TE PŌKAI TARA
UNIVERSITIES
NEW ZEALAND

Briefing for the Incoming Minister

December 2016

Universities New Zealand
(The New Zealand Vice-Chancellors' Committee)

1. Background

Universities New Zealand - Te Pōkai Tara is the sector voice for all eight universities in New Zealand, representing their views nationally and internationally, championing the world-class education they deliver and the important contribution they make to New Zealand, economically and socially.

Universities New Zealand is made up of the eight university Vice-Chancellors. From 1 January 2017, it will be Chaired by Professor Stuart McCutcheon, Vice-Chancellor of the University of Auckland, for a two-year period.

Universities New Zealand is supported by a small team led by the Executive Director, Chris Whelan, your key point of contact.

His contact details are: chris.whelan@universitiesnz.ac.nz; 04 381 8511; 027 242 5886, www.universitiesnz.ac.nz.

2. Statutory role

Universities, along with other tertiary education institutes (i.e., polytechnics and Wānanga) are autonomous Crown Entities (Section 7 of the Crown Entities Act 2004).

Their autonomy is set out under the Education Act 1989 (Section 169):

"The object of the provisions of this Act relating to institutions is to give them as much independence and freedom to make academic, operational, and management decisions as is consistent with the nature of the services they provide, the efficient use of national resources, the national interest, and the demands of accountability."

Under the Education Act (Section 146(4)(a)), a university must fulfil of the following characteristics:

- "they are primarily concerned with more advanced learning, the principal aim being to develop intellectual independence:
- their research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge:
- they meet international standards of research and teaching:
- they are a repository of knowledge and expertise:
- they accept a role as critic and conscience of society."

Universities New Zealand, also known as the New Zealand Vice-Chancellors' Committee, is a statutory body under Part 19 of the Education Act. Our key responsibilities include the quality assurance of university programmes, and granting undergraduate and postgraduate scholarships.

In additional, we co-ordinate international education policy, provide sector coordination, and inform and influence decision-making.

3. Executive Summary

Universities New Zealand shares the Government's aspirations for a high-performing, smart, and resilient country. Universities have a key role to play in supporting Government to achieve this aspiration.

As our Minister, we look forward to working with you and supporting you in your new portfolio.

This briefing covers four areas;

1. What we see as the key opportunities for this Government in working with universities to drive economic, social and cultural benefits for New Zealand.
2. What we see as the key challenges for the university sector in assisting government in this role.
3. Identification of a few key areas that we believe require early attention.
4. Several areas where universities might be able to assist you in future.

We welcome the opportunity for the Chair and Executive Director to brief you in person as you take up this portfolio. We also invite you to meet with Vice-Chancellors quarterly. We are also available to brief you on common issues and challenges as they arise.

4. An Effective University System

You will have oversight of a university system that is extraordinarily effective by international standards.

- New Zealand is the only country in the world where all of its universities are world-ranked[1].
- New Zealand has some of the best qualification completion rates in the world. Only 16%[2] of full time students who start a bachelors-level qualification at a university in New Zealand do not have a qualification within eight years. By comparison, non-completion rates at polytechnics/institutes of technology are 28%[3] and 32%[4] for Wānanga. International comparisons are problematic because different countries track completion rates over different time periods, but reported non-completion rates are 18%[5] in the UK, 27%[6] in Australia, 41%[7] in the US, and around 50–55% in South America and Asia.

[1] Using the QS World Rankings – www.topuniversities.com/university-rankings.
[2] Education Counts - https://www.educationcounts.govt.nz/statistics/tertiary-education/retention_and_achievement Com.35 cells P7 (European), P22 (Maori) and P31 (Pasifika)
[3] Education Counts - https://www.educationcounts.govt.nz/statistics/tertiary-education/retention_and_achievement Com.34 cell P58
[4] Education Counts - https://www.educationcounts.govt.nz/statistics/tertiary-education/retention_and_achievement Com.34 cell P85
[5] https://www.timeshighereducation.com/news/how-student-completion-rates-vary-across-europe
[6] Completion Rates of Domestic Bachelor Students – a Cohort Analysis, 2005-2013, Australian Government, Department of Education, Page 4.
[7] National Centre for Education Statistics, US Department of Education, 2015. https://nces.ed.gov/fastfacts/display.asp?id=40 Note that this is 4 year degrees completion rates after 6 years.

