

Lincoln University Transformation Board Report

Advice and recommendations to
the Lincoln University Council to
inform its decisions regarding
the Transformation Programme

31 October 2017

Lincoln University
Transformation Board Report

Eke panuku,
eke Takaroa

Achieve greatness, overcome all
obstacles and strive for excellence

Table of Contents

Foreword	2
Executive Summary	4
Introduction	6
1. Background	6
2. Recent challenges have been significant	7
3. Change is underway	8
The case for change and the opportunity	11
4. Lincoln is underperforming	11
5. Setting a new direction	14
Designing the future - What could Lincoln University's contribution be?	18
6. Understanding what a globally leading agri-university might look like	18
7. The forward path	21
Recommendations	24
Next Steps	33
Appendix	
Appendix 1: Transformation Board Terms of Reference	34
Appendix 2: Transformation Board Members	37
Appendix 3: List of Organisations and Individuals Consulted	39
Appendix 4: Summary of Findings from Stakeholder Engagement	40
Appendix 5: Summary of Options in the EY Report	42
Appendix 6: Information Sources	43
Appendix 7: Overview of Productivity Commission Report	44
Appendix 8: List of some of the University's prestigious alumni	46

Foreword

Lincoln University has been through some well-publicised issues over the past few years. These have had a detrimental effect on the overall performance of the University, both financially and academically, and have weakened its standing.

Since 2015, a number of steps have been taken by the University itself, supported by external parties, to address issues of financial health and institutional strength. Establishing the Transformation Board has been part of that process.

In the course of its work, the Transformation Board has found significant goodwill for the University in the primary industries, the tertiary education sector, and amongst alumni and other stakeholders. There was strong support for Lincoln University to grow and succeed so that it could assist in further transforming the land-based sectors domestically and more widely.

The evolution of the Transformation Board began in July 2016 when EY reported back on the future strategic options for Lincoln University. This EY Report provided the platform for the Council to establish a Transformation Board to provide advice and recommendations to the Council on how Lincoln University could be strengthened, so as to best position the University to achieve its vision.

The University has been fortunate to have secured the support, judgement and experience of the members of the Transformation Board to undertake this assignment. Only one of us is an alumnus. I extend to all members of the Board my warm thanks for their participation and contribution, and the constructive manner in which they have approached the assignment.

In particular, the work of the Board has benefited significantly by having both the Chair and Chief Executive of the Tertiary Education Commission as members, alongside the Chancellor and Vice-Chancellor of the University. The open and collaborative approach to considering how the University's future could best be assured has been a feature of our discussions. The commitment of these members has been significant.

Three international advisory panel members also agreed to assist the Transformation Board in its deliberations. I am grateful too for their contributions. Their wealth of experience provided us with an invaluable understanding of globally successful universities.

The Board held its first meeting in March and agreed on the Terms of Reference, in consultation with the Council. It was agreed that the role of the Board would be to provide advice and recommendations to the Council to inform its future decisions on transformation. The Terms of Reference specifically state that ownership of decisions and strategy remain with the Council. The role of the Transformation Board is therefore to act in an advisory capacity. This report sets out the Board's advice to Council, as requested.

In undertaking its work, the Board assessed the University's current state and strategic direction to determine whether it remained fit for purpose, especially in relation to a re-defined value proposition for its stakeholders.

The Board then moved specifically to engage with industry leaders, academics, students and other key stakeholders to understand their views about Lincoln University and its future. It was important to the Board that their voice was heard on what they thought needed to change for the University to be

successful in the long-term. We understand that the University had not undertaken a comprehensive stakeholder engagement exercise like this. We also invited a number of groups to present to the Board.

Later meetings focused on what the University would need to do to achieve the refreshed vision we are proposing, which is that Lincoln University should aspire to become a globally-ranked top five agriculture university and a top five New Zealand university.

The key finding of this report is that the future can be optimistic for Lincoln University. In order to achieve that improved future state, a number of significant decisions will be required, and the Council and University management and staff will need to exercise much stronger governance and leadership. The task of transformation is not one that will be achieved easily or quickly. It will be a journey of ten or twenty years. Numerous challenges will need to be overcome. Those challenges should be seen as an opportunity to refresh not just the quality and nature of academic offerings but also the current institutional arrangements.

The Transformation Board recognises that Lincoln University is not the only New Zealand university currently having to reconsider its way of working. Tertiary education models, practices and preferences are changing domestically and all over the world. Retaining the status quo at Lincoln University is not an option, either for the University or for New Zealand. Audacity is required to implement successful change and seize the opportunities available.

In September 2015, an editorial in The Press stated that “if Lincoln University is having difficulties, it needs to front up, admit them and be more transparent about what is going on”. A further June 2017 editorial stated that “something needs to change at Lincoln University”. The Transformation Board recognises these external expectations about Lincoln University and the desire to see the University set itself on a firmer path going forward. The Board also acknowledges, and welcomes, the steps the University has already taken to set in train a process of positive, sustainable change.

We commend this report and its recommendations to the Council as a contribution to securing a better future for Lincoln University.



Sir Maarten Wevers KNZM

Chair

Transformation Board

Executive Summary

The Transformation Board believes that Lincoln University should aspire to become a globally-ranked, top five agri-focused university and top five New Zealand university. In order to achieve that goal, a sustained effort will be required from the Council, University management and staff. Support from a range of external parties and partners will be essential. The responsibility will lie with Lincoln University itself to identify potential partners, and establish and support the necessary relationships and partnerships for success. Good governance and decision-making will be critical in all aspects of the University's activities, along with effective monitoring of performance.

The Board has developed five strategic themes, encompassing 35 recommendations that we believe, if adopted, will set Lincoln University on a path to achieving this aspiration and enable the University to meet the future demands of students, staff, stakeholders, and New Zealand. These themes are:

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

The detailed recommendations supporting these themes are discussed in the *Recommendations* section of this report.

The Transformation Board recognises the progress that has been made over the last 12 months by the University in addressing a number of areas in which it was performing poorly. It is apparent that previous feedback from Ministers and the Tertiary Education Commission (TEC) has been taken on board and necessary change is being implemented, including through exercising greater rigour in University finances. With recent, significant funding being approved by the Crown for the Lincoln University and AgResearch joint research facility, the University now has a new strategic opportunity to demonstrate its "value-add" to the primary and tertiary sectors, as well as wider New Zealand.

There remain a number of hurdles for the University to overcome, however, before it gets to the point where the Board would consider that it can be a successful University long-term, domestically and internationally. These include overcoming its small scale, substantially growing student numbers, developing a viable long-term strategy, and strengthening current weak relationships with key stakeholders and other organisations.

This last point is key as the Board consider that strengthening existing and developing new partnerships and collaboration with other institutions (not limited to just universities) is critical for Lincoln University

to be successful. The Board's preference is for the University to develop an operating model that allows for greater integration and flexibility around funding, along the lines of the Wageningen University and Research (WUR) model.

If the Council accepts the broad vision, themes and recommendations proposed by the Transformation Board, the challenge will be to ensure that an effective execution strategy is also developed and adopted, which is then appropriately governed, led and monitored. Capability and clear accountabilities will be critical factors in achieving success. To this end, the Council should consider whether its current governance structures are fit for purpose going forward.

This report is set out in the following sections:

1. Introduction
2. The Case for Change and the Opportunity
3. Designing the Future - What Could Lincoln University's Contribution Be?
4. Recommendations
5. Next Steps

The *Introduction* provides a brief background on the history of Lincoln University and its recent challenges. It also outlines the progress that the University has made to date as part of its overall Transformation Programme. The *Case for Change and the Opportunity* section outlines in more detail the areas in which the University is still underperforming and explains why the Board recommends a clear vision to be established to inform the University's strategy. This section also provides a summary of the key findings from the stakeholder feedback that the Board received.

In the section, *Designing the Future - What Could Lincoln University's Contribution Be?*, the report covers the characteristics that make global agriculture-focused universities successful and the actions Lincoln University will need to take to become one of the world's leading agricultural universities. It also provides more detail on the Board's reasoning behind recommending that Lincoln University strive to become a strong, specialist university concentrating on the land, food and ecosystems domains.

The *Recommendations* section provides the detail that supports the five strategic themes as identified by the Board. Within the *Next Steps* section, the Board outlines why it is important that an implementation plan is put in place as soon as possible, once the Council has determined how it wishes to take forward - or not - the Board's recommendations.

The background of the members of the Transformation Board and the work that it carried out is included in the following annexes:

- The Board's Terms of Reference;
- Profiles of each Board Member;
- List of organisations and individuals consulted;
- The process followed in collating stakeholder feedback and key findings;
- The information sources the Board used in its deliberations;
- The summary of the strategic options contained in the EY Report;
- A summary of the Productivity Commission Report - *New models of tertiary education*;
- List of some of Lincoln University's prestigious alumni.

The findings and recommendations of this report are based on the work the Transformation Board carried out between March and October 2017. The initial findings of the report were presented to the University Council at its meeting on 26 September 2017 and the report was finalised in October.

Introduction

1. Background

Lincoln University was the Southern Hemisphere's first dedicated agricultural college when it was established as a School of Agriculture in 1878. From 1896 to 1961, it offered qualifications through the University of New Zealand as the Canterbury Agricultural College.

With the dissolution of the single, over-arching body known as the University of New Zealand in 1961, Lincoln became a constituent college of the University of Canterbury between 1961 to 1990, and was renamed Lincoln College in 1962.

Lincoln ceased to be a college of the University of Canterbury in 1990, whereupon it became an independent, autonomous university. A significant report in 1987 by the 'Watts Committee' (a group of respected international authorities on university education) had concluded that in any restructuring of the university system, the time was right for Lincoln College to become an autonomous university, free from the University of Canterbury.

This view was supported by the Principal of Lincoln College who argued that the specialised land-based agricultural and horticultural nature of Lincoln College's teaching and research, and its intimate connection with New Zealand's land-based economy, were too valuable to the country as a whole to risk being subsumed by a multi-faculty institution such as the University of Canterbury.

In February 1989, the Deputy Prime Minister of New Zealand, Geoffrey Palmer, announced: *"The Government intends, from 1990, to recognise Lincoln as an autonomous but specialised university in its own right. It is a change richly deserved and will allow Lincoln to pursue its own destiny."*

Lincoln University is currently one of eight New Zealand universities and remains New Zealand's smallest university in terms of student numbers. Based on current student enrolments, it is also smaller than almost all of the Institutes of Technology and Polytechnics throughout the country.

The University's current vision is to be a financially sustainable, world-class education and research institution, focused on the needs of land-based sectors, and fit for purpose for students, employers, New Zealand society and NZ Inc. Regrettably, this vision is not currently being achieved. This state of affairs is the principal reason for the establishment of the Transformation Board by the University Council and the preparation of this report.

The University currently employs 598 full-time equivalent (FTE) staff and has 2649¹ equivalent full time students (EFTS). Academic staff are organised into three faculties and one division; the Faculty of Agriculture and Life Sciences, the Faculty of Agribusiness and Commerce, the Faculty of Environment, Society and Design, and the University Studies and English Language Division. There are three centres with advisory boards: Bio-Protection Research Centre, Agribusiness and Economics Research Unit, and South Island Dairying Development Centre.

¹Number of EFTS as at 1 October 2017.

