Goodall	20	18		
J Ranstead	0	18		
C Smith	13	7		
S Smith	0	40		
Total Councillor fees	154	158		

⁽¹⁾ Sir G Harrison has waived his entitlement to Council meeting fees.

⁽²⁾ Mr A Macfarlane has waived his entitlement to Council meeting fees.

5. Remuneration of Auditors

	Gro	oup	Parent		
	2019 \$000	2018 \$000	2019 \$000	2018 \$000	
Audit of the financial statements	264	266	216	186	
Audit of Performance Based Research Fund return	12	12	12	12	
Additional audit fee recoveries	43	11	38	11	
Total	319	289	266	209	

The auditor of the Group is Audit New Zealand on behalf of the Auditor-General. No other fees are paid to the auditor.

6. Personnel and Sub-Contractor Expenses

Accounting policy

Superannuation Schemes

Defined Contribution Schemes

Employer contributions to KiwiSaver, the Government Superannuation Fund, and other defined contribution superannuation schemes are accounted for as defined contribution schemes and are recognised as an expense in the surplus or deficit as incurred.

Defined Benefit Schemes

The Group belongs to the Defined Benefit Plan Contributors Scheme (the scheme), which is managed by the Board of Trustees of the National Provident Fund. The scheme is a multi-employer defined benefit scheme.

Insufficient information is available to use defined benefit accounting, as it is not possible to determine from the terms of the scheme the extent to which the surplus/deficit will affect future contributions by individual employers, as there is no prescribed basis for allocation. The scheme is therefore accounted for as a defined contribution scheme.

	Gro	oup	Parent	
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Salaries and wages	58,745	57,599	53,028	47,775
Employer contributions to defined contribution plan	1,772	1,718	1,666	1,479
Increase (decrease) in employee entitlements	1,091	592	1,083	560
Payments to sub-contractors	1,617	1,762	1,617	1,762
Total personnel and sub-contractor expenses	63,225	61,671	57,394	51,576

7. Cash and Cash Equivalents

Accounting Policy

Cash at banks includes cash on hand and funds on deposit with banks with original maturities of three months or less.

Bank overdrafts which are repayable on demand and which form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

	Group		Parent	
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Cash and bank accounts	206	2,885	97	951
Call accounts	4,541	9,222	750	4,500
Total	4,747	12,107	847	5,451

8. Trade and Other Receivables

Accounting Policy

Trade and other receivables are recorded at face value, less any provision for impairment.

	Gro	oup	Parent		
	2019 \$000	2018 \$000	2019 \$000	2018 \$000	
Trade and other receivables (1)	17,491	13,184	20,141	15,089	
Provision for doutbful debts	(525)	(318)	(525)	(307)	
Inter-company advances (2)	0	0	8,512	8,387	
Other inter-company balances (3)	0	0	143	937	
Earthquake insurance receivable (4)	0	45,000	0	45,000	
Total	16,966	57,866	28,271	69,106	

⁽¹⁾ The average credit period on sales of goods and services is 21 days. No interest is charged on overdue trade receivables balances.

(2) Inter-company advances include loans by the Parent to Lincoln University Property Joint Venture Limited of \$8.5m (2018 \$8.4m). This loan is subject to interest at the discretion of the Parent. The loan is repayable on demand.

⁽³⁾ Other inter-company balances include amounts owed for the supply of goods and services on normal commercial terms.

⁽⁴⁾ Earthquake insurance receivable reflects contractually agreed claims payments received in 2019 related to outstanding claims from prior years.

Movement in the provision for doubtful debts:

	Gro	pup	Parent		
	2019 \$000	2018 \$000	2019 \$000	2018 \$000	
Balance at start of the period	318	1,657	307	1,649	
Additional provisions made	379	10	379	0	
Receivables written off in the year	(173)	(1,349)	(161)	(1,342)	
Balance at the end of the period	525	318	525	307	

As at 31 December 2019, all overdue receivables have been assessed for impairment and appropriate provisions applied. The provision for doubtful debtors has been calculated by assessing each debtor based on current knowledge

	Group						
	2019 \$000 Gross	2019 \$000 Impairment	2019 \$000 Net	2018 \$000 Gross	2018 \$000 Impairment	2018 \$000 Net	
Not past due	16,192		16,192	56,673		56,673	
Past due 1-30 days	449		449	550		550	
Past due 31-60 days	97		97	209		209	
Past due 61-90 days	54		54	64		64	
Past due over 91 days	698	(525)	174	689	(318)	371	
Total	17,491	(525)	16,966	58,184	(318)	57,866	

	Parent						
	2019 \$000 Gross	2019 \$000 Impairment	2019 \$000 Net	2018 \$000 Gross	2018 \$000 Impairment	2018 \$000 Net	
Not past due	27,674		27,674	68,146		68,146	
Past due 1-30 days	328		328	527		527	
Past due 31-60 days	81		81	189		189	
Past due 61-90 days	54		54	51		51	
Past due over 91 days	658	(525)	134	502	(307)	195	
Total	28,769	(525)	28,271	69,414	(307)	69,106	

9. Inventories

Accounting policy

Inventories are measured at the lower of cost or net realisable value. The cost of inventories is based upon the first-in-first-out principle and includes expenditure incurred in acquiring the inventories and bring them to the existing location and condition. The amount of any write-down for the loss of service potential or from cost to net realisable value is recognised in the surplus or deficit in the year of the write-down.

	Gro	oup	Parent		
	2019 \$000	2018 \$000	2019 \$000	2018 \$000	
Farm consumables	460	426	460	426	
Maintenance inventories	159	166	159	166	
LUAgRJF inventories	0	862	0	0	
Sundry inventories	402	398	353	189	
Total	1,021	1,852	972	781	

No inventories are pledged as security for liabilities. Some inventories are subject to retention of title clauses.

10. Inventory - Land held for sale

	Gro	oup	Parent		
Land held for sale at cost (1)	2019 \$000	2018 \$000	2019 \$000	2018 \$000	
Balance at start of the period	11,353	11,707	0	0	
Additions	5,717	4,242	0	0	
Gain on consolidation eliminated	158	457	0	0	
Cost of sales	(3,985)	(5,053)	0	0	
Balance at the end of the period	13,243	11,353	0	0	
Land held for sale - Non-current	5,951	6,857	0	0	
Land held for sale - Current	7,292	4,496	0	0	
Balance at the end of the period	13,243	11,353	0	0	

⁽¹⁾ The Group intends to dispose of a parcel of land it no longer utilises over the next 5-10 years. The property was previously used in the Group's operations. The property is being developed for sale through a joint venture agreement with Ngāi Tahu Property Joint Ventures Limited.

11. Investments

Accounting policy

The University and Group has adopted the new accounting standards, PBE IPSAS 34 to 38, in preparing these financial statements. In applying these new standards, the accounting policies for investments in subsidiaries, associates and joint ventures have been updated. Disclosures have also been updated for the new requirements of PBE IPSAS 38.

Subsidiaries

The University consolidates in the Group financial statements those entities it controls. Control exists where the University has rights or exposures to variable benefits or obligations, whether financial or non-financial, and has the ability to impact the nature and amounts of the benefits or obligations through its power over the entity.

The University measures the cost of a business combination as the aggregate of the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, in exchange for control of the subsidiary plus any costs directly attributable to the business combination. Any excess of the cost of the business combination over the University's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities is recognised as goodwill. If the University's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities exceeds the cost of the business combination, the difference will be recognised immediately in the surplus or deficit.

Investments in subsidiaries are measured at cost in the Parent financial statements.

Joint arrangements, operations and ventures

A joint operation is a joint arrangement whereby the parties that have joint control have rights and exposures to the assets and obligations of the arrangement. Investments in joint operations are measured at cost in the Parent financial statements. The University's interest in the assets, liabilities, revenues and expenses of the joint operation is recognised separately in the Group financial statements.

A joint venture is a joint arrangement whereby the parties that have joint control have rights to the net assets of the arrangement. Investments in joint ventures are measured at cost in the Parent financial statements. Investments in joint ventures are accounted for in the group financial statements using the equity method of accounting.

	Gro	pup	Parent		
	2019 \$000	2018 \$000	2019 \$000	2018 \$000	
Investment in subsidiaries (1)	0	0	408	408	
Investments in supplier companies (2) (3)	2,317	2,608	2,317	2,608	
Investment in other companies (2)	100	138	35	26	
Investment in non-quoted companies ⁽³⁾	75	75	75	75	
Investment in LUAgRJF LP (4)	0	0	0	1,501	
Total	2,492	2,821	2,835	4,618	

⁽¹⁾ The investment in subsidiaries is measured at cost.

⁽²⁾ Supplier companies are companies which require the Group to have a shareholding in that company. This shareholding relates to the volume of trade by the Group with that company.

⁽³⁾ Designated as fair value through other comprehensive revenue and expense.

⁽⁴⁾ The investment in LUAgR JF Limited Partnership is measured at net realisable value in 2018. Refer Note 35. The Group presentation includes the assets and liabilities with other like items.

12. Non-Current Assets Held for Sale

Accounting policy

Non-current assets held for sale are classified as held for sale if their carrying amount will be recovered principally through a sale transaction, rather than through continuing use. Non-current assets held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

Any impairment losses for write-downs of non-current assets held for sale are recognised in the surplus or deficit.

Any increases in fair value (less costs to sell) are recognised up to the level of any impairment losses that have been previously recognised.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised.

Non-Current Assets held for Sale include:

	Gro	up	Parent		
	2019 \$000	2018 \$000	2019 \$000	2018 \$000	
Farm Lane houses	219	0	219	0	
Campus land	477	0	477	0	
Cropping farm	0	3,158	0	3,158	
Springs Road property	0	210	0	210	
Total land and buildings for sale	696	3,368	696	3,368	

These properties were in the market before the balance date and these properties will be sold within the next 12 months.

13. Property, Plant and Equipment

Accounting policy

Recognition and Measurement

Items of property, plant and equipment (PPE) are measured at cost or valuation less accumulated depreciation and impairment losses.

Cost includes expenditure which was directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour costs attributable to bringing the asset to a working condition for its intended use.

Library books and serials include paper based books and serials along with the digital access rights to electronic books and serials. These are valued at cost.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate components.