- The New Zealand universities have some of the best graduate outcomes in the world. Three years after graduating, 97–98% of university graduates are in employment[8]. For graduates aged 29–38 at the time of the 2013 Census, 88% were in jobs that either needed a specific degree (doctor, teacher, etc.) or for which a degree was highly useful (general manager, consultant, policy advisor, etc.)[9]. These employment statistics can be contrasted with countries like the UK where 47% of degree-level graduates are under-employed a year after graduation or the US where 33% of graduates are under-employed 10 years after graduation.

- International education is New Zealand's fourth largest export earner at $4.28 billion annually[10]. Universities generate $1.27 billion of this sum and are the sector that makes the largest individual contribution[11]. New Zealand has the third highest proportion of international students in the world (14.3% of all students)[12]. There were 18,252 international equivalent full-time students (EFTS) at New Zealand universities in 2015[13].

- University research plays a part across New Zealand's economy, society and culture. Universities spend around $800m a year in research – representing around a third of this country's total spend on Research and Development. Over 60% of this research is on physical and information sciences, health, infrastructure and the economy. In return for this investment, NZIER has recently calculated that;

    - The stock of all knowledge generated by universities and adopted over time across the wider economy accounts for around 8.2 percent to 9.7 percent of GDP

    - Expenditure from university research over just the last six years (2010 to 2015) accounts for 0.3 percent to 0.4 percent of GDP

    - A 10 percent increase in higher education research spending (+$80m) can be expected over 10-20 years to increase GDP by 1.75 percent to 1.84 percent (around $4.5bn).

- The New Zealand university system delivers these strong results efficiently. For example, for 2014, using New Zealand dollars in 2014 $NZ exchange rates[14]:

    - New Zealand delivered its outputs with 19% less infrastructure than did Australian universities. That is, Australian universities had $57,280 of buildings, plant and equipment per EFTS compared with $46,381 for New Zealand universities.

    - New Zealand produced its outputs for only 77% of what it cost in Australia. That is Australian expenditure was $34,351 per university EFTS compared with $23,949 for New Zealand.

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[8] What Young Graduates Earn when they Leave Study, NZ Ministry of Education, May 2013.
[9] Universities NZ, Graduate Return on Investment Study – unpublished, February 2016.
[10] http://www.enz.govt.nz/news-and-research/research/the-economic-impact-of-international-education-2015/16201516/
[11] From the eight university annual reports for 2015
[12] Education at a Glance 20162015: OECD Indicators Table C4.1
[13] Calculated by adding international student numbers reported in each of the eight universities audited annual reports.
[14] These figures were calculated from the combined Annual reports of New Zealand's eight universities and the combined 2014 financial information provided by Australian universities to the Australian Government's Department of Education and Training. https://docs.education.gov.au/node/38416

Although this high level of efficiency can be viewed as a benefit, the system is extremely stretched and is at risk due to current funding and policy settings.

For example, New Zealand universities dropped an average of 25 places in the Times Higher Education rankings in the five years from 2009-2015. Similarly, New Zealand universities had dropped by 50 places in QS rankings until a one-off technical adjustment was made to ranking methodology in 2015. Even with this one-off adjustment New Zealand universities are now also 25 places lower in QS rankings in 2016 than they were in 2009.

5. New Zealand University Business Model

Over the past two decades, the New Zealand university business model has become heavily reliant upon increasing student numbers to remain financially viable. This is best characterised as a 'volume-driven business model'.

Looking at the decade from 2006 to 2015, there was a:

+ 21.6% Increase in CPI over the ten year period[15].
+ 40.3% Increase in Student Achievement Component (SAC) funding on a per-capita student basis.
+ 37.5% Increase in domestic student fees on a per-capita basis.
+ 47.4% Best estimate of the actual increase in university expenditure on a per-capita basis.