As at 31 December 2016, total revenue was \$118 million with education and training representing 43% of total revenue, and research and development representing a further 33%. The largest source of research-related revenue was \$10.7 million from the TEC Performance-Based Research Fund. These numbers indicated how far the University has to go to achieve impacts at scale.

In June 2017, the Government approved funding for a new \$206 million facility for research, teaching and learning, jointly owned by Lincoln University and AgResearch. This significant taxpayer commitment offers the University a unique opportunity to drive new forms and levels of research, collaboration and innovation based on campus, through different ways of working between a University and a Crown Research Institute. The goal is to improve research and learning outcomes, and thereby further drive innovation and economic growth for New Zealand.

2. Recent challenges have been significant

The University has faced a number of challenges over the last decade and its resulting performance has fallen off the pace. It is still trying to play catch-up to address a number of historical issues. Governance and leadership of the university has not been as effective as it should have been over this time.

Current strengths and weakness of the University

When compared with other New Zealand universities, Lincoln University is relatively strong in doctoral studies, management /commerce and agriculture subjects, and in producing good employment outcomes for graduates. The University attracts relatively more students from its own region (i.e. Canterbury) and has high student retention and completion rates. On the other side of the ledger, the University has outdated infrastructure (including accommodation), a siloed academic structure, inflexible programmes, lack of critical mass in many areas of endeavour, and poor technology infrastructure and services for both students and staff. The issue of the University's scale has also made it difficult for it to be competitive against larger institutions.

In addition to these internal issues, there were also external developments that impacted negatively on Lincoln University in the period 2007-2015. These included the global financial crisis of 2007-2008, and the Canterbury earthquakes of 2010 and 2011, which caused major damage to infrastructure and severely disrupted the provision of services. There was also an unsuccessful merger with Telford Rural Polytechnic in 2011. Over this time, enrolments fell, financial deficits increased and there was increasing speculation of a potential merger with another entity.

Arguably, the University was not well-placed at the onset of these external shocks, and did not respond adequately to the changed circumstances that arose during this time. Change processes that could have been implemented include: adopting new technology to support teaching and learning, instilling service quality approaches in all academic and administrative areas and improving use of IT systems to reduce overheads.

In 2015, the University reported an operating deficit of \$6.99 million. This resulted in the University, in collaboration with the TEC, commissioning a Strategic Options Assessment from EY to help inform the decision-making process on the strategic direction of the University.

Lincoln University Strategic Options Assessment – 21 July 2016 (EY Report)

This report for the TEC and Lincoln University identified and assessed strategic options that maintained or enhanced the educational and economic outcomes for the land-based sector within a normalised education funding approach. Four strategic options: Current Trajectory, Enhanced Current Trajectory, Merger, and University Wind Down (along with a “Do Nothing option”), were developed and assessed. The analysis and recommendations in the EY Report were considered and assessed by the Transformation Board. Whilst there was much useful data and interpretation in the EY Report, the Board assessed that the merger and wind-down options would neither permit achievement of the University’s current vision nor of the proposed revised vision recommended by the Board in this report.

3. Change is underway

The EY Report prompted the University Council and management to address in a much more active manner a number of the historical issues that had become apparent and have been highlighted. These included the University’s finances and culture. The University accepted the fundamental EY assessment that significant change was required to secure the long-term viability of the institution so it could make an appropriate contribution to the tertiary sector, the primary industries, and ultimately New Zealand’s society and economy.

In 2016, the Council appointed a new Vice-Chancellor. A transformation programme, *Refreshing Lincoln*, was then established to begin to address historical issues. Within this programme, the two major workstreams are:

- A fitness workstream – to improve organisational culture and performance;
- A transformation workstream – to explore strategic options and opportunities to build economies of scale and scope through partnerships with other entities.

New Models of Tertiary Education Report

Lincoln University is not alone in having to reassess how it responds and adapts to the challenges of the modern tertiary education sector. All universities in New Zealand are being required to seek improvements in performance and find ways of becoming much more innovative in teaching and research method and practice. In 2016, the Government asked the Productivity Commission to carry out an inquiry into “new models of tertiary education”.

The inquiry adopted a whole-of-system perspective, with consideration of how future trends (such as technology) may drive changes in business and delivery models in the tertiary sector.

The Productivity Commission recommended better quality control and self-accreditation for strong performers; making it easier for students to transfer between courses; abolishing University Entrance; better careers education for young people; enabling tertiary institutions to own and control their assets; making it easier for new providers to enter the system; and facilitating more and faster innovation by tertiary education providers.

At the time of preparation of this report, the Government’s response to the Productivity Commission’s recommendations had not been revealed.

To support achievement of the objectives of these workstreams, a number of initiatives were initiated during the last quarter of 2016. These included:

- Re-invigorating the Academic Board;
- Making academic units more accountable for their performance;
- Requiring more robust operational planning and performance improvement;
- Improving financial management and asset optimisation;
- Establishing a Transformation Board, supported by a programme manager; and
- Undertaking an options analysis for divesting Telford.

As a result of these changes, the University achieved an operating surplus of \$493k in 2016, its first surplus in a decade. It remains to be seen how sustainable this improved financial performance will be. Enrolments remain lower than desirable, and the University is not well placed to withstand another external shock. The Telford campus has been divested to the Taratahi Agricultural Training Centre and a number of other ventures have been wound up.

Work is continuing on making the academic units more accountable for their performance and the optimisation of assets is advancing. The Transformation Board recognises that whilst progress has been made in a number of areas, there is a long way to go before the University is in a robust financial position. Further initiatives will be required. It will be important to maintain the momentum of change. The University should have a goal to consistently maintain profitability and to exceed TEC’s financial performance benchmarks, especially those relating to utilisation of assets.

The Lincoln Hub and Joint Research Facility

Lincoln Hub is an innovation network and physical precinct that is committed to finding better ways of doing things in the agricultural sector. It plays a key role in connecting the agrifood and technology industry with science to enable industry-driven innovation. The Hub has an important role to enable the development of capability and skills required in the sector for the future competitiveness of New Zealand, its shareholders and industry. The Lincoln Hub has five Founding Partners: AgResearch, DairyNZ, Landcare Research, Lincoln University, and Plant and Food Research.

As part of creating a vibrant precinct, a jointly-owned Lincoln University-AgResearch research and teaching facility, encompassing 27,000 square metres, will be built on the University's campus to support 900 researchers.

Having a world-class education and research facility on campus will present the University with an array of new opportunities and a different way of working. It will also give the University a chance to be one vibrant, world-class institution that has a strong reputation for delivering on its niche by increasing the quality and calibre of its research and graduates. The open organisational architecture in which the University students will be taught and supervised will encourage openness and collaboration, while making it more attractive for potential future staff and students.

The Transformation Board found during its deliberations that there was significant support from industry leaders and other key stakeholders for the Lincoln Hub. No one disagreed with its vision and the benefits that it is seeking to achieve. However, stakeholders wanted to see tangible progress being made as soon as possible, with the Hub clearly able to demonstrate its value-add to the agricultural sector. While this will be challenging, having a model based on greater collaboration and partnerships should help to drive an agrifood and technology innovation ecosystem that grows innovation in the agrifood sector.

The specific challenge for Lincoln University, as part of its transformation, will be to ensure it can demonstrate that new ways of working with other organisations like AgResearch will result in other tertiary and research institutes wanting to partner with the University. To this end, it will be crucial that the new operating model being developed for the Joint Facility is based on an integrated approach that can be effectively implemented to encourage different ways of working within the University

The case for change and the opportunity

4. Lincoln is underperforming

By most metrics, Lincoln University is not delivering on its potential. It remains small scale, has a poor sense of strategy, and has weak relationships with key stakeholders and entities who should or could be partners. The teaching offering and delivery is in need of an overhaul, along with the focus of research activities, so that the University can make a more significant contribution to learning, and to community and national wellbeing.

In the course of its consideration of the EY Review, the Productivity Commission Report, and the Tertiary Education Strategy, the Transformation Board concluded that there was a compelling case for Lincoln University to lift its game on behalf of taxpayers and key clients and stakeholders. We fully believe that this is possible. It is certainly desirable. Such an improvement should probably be considered an obligation on the University given its history, and its area of specialisation in a domain of ongoing critical importance to the nation's future.

The Tertiary Education Strategy

The Tertiary Education Strategy 2014–2019 sets out the Government's long-term strategic direction for tertiary education and how a high-performing tertiary education system can contribute to improved outcomes for individuals and society as a whole. The strategy focuses on ensuring New Zealand has an outward-facing and engaged tertiary education system, with strong links to industry, community and the global economy.

The strategy has six priorities:

1. Delivering skills for industry
2. Getting at-risk young people into a career
3. Boosting achievement of Māori and Pasifika
4. Improving adult literacy and numeracy
5. Strengthening research-based institutions
6. Growing international linkages

A focus of the Transformation Board has been to ensure that the University is contributing strongly on the Tertiary Education Strategy and improving outcomes for individuals and society as a whole. The recommendations in this report will help to strengthen the University contribution to the Strategy's six priorities.

The Board believes there will be significant opportunities for the University, the Canterbury region, the South Island and New Zealand if Lincoln University defines a clearer purpose and offering, and delivers on that in an exemplary manner. It will be no simple task, and will take years to achieve in full. But it is a mission that the Board is proposing to the Council.

Undoubtedly, the University's successes to date have their roots attached firmly to the original focus on land and agriculture. Over the last century, the University has provided a widening offering of education and training, principally in land-based disciplines, allowing students to graduate with skill sets essential to the primary sector and future employers. Data from the TEC shows that Lincoln University has high rates of employment for those who complete a Bachelor's degree. Postgraduate students are also sought after.

The challenge now is to ensure that the University has a clear understanding of the contemporary and possible future needs of its clients and customers, including potential employers of its graduates, and users of its research. Agriculture and the primary sector, broadly defined, remain critical sectors of economic, scientific, environmental and social endeavour domestically, and globally. For New Zealand, our ability to keep abreast of and capture the opportunities that this sector undoubtedly offers will determine our success as a nation. Lincoln University is, in the view of the Transformation Board, not only well placed to contribute substantially in this field, but has the potential to become one of the leading global universities in this domain. Critical to achieving this goal will be good governance, leadership, courage, productive relationships and investment.

The University already has in place a number of respected research programmes, and some gifted teachers and renowned researchers. But too few. Good levels of net research income per academic FTE provide a useful base from which to grow the research contribution further, especially through collaboration with the new Lincoln Hub partners. A strategic long-term view of research priorities is required alongside a search for additional partners with whom substantive and productive collaboration might be possible.

The University has traditionally been known for its Bachelor's degrees in Agriculture, Agriculture Science and Commerce (Agriculture). While these disciplines should remain a focus, the value of the University to the tertiary sector and the New Zealand economy is much wider than agriculture. Established programmes in Landscape Architecture, Viticulture and Oenology, and Environmental Management are offered, as well as Tourism Management, and Sport and Recreation Management. Exactly what the University's future teaching offering should be, going forward, is something that deserves attention. New disciplines and degrees should be considered, and some current courses reevaluated and perhaps discontinued or simplified.

The Importance of Agrifood to New Zealand

The Oxford Dictionary defines agrifood as relating to the commercial production of food by farming. It is also a common collective name in New Zealand to describe dairy, meat and wool, forestry, horticulture, and seafood as one group. The term agrifood in this report refers to the broader domains of Lincoln University's specialist land-based areas, encompassing agribusiness and commerce, agriculture and life sciences, and environment, society and design.