Revaluation

Land and buildings, with the exception of certain assets designated as infrastructural assets, are revalued on a three yearly cycle. The carrying values of revalued items are reviewed at each balance date to ensure those values are not materially different to fair value.

Infrastructural assets comprise parking areas, roads, sewers and storm drains and are valued at historic cost.

Any revaluation increase arising on the revaluation of land and buildings is credited to the asset revaluation reserve, except to the extent that it reverses a revaluation decrease for the same asset class previously recognised as an expense in the surplus or deficit, in which case the increase is credited to the surplus or deficit to the extent of the decrease previously charged. A decrease in carrying amount arising on the revaluation of land or buildings is charged as an expense in the surplus or deficit to the extent that it exceeds the balance, if any, held in the asset revaluation reserve relating to a previous revaluation of that asset class.

Depreciation on revalued assets is charged to the surplus or deficit. On subsequent sale or retirement of a revalued asset the attributable revaluation surplus remaining in the asset revaluation reserve is transferred directly to accumulated funds.

Subsequent Costs

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that that the future economic benefits of the part will flow to the Group and its cost can be reliably measured. The cost of repairs to an item of property, plant and equipment is recognised in surplus or deficit, as they are incurred.

Depreciation

Depreciation is provided on a straight line basis over the estimated useful lives of each part of an item of property, plant and equipment. Leased assets are depreciated over the shorter of the lease term or their useful life. Land is not depreciated.

The estimated useful lives for the current and comparative periods are:

- Freehold buildings Structure 40 - 100 years 17 - 75 years
- Freehold buildings Fit out
- Freehold buildings Services 20 - 75 years •
- Plant and Equipment 5 - 20 years
 - Office furniture 5 - 10 years
- Computer equipment 3 - 10 years
- and technology systems Library books and serials 10 - 20 years

Depreciation methods, useful lives and residual values are re-assessed at the reporting date. Assets under construction are not depreciated.

Impairment of Property, Plant and Equipment

The carrying amounts of the Group's assets are reviewed at each balance date to determine whether there is any objective evidence of impairment.

Where indicators of impairment are identified a detailed assessment is made.

An impairment loss is recognised when the carrying amount of an asset is less than its recoverable amount or value in use for assets valued at depreciated replacement cost.

Impairment losses directly reduce the carrying amount of assets and are recognised in the surplus or deficit for assets held at cost. For assets recognised at fair value any impairment is recognised in other comprehensive revenue and expense to the point where this equals revaluation reserves. Any further impairment is recognised in the surplus or deficit.

The reversal of an impairment loss for assets held at cost is recognised in the surplus or deficit for the period.

The reversal of an impairment loss for a revalued asset is recognised in other comprehensive revenue and expense and increases the revaluation reserve for the class of asset. However, to the extent that an impairment loss for a class of assets was previously recognised in the surplus or deficit, a reversal of an impairment loss is recognised in the surplus or deficit.

Critical accounting estimates and assumptions

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of Property, Plant and Equipment within the next financial year are:

Estimating the fair value of land and buildings

An independent valuation of the Group's land and buildings was performed by FordBaker Valuation Limited, registered independent valuers not related to the Group, to determine the fair value of the land and buildings as at 31 December 2019. The valuations were performed in accordance with the following accounting standards:

PBE IPSAS 17 - Property, Plant and Equipment PBE IPSAS 21 - Impairment of Non-Cash Generating Assets PBE IPSAS 26 - Impairment of Cash Generating Assets

These International Valuation Standards became effective from 1 January 2014 and these have been applied in conjunction with the Professional Practice Standards of the Australian and New Zealand Property Institute.

An impairment of buildings has been recognised in other comprehensive revenue and expense in the current year that estimates the change in value of the assets as a result of the earthquake damage incurred.

The valuation incorporates the impairment assessment resulting from the series of Canterbury Earthquakes to land or buildings, which were made based on advice from structural engineers, quantity surveyors and other experts where necessary. Note 32 further expands the reasons and approach for this and the methodology used.

Estimating the useful lives of Property, Plant and Equipment

Estimates are made when determining the remaining useful lives over which assets will be depreciated. Any change in the useful life of an asset during the year will result in an over or under charge for depreciation. To minimise this risk the Group engages independent valuers to undertake the revaluation of land and buildings.

	Group						
Group cost and valuation	Freehold Land at Fair Value \$000	Buildings at Fair Value \$000	Plant & Machinery at Cost \$000	Furniture & Fittings at Cost \$000	Library Books & Serials at Cost \$000	Total \$000	
Gross carrying amount							
Balance at 1 January 2018	59,828	88,236	52,677	3,153	28,922	232,816	
Additions	0	4,146	2,822	69	1,173	8,210	
Disposals	0	(17)	(2,241)	(2)	0	(2,261)	
Impairment adjustment	0	6,250	0	0	0	6,250	
Net revaluation increments/(decrements)	0	(19)	19	0	0	0	
Assets transferred to non-current held for sale	(3,368)	0	0	0	0	(3,368)	
Balance at 31 December 2018	56,460	98,596	53,277	3,219	30,095	241,647	
Additions	0	4,340	3,037	507	1,680	9,564	
Disposals	(2,790)	(854)	(795)	(9)	0	(4,448)	
Impairment adjustment	0	(4,464)	0	0	0	(4,464)	
Net revaluation increments/(decrements)	5,105	16,675	0	0	0	21,780	
Assets transferred to non-current held for sale	(477)	(238)	0	0	0	(715)	
Balance at 31 December 2019	58,298	114,055	55,519	3,717	31,775	263,364	

Group depreciation

Accumulated depreciation/ amortisation and impairment						
Balance at 1 January 2018	0	4,898	42,640	2,013	16,022	65,573
Disposals	0	(17)	(2,151)	(2)	0	(2,170)
Depreciation expense	0	4,030	2,247	99	1,154	7,529
Balance at 31 December 2018	0	8,911	42,736	2,109	17,176	70,932
Disposals	0	(568)	(617)	(1)	(2)	(1,188)
Depreciation expense	0	4,913	2,423	171	1,281	8,788
Depreciation recovered upon valuation	0	(11,309)	0	0	0	(11,309)
Assets transferred to Non-current held for sale	0	(19)	0	0	0	(19)
Balance at 31 December 2019	0	1,927	44,543	2,279	18,454	67,203

Group net book value

As at 31 December 2018	56,460	89,686	10,540	1,110	12,919	170,713
As at 31 December 2019	58,298	112,128	10,976	1,438	13,321	196,161

		Parent					
Parent cost and valuation	Freehold Land at Fair Value \$000	Buildings at Fair Value \$000	Plant & Machinery at Cost \$000	Furniture & Fittings at Cost \$000	Library Books & Serials at Cost \$000	Total \$000	
Gross carrying amount							
Balance at 1 January 2018	59,828	88,105	50,615	3,126	28,922	230,596	
Additions	0	3,864	2,216	69	1,173	7,321	
Disposals	0	0	(1,896)	0	0	(1,896)	
Impairment adjustment	0	6,250	0	0	0	6,250	
Assets transferred to Non-current held for sale	(3,368)	0	0	0	0	(3,368)	
Balance at 31 December 2018	56,460	98,218	50,935	3,195	30,095	238,903	
Additions	0	4,112	2,361	368	1,680	8,521	
Disposals	(2,790)	(854)	(640)	(8)	0	(4,292)	
Impairment adjustment	0	(4,464)	0	0	0	(4,464)	
Net revaluation increments/ (decrements)	5,105	16,675	0	0	0	21,780	
Assets transferred to Non-current held for sale	(477)	(238)	0	0	0	(715)	
Balance at 31 December 2019	58,298	113,449	52,656	3,554	31,775	259,733	

Parent depreciation

Accumulated depreciation/ amortisation and impairment						
Balance at 1 January 2018	0	4,849	41,227	2,000	16,022	64,098
Disposals	0	0	(1,872)	0	0	(1,872)
Depreciation expense	0	4,018	2,072	96	1,154	7,340
Balance at 31 December 2018	0	8,867	41,427	2,096	17,176	69,566
Disposals	0	(574)	(595)	0	(2)	(1,171)
Depreciation expense	0	4,870	2,236	137	1,281	8,524
Depreciation recovered upon valuation	0	(11,309)	0	0	0	(11,309)
Assets transferred to Non-current held for sale	0	(19)	0	0	0	(19)
Balance at 31 December 2019	0	1,834	43,068	2,234	18,454	65,591

Parent net book value

As at 31 December 2018	56,460	89,352	9,508	1,098	12,919	169,337
As at 31 December 2019	58,298	111,614	9,588	1,320	13,321	194,141

14. Assets Under Construction

Accounting policy

Assets under construction are carried at cost, comprising expenditure incurred and any certified progress payment claims up to balance date.

These assets are not in use and have not been depreciated at balance date.

	Group and Parent			
	Buildings \$000	Plant \$000	Intangible Assets \$000	Total \$000
Balance at 1 January 2018	11,067	389	421	11,877
Movements	2,120	430	424	2,974
Transfer to Investment in LUAgR JF LP	(8,824)	0	0	(8,824)
Balance at 31 December 2018	4,363	819	845	6,027
Transfers to PPE	(4,112)	(418)	(472)	(5,002)
Additions	9,562	258	1,396	11,217
Balance at 31 December 2019	9,813	659	1,769	12,242

At 1 January 2018, the work in progress included project costs related to the Lincoln University AgResearch Joint Facility, which were transferred to Investment in LUAgR Joint Facility Limited Partnership during 2018. Refer Note 35 LUAgR JF Project.

	Group and Parent			
	Buildings \$000	Plant \$000	Intangible Assets \$000	Total \$000
Research	0	117	0	117
Information systems	0	258	1,769	2,027
Other	9,813	284	0	10,097
Total at 31 December 2019	9,813	659	1,769	12,242

	Group and Parent				
	Buildings \$000	Plant \$000	Intangible Assets \$000	Total \$000	
Research	0	88	0	88	
Information systems	0	442	845	1,286	
Other	4,363	289	0	4,652	
Total at 31 December 2018	4,363	819	845	6,027	

15. Intangible Assets

Accounting policy

Acquired software licenses are capitalised on the basis of the costs incurred to acquire and bring in to use the specific software.