Table 1 – Comparison of University Costs 2006 vs 2015

Calc	University Sector	2006	2015	10 Yr Change
x	Avg domestic tuition fee per EFTS	$4,261	$5,860	37.5%
y	Avg SAC Rate per EFTS[16]	$7,455	$10,455	40.2%
a	SAC Funding Total	$811,786,978	$1,189,508,000	46.53%
b=(c*x)	Domestic Student Fee revenue	$464,003,850	$666,701,000	43.68%
c	Domestic Student EFTS	108,899	113,775	4.48%
z	International Student EFTS	19,626	18,252	-5.83%
d	Total EFTS (Domestic & Int)	128,525	132,257	2.90%
e	Total operating costs	$2,306,561,000	$3,499,505,000	51.72%
f=(a/c)	Per capita SAC Funding	$7,455	$10,455	40.25%
g=(b/c)	Per capita student fees	$4,261	$5,860	37.53%
h=(e/d)	Per capita operating costs	$17,946	$26,460	47.44%

Over the same period, university sector operating costs have increased by just over 47% on a per-student basis – mostly driven by rising salary costs (57%), compliance costs, building maintenance costs, rising utilities costs, the cost of purchasing ICT equipment and licences

[15] CPI does not reflect the real increase in costs experienced by organisations like universities where costs are mostly driven by salaries and the costs of operating capital-intensive infrastructure. The Ministry of Education reviewed this in 2009 and, at that time, found that university costs actually increased at an average of around 1.5 times CPI annually.

[16] The SAC funding rates were provided by the Tertiary Education Commission.

from overseas and increasing costs of libraries as a consequence of subscriptions to online electronic resources.

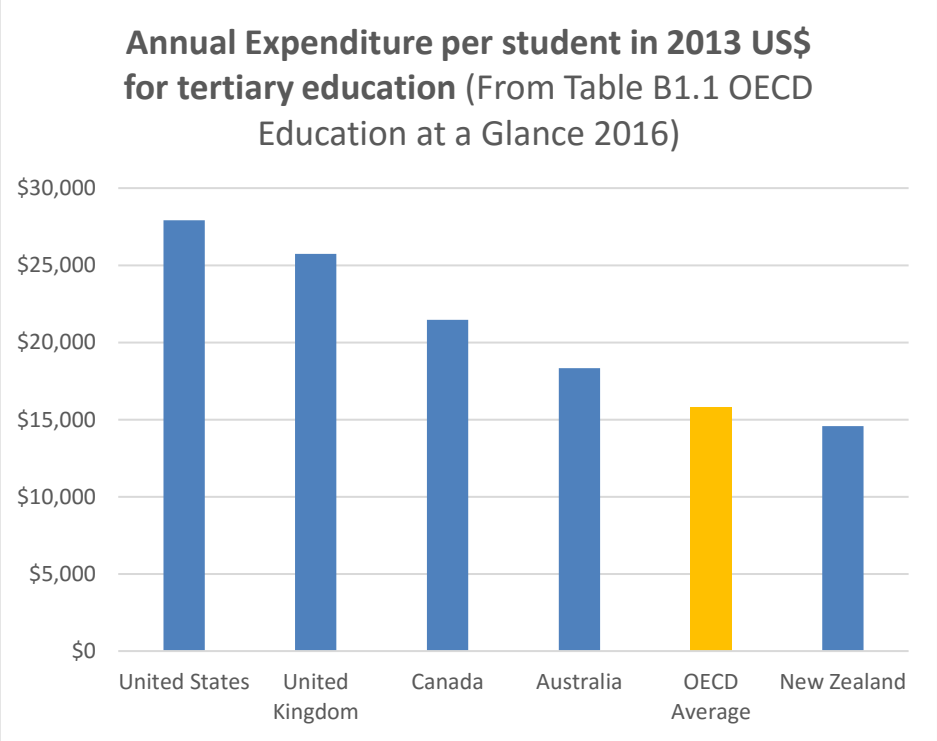
None of these costs are reflected in the calculation of the CPI and all have risen faster than CPI over the past ten years.

Salaries are particularly problematic because universities compete in an international market place for top academics. New Zealand already pays well below comparable universities in Australia, the UK and Canada. Although New Zealand offers lifestyle factors as partial compensation for lower salaries, this formula only works to a point. The further New Zealand slips behind international remuneration levels, the more difficult it becomes to recruit and retain good staff.

Quality of academic staff is the single-most important determinant of the quality of a university.

TEC funding criteria require universities to generate 2-3% surpluses each year and there are a range of dire consequences threatened for institutions that fail[17]. Outside of Christchurch, universities have managed to generate the required level of surplus, however, this level of surplus has become increasingly difficult in recent years as all cost management options have been progressively exhausted. In order to continue generating surpluses over a period where costs have risen faster than per-capita income, universities have had to carefully manage costs while growing income via a volume strategy – maximising numbers of domestic and international students.

The challenge facing New Zealand universities in remaining competitive internationally is indicated by the following OECD data on per-student funding.[18].