It can be difficult quantifying exactly the total value globally of the agrifood sector. However, recent estimates put the value of the agrifood industry at \$7.8 trillion. The agrifood sector contributed \$992 billion to US GDP alone in 2015. According to the United Nations, the number of workers in this sector reached over one billion in 2009 and recent data from the US Department of Agriculture and Purdue University shows that there will be high demand for the foreseeable future for college graduates with a degree in agricultural programmes.

Regionally, the value of the agrifood sector in New Zealand is very high, with one in five New Zealanders employed in this industry, and according to the Agribusiness and Economic Research Unit Report *The Land and the Brand* for every \$5 of value created in the New Zealand economy each year, just under \$1 is due directly or indirectly to the agrifood industry. Of total goods exported in the 2016 calendar year, more than \$29 billion (60%) were agrifood, up from 57% in 2015.

Over the last century, the agrifood sector has long been seen as an area of strategic long-term competitiveness for New Zealand and a point of difference from other countries that compete for a share of the global market. New Zealand has a strong international reputation in this sector, with a marketing focus on portraying a clean and green image and has a well-established export market and investment linkages with the key players in the global agrifood industry. It has also developed strong brand reputation and a diverse industry base through companies like Fonterra and Zespri and the Crown. This has been coupled with a strong research and development focus and a continual drive by Governments for more innovation out of the sector.

As global demand for agrifood commodities will continue to increase for the foreseeable future, there remains considerable opportunity for New Zealand to maximise and grow its contribution to the global agrifood sector. In its Report, the Agribusiness and Economics Research Unit outlines six aspects that it considers would facilitate the agrifood sector's continued growth:

- Strong industry leadership;
- Private-public partnerships;
- Effective science and innovation systems;
- Market awareness;
- Responsive skills development ecosystems; and
- Cooperative investment to support chain enhancements.

Arguably, the most important facet that will drive the future growth of the agrifood sector in New Zealand will be how businesses, tertiary and research institutes harness the use of new technology and innovation to continually drive growth in the sector. There will be challenges in the global agrifood sector that need to be overcome. These include climate change becoming more prevalent, with a continual increase in natural disasters and a shortage of resources, and increasing competition for these resources. New Zealand has a significant part to play in helping to address these challenges.

5. Setting a new direction

It is critical that the University is very clear on what its purpose is, and how it proposes to achieve that purpose. In the Board's judgement, this clarity is currently lacking. To be successful, the University Council, management, staff and the student body should all have a shared understanding of what the University offers, and what the value of that offering is. It is proposed, therefore, that the University redefine its value proposition for its key stakeholder groups. In addition, a clear vision needs to be established to inform the University's strategy. In this report, the Board proposes a draft vision and some draft value propositions for Council consideration. In our view, Lincoln University should be much more ambitious.

Our suggested vision is for Lincoln University to become one of the top five globally-ranked agricultural universities, and one of the top five New Zealand Universities. This will be no easy task. In later parts of this report, we set out a series of recommendations about how this vision might be achieved. We have no illusions about how challenging this road will be, but are confident that the vision is achievable, and will deliver enormous value to Lincoln University, its partners, and the community.

What the students told us

A key part of the Transformation Board's work was to understand what attracted students to the University and also what students thought could be improved. To this end, the Board commissioned a student research project and the Lincoln University Students' Association (LUSA) provided a collective view from students on their current experience at the University.

The key findings presented to the Board on why students are currently attracted to Lincoln University, and what they enjoy about their experience, include:

- Specialist courses that are not offered elsewhere and allow graduates to offer a point of difference with potential employees
- Teaching staff being approachable, helpful and accessible
- The campus having a social feel with like-minded people that provides a close-knit community experience

The student advice on what the University needs to improve included:

- Currently trying to be too much to everyone, with no clear strategy on its qualifications
- Overcoming a perception of having "second-tier status"
- Greater focus "on what it is good at"
- Dysfunction – new programmes need to be checked with employers and prospective students, otherwise they're falling flat
- Overcoming perception in the marketplace that agriculture is the University's sole focus
- Inflexible and outdated spaces within the current campus design
- The past still clouds the University's future – older generations still think of it as "Lincoln College"

The Board found considerable goodwill from students towards the University and they supported a focus on specialised courses that are relevant to industry, in turn creating better opportunities for career progression. The attraction of having an open campus and easy access to lecturers is highly valued by students. However, there is still work to be done by the University in changing some perceptions that it is a second rate "farmers" university and lacks excitement.

The Board recognises that the University has made progress in addressing some management and other challenges in the last 18 months, but considers that it remains in a delicate state. The University will continue to be exposed to downside risks in both cost and revenue lines over the next few years. The successful implementation by the Council of the Board's recommendations has the potential, in the view of the Board, to transform the University. However, the rapidly changing nature of the tertiary education sector means that even full adoption of the proposed changes does not guarantee ongoing sustainability. We therefore recommend the University be open to future operating models and partnerships of all types, including comprehensive integration.

In undertaking its work, the Transformation Board consulted University staff, management and students, as well as a range of external stakeholders. We deliberately conducted ourselves in an open manner as we considered the issues that we had been asked to address by Council, and shared with a range of external parties the purpose of our work and sought their comment and input. We invited a number of internal and external parties to our meetings to brief us on their perceptions and expectations of Lincoln University. These were very useful discussions.

Surprisingly, we discovered that the University itself had not undertaken any recent work to assess the views of its stakeholders, customers or clients about its performance. We would have expected to see this. We assessed that it was critical for us to understand stakeholder perceptions of the University, including how students assessed their Lincoln University "experience", as we sought to provide advice to Council on how to lift the University's contribution.

We therefore commissioned a comprehensive stakeholder survey as a key component of our work. Key findings of that survey are set out below.

The very act of seeking the views of a range of parties with an interest in Lincoln University was welcomed. Our inquiries revealed that current perceptions were often ones of disappointment at the state of the University, although there was also recognition of potential for improvement. A key theme to emerge from engagement with stakeholders was that if Lincoln University embraces change and takes advantage of opportunities in sectors like agrifood it could, over time, become recognised globally as a world-leading agriculture university

Stakeholder Feedback: Key Findings

The Transformation Board sought the opinion of stakeholders and industry leaders on what value they placed in Lincoln University and its product, and what role they thought the University might play to ensure sustainable economic growth in New Zealand's land-based sectors. The key findings were:

- Leaders see the imperative to explore complex issues in more proactive and purposeful ways
- A quantum shift in workforce composition is required to meet future needs
- Traditional models of operation are being disrupted in both farming and education
- Leaders are looking for people who can accelerate and unleash the power of technology
- More complex challenges need more sophisticated collaboration
- Global market navigation is the new normal
- The face of farming is changing
- The sector is backing the University's intent to transform

This last aspect is critically important, as the performance of the primary sector is vital to the success of the New Zealand economy. Overall in 2016, the primary sector accounted for around 6% of real GDP and contributes around half of New Zealand's total export earnings. A 2016 Report by the Agribusiness and Economics Research Unit (based at Lincoln University) found that the agrifood sector will continue to play a dominant role in the New Zealand economy for the foreseeable future. This demonstrates the importance of institutions like Lincoln University focusing on sectors that are not "sunset" in nature but instead are continuing to grow and transform.

There are numerous opportunities for institutions like Lincoln University to contribute to the further development of agriculture through creation and application of new technologies, science, innovation and research. The agrifood sector in particular will continue to need to address the pressures arising from a growing global population, changing consumer demands, and greater environmental consciousness.

In an increasingly globalised economy, New Zealand businesses will need to innovate continuously to prosper on the world stage. Lincoln University has the opportunity to support companies that are reshaping and reorganising themselves to take advantage of emerging market opportunities based on new technologies and fresh approaches to meeting consumer demand. These competitive pressures in the agrifood sector are unlikely to subside. Businesses that are unable to leverage technology and innovate in order to stay competitive will find it increasingly harder to succeed.

Stakeholder Feedback: What they said

The following quotes have been extracted from the substantial feedback that was received from the stakeholder engagement that was undertaken.

The opportunity and challenges in the agri-sector

"One of our biggest challenges is having a labour force that is competent with rapidly changing technology in the farming space."

"People have a backwards looking view of the sector. They need to be more forward looking and be aware of the phenomenal opportunities."

"For me, a big opportunity is understanding how the things we produce from our farming communities can actually be used innovatively as end products for consumers."

The role Lincoln University can play in the agri-sector

"The sector is changing – it is more dynamic, innovative and vibrant. The kinds of skills we need are more diverse. Lincoln University is an important gateway and needs to entice students by making them aware of the sector's possibilities."

"We often get uni's coming and wanting to learn from us. But what I'd like to see is uni's getting more research out there. I'd love Lincoln to come to us and say, 'Hey! We've been doing this.'"

"People I present to are super keen to explore disruptive forces in agriculture. Lincoln could be out in front of this."

"Lincoln should come up to us.....Everyone is selling us their wares, so it's not so much playing Lincoln off with say Waikato...but being relevant to what we are trying to do."

The needs of students and industry

"If graduates had an understanding of global practices, not just local, it would super-charge the benefits to us."

"Learners want to learn differently now, so again you are using technology as the base. The traditional sort of degree, three years come out with a Bachelors or whatever actually starts to change."

"In these academic systems you need great minds, if you can get great minds and build critical mass the students, the smartest students will want to come and the smartest businesses will want to get involved. It becomes a self-reinforcing thing and the best international people want to come and jump on board as well and it becomes a self-reinforcing system."

"People can attend a university anywhere in the world from their living room. So, with your new delivery models you won't get people just in lecture halls."

The case for change

"Why is it our universities don't understand that countries like Argentina and Uruguay want to send paying students, fully paid students to do agriculture in New Zealand, I could get no engagement so they just sent 200 to Australia instead."

"I had an opportunity to bring in 30 senior people a year but Lincoln had no interest. I would love Lincoln to be more flexible and agile for them to be easy to engage with when exploring new possibilities."

"Lincoln doesn't seem to have an international strategy that makes any sense, but needs one."

"If Lincoln tries to compete with other universities it will fail. It needs to play to its strength."

"Lincoln has been trying to do too many things, however, they've got some very good graduates and some great professors."

"What they're missing is not about agriculture, it's about bringing in technology, new business platforms and new business models and saying where in agriculture can there be some improvements made."

Lincoln Hub

"The hub can be a place of true connection, tapping into the university's talent, attracting international academic talent and our commercial talent."

"How might we use the hub to bring the best science together to solve commercial problems, it can create the land based innovation ecosystem and get people into an entrepreneurial market."

Designing the future - What could Lincoln University's contribution be?

6. Understanding what a globally leading agri-university might look like

The Transformation Board was keen to understand how leading agricultural universities overseas have achieved their success. Universities such as Wageningen University and Research (WUR) in the Netherlands, and the Swedish University of Agricultural Sciences (SLU), illustrate that success can be achieved by having a specific focus on key agriculture components such as land and food. However, the success achieved by WUR did not happen overnight. Part of its success was due to developing a model that involved several research institutions collaborating on individual projects and regularly partnering with both national and international institutes. This collaborative model meant that the University does not have to rely on being a "standalone" institution.