These costs are amortised over their useful economic lives (three to five years) on a straight line basis.

The Group upgrades software and capitalises all direct costs associated with the upgrade.

	Group	Parent
Gross carrying amount	Software \$000	Software \$000
Balance at 1 January 2018	11,646	11,128
Additions	550	546
Disposals	(3)	0
Balance at 31 December 2018	12,193	11,674
Additions	999	555
Disposals	(8)	0
Balance at 31 December 2019	13,184	12,229

Accumulated amortisation & impairment

Balance at 1 January 2018	9,667	9,407
Amortisation	802	714
Disposals	(3)	0
Balance at 31 December 2018	10,466	10,121
Amortisation	896	744
Disposals	(8)	0
Balance at 31 December 2019	11,354	10,865

Net book value

As at 31 December 2018	1,727	1,552
As at 31 December 2019	1,830	1,364

16. Agricultural Assets

Accounting policy

Biological assets are measured at fair value less point-of-sale costs with changes recognised in surplus or deficit. Fair value is deemed to be market price. Point-of-sale costs include all costs necessary to sell the asset. Agricultural produce is included as part of inventory.

	Group		Par	ent
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Balance at beginning of the year	3,326	2,933	3,326	2,933
Additions from subsequent purchases/ expenditure	92	268	92	268
Increases (decreases) attributable to sales and biological assets classified as held for sale	(49)	(46)	(49)	(46)
Net gain/(loss) from changes in fair value less estimated point-of-sale costs	302	171	302	171
Balance at end of the year	3,671	3,326	3,671	3,326

Livestock

The Group owns sheep, cattle and deer. These are held at the Group's farms in the South Island.

At 31 December 2019, the Group owned 9,290 (2018: 9,261) sheep; 1,457 (2018: 1,413) cattle and 42 (2018: 51) deer.

Independent valuers, South Island Dairy Farmers Canterbury Limited (trading as SIDF), Peter Walsh & Associates Ltd and PGG Wrightson Limited, all with the appropriate knowledge and experience in valuing livestock, have valued the livestock assets at 31 December 2019. The significant valuation assumptions adopted in determining the fair value of the livestock assets included current market values net of the selling costs.

Financial Risk Management Strategies

The Group is exposed to financial risks arising from changes in commodity prices. The Group does not anticipate that commodity prices will decline significantly in the foreseeable future. Therefore, no measures have been taken to manage a decline in commodity prices. The Group reviews its outlook for commodity prices regularly in considering the need for active financial risk management.

The Group is exposed to financial risks arising from weather and disease. These risks are normal for the industry.

17. Trade and Other Payables, Employee Liabilities and Provisions

Trade and Other Payables

Accounting policy

Trade and other payables are recorded at the amount payable.

	Group		Parent	
Trade and other payables	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Trade payables ⁽¹⁾	2,515	2,815	871	804
Accruals ⁽¹⁾	8,056	8,488	7,237	6,193
Deposits held on behalf of students (2)	5,196	4,504	5,196	4,504
Advance from MLAIT ⁽³⁾	0	0	5,777	5,535
Other – inter-company ⁽¹⁾	0	0	0	185
Total payables under exchange transactions	15,767	15,807	19,081	17,221
Payables under non-exchange transactions:				
Goods and Services Tax (GST) payable ⁽¹⁾	752	1,252	346	864
Total	16,519	17,059	19,427	18,085

⁽¹⁾ Trade payables, accruals, GST and other inter-company payables are non-interest bearing and are generally settled within 30 days, with the carrying value approximating fair value. The Group has financial risk management policies in place to ensure that all payables are paid within the credit timeframe.

⁽²⁾ Deposits held on behalf of students are non-interest bearing and the carrying value approximates the amount refundable.

⁽³⁾ The advance from MLAIT is repayable on demand with interest accruing at current market rates.

Employee Liabilities

Accounting policy

Long Term Employee Entitlements

The Group's net obligation in respect of long term employee benefits is the amount of future benefit that employees have earned in respect of the length of service in the current and prior periods, with amounts not expected to settle within 12 months of the year end included in long term.

The obligation for non-vested long service leave and retirement leave are calculated on an actuarial basis. Any increases or decreases in the valuation are recognised in the surplus or deficit. Calculated long service leave and retirement leave are actuarial estimates of the present values of future amounts payable in respect of existing employees incorporating assumptions for rates of disablement, resignation, demise, retirement and salary progression.

Termination Benefits

Termination benefits are recognised as an expense when the Group is demonstrably committed (without realistic possibility of withdrawal) to a formal detailed plan to terminate employment before the usual retirement date. Termination benefits for voluntary redundancies are recognised if the Group has made an offer requesting voluntary redundancy and it is probable that the offer will be accepted and the number of acceptances can be estimated reliably.

Short Term Employee Entitlements

Short term employee entitlements including accrued leave, due to be settled within 12 months of the year end, are measured on an undiscounted basis and are expensed as the related service is provided.

A provision is recognised for the amount to be paid under short term performance based bonus entitlements if the Group has a present legal obligation to pay this amount as a result of past service provided by the employee and this amount can be reliably estimated.

Critical accounting estimates and assumptions

Long service leave and retirement leave

The present value of retirement leave and other employee entitlements depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The key assumptions used in calculating this liability include the discount rate, salary growth factors, and probability of employees retiring and leaving. Any changes in these assumptions impact on the carrying amount of the liability. The valuation was carried out by an independent actuary, Eriksen & Associates Limited, as at 31 December 2019. They have based their valuation on the model recommended by Treasury for the reporting purposes of Crown Entities.

	Group		Parent	
Employee liabilities	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Salary accrual	1,135	866	855	563
Annual leave	3,746	4,223	3,420	3,678
Long service leave	868	540	716	319
Retirement leave and other employee entitlements	5,625	5,196	5,625	4,973
Total	11,374	10,825	10,616	9,533

	Gro	oup	Parent	
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Current liabilities	5,271	5,246	4,665	4,322
Long term liabilities	6,103	5,579	5,951	5,211
Total	11,374	10,825	10,616	9,533

Provisions

Accounting policy

A provision is recognised for future expenditure of uncertain amount or timing when:

- there is a present obligation (either legal or constructive) as a result of a past event;
- it is probable that an outflow of future economic benefits or service potential will be required to settle the obligation; and
- a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of the expenditure expected to be required to settle the obligation using market yields on Government bonds at the balance date with terms of maturity that reasonably match the estimated future outflows. The increase in the provision due the passage of time is recognised as an interest expense and is included in interest expense.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognised as an asset if it is virtually certain that recovery will be received and the amount of the receivable can be measured reliably.

	Gro	pup	Parent	
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Demolition provision	5,200	0	5,200	0
Total long term liability	5,200	0	5,200	0

In terms of an agreement for sale and purchase of real estate dated 8 July 2019, between Lincoln University and AgResearch Limited, Lincoln University has agreed to demolish the Burns building at its own cost, by the earlier of 1 June 2025 or 18 months after the date of practical completion of the science facility to be built by the University.

The \$5.2 million demolition provision is an estimate of the present value of this contractual long term obligation.

18. Revenue in Advance

Accounting policy

Tuition fees in advance includes both liabilities recognised for domestic student fees received for which the course withdrawal date has not yet passed and deferred revenue on international student fees which is based on the percentage of completion of the course.

Research revenue in advance includes both liabilities recognised for research funding with unsatisfied conditions (non-exchange) and liabilities for exchange research funding received in excess of costs incurred to date on the required research.

	Group		Parent	
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Tuition fees in advance	6,704	7,004	6,704	7,004
Research revenue in advance	7,434	7,706	6,145	7,019
Other	2,356	1,647	1,861	1,307
Total	16,494	16,357	14,710	15,330

19. Equity

Accounting policy

Equity is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into the following components:

Accumulated Funds

This is the sum of surpluses and deficits from the current and prior years.

Revaluation Reserves

This reserve relates to the revaluation of land and buildings to fair value.

Trusts Reserves

This reserve comprises the value of Trusts that have been left to Lincoln University. This includes revaluations on land and buildings within the Trusts as well as the fair value of investments held.

Other Reserves

These reserves comprise the cumulative net change of financial assets classified through other comprehensive revenue and expense.

Trust Funds

Where there is a present obligation to repay trust funds, these amounts have been treated as liabilities. Where there is no present obligation to repay unused funds, the trust funds have been treated as equity.

		Asset	Fair Value Through Other Comprehensive		
	Accumulated	Revaluation	Income		Total
	Funds	Reserves	Reserves	Trusts	Equity
Group equity	\$000	\$000	\$000	\$000	\$000
Group balances at 1 January 2018	122,104	86,042	1,161	20,212	229,519
Surplus (deficit) 2018	30,198	0	0	0	30,198
Other comprehensive revenue and expense	0	6,250	(889)	(13)	5,348
Total comprehensive revenue and expense for 2018	30,198	6,250	(889)	(13)	35,546
Share of surplus (deficit) to trusts	(593)	0	0	593	0
SIDE Trust Distribution	0	0	0	(273)	(273)
Group balances at 31 December 2018	151,710	92,292	272	20,519	264,793
Surplus (deficit) 2019	172	0	0	0	172
Other comprehensive revenue and expense	(4,464)	32,372	(272)	726	28,362
Total comprehensive revenue and expense for 2019	(4,292)	32,372	(272)	726	28,534
Share of surplus (deficit) to trusts	(490)	0	0	490	0
Argyle Trust distribution to LU	3,498	0	0	(3,498)	0
SIDDC partner distribution	3	0	0	0	3
Blinc Innovation investment	113	0	0	0	113
Group balances at 31 December 2019	150,543	124,664	0	18,237	293,444

Parent equity

Parent balances at 1 January 2018	114,676	86,042	1,161	19,689	221,568
Surplus (deficit) 2018	28,914	0	0	0	28,914
Other comprehensive revenue and expense	0	6,250	(889)	(13)	5,348
Total comprehensive revenue and expense for 2018	28,914	6,250	(889)	(13)	34,262
Share of surplus (deficit) to trusts	(575)	0		575	0
SIDE Trust Distribution	0	0	0	(273)	(273)
Parent balances at 31 December 2018	143,014	92,292	272	19,979	255,557
Surplus (deficit) 2019	(2,032)	0	0	0	(2,032)
Other comprehensive revenue and expense	(4,464)	32,372	(272)	726	28,362
Total comprehensive revenue and expense for 2019	(6,496)	32,372	(272)	726	26,330
Share of surplus (deficit) to trusts	(473)	0		473	0
Argyle Trust distribution to LU	3,498	0	0	(3,498)	0
Parent balances at 31 December 2019	139,546	124,664	0	17,679	281,889

20. Related Party Disclosures

(a) Parent Entity

The parent entity of the Group is Lincoln University.