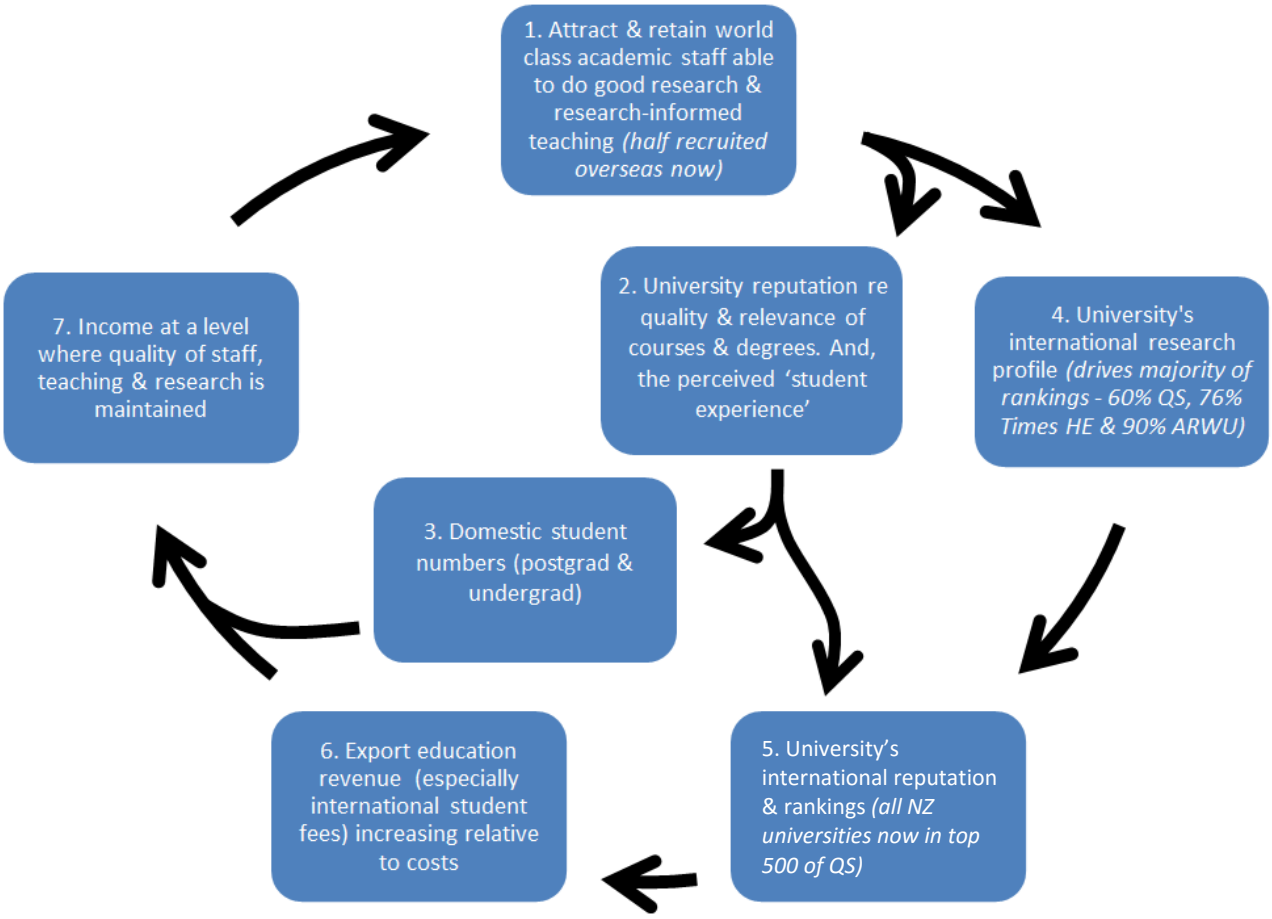


[17] Ranging from putting an institution under management through to significantly augmented reporting and monitoring regimes.

[18] Note that the OECD average figure includes a range of countries that NZ does not traditionally compare itself against – including Indonesia, Colombia, Mexico, Brazil and Turkey.

The High Level Model

The resulting volume-driven business model is depicted in the following diagram.



This diagram demonstrates the requirement for continuous growth in [3] domestic and [6] international student number to fund [7] ongoing increases in the associated costs of [1] recruiting and retaining high quality academic staff, [4 & 5] maintaining and improving each university's reputation and positioning in international rankings by high quality teaching and research, and in [2] delivering a quality student experience on and off campus.