The Board was very fortunate that Dr Aalt Dijkhuizen, a former President of WUR, agreed to become a member of the International Advisory Panel supporting the Board. Dr Dijkhuizen came to New Zealand in April, and briefed the Board on the significant reformation that his university had undertaken in recent years, to the point where WUR is now ranked #1 in the world amongst agricultural universities. A description of WUR's process of change is set out on page 20.

Clearly, care needs to be taken in assessing the extent to which lessons can be drawn for Lincoln University from agricultural teaching and research institutions overseas, or even from other universities domestically. On the other hand, keeping abreast of best practice in university management, new approaches to teaching, learning and research, key developments in disciplines relevant to the primary sector, technological and scientific advances, changing business models and policy settings, and so on are all essential elements of building a world-ranked university. Looking outwards, and being open to change and innovation, are as important for a university or research organisation as they are for a private business. And in the case of Lincoln University, all of these changes must always be tested against the question - "how is this relevant to our purpose and situation?"

Although the EY Report identified that a merger with another institution was an option for Lincoln University, the Transformation Board does not believe that this would be in the best interests of Lincoln University or New Zealand. Rather, we think the most suitable pathway is in the development of a set of strategic partnerships between Lincoln University and a varied group of external entities. The recent announcement of taxpayer funding for the Joint Facility with AgResearch, and the creation of the wider Lincoln Hub, are valuable steps in this direction. The Board sees good scope for expanding the University's strategic partnerships in coming years to include other universities - domestic and international, and research entities, private companies, iwi, and other organisations. Further consideration of this proposed direction of travel is outlined in the Recommendations section.

In assessing what lay behind the success of international agriculture-focused universities, several factors stood out. (We acknowledge, of course, that funding and governance models, historical circumstances, and educational policy settings all differ markedly across the world). The success factors include:

- Having a clear vision and mission statement that is simple and resonates with staff, students and key stakeholders;
- Demonstrating a value proposition and clearly articulating the institution's niche;
- Hiring highly educated and qualified staff;
- Investing in infrastructure, housing and facilities;
- Having access to outstanding research facilities and equipment;
- Forming partnerships and driving greater collaboration with research institutes;
- Facilitating strong brand recognition; and
- Creating continual opportunities for growth through innovation.

Developing a global platform for success

For Lincoln University to be able to achieve a global top five agriculture university ranking, it will need to demonstrate that it can build on its current research platform by becoming more innovative and do things differently. The University has a number of research projects demonstrating its potential to become more successful on the global stage. Some of these projects include:

- **Integrating Value Chains** – Part of the National Science Challenge: Our Land and Water Project which aims to enhance primary sector production and productivity
- **Reducing nitrogen losses in farms** – a large, five-year project
- **Forages for reduced nitrate leaching** – a large, six-year project that has been ongoing since 2013 and involves all of the Lincoln Hub partners
- **Optimisation of subterranean clover for dryland pastures in New Zealand** – a research project involving collaboration with a number of partners
- **Matauranga Māori characterisations of New Zealand's biodiversity:** Whakamanahia nga matauranga o nehe hai orange tangata, orange taiao – a kaupapa Māori-based research project which contributes to the Vision Mātauranga science policy perspective and aims to unlock the innovation potential of Māori knowledge, resources and people

However, to become globally successful, the University will need to pursue further partnerships and collaboration within research projects. One way it can do this is by investigating different overseas initiatives. For example, the Universities of Sheffield and Manchester are co-leading a new research network which brings together an international team of researchers from multiple disciplines to address the challenge of providing a safe, sustainable, nutritious and affordable food supply for all. Demonstrating this type of leadership in the agrifood sector is something Lincoln University should be pursuing.

Wageningen University and Research: A Case Study

The Netherlands is a small country in terms of land size (New Zealand is about six times bigger) but densely populated (it is home to 17 million people - over three times New Zealand's 4.7 million population). It is currently the second-largest exporter of food in the world after the United States. Traditionally, it has been very strong in agriculture, with a highly productive, efficient and knowledge-intensive sector. A number of its agribusiness companies also have strong global presence.

Key to the success of the agriculture sector in the Netherlands has been its focus on the "golden triangle" collaboration between the private and public sectors, along with knowledge institutions. The golden triangle is strongly supported by the Netherlands government and the Top Sector approach, an innovative concept that focuses public resources on specific sectors and promotes coordination of activities in these areas by businesses, government and knowledge institutes. Nine Top Sectors are targeted by the Dutch government, of which agrifood is one.

Other initiatives by the Netherlands government included establishing a "food valley" - a region in the country where international food companies, research institutes and the Wageningen University and Research (WUR) are located.

WUR's mission is to explore the potential of nature to improve the quality of life. Its core domain consists of three related areas: 1) Food and food production; 2) Living environment; and 3) Health, lifestyle and livelihood. WUR has a staff of 6,500 with around 10,000 students from over 100 countries. Over the last several years, WUR has been consistently rated in the top five global agriculture and forestry universities by the Quacquereli Symonds (QS) World University Rankings.

WUR has demonstrated that global success is still achievable, despite having historical difficulties in similar issues to those experienced by Lincoln University. Established in the Netherlands in 1918 as part of the Ministry of Agriculture, Wageningen previously suffered from specialising in an industry that was struggling to attract students. This resulted in enrolments at WUR dramatically declining throughout the 1970s and 1980s, causing large financial problems for the University and continuing questions around its future long-term viability. Due to the changes that WUR implemented throughout the University over the last 20 years, it is now ranked by the QS World University Rankings as the number one Agriculture and Forestry University in the world.

Dr Dijkhuizen, the former President and Chairman of WUR, credits its turnaround and success to five key factors:

1. **House in order** – developing a professional (financial) reporting system and defined clear management responsibilities and reporting lines;
2. **A clear strategy** – identifying growth areas and intensifying ties with (potential) customers, especially those from the private industry;
3. **Professional management** – putting professional management procedures in place and having appropriate (financial) management information available;
4. **Stakeholder engagement** – extensively engaging alumni, especially prominent individuals and creating strong alliances with other partners in the same domain; and
5. **External profiling and communication** – building up a strong profile and extensively thinking through all communications requirements.

A key component of WUR's success and long-term sustainability was arranging its internal operating model in a way that encouraged a new organisational culture and way of working.

In 2018, Lincoln University was ranked the =319 global university (=39 for agriculture and forestry) by the Quacquareli Symonds (QS) World University Rankings. The Times Higher Education University Rankings in 2018 ranked Lincoln University in a global 501-600 band (a drop from its previous band in 2017 of 401-500). While university rankings are sometimes controversial and have been criticised for using overly simplistic methodologies, they can serve as a useful benchmark for comparing universities that occupy similar niches. Lincoln University is currently lacking in some of the characteristics that make other global agricultural universities successful. The University has historically struggled to focus externally on what makes similar universities successful and how it could potentially adopt a similar operating model. This has arguably made it difficult in the past to implement a change in culture.

World University Rankings

The Quacquareli Symonds World University Rankings is an annual publication of university rankings of more than 950 universities from over 80 countries. It uses six metrics to measure university performance, with heavier weighting (40%) on academic reputation:

1. Academic reputation
2. Employer reputation
3. Faculty/student ratio
4. Citation per faculty
5. International faculty ratio
6. International student ratio

It is the considered to be one of the most widely read university ranking publications, along with the Times Higher Education and ShanghaiRanking.

Understanding the characteristics of a globally successful agricultural university, and how these can be benchmarked and achieved, would provide Lincoln University with the ability to gauge how it could strengthen its brand and be known for delivering on its niche. To succeed in this, the University will need to ensure its future state, vision, domain, purpose and value propositions are compelling for staff, students, alumni, industry partners and businesses.

Long-term success will also require consistent execution of strategy over many years. At the same time, the University's progress will need to take due account of external dependencies that could influence progress, factors that might be risks for the University, and changes in external policy settings such as new tertiary funding models or changes in Government priorities for the tertiary sector.

7. The forward path

The principal conclusion of the Transformation Board's deliberations is that Lincoln University has the opportunity to become one of the world's leading agricultural universities. It has an established history and track record, and has played a significant role, in the past, in New Zealand's development. Currently, it is not performing to its potential because its vision and strategy are not well defined or understood, and the governance, leadership and management of the University has lagged behind best practice for a decade or more.

The Board is firmly of the view that all of these current shortcomings can be overcome, and that with a clear vision and sound strategy, strong governance, leadership, and execution, and a new set of strategic

relationships and partnerships, Lincoln University can establish a globally-recognised reputation. Achieving that point will undoubtedly take time, much effort, and substantial investment. However, the foundations are there. New Zealand's existing reputation and networks in the agricultural and agrifood sectors, in economic and trade policy, in tertiary education, and in many other fields, can all be drawn on to support a reinvigorated University. This will lead to Lincoln University contributing as strongly in the future as it has been able to do during its most influential periods in the past.

The Transformation Board believes that Lincoln University's future will best be secured if it focuses on becoming a strong, specialist university focused on land, food and ecosystems. In order to achieve this vision, Lincoln University will need to develop and sustain deep collaborative relationships with industry, government and research entities, locally and internationally, and with iwi and local communities. Those linkages will help drive strong research outcomes, and will need to be supported by high quality and relevant teaching, delivered flexibly in forms suitable for modern, life-long learning. A university with these characteristics will be much better placed than Lincoln University currently is to deliver impactful multi-disciplinary and multi-sector knowledge, and thereby promote the wellbeing of New Zealanders, their communities and businesses.

The following sections of this report set out in more detail the domains on which the Transformation Board believes the University should focus, and identifies five themes that should be reflected in the reinvigorated Lincoln University. For each theme, a series of recommendations is identified which, in the Board's view, will assist in achieving the refreshed vision for the University.

Concentrating focus will assist Lincoln University to better connect to key stakeholders, and make clearer the choices with its partners. A wide range of issues in the domains of land, food and ecosystems require sustained critical inquiry on behalf of New Zealand, and the University's stakeholders and partners. Spreading the University's resources and talent too thinly will impede delivery of meaningful impact. Improving processes for assessing trade-offs and making decisions between different teaching and research investments will be a necessary part of improvements in University leadership and management going forward.

Land, food, ecosystems, and how they connect

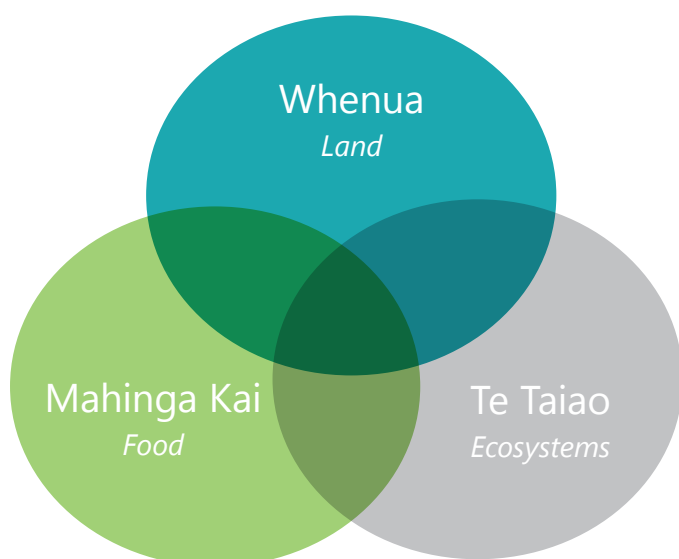


Fig: Lincoln University's niche

Other universities around the world operate in the same domains as Lincoln University, and some of these are specialised agricultural universities such as WUR, and the SLU mentioned previously. Other examples of larger and more diverse universities include UC Davis and Cornell. In the Southern Hemisphere, the closest counterparts, are the Massey University, the University of Queensland, the Australian National University, the University of Melbourne, the University of Western Australia, Charles Sturt University and Universidade de Sao Paulo.