(b) Equity Interests in Related Parties

Equity interests in subsidiaries:

Details of the percentage of ordinary shares held in subsidiaries are disclosed in Note 23 to the financial statements.

Equity interests and joint ventures:

Details of interests in joint ventures are disclosed in Note 27 to the financial statements.

(c) Transactions with Related Parties

Related party disclosures have not been made for transactions with related parties that are within a normal supplier or client/ recipient relationship on terms and conditions no more or less favourable than those that are reasonable to expect the University would have in dealing with the party at arm's length. Transactions with Government agencies such as TEC, IRD and Crown Research Institutes are not disclosed as related party transactions when they are consistent with the normal operating arrangements with the University and are undertaken on the normal terms and conditions for such transactions.

The University had the following inter-group transactions with its wholly owned subsidiary companies and its joint venture partners.

		Sales by Parent to:		Purchases by Parent from:		
Transactions during the year	Relationship	2019 \$000	2018 \$000	2019 \$000	2018 \$000	Nature of transactions
Lincoln Hospitality Limited	Subsidiary	0	4,007	0	1,409	Support services
Lincoln Agritech Limited	Subsidiary	813	821	89	74	Support services
Lincoln University Property Joint Venture Limited	Subsidiary	125	120	0	0	Land development
Massey-Lincoln and Agricultural Industry Trust	JV Partner	0	0	0	0	Research funding
Blinc Innovation Limited	JV Partner/ Subsidiary	0	0	200	200	Support services

During 2018, Lincoln University transferred \$8.8m of assets under construction and \$7.9m in cash to the Lincoln University AgResearch Joint Facility Limited Partnership, making up its total \$16.7m investment in the Limited Partnership at 31 December 2018. In January 2019, the LUAgR JF LP board resolved to discontinue the design and build of the Joint Facility and commenced an orderly winding down of the Limited Partnership, which resulted in the investment in the Limited Partnership being impaired by \$15.2m to a net realisable value of \$1.5m at 31 December 2018. During 2019 the remaining assets of the Limited Partnership were realised, liabilities were settled in full, and the final distribution in December 2019 to the University of its share on winding up was \$1.2m.

Effective 1 December 2019, Blinc Innovation Limited became a wholly owned subsidiary of Lincoln University. Refer to Note 23 Subsidiaries and Controlled Entities.

		Amounts owi	ng to Parent:	Amounts owe	ed by Parent:
Balances at year end	Relationship	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Lincoln Hospitality Limited	Subsidiary	0	854	0	208
Lincoln Agritech Limited	Subsidiary	149	146	0	6
Lincoln University Property Joint Venture Limited	Subsidiary	8,512	8,387	0	0
Blinc Innovation Limited	JV Partner/ Subsidiary	0	0	0	58
Massey-Lincoln and Agricultural Industry Trust	JV Partner	4,475	4,475	5,777	5,535
Lincoln AgResearch Joint Facility Limited Partnership	JV Partner	0	1,501	0	0

During the financial year, the University provided accounting and administration services to some Subsidiaries and Joint Ventures for no consideration.

Directors' Fees

The following directors' fees were paid to directors of subsidiaries:

	2019 \$000	2018 \$000
E Rogers	68	57
J Hay	19	17
A Townsend	19	17
M Frost	27	25
A Hall	0	8
I Crowe	0	8
B Gemmell	11	0
Total	144	132

(d) Key Management Personnel Remuneration

Details of key management personnel remuneration are disclosed in Note 4 to the financial statements.

21. Notes to the Cash Flow Statement

Reconciliation of Cash and Cash Equivalents

For the purposes of the cash flow statement, cash and cash equivalents include cash on hand and in bank accounts and investments in money market instruments, net of outstanding bank overdrafts.

	Gro	Group		ent
Reconciliation of the surplus for the period to net cash flows from operating activities	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Surplus for the period	172	30,198	(2,032)	28,914
(Gain)/loss on sale of fixed assets	(3,004)	(1)	(3,004)	(1)
(Gain)/loss on sale of developed land	(1,370)	(2,074)	0	0
Unrealised (gain)/loss on exchange movements	(22)	(35)	(22)	(35)
Depreciation and amortisation of non-current assets	9,683	8,373	9,268	8,054
LUAgRJF impairment costs	178	15,190	178	15,190

(Increase)/decrease in assets:

(Increase)/decrease current trade receivables	303	348	238	806
(Increase)/decrease current earthquake insurance receivable	45,000	(45,000)	45,000	(45,000)
(Increase)/decrease prepaid expenses	(663)	(286)	(703)	(267)
(Increase)/decrease agricultural assets	(345)	(393)	(345)	(393)
(Increase)/decrease current inventories	831	(1,041)	(191)	(154)

Increase/(decrease) in liabilities:

Increase/(decrease) trade and other payables	(582)	2,635	1,374	594
Increase/(decrease) revenue in advance	137	3,235	(620)	3,606
Increase/(decrease) in current employee liabilities	25	408	343	221
Increase/(decrease) in term employee liabilities	524	262	740	339
Increase/(decrease) in provisions	5,200	0	5,200	0

Items classified as investing activities

Movement in fixed asset creditors	(1,180)	(291)	(1,180)	(291)
Insurance recoveries classed as non-operating	(45,000)	0	(45,000)	0
Net cash from operating activities	9,887	11,528	9,244	11,583

22. Financial Instruments

(a) Financial Risk Management Objectives

The Group's corporate treasury function provides services to the business, co-ordinates access to domestic and international financial markets, and manages the financial risks relating to the operations of the Group.

The Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes. The use of financial derivatives is governed by the Group's policies approved by the University Council, which provide principles on the use of financial derivatives.

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates.

(b) Significant Accounting Policies

Details of the significant accounting policies and methods adopted, including the criteria for recognition, and the basis of measurement applied in respect of each class of financial asset, financial liability and equity instrument are disclosed in Note 1 to the financial statements.

(c) Foreign Currency Risk Management

The Group undertakes certain transactions denominated in foreign currencies, hence exposures to exchange rate fluctuations arise. Exchange rate exposures are managed within approved policy parameters utilising forward foreign exchange contracts.

(d) Credit Risk Management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral where appropriate, as a means of mitigating the risk of financial loss from defaults. The Group exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded are spread amongst approved counterparties.

The Group Treasury policy limits the amount of credit exposure to any one financial institution for call and short term investments. No counterparty with a Standard & Poor's (S&P) rating category of higher than A is to have in excess of 30% of total funds on deposit at any one time. No counterparty with an S&P rating category of A is to have in excess of 15% of total funds on deposit at any one time. No investment in a counterparty with an S&P rating of less than A will be permitted without Council approval.

Trade and other accounts receivable consist of a large number of customers, spread across diverse industries and geographical areas. On-going credit evaluation is performed on the financial condition of trade and other accounts receivable.

The carrying amount of financial assets recorded in the financial statements, net of any allowance for losses, represents the Group's maximum exposure to credit risk without taking account of the value of any collateral obtained. The Group does not have any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. The credit risk on liquid funds and derivative financial instruments is limited because the counterparties are banks with high credit-ratings assigned by international credit-rating agencies.

(e) Fair Value of Financial Instruments

The University Council considers that the carrying amount of financial assets and financial liabilities recorded in the financial statements approximates their fair values.

The fair values of financial assets and financial liabilities are determined as follows:

- the fair value of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices. No collateral has been granted by the Group on any financial asset.
- the fair value of financial assets not traded on active markets is estimated using various valuation techniques.

(f) Fair Value Interest Rate Risk

Fair value interest rate risk is the risk that the value of a financial instrument will change due to the movement in market interest rates. The Group has minimal exposure to market interest rate risk by, generally, investing in fixed term deposits with maturity dates of less than one year.

(g) Sensitivity Analysis

Investment revenue is subject to interest rate movements which are both volatile and unpredictable. If interest rates should increase or decrease by 1% the estimated effect on the Group surplus or deficit would be \$900,000 - \$925,000.

(h) Cash Flow Interest Rate Risk

Cash flow interest rate risk is the risk that cash flows from a financial instrument will vary due to changes in market rates. Investments made at variable interest rates expose the Group to cash flow interest rate risk. Cash flow interest rate risk is minimised by the use of fixed term deposits.

(i) Credit Quality of Financial Assets

The Group invests only in the major banking institutions. All these institutions are ranked A or better by Standard & Poor's.

(j) Liquidity Risk Management

The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities. Liquidity risk is the risk that the University or Group will not be able to raise funds to meet commitments as they fall due.

(k) Price Risk

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate as a result of changes in market prices. This applies to listed shares held by the Group totalling \$2.16m (2018 \$2.45m). This includes \$2.10m (2018 \$2.38m) of shares in supplier companies that require the Group to have a shareholding in order to engage in trading activities with the entity.

Maturity Profile of Financial Instruments

The following table details the Group and Parent exposures to interest rate risk as at 31 December 2019:

Group 2019 Financial assets:	Weighted Average Effective Interest rate %	Variable Interest rate \$000	Less than 1 year \$000	Non-Interest Bearing \$000	Total
Cash and cash equivalents	1.17%	206	4,541	0	4,747
Other financial assets ⁽¹⁾	2.91%	0	86,586	0	86,586
Trade receivables		0	0	16,966	16,966
Parent 2019 Financial assets:					
Cash and cash equivalents	0.89%	97	750	0	847
Other financial assets (1)	2.93%	0	83,534	0	83,534
Trade receivables		0	0	28,271	28,271
Group 2018 Financial assets:					
Cash and cash equivalents	2.00%	2,885	9,222	0	12,107
Other financial assets (1)	3.48%	0	35,153	0	35,153
Trade receivables		0	0	12,866	12,866
Earthquake insurance receivable		0	0	45,000	45,000
Parent 2018 Financial assets:					
Cash and cash equivalents	2.40%	951	4,500	0	5,451
Other financial assets (1)	3.52%	0	32,374	0	32,374
Trade receivables		0	0	24,106	24,106
Earthquake insurance receivable		0	0	45,000	45,000

⁽¹⁾ Includes Trust Term Deposits. Trust term deposits represent funds held on behalf of University controlled and administered trusts. These funds are restricted use funds generally governed by a trust deed.