It should be noted that generation of research revenue does not feature strongly in this diagram; this omission is deliberate. Most research is funded on a cost-recovery basis and, relative to student tuition revenue, has much more limited impact on a university's ability to offset the impact of increasing costs. The focus is therefore [7] generating sufficient tuition fee revenue from [3] domestic and [6] international students so as to be able to maintain the quality of offerings (including learning & teaching) in other parts of the business model.

As a consequence of these business drivers, universities are focussed on delivering a system that aligns well with Government policy objectives. Specifically, New Zealand universities are:

- Focussed on maintaining a world-class standard of teaching and research.
- Very responsive to student demand for courses and degree programmes that are relevant and of high quality and underpinned by the best modes of learning and teaching possible.
- Supportive of Government pipeline and pathways initiatives that increase university participation rates (particularly Māori & Pasifika), that grow numbers of students entering

university education, progressing successfully through it and achieving positive employment outcomes at the end of their studies.

- Very focussed on having their academic staff producing and disseminating high quality relevant research.
- Very supportive of the Government's broader international education objectives.
- Keen to diversify and grow alternative income streams.

6. Key challenges and opportunities for New Zealand's university sector

There are a wide range of challenges and opportunities in your portfolio. The Vice-Chancellors suggest the following five areas for your immediate attention;

A. Funding levels and the decline in international rankings

As outlined above, there is a high level of interdependence between elements such as funding levels, teaching quality, research quality, international rankings, international student numbers, and the ability to attract and retain world-class teachers and researchers. The New Zealand university system is slipping backwards in both funding levels and international rankings which is putting all other parts of the university system at risk.

We realise that there are many demands on Crown funding, but we hope you will make the case for further investment in this country's university system. We are, of course, keen to assist you in developing this case and helping to quantify the benefits that will make it compelling to your Cabinet colleagues.

B. Productivity Commission Inquiry

Universities New Zealand has provided two submissions to the Productivity Commission's Inquiry into Future Models of Tertiary Education. They are on our website at http://www.universitiesnz.ac.nz/productivity-commission-inquiry-tertiary-education.

The current draft Productivity Commission report provides a useful analysis of many of the problems facing the tertiary education system but then fails to identify why the problems exist or how to address them. We hope that the final report will be extensively rewritten to reflect the largely critical reception the draft has received. At this stage, we agree with the Productivity Commission that:

- **The Tertiary Education Strategy is high level and vague** – creating ambiguity around goals and objectives. Coordination of tertiary education is complicated and split across multiple agencies leading to fragmentation, lack of cohesion and unclear objectives. We agree. We would like to see a sub-sector strategy for the university sector with agreed expectations around performance and results to guide priority setting and investment.
- **The Educational Performance Indicators (EPIs) are poor measures of system performance**. We recommend you have your officials work with national and international experts in the education system to develop more meaningful measures to assess the quality and effectiveness of the education system.
- **The funding system is now so locked down that it is limiting sensible levels of innovation and differentiation and preventing the widespread adoption of new models of teaching and learning.** SAC funding rates were largely set when the SAC funding system was introduced in the early 1990s. Funding rates were set based on an

assessment of reasonable costs determined by looking at how teaching was delivered at the time. When subjects had work-experience practicums (like engineering, medicine and teaching) the cost of these practicums was built into the SAC funding cost category. When subjects did not have practicums (like the arts, sciences and commerce), funding was set at a lower level to reflect that.

SAC funding rates have been adjusted periodically, but adjustments are done based on benchmarking of actual current costs which are driven by the prevailing business model. This creates a chicken and egg problem – where universities can't, for example, mainstream internships for arts students without a general increase in SAC funding or tuition fees.

C. Tools to assist young people in assessing study & career options

There has been a proliferation of Government tools and approaches aimed at improving study and career choices for young people. At last count, there were at least seven initiatives[19] – of varying quality and with no overall responsibility or strategy for ensuring they can be found and used by students.

We hope that the merger of Careers NZ into the Tertiary Education Commission will provide an opportunity for rationalisation in this area. We would like to see an overall Government vision and strategy in this area with a goal of providing coherent quality advice within the next couple of years.

D. International education settings and public opinion

New Zealand has historically been regarded as a welcoming, tolerant and high quality destination for international students. This reputation has seen the earnings from international education rise to the current record levels.