Two of these, Massey University and Charles Sturt University, offer courses that compete in a similar domain to Lincoln University. There is also a specialist China Agricultural University in Beijing, providing another alternative for Chinese students, who make up New Zealand's single largest source of international students.

Recommendations

Good progress is being made at Lincoln University, however, there is still a significant amount of work to be done within the organisation for it to be able to meet the vision and challenge the Board has set for it. This will not happen quickly or easily. The University's management will need to embark on a long-term journey with a clear road-map outlining how success can be achieved. Before this can happen, management will need the Council's full support and backing. Change is not something that should be feared, rather, it should be seen as an opportunity to reset the University's value proposition to the tertiary sector and New Zealand.

While the University is small in scale it has a strong legacy in a number of its niche programmes and remains well respected by a number of businesses who prefer Lincoln University graduates. However, what has worked in the past will not necessarily work in the future as the social, business and tertiary education context has rapidly changed and continues to do so. It also has a perception issue to overcome, that it is not a "mainstream" university able to compete with other institutes of a bigger size and scale. Success will take leadership and courage.

To this end, the Transformation Board has developed five strategic themes encompassing 35 recommendations to strengthen Lincoln University and enable it to meet the future demands of students, staff, stakeholders and broader Aotearoa New Zealand.

The strategic themes embrace the aspirational vision and purpose that the Board has proposed for Lincoln University, and the opportunity to have a meaningful impact on New Zealand's role in the global agrifood sector.

They are:

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

Theme 1: Redefine quality course offerings and create new ways of student-focused learning for undergraduates, postgraduates and mid-career professionals

Lincoln University's academic programmes are tailored to the needs of school-leavers, international students and postgraduates looking for specific qualifications in their chosen field of study. They have historically been successful, with a very high proportion of graduates going on to employment or returning to their own country with skills that will serve them well in their chosen careers.

As education transitions from a once-in-a-lifetime event to a lifelong experience, fundamental knowledge is becoming ubiquitous and democratised, and time spent at university is increasingly recognised as only a component of a diverse range of learning during a person's career. Within that context, the rigid and specialised nature of Lincoln University's qualifications is starting to constrain its ability to integrate into a set of more flexible higher education pathways.

Lincoln University and its students would benefit from significantly reducing the number of undergraduate qualifications it offers, while ensuring there is increased flexibility in the choice of majors and better aligning those majors to the areas where industry needs skills in the land, food and ecosystems domains. This could be achieved by designing programmes around student needs and emerging education pathways to allow for a greater variety of entry and exit points.

The ability to scaffold qualifications to provide flexibility and choice as students progress and provide greater options for mid-career professionals to re-engage with higher education will be important. Another lever to increase flexibility would be to increase entry points for graduates of other universities who wish to extend their study and research in disciplines for which Lincoln University is recognised.

We believe this would also reduce the cost and complexity of the University's academic programmes by eliminating structural barriers that are driving undesirably low class sizes and affecting the attractiveness or effectiveness of courses. Related to this is a need for Lincoln University to focus on the disciplines and course offerings that are differentiated or core to its domains and value proposition, and to source supporting content and skills from other universities around New Zealand or the world. It is no longer necessary for a university to design, build and deliver all of the courses it wishes to offer to students, as they can be sourced from other leading universities and integrated into Lincoln University programmes.

The Board is strongly of the view that the University has not had sufficient focus on its engagement with tangata whenua, despite the enduring and intrinsic linkages between Māori and the land. This is a missed opportunity. Greater participation by Māori and Pasifika students should be a priority for Lincoln University. It is already a key objective of the current Tertiary Education Strategy. Improving outcomes here will require different approaches, including much stronger upstream engagement with schools, communities and iwi to increase the relevance and understanding of the University's programmes, and to improve participation rates and success in university and pre-university study.

Lincoln University also has an opportunity to transform and elevate the student experience and demonstrate that it is responsive to the student voice. Learning is a co-creation process with the students as equal partner. Accordingly, better understanding the student experience and improving the ability of students to shape the learning environment are essential steps in enabling the best educational outcomes. Students and those funding their education are becoming more demanding around the quality of the student experience.

As students are presented with increasing choices around post-secondary school education, international students look for the best options from a range of world universities for meeting their learning needs. Lincoln University must meet the expectations of these students if it wants to attract them. Similarly, the

needs of the mid-career workforce should be a greater focus for the University. The opportunity to step back from daily responsibilities in industry or elsewhere to re-tool and re-energise for future roles is a valuable one. Decisions on where to study will be made around the quality of the end-to-end experience, as well as course content and quality.

The Transformation Board judges that there also needs to be a fundamental restatement of the University's teaching and learning strategy to recognise modern pedagogy and changes such as digital/virtual learning environments and learner analytics. The Board has noted that Lincoln University's approach to teaching and learning may be characterised by outmoded instructional and assessment models, which create a brake on the deployment of more engaging, effective and higher quality models that are the hallmarks of successful universities overseas.

As part of transforming the University, there will be a need to review how it is currently attracting endowments and other alternative funding to allow for the development of more innovative models. The primary source of endowment funds at American colleges and universities has been gifts from donors. Globally, universities have been developing innovative ways to encourage endowment giving from alumni and friends.

The role of internships and work-based programmes as part of the overall University experience should also be examined to determine whether their increased use would help to build stronger connections between the University and industry, helping to produce real-world ready graduates in greater numbers to meet the demands of the growing economy and primary sector.

Eight recommendations support this theme:

- 1a. Reduce and simplify programme and course offerings to ensure critical mass and quality, and align majors with the purpose and industry need; identify and fill gaps.
- 1b. Articulate innovative and accessible pathways for entry, retention and exit for students by developing flexible admission and sought-after academic offerings.
- 1c. Develop a leading-edge teaching and learning strategy and culture to support a greater student experience that forms part of a modern learning environment (including digital), pedagogy and quality.
- 1d. Develop feedback and response mechanisms to drive continuous improvement in the student experience that results in increased student satisfaction levels.
- 1e. Develop internship and work-based programmes to suit student needs and industry demand.
- 1f. Give priority to growing Māori and Pasifika student numbers through strong relationships upstream with schools and communities who provide/support those students.
- 1g. Attract endowment and other funding to allow development of more innovative offerings including scholarships.
- 1h. Develop partnerships to deliver the course offerings that are required for completeness, but may themselves not be core to the University's value proposition or strengths.

Theme 2: Build Lincoln University's research outcomes and reputation to deliver positive change for Aotearoa New Zealand in the land, food and ecosystems domain

Lincoln University has a positive, if comparatively modest, track record in research. It is in fact relatively research-intensive compared with other New Zealand universities. However, scale remains an issue at the University. Arguably, Lincoln University's current research activities are not supported by an underlying research strategy. The Board's view is that the University needs to strengthen its approach to research, including by drawing more thoroughly on its stronger disciplines, as well as more systematically addressing the big issues facing land, food and ecosystems in New Zealand and elsewhere.

The Transformation Board recommends identifying a relatively small set of research initiatives as priorities for investment. These could include those that draw in partner collaborators and bring researchers from different disciplines together. These initiatives should be regularly reviewed and can be expanded as resources permit.

An example of one gap is that Lincoln University has very little in terms of earnings from licenses on intellectual property it controls. A more clearly defined approach to intellectual property ownership and commercialisation would help the University to approach research in ways that will help to build its reputation, as well as annuity income streams.

This would also be helped by clearer and more active communications around the University's research activity, with a focus on publicly-funded research that can be shared more widely, and greater involvement of undergraduates in research which stimulates their interest and develops their skills. Such an approach would complement the wider operation of the Lincoln Hub, outlined in more detail in recommendation three.

Many of the research topics in Lincoln University's sphere have global applicability. The impact of climate change, sustainable access to clean water, and the future of farming are all examples of topics that are globally relevant. The ability to bring international researchers to New Zealand, or for Lincoln University's researchers to take secondments or sabbaticals overseas, could increase the relevance of the University's research on pressing issues while helping to increase its overall global profile. This could potentially make it more attractive as a destination for leading international talent.

Research is also an important pathway to advance Lincoln University's relationship and contribution to its local community. The region encompassed by Te Taumutu Rūnanga, Ngāi Tahu, Te Tau Ihu (top of the South Island), and Canterbury more generally, faces its own set of challenges and issues in the land, food and ecosystems. Challenges such as water quality are hot topics across the country, including the Selwyn District, and there is scope for the University's research to have a practical benefit to its neighboring community.

Recent successes such as the taewa (Māori potatoes) grown at Koukourāata Marae with Lincoln University's help are a small example of what is possible. Deeper research relationships between the University and Ngāi Tahu could create a platform for wider engagement with Māori on matters of shared concern for Lincoln University and iwi, and – over time – demonstrate the University's commitment to live the values it teaches and researches.

Five recommendations support this theme:

- 2a. Initiate a process to define a core research strategy and secure and allocate resourcing and funding accordingly.
- 2b. Explore new models for leveraging and commissioning research to deliver gains in reputation, commercialisation and industry outcomes.
- 2c. Investigate and implement new models of student involvement in research, including greater undergraduate involvement in research activities.
- 2d. Develop a communication programme for research activity and outcomes that increases public and academic recognition and impact.
- 2e. Develop secondment/study leave opportunities for researchers and offer better pathways for exchange students and those wishing to continue their studies abroad in order to increase relevance to industry and create more flexibility.

Theme 3: Move away from being a standalone university to being the academic heart of the Lincoln Hub and a valued partner to institutions with shared goals.

There are two major parts to this theme: maximising the value from the opportunity presented by the Lincoln Hub and creating defining partnerships with universities and other relevant organisations to enable and accelerate transformation.

The Lincoln Hub creates the environment for collaborative relationships between Lincoln University, AgResearch, DairyNZ, Landcare Research, Plant and Food Research, and potentially other organisations. The associated investment in joint facilities to promote cross-organisational, cross-functional work practices has the potential to create one of the most dynamic and exciting places to be an academic or researcher in the New Zealand agrifood sector.

One of the exciting possibilities is the cross-pollination between staff working for the University and the Hub partners, as they work together to teach, supervise or contribute to research activities. The combination of specialised disciplines across the partner organisations creates a deeper combined capability that will be compelling to students. And the ability to focus multi-disciplinary research on a relatively small number of big issues in the land, food and ecosystems domain will allow the organisations to jointly drive insights and outcomes from the ideal combination of academic and research capabilities.

Many elements must come together to allow Lincoln University to maximise the value from this opportunity. The Joint Facility needs to be delivered on time and on budget, and be capable of delivering the promised benefits; there needs to be a collaborative operating model across the organisations and capabilities involved in the Lincoln Hub; there must be greater value from collaborating than each participant could access on their own or through alternative arrangements; and there needs to be communication, coordination and leadership amongst the partners to reduce friction around collaborative interactions.