	20	19	2018	
Group Financial liabilities: contractual cash flows	Loans and Borrowings \$000	Trade Payables \$000	Loans and Borrowings \$000	Trade Payables \$000
Less than 1 year	0		201	
1-2 years	0		0	
2-3 years	0		0	
3-4 years	0		0	
4-5 years	0		0	
5+ years	0		7,816	
Total	0		8,017	
Weighted average effective interest %			3.09%	
Non-interest bearing		1,501		17,059

	2019		2018	
Parent Financial liabilities: contractual cash flows	Loans and Borrowings \$000	Trade Payables \$000	Loans and Borrowings \$000	Trade Payables \$000
1-2 years	0		0	
2-3 years	0		0	
3-4 years	0		0	
4-5 years	0		0	
5+ years	0		0	
Total	0		0	
Weighted average effective interest %				
Non-interest bearing		19,427		18,085

Financial Instrument Categories

The accounting policies for financial instruments have been applied to the line items below:

	Group		Parent	
Financial assets	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Loans and receivables				
Cash and cash equivalents	4,747	12,107	847	5,451
Debtors and other receivables	16,966	12,866	19,759	15,719
Earthquake insurance receivable	0	45,000	0	45,000
Other financial assets:				
- Term deposits ⁽¹⁾	86,586	35,153	83,534	32,374
- Loans to related parties	0	0	8,512	8,387
Total loans and receivables	108,299	105,126	112,652	106,931

Fair value through other comprehensive income

Other financial assets:				
- Unlisted shares	331	370	674	666
- Listed shares	2,161	2,451	2,161	2,451
Total fair value through other comprehensive income	2,492	2,821	2,835	3,117

Financial Liabilities

Financial liabilities at amortised cost				
Loans and borrowings	0	8,017	0	0
Creditors and other payables	16,519	17,059	19,427	18,085
Total financial liabilities at amortised cost	16,519	25,076	19,427	18,085

⁽¹⁾ Includes Trust Term Deposits, which have restricted use. Refer to Note 1 Statement of Accounting Policies.

Fair Value Hierarchy Disclosures

For those instruments recognised at fair value in the statement of financial position, fair values are determined according to the following hierarchy:

- Quoted market price financial instruments with quoted prices for identical instruments in active markets.
- Valuation techniques using observable inputs financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable.
- Valuation techniques with significant non-observable inputs financial instruments valued using models where one or more significant inputs are not observable.

The following table analyses the basis of valuation of classes of financial instruments measured at fair value in the statement of financial position:

	Valuation Techniques			
Group 2019	Total \$000	Quoted Market Price \$000	Observable Inputs \$000	Significant Non-Observable Inputs \$000
Financial assets				
- Listed shares	2,161	2,161	0	0
Parent 2019				
Financial assets				
- Listed shares	2,161	2,161	0	0
Group 2018				
Financial assets				
- Listed shares	2,451	2,451	0	0
Parent 2018				
Financial assets				
- Listed shares	2,451	2,451	0	0

23. Subsidiaries

	Ownership Interest		
Parent entity	Country of Incorporation	2019 %	2018 %
Lincoln University	New Zealand		
Subsidiaries			
Lincoln Hospitality Limited	New Zealand		100
Lincoln Agritech Limited	New Zealand	100	100
Lincoln University Property Joint Venture Limited	New Zealand	100	100
Blinc Innovation Limited	New Zealand	100	20
The Lincoln Westoe Trust	New Zealand		Control
Ivey Hall and Memorial Hall 125th Anniversary Appeal Gifting Trust	New Zealand	Control	Control
Ivey Hall and Memorial Hall 125th Anniversary Appeal Taxable Activity Trust	New Zealand	Control	Control
Lincoln University Foundation	New Zealand	Control	

The value of the share capital of subsidiaries has been recorded by Lincoln University (the Parent) at cost.

Prior to 2019, Lincoln Hospitality Limited (LHL) principally provided accommodation and catering services to students. Effective 1 January 2019, the operations of LHL were transferred to Lincoln University. During the year ended 31 December 2019, the legal entity was wound up and ceased to operate, with all liabilities settled and the remaining funds distributed to Lincoln University in the form of a \$40,000 grant for teaching and research.

Lincoln Agritech Limited provides research, development and consultancy services to industry as well as local and regional government.

Lincoln University Property Joint Venture Limited is involved with the development of surplus University land for residential and commercial purposes, and holds the University's investment in Lincoln Land Development Joint Venture, a joint operation with Ngāi Tahu Property Joint Ventures Limited.

The purpose of Blinc Innovation Limited (Blinc) is to promote collaboration between research, education and industry, and transform productivity and environmental performance of New Zealand's primary industries. Effective 1 December 2019, Blinc became a wholly owned subsidiary of Lincoln University, when all shareholdings other than Lincoln University were cancelled when the other shareholders elected to withdraw from the shareholders' agreement. The assets and liabilities of Blinc, consolidated for the first time from 1 December 2019 as part of the Group Balance Sheet, comprised cash and bank \$92,151, accounts receivable and prepayments \$24,241, fixed assets \$153,004, accounts payable and accruals \$127,896, and total net assets of \$141,500.

The Lincoln Westoe Trust (LWT) is a charitable trust, whose primary objective is to establish and operate land based agricultural training and education facilities. Effective 20 September 2019, the Lincoln University nominated trustees resigned from the LWT board of trustees and the LWT was no longer a trust under the control of the University.

The Ivey Hall Trusts were established to raise funds for the refurbishment of Ivey Hall and Memorial Hall.

The Lincoln University Foundation was established to raise funds for teaching and research at the University.

24. Commitments

(a) Capital expenditure commitments

Commitment for capital expenditure is the total amount of capital expenditure contracted for the acquisition of property, plant and equipment and intangible assets which have been neither paid for nor recognised as a liability in the balance sheet.

	Group		Pare	ent
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Buildings	4,337	616	4,337	616
Land development	1,580	1,159	0	0
Library books and serials	1,160	1,100	1,160	1,100
Information systems	219	0	219	0
Total	7,296	2,875	5,716	1,716

(b) Lease commitments

The University has commitments under a livestock lease expiring 2021, where there is an obligation to return the leased livestock to the value of \$1.1m to the stock owner, unless otherwise renewed or extended.

There are no other lease commitments. Non-cancellable operating lease commitments are disclosed in Note 26 to the financial statements.

25. Contingent Liabilities and Contingent Assets

The University and its Subsidiaries have no contingent assets or liabilities at 31 December 2019 or 31 December 2018, other than as noted below.

Crown Funding Agreement

The University has a contingent asset of up to \$80 million due from the Crown under a 2019 funding agreement, dependent on the successful completion of approved plans and other performance dependencies.

National Provident Fund's DBP Contributors Scheme

The University is a past participating employer in the DBP Contributors Scheme ('the Scheme'), which is a multi-employer defined benefit scheme with benefits payable guaranteed by the Crown. Insufficient information is available to use defined benefit accounting, as it is not possible to determine from the terms of the Scheme the extent to which the deficit will affect future contributions by employers, as there is no prescribed basis for allocation.

As at 31 March 2019, the Scheme had a past service deficit of \$1.79 million (1.9% of the liabilities). This amount is exclusive of Employer Superannuation Contribution Tax. This deficit was calculated using a discount rate equal to the expected return on the assets, but otherwise the assumptions and methodology were consistent with the requirements of NZ IAS 19.

The Actuary to the Scheme recommended the employer contribution rate be set at 1 times the contributors' contributions from 1 April 2019, increasing to 3 times from 1 April 2020, to 4 times from 1 April 2021, and to 5 times from 1 April 2022.

The funding arrangements for the Scheme are governed by Section 44 of the National Provident Fund Restructuring Act 1990 and by a Trust Deed. This Act requires that any increase or decrease to the employer contribution rate should result in contributions being at a level to achieve neither a surplus nor a deficit when the Scheme no longer has any beneficiaries.

If the other participating employers ceased to participate in the Scheme, the remaining employers could be responsible for any deficit of the Scheme. Similarly, if a number of employers cease to have employees participating in the Scheme, the remaining employers could be responsible for an increased share of the deficit.

At 31 December 2019, the University had no employees participating in the Scheme. Due to the multi-employer participation in the Scheme, no Lincoln University current contribution or participation in the Scheme, and the Crown guarantee of benefits payments, the likelihood of the University being required to fund any Scheme deficit is currently considered remote.

26. Leases

Disclosures for Lessees

Finance Leases

The Group has no finance leases.

Operating Leases

(a) Leasing arrangements

Operating leases relate to office equipment and vehicles. All operating lease contracts contain market review clauses in the event that the Group exercises its option to renew. The Group does not have an option to purchase the leased asset at the expiry of the lease period.

(b) Non-cancellable operating lease payments

	Gro	oup	Par	ent
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Not later than 1 year	428	559	84	228
Later than 1 year and not later than 5 years	355	718	11	56
Later than 5 years	0	0	0	0
Total	783	1,277	95	284

27. Jointly Controlled Entities

Accounting policy

The University and Group has adopted the new accounting standards, PBE IPSAS 34 to 38, in preparing these financial statements. In applying these new standards, the accounting policies for investments in joint ventures have been updated. Disclosures have also been updated for the new requirements of PBE IPSAS 38.

Joint arrangements, operations and ventures

A joint operation is a joint arrangement whereby the parties that have joint control have rights and exposures to the assets and obligations of the arrangement. Investments in joint operations are measured at cost in the Parent financial statements. The University's interest in the assets, liabilities, revenues and expenses of the joint operation is recognised separately with like items in the Group financial statements.