Unfortunately, international education is now at significant risk due to a small number of mostly private tertiary education providers offering migration pathways via low value and low quality qualifications to (mainly) the Indian market. This leads to:

- Across-the-board tightening of immigration settings;
- Tarnishing New Zealand's reputation in international markets;
- The creation of a false public perception within New Zealand of international students;
- Public perceptions that international students are taking New Zealanders' jobs, when this isn't the case.

The last time something similar happened in New Zealand was in 2003 when poor quality education by some providers saw the Chinese Government recommend that its citizens not choose this country for their studies. International student numbers dropped 20% in the following years and have only recently returned to pre-2003 levels.

We hope the Government will continue to provide support to high quality tertiary education providers while identifying and managing providers that are threatening the overall reputation of New Zealand.

[19] Careers NZ's online tools, MBIE's Occupation Outlook, the Ministry of Education's Vocational Pathways, NZQA's qualification framework, and the TEC's Information for Learners, Rate my Qualification, and Earnings and Employment.

E. Fire Services Levy

The proposed Fire and Emergency New Zealand Bill has the potential to significantly increase costs for both the university sector and the ITP sector by changing the basis on which levies are calculated from a 'Fire Damage Limit' (typically a few tens of millions of dollars) to 'the Material Damage Limit' (around $6 billion dollars). We hope you will work with the Minister of Finance and the Minister of Internal Affairs to ensure that this change either does not proceed or is done in a more sensible way.

Universities New Zealand wrote to the Minister of Internal Affairs on this matter on 2 September 2016 and 28 October 2016.

F. Continuing to Lift Māori and Pasifika Achievement

We know that by 2030–2038, 30% of New Zealand's population will be Māori or Pasifika and half of the Māori population will be younger than 28 years, and we also know that the challenges facing Māori and Pasifika students at university are systemic and complex. The universities are doing a lot of work on improving access, participation and achievement for Māori and Pasifika students, and they are committed to improving parity in both access and achievement. But, the universities most effective interventions are typically resource intensive, and costly. This issue is not new; equity funding as a mechanism is well short of the actual cost needed to support the upscaling of initiatives that could deliver greater results.

We have considered this area through our budget initiatives in more detail, and would be more than willing to assist further in this area - that we know is a key priority within the Tertiary Education Strategy.

7. What the university sector can do to assist you

A. Linking academic expertise to Government policy priorities

The New Zealand university sector has expertise across nearly every conceivable social and economic challenge facing this country. We have academics and university leaders who understand the policy environment and who are willing to bring their knowledge and expertise to any area you wish.

If you need to locate particular expertise within the university sector, you can approach Universities New Zealand, Executive Director, Chris Whelan in the first instance, or the Vice-Chancellor of a given university.

B. Budget initiatives

Universities New Zealand wrote to your predecessor with suggestions for Budget 2017 based on priorities he outlined to the Vice-Chancellors in August. A copy of those suggestions is attached.

If you have different priorities and would like additional options, we would be pleased to assist.

We understand that Government spending is increasingly being driven by investment logic and we would be pleased to work with your officials on working up any initiatives you wish to take forward and to support them in determining financial and non-financial costs and benefits.

APPENDIX - Universities key statistics (Information from the 2015 Annual Reports)