The Board has observed a number of examples of alternative governance and organisational arrangements between universities and research institutions, from informal models through to joint ventures and on to full integration. It is important that Lincoln University and its partners select the model that will best deliver the benefits and not assume the current model will always be the best

option. The Board's preference is for a model that allows for greater integration and funding flexibility along the lines of the WUR model.

Along with the model, it is important to realise that the existing committed Hub partners should not be the end-point in terms of collaboration. Lincoln University should take a leadership role to attract and integrate new partners, especially commercial and international ones, to the University campus as additional Hub partners. The governance and organisational arrangements need to permit flexibility, with a view to extending the influence and impact of the Hub on New Zealand's economy and the world's thinking around land, food and ecosystems.

Nowhere is this more important than the flagship projects and initiatives the University will be undertaking over the next decade. The Joint Facility is one example, but others include the comprehensive deployment of a Virtual Learning Environment to support online and blended delivery of teaching and learning including assessment, performance management, and analytics; implementation of an agile teaching model that allows content to be provided by partners and integrated into University programmes, as well as supervision to be sourced from Hub partners; and redesign of the campus and end-to-end student experience to ensure it is the best in New Zealand and comparable to other leading universities overseas.

One of the attractions of the University campus is its strong identity, sense of place, heritage and potential for long-term and well-managed investment. This campus should be further developed in conjunction with Te Taumutu Rūnanga as they can help to guide and realise the distinctive identity and promise of the wider campus and its immediate vicinity.

A further important partnership for the University will be with the TEC, including to ensure that the University continues to meet the Commission's expectations around investment and monitoring. In relation to the eventual response from the Government to the Productivity Commission's Report on New Models of Tertiary Education, the forthcoming refresh of the Ministry of Education's Tertiary Education Strategy and the construction of the Lincoln University-AgResearch Joint Facility, the TEC will be working on a range of critical matters with the University on growth plans, funding arrangements, and performance expectations. A constructive and reinforcing relationship with the TEC will be a priority for the University.

Ten recommendations support this theme:

- 3a. Prioritise delivery of the Joint Facility building on time and on budget with the right capability and oversight in place.
- 3b. Commit to a principle of openness to Hub partners and others participating in all University teaching and research training on a merit-basis.
- 3c. Develop a strong sense of place and identity on campus in conjunction with Te Taumutu Rūnanga.
- 3d. Adopt a collaborative model that aligns with the drivers and stated outcomes of the Lincoln Hub while helping to ensure its success by attracting new partners to invest and relocate.
- 3e. Rebuild the industry and stakeholder engagement capability in the organisation with a focus on building trust and productive relationships.
- 3f. Partner with select universities where superior academic offerings can be brought in or provided to mutual benefit.

- 3g. Explore innovative partnerships to connect to and deliver flagship projects by giving priority to opportunities within Canterbury, Ngāi Tahu, and Te Tau Ihu.
- 3h. Establish an alignment with a broad base of iwi, Māori land incorporations, science providers and Māori industry bodies to develop a practice of collaboration with a focus on the South Island first.
- 3i. Investigate options for efficiently sourcing the best supporting services (finance, administration, HR, IT, asset management, etc) from a partner or partners.
- 3j. Commit to partnering with the TEC in order to deliver the recommendations in line with the tertiary strategy.

Theme 4: Imbue Lincoln University with a clear purpose that delivers for Aotearoa New Zealand and contributes globally to create knowledge and opportunities around land, food and ecosystems, building on the University's historical strengths.

Lincoln University can be proud of its history of contributing to world-leading education and research in agriculture, food, science, and land-based disciplines including tourism, landscape architecture, sport and recreation. It holds a special place in the hearts of its alumni, many of whom occupy prominent positions in New Zealand and overseas private, public and non-governmental organisations.

As in many other sectors, the possibilities offered up by technological advances, disruptive business models and economic changes are opening up new opportunities for universities to advance thinking, stimulate learning and explore how their role contributes to the betterment of society and the economy.

This is not an easy change for a university to make. Higher education is undergoing large-scale global change, as are the disciplines taught and researched within the University. Increasingly, big issues need to be tackled on a national or global scale, requiring multi-disciplinary academic contributions, along with fundamental and applied research. Collaboration and partnerships are essential to provide the mix of capabilities that can successfully tackle wicked problems, leading to more diverse organisational responses than the traditional university model could entertain. And the transformation of learning brings its own challenges as long-lived institutions have to find new ways of operating to stay relevant, competitive, and compelling in a digital world.

Despite all this change, at the heart of the University remain the students and academics around whom the system is based. Universities must get better at meeting their needs, recognising where there are rising expectations around teaching and research excellence, value for money, relevance, economic impact, and the real-world practicality of a university education. The changing nature of work is also affecting both university graduates and staff, as their future roles evolve and the linear, predictable careers we used to see become the exception rather than the norm.

The Transformation Board believes Lincoln University should commit to being a leading example of a specialist university that delivers national and global impact through student-centric programmes and research into the big issues across land, food and ecosystems. Although this will build on the rich history of the University, it will also require fundamental change in its culture and ways of working, the way it engages with students and alumni, and how it interacts with industry, government, other universities and research institutes.

The result will be a globally-leading university nurturing capability and knowledge that sustains and grows prosperity from the land, food, and ecosystems.

Five recommendations support this theme:

- 4a Finalise and adopt a collective future state vision, domain, purpose and value propositions that are absolutely compelling and deliver Aotearoa New Zealand's leading end-to-end student experience across all cohorts.
- 4b Develop excellence in scanning and foresight of global developments that will impact the land, food and ecosystems domain and adjust purpose, course offerings, governance and career advice accordingly.
- 4c Harness the alumni of former students and staff and engage them throughout their careers to provide support to the University's direction and activities.
- 4d Develop a national leadership voice on the big issues that affect the land, food and ecosystems domain.
- 4e Regularly seek feedback from current students on how they think the University is tracking against its purpose and creating opportunities for them in the land, food and ecosystems domain.

Theme 5: Reset the governance and executive capability to achieve Lincoln University's renewed purpose.

Lincoln University will be embarking on several large concurrent programmes of work as it implements these recommendations and positions itself for the future. These work programmes would be a challenge for many organisations, and Lincoln University will need to consider how it should best govern and manage the execution of these programmes to ensure the right oversight, expertise and resources are in place, the risks are managed, and success can be measured.

The Board considers that the University should review its existing governance and management arrangements to ensure they are fit for purpose.

This also extends to the team tasked with implementing the recommendations, as it will need access to resources and skills at a scale the University has not previously required. Their focus on implementing the Board's recommendations and overseeing other major transformational initiatives will be an important determinant of success. At the same time, the University's leadership and management will need to keep the University's performance on the correct side of the TEC's monitoring framework as any slip in operational performance could erode confidence in the turnaround and transformation strategy.

A number of other changes are required to prepare Lincoln University for an emerging model of tertiary education. Greater agility will be required in the way the University's organisation and resources are aligned to the disciplines and initiatives that will form the basis of its teaching, learning and research focus into the future. More flexible funding models and academic pathways will require the University to respond dynamically, and to reshape its academic offering to better meet the needs of learners. This includes ensuring the University's offering is compelling and relevant to Māori and Pasifika students.

The Board believes Lincoln University can better achieve growth and scale by actively collaborating with organisations that can provide the skills and resources required by the University. This should start with a focus on strategic collaboration around the existing University campus before extending to a broader conversation with other like-minded organisations in New Zealand and other parts of the world.

Seven recommendations support this theme:

- 5a. Urgently review existing governance arrangements and practice of the Council and associated entities, to ensure best in class governance to support the existing University and ongoing execution of the Transformation Programme.
- 5b. Design an appropriate model for the governance and execution of the Transformation Programme that does not allow the programme to be affected by the inertia of the status quo.
- 5c. Assess the current shape and capabilities of the broader operating team to ensure they are ready, willing and able to lead, execute and address the key gaps identified within the recommendations above and achieve ongoing operational excellence.
- 5d. Implement a new University academic organisation structure and operating model to best achieve the recommendations of this report.
- 5e. Bolster capacity and resources available to deliver the iwi/Māori dimension of Lincoln University's future.
- 5f. Support the Government's exploration of more flexible funding models as an outcome of the Productivity Commission Report.
- 5g. Ensure targets are in place to consistently maintain profitability and to exceed TEC's financial performance benchmarks – especially those relating to utilisation of assets.

Next Steps

The future of Lincoln University will need to be based on doing things differently. The University will need to embark on a major journey over the next ten to twenty years if the Council agrees to adopt the vision proposed by the Transformation Board. If this report is accepted and adopted, how the University seeks to implement the recommendations will be of critical importance to achieving its goals.

A clear implementation plan and road map will be required so that the recommendations can be effectively executed. It will need to be demonstrated that the changes being asked of the University are achievable and realistic. The Board acknowledges that not all recommendations can be delivered at once and accepts there will be a need to understand the most appropriate phasing for implementing the recommendations, as well as cost.

In the Board's view, however, if the report is accepted, some recommendations should be progressed almost immediately to ensure that no momentum is lost.

The University's management should ensure that work already underway in the *Refreshing Lincoln* transformation programme is tailored accordingly to take into consideration the recommendations contained in this report.

The Transformation Board recommends building formal review points into the current governance structure to monitor the implementation plan and road map (once developed), ensuring that urgency and momentum is maintained in the Transformation Programme. If the Council wishes, this could be done through another form of Transformation Board or external panel that reports directly to the University Council. Alternatively, the Council may wish to establish a special implementation sub-committee.

Appendix 1: Transformation Board Terms of Reference

The Transformation Programme

1. Lincoln University has positioned itself as a 'specialist land-based University'. This implies a clear focus on land-related disciplines, including environmental and agricultural sciences, landscape architecture, natural resource management, societal issues associated with land and agribusiness, trade and commerce.
2. New Zealand universities are expected to demonstrate the teaching-research nexus. Intrinsicly, their research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge. The distinctive contribution of Lincoln University is intimately linked to the quality of its research programmes and their application to real-world problems and to enriching the learning environment for students. Lincoln University is keen to further improve its standing in global rankings of universities. Of the New Zealand universities, Lincoln University has the highest external research revenue per academic staff member.
3. The University Council agreed, following consideration of the Lincoln University Strategic Options Assessment ("the EY Report") in July 2016, to establish a Transformation Board to advise it on options drawing on the assessment.
4. The Chancellor and Vice-Chancellor met the Minister for Tertiary Education, Skills and Employment in October 2016 and were advised that the selection of one or more options was at the Council's behest. The Minister expected that the Transformation Programme would have rigour, be well-informed and Council-led, and have no predetermined outcomes in mind.
5. The objective of the Transformation Programme is to strengthen Lincoln University so that it can achieve the vision determined by the Council to the fullest extent possible. The role of the Board is to provide advice and recommendations to the Council to inform its decisions regarding the Transformation Programme.
6. As a first step, the Board will assess the University's current state and strategic direction to determine if it remains fit for purpose, especially in relation to the value proposition for its stakeholders. The Council is seeking advice from the Board on strategies to better articulate and achieve the vision, being informed by the EY Report and the University's response to it.