A joint venture is a joint arrangement whereby the parties that have joint control have rights to the net assets of the arrangement. Investments in joint ventures are measured at cost in the Parent financial statements. Investments in joint ventures are accounted for in the Group financial statement's using the equity method of accounting.

	Ownership Interest			
	2019 %	2018 %		
South Island Dairy Development Centre (SIDDC)	20	17		
Massey-Lincoln and Agricultural Industry Trust (MLAIT)	50	50		
Agri One Limited		50		
Lincoln Land Development Joint Venture	50	50		
Lincoln University AgResearch Joint Facility Limited Partnership		60.5		
Blinc Innovation Limited	100	20		

The purpose of SIDDC is to promote best practice dairy farming. The University's interest in SIDDC is accounted for as a joint operation in the Group financial statements.

The purpose of the joint venture with MLAIT is to provide research funding under the Partnership for Excellence scheme. The University's interest in MLAIT is accounted for as a joint operation in the Group financial statements.

The purpose of Agri One Limited was to develop and deliver agriculture related short courses. This company was liquidated in 2019.

The purpose of the Lincoln Land Development Joint Venture (LLD) with Ngāi Tahu Property Joint Ventures Limited is to develop and sell surplus land. The University's interest in LLD is accounted for as a joint operation through the wholly owned subsidiary Lincoln University Property Joint Venture Limited in the Group financial statements.

The purpose of the Lincoln University AgResearch Joint Facility Limited Partnership was to build and operate the intended shared education and research facilities. Refer to Note 35 regarding the wind down of the partnership. The partnership ceased operating and all liabilities were settled and assets were distributed to the partners in 2019.

The purpose of Blinc Innovation Limited (Blinc) is to promote collaboration between research, education and industry, and transform productivity and environmental performance of New Zealand's primary industries. Effective 1 December 2019, Blinc became a wholly owned subsidiary of Lincoln University, when all shareholdings other than Lincoln University were cancelled when the other shareholders elected to withdraw from the shareholders' agreement.

The following amounts are included in the Group financial statements under their respective categories to reflect the University's interest in the assets, liabilities, revenues and expenses of the joint operations of SIDDC, Massey-Lincoln & Agricultural Industry Trust, and Lincoln Land Development Joint Venture, Blinc Innovation Limited (2018, and to 30 November 2019 only) and Lincoln University AgResearch Joint Facility Limited Partnership (2018 only).

	Group			
	2019 \$000	2018 \$000		
Current assets	6,336	8,482		
Non-current assets	150	115		
Current liabilities	5,020	5,942		
Non-current liabilities	0	0		
Net assets	1,466	2,655		
Revenue	592	468		
Expenses	410	236		
LUAgR JF project impairment	144	15,190		

The Group is responsible for the accounting and administration of the SIDDC and MLAIT joint operations. For details regarding the LUAgR JF project impairment refer to Note 35.

Contingent Liabilities and Capital Commitments

The capital commitments and contingent liabilities arising from the Group's interests in joint ventures are disclosed in Notes 24 and 25 respectively.

28. Loans and Borrowings

	Group		
	2019 \$000	2018 \$000	
Current loans and borrowings are represented by:			
Lincoln Westoe Trust:			
Rabobank New Zealand Limited	0	4,448	
Loan - Howard Family Partnership	0	3,569	
Total current loans and borrowings	0	8,017	
Term loans and borrowings are represented by:			
Lincoln Westoe Trust:			
Rabobank New Zealand limited	0	0	
Loan – Howard Family Partnership	0	0	
Total term loans and borrowings	0	0	

0

8,017

Effective 20 September 2019, the Lincoln University nominated trustees on the Lincoln Westoe Trust (LWT) resigned, and the LWT was no longer controlled by Lincoln University.

Total loans and borrowings

29. Subsequent Events

On 31 December 2019, China alerted the World Health Organisation to the outbreak of a virus in the Hubei province that is now commonly referred to as COVID-19. The global impact of this virus is rapidly changing and is difficult to assess. The possible effects on the University that have been identified resulting from the COVID-19 pandemic include: Government tuition funding (SAC) for 2020 has been guaranteed; international enrolments have reduced due to the travel bans imposed by the New Zealand government; the lockdown procedures enforced during 2020 will reduce accommodation, catering and other campus revenues; additional costs are being incurred to enhance and facilitate alternative student teaching and research capability; and capital plans have been impacted by reduced access to design, engineering and on campus development and build resources. Preliminary assessments indicate that the University's revenues may reduce by up to \$10 million, and net of cost saving initiatives and the Government SAC funding support measures could result in a Group operating deficit for the 2020 financial year.

The potential impact on other revenues, domestic student enrolments and non-financial reporting is unknown and is not able to be quantified at this time.

However, the University has adequate financial resources to ensure that any adverse impact of this uncertainty will not materially affect the financial position or prospects of the Lincoln University Group. There have been no other significant events after the balance date.

30. Capital Management

The University's capital is its equity which comprises accumulated funds, revaluation reserves and trust funds. Equity is represented by net assets as disclosed by the Statement of Financial Position.

The University manages its revenues, expenses, assets and liabilities and day to day financial dealings prudently.

The purpose of managing the University's equity is to ensure that the University achieves its goals and objectives whilst remaining a going concern.

Trust funds comprise cash and other assets. On the cessation of the associated trusts, the funds revert to the University.

The University is subject to the financial management and accountability provisions of the Education Act 1989, which includes restrictions in relation to disposing of assets or interests in assets, the ability to mortgage or otherwise charge assets or interests in assets, the granting of leases of land or buildings or parts of buildings, and borrowing.

31. Explanation of Significant Variances Compared with the Group Budget

Revenue

The higher total revenue than budget was primarily in two areas. Firstly the strong international enrolments resulted in higher international tuition fees, and secondly, the higher other revenue included gains on the disposal of fixed assets which were not budgeted. TEC Grant funding and domestic tuition fees were marginally down on budget primarily due to an adverse student mix and domestic enrolments lower than was budgeted.

Trading income was down on budget primarily due to lower accommodation occupancy and halls catering revenues, and lower conference and events revenues.

Research revenues were marginally lower than budget due to lower than anticipated research contracting and activity.

Expenditure

Personnel and operating costs were marginally below budget primarily due to continued efforts to control costs and improve efficiencies.

Abnormal and non-operating items

The two significant abnormal items budget variances included the earthquake insurance recoveries variance of \$20m and the building demolition expenses variance of \$5m.

The insurance recoveries variance was due to the \$45m insurance recoveries settled with insurers in early 2019 and accounted for in the 2018 financial year, rather than in the 2019 financial year as was budgeted.

The building demolition expenses variance primarily comprises the Lincoln University obligation in favour of AgResearch Limited to demolish the Burns building, which is a key element of an agreement reached to sell them part of the Lincoln Campus. At 31 December 2019, a provision was raised for the unbudgeted estimated \$5.2m demolition cost resulting from this contractual obligation.

Other variances are primarily for abnormal item expenses that were budgeted but not incurred.

Balance Sheet

Total assets at \$343m are \$48m higher than budget, with the significant variances summarised as follows.

Cash and bank deposits are \$28m higher than budget primarily due to successful settling of the earthquake insurance claims by \$25m more than was budgeted, with other contributing factors being the lower than budget capital expenditures during the year, and the better operating cash flows than budgeted. Offsetting this were the lower fixed asset sales proceeds than was budgeted.

Other notable variances include: the higher than budget trade and other receivables, mostly due to the Argyle Farm sale transaction recorded in the year which settled in January 2020; the non-current assets to be transferred, relating to the Lincoln Westoe Trust (LWT), which were deconsolidated in 2019 due to the planned relinquishing of control of the Trust during the year; the increase in property, plant and equipment which reflects mostly the revaluation of land and buildings at 31 December 2019; and the higher assets under

construction resulting from the increased activities and projects associated with the campus redevelopment plans.

Total liabilities remained in line with budget, with the unbudgeted \$5m increase in provisions for the obligation to AgResearch Limited to demolish the Burns building, plus the higher accrued employee retirement obligations largely due to lower prevailing interest rates, substantially offset by the reduction in the LWT loans in the year.

The higher equity at year end is substantially due to the unbudgeted higher earthquake claim settlement and the land and building revaluations during the financial year.

Cash Flow Statement

The net cash inflow from operating activities was higher than budget primarily due to the higher revenues and cost savings during the year compared to budget.

The net cash outflow from investing activities was lower than budget primarily due to the higher insurance recoveries during the year and the lower capital expenditures, offset by lower section sale receipts and increases in term deposits.

32. Impact of the Earthquakes

A number of significant earthquakes occurred from September 2010 to mid-2011, which caused substantial damage to the University's assets as summarised below.

Land

A number of geotechnical assessments of the University land were completed with necessary urgent repairs largely completed, and other repairs being undertaken as required.

Buildings

Several major buildings were severely damaged by the earthquakes, including the Hilgendorf complex, Union, Burns, Memorial Hall and part of the west wing of Ivey Hall. All these buildings were fully impaired. In 2015, the Hilgendorf building was demolished in preparation for campus rebuild initiatives. Further detailed engineering assessments undertaken during 2014 resulted in a number of additional buildings being impaired, which included George Forbes, Hudson Hall, Colombo Hall, Stevens Hall, and Lowrie Hall.

As part of the detailed revaluation undertaken at end 2019 by FordBaker, the impairment assessments and resulting provisions have been updated using engineers and quantity surveyors repair cost estimates inflated to December 2019 values.

Plant

Items of plant and equipment were not materially impacted by the earthquakes.

Impairment Provisions

The earthquake damage to the University buildings has required impairment provisioning based on engineering assessments of damage to buildings and repair estimates from quantity surveyors. The impairment provisioning is the best estimate based on the currently available information. Where earthquake repair cost estimates exceed the current building valuations, the buildings have been fully impaired. Where the repair cost is less than the current building valuation, the asset has been partially impaired. During 2018 the impairment provisions were reassessed and reduced to consider remediation and updated engineering assessments totalling \$6.25m.