Consolidated $000's	Auckland	AUT	Waikato	Massey	VUW	Canterbury	Lincoln (Incl Telford)	Otago	**TOTAL**
Academic Staff	2,183	1,135	647	1,109	968	708	236	1,619	**8,605**
Other Staff	2,892	1,214	863	2,006	2,073	1,158	446	2,184	**12,836**
Total Staff	5,075	2,349	1,510	3,115	3,041	1,866	682	3,803	**21,441**
Total EFTS	33,489	19,798	10,018	18,688	16,978	11,931	2,934	18,421	**132,257**
Total Headcount	42,100	28,628	12,278	31,623	21,457	14,830	5,819	20,601	**177,336**
Domestic EFTS	29,612	16,296	8,483	15,872	14,800	11,053	1,830	15,829	**113,775**
International EFTS	3,877	3,272	1,535	2,816	2,178	878	1,104	2,592	**18,252**
Māori EFTS	2,469	2,289	2,249	1,823	2,064	866	251	1,759	**13,770**
Pasifika EFTS	3,057	2,954	624	785	1,239	366	51	804	**9,880**
Postgrad EFTS (incl honours)	7,717	3,103	1,743	4,670	2,898	2,654	471	3,092	**26,348**
Income $m	Auckland	AUT	Waikato	Massey	VUW	Canterbury	Lincoln (Incl Telford)	Otago	**TOTAL**
Domestic	$171.5	$90.6	$46.6	$100.5	$83.9	$61.4	$8.8	$103.4	**$666.7**
International Full Fee	$104.2	$67.0	$30.2	$57.6	$30.9	$21.5	$12.0	$43.6	**$367.1**
Student Fees	$275.7	$157.6	$76.9	$158.1	$114.8	$82.9	$20.7	$147.0	**$1,033.8**
Govt SAC Funding	$316.0	$141.3	$71.1	$145.9	$132.8	$130.8	$29.3	$222.3	**$1,189.5**
Govt PBRF Funding	$85.4	$13.9	$15.7	$39.8	$30.1	$27.7	$9.8	$58.0	**$280.5**
Other Govt Funding	$10.6	$4.7	$15.0	$0.0	$0.0	$1.0	$0.0	$2.3	**$33.6**
Research & contracts	$252.9	$11.1	$32.8	$53.8	$42.5	$27.4	$24.7	$92.1	**$537.4**
Other Income	$134.0	$39.2	$32.8	$62.2	$81.7	$61.2	$25.1	$134.5	**$570.5**
Total Income	$1,074.6	$367.8	$244.3	$459.9	$401.9	$331.0	$109.7	$656.2	**$3,645.3**
Expenses $m									
People Costs	$600.6	$215.9	$134.7	$271.1	$208.2	$171.4	$63.3	$384.4	**$2,049.5**
Operating Costs	$282.7	$84.1	$77.8	$130.6	$134.4	$107.9	$45.3	$178.4	**$1,041.1**
Deprn & Amortisation	$123.3	$46.9	$21.8	$52.0	$40.4	$44.0	$7.8	$60.7	**$396.8**
Other expenses	$0.1	$2.5	$0.2	$3.4	$0.5	$4.2	$1.0	$0.1	**$12.1**
Total Expenditure	$1,006.8	$349.4	$234.5	$457.0	$383.5	$327.5	$117.3	$623.6	**$3,499.5**
Net surplus	$67.9	$18.4	$9.8	$2.9	$18.4	$3.5	-$7.7	$32.6	**$145.8**
	6%	5%	4%	1%	5%	1%	-7%	5%	**4%**
Property, plant & equipment book value	$2,035.5	$697.0	$394.9	$1,265.2	$752.3	$801.3	$170.5	$1,492.6	**$7,609.2**

Key financial and non-financial measures (From 2015 University Annual Reports)

- On average, 49.3% of university sector income comes from the Government and 28.4% from students.
- The remaining 22.4% comes from a range of sources, including research and investments.
- On average 10.1% of university sector income comes from full-fee paying international students.
- International students make up 13.8% of all EFTS, but their fees represent 35.5% of all student fee income.

Income Line by Source (all 8 universities)	**Total Income 2015 $m**	**% of all Income**
Fee Income from Students	$1,033.76	28.4%
Income from Government (all sources)	$1,796.16	49.3%
Other Income (Non student & non-Government)	$815.31	22.4%
Total	**$3,645.22**	**100.0%**

About New Zealand's University System

Relevant legislation

1. Education Act 1989 - Part 14 Establishment and disestablishment of tertiary institutions
    a. Universities are subject to the provisions of the Education Act which describes their characteristics s162(4)(a)(1)-(v) and (b)(iii) protects their academic freedom,
    b. determines the constitution of their councils (Part 16 s165)
    c. defines their Crown reporting arrangements (through the Tertiary Education Commission)
    d. allows them to establish and quality assure their own courses and programmes
    e. and specifies that their chief executives (vice-chancellors) will be appointed through the provisions of the State Sector Act.
2. Official Information Act 1982
    a. Universities are subject to the Act (see S2)
3. Crown Entities Act 2004 s7 (1)(e)
    a. Tertiary institutions established under Part 14 of the Education Act including universities are defined as crown entities
4. Own legislation
    a. All universities in New Zealand have been established under their own legislation. Each is a "body corporate with perpetual succession and a common seal, and may hold real and personal property, and sue and be sued, and do and suffer all that bodies corporate may do and suffer."
    b. Education Act Part 19 – establishes Universities New Zealand /The New Zealand Vice-Chancellors' Committee (under S240)