Context

7. In 2016 financial and organisational improvements were made, and will continue to be made in 2017, under the Vice-Chancellor's direction. Initiatives well in hand include the 'Fitness Programme', with elements of improving academic programme attractiveness, improving the use of teaching technology, reducing costs in a manner that does not detract from core business, and transferring the Telford campus to a different provider. The University's 2017 budget shows a large improvement over prior years; monthly financial reports show continuing improvement. Cash reserves and assets are strong. In 2016, EY affirmed the soundness of the University's strategic direction and the Academic Quality Agency affirmed the overall soundness of Lincoln University's academic approaches.

8. The Lincoln University – AgResearch Joint Facility project is also well in hand, and funding is being sought from the Government for up to \$100m to partially fund a \$206m Joint Facility owned and operated by the University and AgResearch. In parallel with this, a company (Lincoln Hub Ltd) was formed in July 2016 by the University with three Crown Research Institutes (including AgResearch) and DairyNZ. The company has recruited three external directors and a CEO.
9. The case for the Lincoln University – AgResearch Joint Facility is founded on the need for new buildings following the Canterbury earthquake in 2010, decisions by AgResearch to relocate its South Island staff to Lincoln, and synergies ('additive value') created by new ways of working together.
10. The new ways of working together include conceptualisation of learning as comprising teaching, research training, and research. This conceptualisation avoids disjuncture between teaching and research, and recognises research training (students undertaking research projects as part of their studies) as important to producing future leaders.
11. Similarly, Lincoln Hub projects are inherently multidisciplinary, as well as multi-institutional.

Scope

12. The Transformation Board's work will include the following:
 - Situational scan – assessing and documenting features of Lincoln University's recent history, current status (infrastructure, finances, capabilities and risks) and performance.
 - Reassess and articulate the vision for Lincoln University and validate with Council - this will be a collaborative activity involving Council, senior management, and the Board.
 - Needs analysis – identifying and assessing strategic needs and gaps for achievement of the vision.
 - Market sounding and stakeholder engagement - engaging widely on how Lincoln University might address the challenges of the Transformation programme.
 - Identifying options – assessing the outcome of the engagement process and developing a range of options and a recommended path forward for consideration by the Council.

The Transformation Board

13. Details of governance arrangements for the programme and membership of the Transformation Board from various sources contains relevant details about the roles and responsibilities of parties associated with the Transformation Programme.
14. In undertaking its work, the Transformation Board will be supported by the Transformation Programme and receive documentation as required to assist its deliberations.

Protocols

15. The Transformation Board will develop some agreed operating protocols, including regular reporting to Council.
16. The Council will not delegate functions to the Transformation Board. Ownership of decisions and strategy remains with the Council. From time to time, Council will be involved with specific activities undertaken by the Board, such as the reassessment of the vision.

17. Members of the University community will be invited to make submissions in relation to the Transformation Programme, and in doing so, they may indicate whether they are representing a constituency or their individual views. This will be managed through the wider process of engagement and seeking submissions from stakeholders.

Appendix 2: Transformation Board Members

Sir Maarten Wevers (Chair)

Sir Maarten served as Chief Executive of the Department of the Prime Minister and Cabinet from 2004 until 2012. He was formerly Ambassador to Japan and High Commissioner to Papua New Guinea. Sir Maarten's current roles include Chair of the EQC Board and a member of the Ministry of Primary Industries Investment Advisory Panel for the Primary Growth Partnership.

Tim Fowler, Chief Executive, Tertiary Education Commission

Tim has been Chief Executive of the Tertiary Education Commission since April 2013. He was previously Deputy Chief Executive, Quality Assurance at the New Zealand Qualifications Authority. Tim has held leadership positions in Australia and New Zealand in both the private and university sectors, after starting his career in the Department of Prime Minister and Cabinet.

Anake Goodall, Te Taumutu Rūnanga

Anake is currently a director of Meridian Energy. He Chairs the Ākina Foundation, the Hillary Institute of International Leadership and Nutrient Rescue Limited, and is a trustee of The Gift Trust. Anake was Ngāi Tahu's Claims Manager during its Treaty Settlement negotiations and served as CEO at Te Rūnanga o Ngāi Tahu until 2011. He is an immediate past member of the Te Waihora Co-Governance Group and is an Adjunct Professor at the University of Canterbury. Anake is a Harkness Fellow.

Nigel Gould, Chair, Tertiary Education Commission Board

Nigel has been a Commissioner on The Tertiary Education Commission Board since May 2013 and is Chair of the Civil Aviation Authority of New Zealand, the Young Enterprise Trust and Destination Marlborough. Nigel served on the Massey University Council for 10 years, including six years as Chancellor. He is a past President of the Wellington Regional and New Zealand Chambers of Commerce. Over the past 30 years, Nigel has established companies in the information technology, primary and exporting sectors, and has recently taken an active interest in tourism.

Maury Leyland

Maury is a Fellow of the Institution of Professional Engineers of New Zealand and a Chartered Member of the Institute of Directors, and has been on the boards for Spark and Transpower, Genesis Energy, and is currently chair of The Education Hub and on the steering committee of Te Hono Movement. Maury worked at Fonterra from 2005 until 2016, most recently as a member of the executive team in the role of Managing Director for People, Culture and Strategy.

Professor Robin Pollard, Vice-Chancellor and Council Member, Lincoln University

Robin commenced as Vice-Chancellor on 29 Feb 2016. He was previously the Group VP and Deputy Vice-Chancellor at the University of Central Lancashire (2014-2016) where he was responsible for international, corporate strategy and research. He has extensive international experience, including roles in Melbourne, Malaysia, NSW, Cyprus, Mauritius, Hebei-China, and Thailand. Robin was Christchurch born and trained at the University of Canterbury as a condensed matter physicist. He has held research positions, including a physicist and research chemist, and also held academic positions in marketing and information technology.

Steve Smith, Council Member, Lincoln University

Steve is a Lincoln University alumni whose career has always been in the wine sector, however the dynamic has moved through academic, technical, managerial and entrepreneurial. His most notable achievement in the business world has been co-founding and leading the creation and development of Craggy Range Winery in Hawke's Bay, crowned as the best winery in the new world by Wine Enthusiast Magazine in 2014. Alongside his role as Chancellor at Lincoln University, he sits on the Primary Growth Partnership independent panel of experts and is active in the Te Hono Movement, a private sector lead initiative to embrace market lead change in the New Zealand primary sector

Miriana Stephens

Miriana is currently a director of Aotahi, a Māori-owned and managed business specialising in the development and management of educational programmes in the areas of small business and money management for communities throughout Aotearoa. Miriana is also a director for Wakatū Incorporation (Wakatū), its subsidiaries and various committees. Miriana was awarded the 2016 Aotearoa NZ Māori Woman Business Leader award in recognition of outstanding success and excellence in business.

International panel

Robert Cochrane, Pt Unico Nusantara, Jakarta

Formerly Pro Vice Chancellor Singapore / CEO University of Newcastle Singapore for five years, Robert is now CEO of South Bank College. Prior to that he was a consultant based in Jakarta currently advising a major private RTO / Educational Investment Group on how to register a new College as a higher education provider, including preparation of policies and procedures and curriculum for the registration process. He has undertaken feasibility studies and strategic and risk analyses for educational providers and has expert knowledge of software systems and their implementation in Higher Education organisations.

Dr Aalt Dijkhuizen, Aalt Dijkhuizen BV

Until mid-2014, Aalt was the President and Chairman of Wageningen University in the Netherlands, the number one ranked university in Agriculture globally. He is an industry leader with extensive international experience. In 2014 he became President of the Dutch Topsector Agri&food, a collaboration and innovation network between government, private industry and universities/research institutes. More recently, he established the Holland Centre in Shanghai to support Dutch Agri&Food companies doing business in China.

Dr Gai Murphy, GM Education Consultancy Ltd, UK

Dr Murphy is the Director of GM Educational Consultancy Ltd, based in the UK and was born and raised in N. Ireland. She has over 25 years' experience of working in Higher Education and has held a number of senior roles (including Pro Vice Chancellor (Student Experience) and PVC (Learning and Teaching)). Gai is a UK Quality Assurance Agency Reviewer, and she has a detailed knowledge and understanding of governance issues and has been appointed to Governing Bodies in higher, tertiary and secondary education institutions.

Appendix 3: List of Organisations and Individuals Consulted

There are a number of individuals who gave up their time to provide feedback on how Lincoln University can address its challenges and opportunities moving forward. The Transformation Board are grateful to them for their insights and innovative ideas.

Organisation	Individuals
AgFirst	Hilton Collier
AgResearch	Tom Richardson
Alliance	Chris Selbie and Nigel Jones,
ANZCO Foods	Sir Graeme Harrison
ASB	Kevin Cooney
DairyNZ	Mark Paine
Education NZ	Grant McPherson
Environment Canterbury	Bill Bayfield
Fonterra	Ross Abercrombie and Chris Greenough
Icebreaker	Nicola Simpson
Kono New Zealand	Rachel Taulelei
Ministry of Business, Innovation and Employment	Paul Stocks
New Zealand Ministry of Foreign Affairs and Trade	Anton Ojala
Ministry of Primary Industries	Ruth Shinoda
Ngāti Porou Miere Limited Partnership	Victor Goldsmith
Ngāi Tahu Holdings Corporation	Mike Sang
PGG Wrightson	Mark Dewdney
Plant and Food Research	Peter Landon-Lane
Poutama	Richard Jones
Prime Minister's Chief Science Advisor	Sir Peter Gluckman
Property Institute of New Zealand	Allan Smee
Ravensdown	Mike Manning and Greg Campbell
Robotics Plus	Steve Saunders
Royal Institution of Chartered Surveyors	Michelle Manley
Singularity University	Kaila Colbin
Synlait	Dr John Penno
Tech Futures Lab	Frances Valentine
Te Taumutu Rūnanga	Liz Brown and David Perenara-O'Connell
Tru Test	Greg Muir and Brendan O'Connell

Appendix 4: Summary of Findings from Stakeholder Engagement

The Transformation Board undertook a comprehensive process to gather feedback from industry leaders, academics, students and other key stakeholders to understand their views about Lincoln University and its future.

Designworks

Designworks facilitated a 'Future State' workshop with the Transformation Board, then ran a workshop with a cross-section representation of all students. Their findings revealed that 'land-based' (and the environment) as a concept is largely misunderstood by prospective students and that Lincoln University's academic offerings are considered to be "ever changing" and unfocused, creating confusion.

However, students felt that the University's small size is one of its key strengths. Students enjoy the small class sizes and personal connections with lecturers and staff, and their studies help them to feel connected with the real world, both in terms of industry and post-study career opportunities. Lincoln University's reputation in its areas of specialisation is a key attractor for prospective students, and the focus on practical studies gives students a head start when looking at future career options and employment.

Designworks provided an outline of Lincoln University's competitors for market share in the New Zealand tertiary sector and found that Lincoln University's specialisation is its strength – it is a niche university that appeals to a niche audience.