As part of the detailed revaluation undertaken at end 2019 by FordBaker, the impairment assessments and resulting provisions have been updated using engineers and quantity surveyors' assessments and repair cost estimates inflated to December 2019 values, which continue to reflect earthquake remediation still to be undertaken. As a result, the total impairment provisioning was increased through Other Comprehensive Revenue and Expense in 2019 by \$4.5m, and in total, net of depreciation, other changes and demolitions in the year, reduced by \$1.3m.

The impairment provision for fully impaired assets is \$26.6m at 31 December 2019 (\$23.9m at 31 December 2018), and for partially impaired assets is \$26.2m at 31 December 2019 (\$27.2m at 31 December 2018). In total impairment provisions are \$52.8m at 31 December 2019, compared to \$54.1m at 31 December 2018.

Valuation of Buildings

The revaluation of buildings was carried out by FordBaker Valuation Ltd at 31 December 2019. The revaluation incorporated the assessment of the impairment provisioning required for earthquake damage to buildings. Loss of service potential is reflected in the provision for impairment. The revaluation has resulted in a decrease in useful remaining lives for some buildings (related to their compliance with current building and seismic standards) which, in turn, has increased the amount of depreciation to be charged.

The FordBaker revaluations at 31 December 2019 resulted in an increase of \$28.6m to the value of land and buildings, including the impact of impairment at that date. The next revaluation of the buildings is scheduled for 2022.

Insurance Proceeds

As disclosed in the Statement of Comprehensive Revenue and Expense, Lincoln University settled outstanding earthquake insurance claims with the insurers related to earthquakes which occurred in prior years. As a result, a \$45m insurance recoveries gain was recorded in year to 31 December 2018, with the claim receipt recorded in the year to 31 December 2019.

Accounting Policy

Insurance Proceeds

Insurance proceeds are recognised in the financial statements when received or when it is virtually certain that they will be received and can be reliably measured under the insurance contracts in place. All insurance proceeds are recognised in the surplus or deficit.

Treatment of Repair and Other Costs

All expenditure incurred relating to the costs of securing acceptable earthquake claims settlements, remediating the impact of the earthquakes and demolishing earthquake damaged buildings are recognised as abnormal expenses and separately disclosed in the Statement of Comprehensive Revenue and Expense. Any expenditure on repairing the damage caused by earthquakes, which results in an increase in the service potential of the assets, is capitalised to the relevant asset class.

33. Discontinued Entities

On 2 August 2017, the shareholders agreed to wind up Agri One Limited, a company jointly controlled with Massey University. Business operations of the company ceased in 2018 and the wind up was completed in 2019.

During 2019, the University agreed to wind up Lincoln Hospitality Limited (LHL). The operations of LHL during 2019 were limited to the provision of funding to and management of funds for Lincoln University's wholly owned subsidiary LU Property Joint Venture Limited. LHL had no assets or liabilities at 31 December 2019. The prior LHL accommodation, catering, recreation, conferencing and childcare activities which transferred to Lincoln University effective 1 January 2019 are excluded from the table below, as these operating activities are not discontinued.

During 2019, the partners agreed to wind up Lincoln University AgResearch Joint Facility Limited Partnership (LUAgR JF LP). The operations of LUAgR JF LP during 2019 were limited to wind up activities, including settlement of liabilities and realisation of assets of the company, and distribution of surplus funds to the shareholders. The company had no assets or liabilities at 31 December 2019.

In September 2019, the Lincoln University nominated trustees of the Lincoln Westoe Trust resigned, as a result of which the University no longer controlled the trust. At the 31 December 2019 balance date, the Group Statement of Financial Position included no assets or liabilities of the LWT.

The financial impact on Lincoln University of the discontinued entities is summarised below.

	Group		Par	ent
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
Operating surplus/(deficit) from discontinued entities				
Revenue	264	92	0	0
Less Operating expenses	290	15	0	0
Total Operating surplus/(deficit) from discontinued entities	(26)	77	0	0
Abnormal Loss from discontinued entities				
LUAgR JF Project Impairment	178	15,190	178	15,190
LWT loss on transfer of assets	31	0	0	0

34. Lincoln Westoe Trust assets transferred

At a meeting of the Trustees of the Lincoln Westoe Trust (LWT) on 1 September 2017, it was agreed that the assets, liabilities and operations of the LWT would be transferred to a new trust with similar objectives of the LWT, with no further investment, control or participation from Lincoln University.

Effective 20 September 2019, when the Lincoln University nominated trustees resigned from the LWT board, the LWT's assets, liabilities and operations were no longer under the control of Lincoln University. As a result, from that date LWT has no longer been consolidated into the Lincoln University Group Statements of Revenue and Expense and Financial Position.

LWT assets and liabilities consolidated in the Lincoln University Group Statement of Financial Position are as follows:

	Group		
LWT Assets and Liabilities to be transferred	2019 \$000	2018 \$000	
Land	0	7,311	
Buildings	0	661	
Asset under construction	0	52	
Total Trust assets	0	8,025	
Trust assets to be transferred	0	8,025	
Loans and borrowing associated with the Trust assets to be transferred	0	8,017	

35. LUAgR JF Project

Critical judgement in applying accounting policies

Management exercised its judgement in determining the carrying value of the University's investment in the Lincoln University AgResearch Joint Facility Limited Partnership (LUAgR JF LP). Accordingly, the investment was impaired to net realisable value as at 31 December 2018 and the impairment write down was reflected as an abnormal loss in the Group and Parent Comprehenive Statement of Revenue and Expense.

During 2018, the LUAgR JF LP commenced operations, which had as its primary purpose the design and build of the joint teaching, research and office facilities for the Lincoln University and AgResearch Limited. To 31 December 2018 Lincoln University had invested \$16,691,114 in the Limited Partnership for its 60.5% partnership contribution.

In January 2019, the LUAgR JF LP Board recommended and it was resolved to discontinue the design and build of the Joint Facility, primarily due to not securing Crown funding and approval for the project. As a result, the Limited Partnership commenced an orderly winding down, with the primary purpose of the LP refocused on academic and research collaboration.

As a result, Lincoln University's investment in the Limited Partnership was impaired to a net realisable value of \$1,511,914 at 31 December 2018, determined with reference to the active market and as reflected in the audited financial statements of the Limited Partnership for the period ended 31 December 2018.

In 2019, the partners agreed to wind up the Limited Partnership. As a result, during 2019 the LUAgR JF LP liabilities were settled in full, all assets were realised and surplus cash was distributed to shareholders in proportion to their shareholdings. Refer to Note 33 Discontinued Entities and Note 27 Jointly Controlled Entities.

	Group		Par	ent
	2019 \$000	2018 \$000	2019 \$000	2018 \$000
LUAgR JF LP Project costs and Investment Impairment			178	15,190
LUAgR JF Project Costs and impairment	178	15,190		
Total LUAgR JF Project Costs and impairment	178	15,190	178	15,190

Lincoln University's proportionate share of the loss for the year in the LUAgR JF LP financial statements to 31 December 2019 is set out below:

	LU Share	LU Share
	2019 \$000	2018 \$000
Employee benefit expenses	199	546
Depreciation expense	17	39
(Reversal) of Impairment of property, plant and equipment	(257)	13,263
Write-down of inventory to net realisable value	0	467
Other expenses	219	876
Total LU share of LUAgR JF LP loss	178	15,190

Statement of Cost of Outputs

The University's activities contribute to four broad classes of outputs. These outputs are Teaching and Learning, Research, Commercial, and Other Partnerships, Collaboration and Community.

The following table outlines the direct cost (excluding GST) of providing these outputs.

	University			
	2019 \$000	2018 \$000		
Teaching and Learning	55,938	48,727		
Research	33,130	31,227		
Commercial	8,164	6,903		
Other Partnerships, Collaboration and Community	9,880	8,598		
Total Cost of Outputs	107,112	95,455		

Compulsory Student Services Fees

Compulsory Student Services Fees For the Year Ended 31 December 2019	Advocacy and Legal \$000	Careers Information \$000	Financial Support \$000	Counselling \$000	Childcare Support \$000	Health Services \$000	Media \$000	Clubs & Societies \$000	Sport & Recreational Facilities \$000	Total \$000
Revenue										
Compulsory	201	71	24	21	0	381	88	71	838	1,694
Student										
Services Fees										
Other income	0	0	0	0	1,150	534	0	0	716	2,400
Total income	201	71	24	21	1,150	915	88	71	1,554	4,094
Expenses										
Expenditure	128	98	33	58	1,073	964	77	84	1,852	4,368
Surplus/ (deficit)	73	(27)	(10)	(36)	77	(50)	11	(13)	(298)	(274)

All income and expenditure associated with the provision of student services is separately accounted for in the University's accounting system.

For the year ended 31 December 2019:

The compulsory student services fee was set at \$720 (GST inclusive) per full-time student in 2019.

The fee funds key services for students to assist their success, retention and overall well-being while studying at Lincoln, and through further delivery arrangements nationwide.

All students except exchange students must pay the fee and can borrow the amount against their student loan.

Following the introduction of voluntary student unionism and the establishment of the Student Services Fees, Lincoln University and the Lincoln University Student Association (LUSA) entered into a collaborative partnership signing a Service Level Agreement in December 2013.

This agreement was renewed in December 2016 for the period 2017 to 2021. The Service Level Agreement outlines the delivery and performance of student services to ensure the services are meeting the requirements of students as described below.

Other income comprises fees and charges for childcare, healthcare and sports and recreation services and facilities recovered from other users and members.

Advocacy and legal advice

Advocating on behalf of individual students and groups of students and providing independent support to resolve problems. This includes advocacy and legal advice relating to accommodation.

Careers information, advice and guidance

Supporting students' transition into post-study employment. Including providing information about employment opportunities for students while they are studying.

Financial support and advice

Providing hardship assistance and advice to students.

Counselling

Providing counselling services to students.

Childcare services

Providing affordable childcare services whilst parents are studying.

Health services

Providing health care and related welfare services.

Media

Supporting the production and dissemination of information by students to students, including newspapers, radio, television and internet based media.

Clubs and Societies

Supporting student clubs and societies, including the provision of administrative support and facilities for clubs and societies.

Sports, recreation and cultural activities

Providing sports, recreation and cultural activities for students.

Future Leader Bryleigh Collins shows visitors around Lincoln University's Halls accommodation on Open Day.





Independent Auditor's Report

To the readers of Lincoln University and group's financial statements and statement of service performance for the year ended 31 December 2019

The Auditor-General is the auditor of Lincoln University (the University) and group. The Auditor-General has appointed me, Julian Tan, using the staff and resources of Audit New Zealand, to carry out the audit of the financial statements and statement of service performance of the University and group on his behalf.

Opinion

We have audited:

- the financial statements of the University and group on pages 68 to 113, that comprise the statement of financial position as at 31 December 2019, the statement of comprehensive revenue and expense, statement of changes in equity and statement of cash flows for the year ended on that date and the notes to the financial statements that include accounting policies and other explanatory information; and
- the statement of service performance of the University and group on pages 49 to 61 and 114.

In our opinion:

- the financial statements of the University and group on pages 68 to 113:
 - present fairly, in all material respects:
 - the financial position as at 31 December 2019; and
 - the financial performance and cash flows for the year then ended; and
 - comply with generally accepted accounting practice in New Zealand in accordance with Public Benefit Entity Reporting Standards.
- the statement of service performance on pages 49 to 61 and 114:
 - presents fairly, in all material respects, the University and group's service performance achievements as compared with

the forecast outcomes included in the investment plan for the year ended 31 December 2019; and

- complies with generally accepted accounting practice in New Zealand.

Our audit was completed on 28 April 2020. This is the date at which our opinion is expressed.

The basis for our opinion is explained below, and we draw your attention to the possible effects of the COVID-19 pandemic on the University and group. In addition, we outline the responsibilities of the Council and our responsibilities relating to the financial statements and the statement of service performance, we comment on other information, and we explain our independence.

Emphasis of matter - COVID-19 pandemic

Without modifying our opinion, we draw your attention to the disclosures in note 29 on page 109, which outline the possible effects to the University and group as a result of the COVID-19 pandemic. It is difficult to determine the full effect of it on the University and group at this time.

Basis for our opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Council for the financial statements and the statement of service performance

The Council is responsible on behalf of the University and group for preparing financial statements that are fairly presented and that comply with generally accepted accounting practice in New Zealand.

The Council is also responsible on behalf of the University and group for preparing a statement of service performance that is fairly presented.

The Council is responsible for such internal control as it determines is necessary to enable it to prepare financial statements and a statement of service performance that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements and the statement of service performance, the Council is responsible on behalf of the University and group for assessing the University and group's ability to continue as a going concern. The Council is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless the Council intends to liquidate the University and group or to cease operations, or has no realistic alternative but to do so.

The Council's responsibilities arise from the Crown Entities Act 2004 and the Education Act 1989.

Responsibilities of the auditor for the audit of the financial statements and the statement of service performance

Our objectives are to obtain reasonable assurance about whether the financial statements and the statement of service performance, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers taken on the basis of these financial statements and statement of service performance.

For the budget information reported in the financial statements and the statement of service performance, our procedures were limited to checking that the information agreed to the University and group's Council approved budget for the financial statements, the investment plan for the statement of service performance.

We did not evaluate the security and controls over the electronic publication of the financial statements and the statement of service performance.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements and the statement of service performance. whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University and group's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Council.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Council

and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the University and group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements and the statement of service performance or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the University and group to cease to continue as a going concern.

- We evaluate the overall presentation, structure and content of the financial statements and the statement of service performance, including the disclosures, and whether the financial statements and the statement of service performance represent the underlying transactions and events in a manner that achieves fair presentation.
- We obtain sufficient appropriate audit evidence regarding the financial statements and the statement of service performance of the entities or business activities within the group to express an opinion on the consolidated financial statements and the consolidated statement of service performance. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Council regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

Other information

The Council is responsible for the other information. The other information comprises the information included on pages 1 to 48, 62 to 67, 115 and 118 to 120 but does not include the financial statements and the statement of service performance, and our auditor's report thereon. Our opinion on the financial statements and the statement of service performance does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

In connection with our audit of the financial statements and the statement of service performance, our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the financial statements and the statement of service performance or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Independence

We are independent of the University and group in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1: International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board.

In addition to the audit, we have completed an assurance engagement reporting on the University and group's annual return on performance-based research fund external research income.

Other than the audit and this engagement, we have no relationship with or interests in the University or any of its subsidiaries.

Lian Tan

Julian Tan Audit New Zealand On behalf of the Auditor General Christchurch, New Zealand

Quick Reference Facts and Figures

	2019	2018	2017	2016	2015
Lincoln University Enrolled Students (Head Count)	3,305	3,181	3,107	3,115	2,943
Telford Enrolled Students (Head Count)	0	0	1,460	3,164	2,876
Total Enrolled Students (Head Count) *	3,305	3,181	4,567	6,279	5,819
PhD Degrees	311	347	329	312	278
Master's Degrees	522	383	330	295	231
Bachelor with Honours	38	44	56	56	54
Postgraduate Diplomas and Certificates	102	78	64	78	71
Graduate Diplomas and Certificates	124	96	89	84	68
Bachelor Degrees	1,474	1,519	1,577	1,570	1,524
Diplomas	397	381	369	383	369
Certificates	37	54	703	1374	1595
Certificate of Proficiency Undergrad and Postgraduate	150	154	296	771	533
Certificate of Proficiency - Certificate Level	0	0	110	586	358
English Language Programmes	327	299	234	256	216
STAR	0	0	570	808	763
Full Time	2,022	1,973	1,984	2,055	1,904
Part Time	1,283	1,208	2,583	4,224	3,915
Male	1,608	1,548	2,312	3,526	3,144
Female	1,695	1,632	2,255	2,753	2,675
Diverse	2	1			
Domestic head count - Lincoln University	1,713	1,812	1,860	1,908	1,842
Domestic head count - Telford	0	0	1,459	3,161	2,876
International head count - Lincoln University	1,592	1,369	1,247	1,207	1,101
International head count - Telford	0	0	1	3	0
Current Top 10 Countries					
China	705	631	561	530	506
India	261	155	88	60	36
Japan	115	113	76	100	98
United States	58	62	78	89	97
Malaysia	39	34	17	41	43
Indonesia	33	33	32	25	19
Viet Nam	32	28	37	38	28
Thailand	28	20	18	19	13
Papua New Guinea	16	19	27	16	14
Pakistan	14	16	15	18	18
Rest of the World	293	274	292	288	249

* Total enrolled student headcount includes each student once, although a student could be counted under each category in the campus breakdown due to enrolments at each institution.

Equivalent Full Time Students - EFTS	2019	2018	2017	2016	2015
Domestic – Lincoln University	1,475	1,557	1,602	1,618	1,547
Domestic - Telford	0	0	219	668	640
International – Non SAC Funded	963	713	646	591	565
International – SAC Funded	195	241	227	220	182
Total	2,633	2,511	2,695	3,097	2,934
Qualification Completions					
Postgraduate	334	290	263	203	208
Undergraduate	481	481	418	403	439
Sub-Degree (Combined LU & Telford)	174	202	560	564	555
Research Degree Completions					
Research Degree Completions	83	80	84	73	71
External Research Revenue (\$000)	\$31,877	\$31,275	\$30,236	\$28,829	\$24,703
Staffing (Full-time Equivalents)					
All Staff	666.7	663.2	691.7	673.5	722.3
Academic Staff	195.3	188.0	200.4	214.9	235.7
Research and Technical Staff	126.2	135.5	131.9	138.9	146.8
Trading and Operational Staff	71.0	65.8	72.3	59.7	43.5
Administrative and Support Staff	274.2	273.9	287.1	260.0	296.3
Financial Performance and Position	\$000	\$000	\$000	\$000	\$000
Group Revenue	\$126,876	\$118,610	\$116,386	\$123,332	\$111,145
Group Expenditure	\$119,508	\$114,496	\$109,324	\$122,839	\$118,133
Group Operating Surplus/(Deficit)	\$7,368	\$4,114	\$7,062	\$493	(\$6,988)
Group Total Assets	\$343,031	\$314,115	274,882	288,400	259,856
Group Total Liabilities	\$49,587	\$49,322	45,363	50,230	47,735
Group Equity/Net Assets	\$293,444	\$264,793	229,519	238,170	212,121
Group Financial Ratios					
- EBITDA as % Revenue EBITDA/Revenue (excl. Insurance Revenue) %	11.4%	9.0%	13.6%	4.0%	-0.3%
- Operating Surplus (Deficit) as % Revenue					

- Operating Surplus (Deficit) as % Revenue Operating Surplus (Deficit)/Revenue (excl. Insurance Revenue) %	5.8%	3.5%	6.1%	0.4%	-6.3%
- Cash Cover Cash/Total Operating Cash Inflows %	60.6%	25.5%	29.7%	35.4%	27.4%
- Asset Productivity Revenue (excl. Insurance Revenue)/Property, Plant & Equipment %	64.7%	69.5%	66.4%	65.7%	64.8%
- Return on Total Assets Operating Surplus (Deficit)/Total Assets %	2.1%	1.3%	2.6%	0.2%	-2.7%

Becxs Bush was one of the students who featured in our 2019 recruitment campaign, her image appearing in advertisements and in social media. Their reasons for choosing Lincoln, and why they enjoy studying here, were central to the campaign.



BECXS IS CHAMPIONING ANIMAL WELFARE AND HERSELF AS A FORWARD THINKER. INCOLN. GROWING THE FUTURE



Apply now

Lincoln Grow Manifesto

Potential is a seed.

Its fruition depends on the ground in which it's placed.

And the effort and care with which it's nurtured.

At Lincoln, we champion growth in all its forms.

Intellectual. Emotional. Physical.

Personal and individual, collective and societal.

We believe that character is grown through effort and perseverance.

- Relationships through collaboration and respect.
- That often, our own well-being grows best when we seek to grow others.
- We enable growth by passing on knowledge and concepts.

By adding to the pool of existing knowledge through a steadfast commitment to research.

- By allowing each student to grow their own way by tailoring their learning to their ambitions.
- By partnering with industry to prepare our students for the challenges of the real world.
- And when the time comes, sending them out.

Ready to enhance lives.

Enrich the world.

And grow the future.

Lincoln University. Grow.







Find out more at www.lincoln.ac.nz