Industry Insights

The Transformation Board commissioned ThinkPlace to carry out interviews with industry leaders to gain insights about how Lincoln University fits into their sector. The organisations and individuals consulted are detailed in Appendix 3. Key themes gathered were:

1. Have a sharp, non-diluted focus. Outline the University's mission for New Zealand's future, and how it will deliver for students and industry.
2. Reconnect and realign. People are longing for an authentic and relevant connection with Lincoln University and an understanding of what the University's value proposition is.
3. Kaitiakitanga – the wise and enduring use of whenua means perusing opportunities for a unique and natural partnership between tangata whenua and Lincoln University.
4. Re-imagine – the first waves of "educational disruption" are already affecting a number of tertiary institutions. In the near future, the truly digital generation wave will hit universities.
5. Make the Lincoln Hub aspirational and real. People are excited and energised by the Lincoln Hub concept, but they want to see the vision translated into reality.

6. Be receptive – have an awareness and receptiveness to opportunities as they present, and the agility to be flexible and act on those opportunities.
7. Deliver the “core” and the “edge”. The sector needs talented people with core skills, as well as skills that will help give them an edge in the market.
8. Recognise the talent within Lincoln University. Value and leverage Lincoln University’s existing talent and attract top global talent, creating a virtuous cycle.

In summary, the current industry respects Lincoln University’s rich history of educating some of today’s leading researchers, business people and government leaders nationally and internationally. They would like more engagement with Lincoln University, which some industry leaders feel has been lost as the University’s focus has broadened. They also suggested that the sector needs talented people with core skills and edge skills/research, and stated that if the University becomes more connected with industry and is at the edge of agricultural thinking, then it would be well placed to predict future skills requirements. When the opportunity presents itself, the University needs to be receptive to engaging with partners, as attempts to engage have dissipated recently.

Both Māori and Pakeha stressed the potential for a unique and natural partnership between Tangata Whenua and Lincoln University. Industry representatives spoke about the world trending towards guardianship of the land, which Māori values have always reflected.

The digital age is also an area that the University needs to understand and make use of. There is a view that it is important to extend and enlarge the virtual/online footprint. The younger generations are very tech-savvy, and greater value and emphasis should be put on technology – agritech, food tech, food e-commerce, irrigation, indoor agricultural, urban farming etc.

The Lincoln Hub is exciting industry – industry leaders are excited and energised by the concept and believe in the huge opportunity. However, they have stressed that it will require a new mindset and way of working. The University has some nationally and internationally respected researchers and academics, and has the potential to attract very talented people from the academic community, as well as future students. There needs to be a strong alignment of purpose between academic staff, Council and management, and it was recognised that this would be a challenging change journey.

Appendix 5: Summary of Options in the EY Report Lincoln University Strategic Options Assessment (21 July 2016)

The EY Report sought to address the issues facing Lincoln University at that time. This included immediate financial pressures, and financial projections that showed a return to acceptable financial performance around 2024. This was predicated on revenue growth and cost reductions that had yet to be demonstrated. In addition, the University was working through the challenges presented by its Telford Division, which had declining enrolment and revenues.

The report canvassed five options for the University:

- Do nothing.
- Continue on the current trajectory, as per the plans and financial projections that had already been prepared.
- Enhance the current trajectory, taking more action around cost reductions
- Consider integration, across a continuum of sub-options
- Wind down, with a possible sale of assets.

Given the information at hand, it was reasonable for the report to consider the enhanced current trajectory and integration options as presenting the most credible ways forward for an organisation in such a poor financial condition. These options would better serve the Crown's interests in regard to managing risks and ensuring students could continue to receive the benefits of a specialist land-based education.

The report noted that while its preference was for integration as a lower-risk option, the initial steps were sufficiently similar for the two options to allow the decision to be deferred while cost reduction, asset optimisation and market sounding activities were undertaken.

Since the EY Report was completed, the University has acted rapidly to address costs, commence asset optimisation, exit the Telford Division, and introduce its internal economy model to improve resource allocation, and it has benefited from improved revenues. The combined effect has led to the achievement of an acceptable financial performance against the TEC's Financial Monitoring Framework (FMF) in the current (2017) year, around seven years ahead of the projections originally shared with EY.

While there is no guarantee the current performance can be sustained against headwinds that include the unpredictability of external research income, competitive pressures such as the movement of staff to other institutions, cost pressures such as wage and salary growth, potential changes to immigration policy that may affect the attractiveness of New Zealand to international students, and the generally declining roster of school leavers seeking enrolment in universities, the landscape of options available to Lincoln University is now greater than at the time the EY Report was prepared.

Appendix 6: Information Sources

Published documents

Controller and Auditor-General, *Investing in tertiary education assets*, February 2017
 EY, *Lincoln University Strategic Options Assessment*, July 2016
 Lincoln University, *Lincoln University Strategic Plan 2014-2018*
 Lincoln University, *Investment Plan 2017-2019*
 Lincoln University, *Transform: A profile of Lincoln University's research*, January 2016
 Lincoln University, *Our Story*
 MBIE, *National Statement of Science Investment*
 MBIE and Ministry of Education *New Zealand Tertiary Education Strategy 2014-2019*
 Productivity Commission, *New models of tertiary education*, March 2017

Presentations (to the Transformation Board)

CarteBlanche, *Lincoln University Student Research Project 2017*, June 2017
 Designworks, *Transforming Lincoln University*, April 2017
 Designworks, *The Lincoln Project*, June 2017
 Dr Aalt Dijkhuizen, *Lessons learned from Wageningen as input from the Lincoln University transformation process*, May 2017
 Gai Murphy, *Student Experience*, July 2017
 Gai Murphy, *Student Experience (presentation to staff and board)*, August 2017
 Kevin Hurren, *Intellectual Property and Commercialisation at Lincoln University*, July 2017
 Lincoln University management, *Lincoln University: A closer look at staffing, students and the basis of the 10 year forecast*, April 2017
 LUSA Board, *Presentation to Transformation Board*, July 2017
 Professor David Simmons, *This is Land*, March 2017
 Professors David Simmons and Bruce McKenzie, *Lincoln University Research Platform Situation Profile*, May 2017
 Tertiary Education Commission, *Lincoln University - TEC presentation to the Transformation Board*, April 2017

Commissioned Work

Designworks, *Lincoln University Student Value Proposition*, August 2017
 ThinkPlace, *Industry Insights: Finding and Report Back*, July 2017
 ThinkPlace, *Industry Insights: Phase two*, August 2017

Appendix 7: Summary of Productivity Commission Report

New models of tertiary education March 2017

In 2016 the Government asked the Productivity Commission to carry out an inquiry into new models of tertiary education. The below provides a summary of the headings from the Overview section of that report:

- New Zealand's tertiary education system
 - Why does tertiary education matter?
 - The current state of the tertiary education system
- Where is the system innovative? What are the possibilities?
 - Teachers and providers innovate – but core business models persist
 - Better matching is possible via new models
- Inertia is an emergent property of the system
 - Government control is pervasive
 - Regulation does the opposite of what it does in other sectors
- The result is the delivery of more "traditional" tertiary education
 - A system that is educating fewer students in recent years...
 - ... and continues to underperform for some population groups
 - Students are disempowered
- The tertiary education system is exposed to uncertain trends
- Providers respond to government, not students
- Information to support new models
 - Better prepare students
 - Promote student access and mobility
- Recommendations to get the regulatory balance right
 - Competent institutions should self-accredit
 - Remove some restrictions on how funding is used
 - Address the imbalance between research and teaching
 - Increase tertiary education institutions' autonomy and responsibility
 - Allow new entrants

- Purchasing to reward new models
 - Enable students to access courses that do not attract TEC funding
 - Reform fee regulation
 - Allocate funding in a way that follows student demand
 - Enable new entrants to access funding
 - Break open the EFTS
- System architecture to support new models
- What it all means

Appendix 8: List of some of the University's prestigious alumni

Hon. Margaret Austin, CNZM

Former MP and Minister of Research Science and Technology, and former Chancellor of Lincoln University. Awarded Doctor of Science *honoris causa* 2006.

Hon. Maggie Barry ONZM

Media personality and MP for North Shore and former Minister for Conservation. Diploma in Horticulture.

Dr Frank Boffa, ONZM

Founder of Boffa Miskell, a leading landscape architectural practice. Diploma in Horticulture. Awarded Doctor of Natural Resources *honoris causa* 2005.

Rt. Hon. Tā Turi Carroll KBE, OBE

(Deceased) Maori Leader and former Maori Vice-President of the National Party. Diploma of Agriculture. Foundation Chairman NZ Maori Council. Awarded the Bledisloe Medal in 1940.

Rt. Hon. David Carter

Former Speaker of the New Zealand House of Representatives. Bachelor of Agricultural Science.

Annabel Langbein

Celebrity cook, food publisher and writer, and TV presenter. Diploma in Horticulture with Distinction. Member Sustainability Council of New Zealand. Awarded Doctor of Commerce *honoris causa* 2017.

Neil Craig, ONZM

Founder of Craigs Investment Partners, a specialist wealth investment manager. Master of Agricultural Commerce.

Sir Peter Elworthy

(Deceased) Former Dominion President Federated Farmers. Completed Intensive Farming Course 1955. Nuffield Scholar. Awarded Bledisloe Medal 1987 and Doctor of Commerce *honoris causa* 2002.

Dr Murray Horn, CNZM

Former NZ Treasury Secretary, Managing Director ANZ (New Zealand), represented NZ at the OECD. Bachelor of Agricultural Commerce and MAgCom (Hons). Awarded Bledisloe Medal 2000.

Mark Inglis, ONZM

Mountaineer, winemaker, research scientist, Paralympian. Lincoln BSc (Hons) in Biochemistry 1989. Senior Winemaker for Montana Wines. Awarded Doctor of Natural Resources *honoris causa* 2009.

Rt. Hon. Sir Don McKinnon, ONZ, GCVO

Former Deputy Prime Minister and Commonwealth Secretary-General. Intensive Farming Course at Lincoln. Vice-President Lincoln College Students' Association 1961. Awarded Doctor of Commerce *honoris causa* 1999.

Richie McCaw, ONZ

Captained the All Blacks to victory in two Rugby World Cups. Studied for a Bachelor of Agriculture and awarded Doctor of Natural Resources *honoris causa* 2012.

Tan Sri Alfred Jabu Numpang

Retired Deputy Chief Minister (Deputy Prime Minister) of Sarawak 1976-2016. Bachelor of Agricultural Science, Lincoln, 1967. Awarded Doctor of Natural Resources *honoris causa* 1997.

Dr John Penno

CEO of Synlait, an innovative dairy processing company in Canterbury recently winning the Best Growth Strategy in Deloitte's 2017 awards. Bachelor of Agricultural Science.

Sam Robinson

Chairman of AgResearch/Director Silver Fern Farms. Bachelor of Agricultural Science with Honours and awarded Bledisloe Medal 2008.

Hon. Jeremy Rockliff

Deputy Premier of Tasmania, Minister for Education and Training, Minister for Primary Industries and Water. Lincoln Diploma in Farm Management 1990. Lincoln Alumni International Medal 2016.

Toni Street

TV host on TV1 current affairs programme. Attended Lincoln University on a sports scholarship (cricket). Bachelor of Commerce and Management 2005.

Captain Charles Upham VC and Bar

(Deceased) Twice awarded the Victoria Cross for gallantry in the Second World War. Diploma of Agriculture, and Diploma in Valuation and Farm Management.

Matarehua Wikiriwhi, DSO, MC, M.I.D

(Deceased) Highly decorated Maori soldier in World War Two. Worked as Farm Adviser, Maori Affairs Department. Diploma in Valuation and Farm Management.

Lincoln University
Transformation
Board Report
