

Investment Plan

2017-2018

Auckland University of Technology

Contents

Section 1: Introduction	3
Strategic intent	3
Stakeholders	6
Stewardship and capital asset management	8
Summary of programmes and activities	9
Section 2: AUT's contribution to Government priorities	10
Impact 1: Excellent scholars and sought-after graduates	10
Impact 2: Research that inspires curiosity, advances knowledge and benefits communities	18
Impact 3: Wider participation and success in education	25
Impact 4: Educated citizens igniting change in their communities	25
Impact 5: A stronger reputation for AUT	35
Section 3: Strategic investment opportunities	39
My Future	39
South Auckland Schools partnership	39
Project Pipeline	40
Expansion of UniPrep	40
EE2E application with Rutherford College	41
Section 4: Performance commitments	42
Achievement against Strategic Plan goals	42
Achievement against Investment Plan 2015-2017 goals	42
Employment outcomes of tertiary education (EOTE)	43
Progress towards performance commitments	44
Forecast Statement of Service Performance	48
Appendix 1. TES Priority commitments	52
Appendix 2. Mix and volume of provision (TEC-funded EFTS) Error! Bookmark not do	efined.
Managing demand Error! Bookmark not de	efined.
Summary of the mix and volume of provision Error! Bookmark not do	efined.
Case for change to funding classifications Error! Bookmark not do	efined.
Appendix 3. Summary of funding Error! Bookmark not do	efined.
Appendix 4. Sub-contracting and joint teaching Error! Bookmark not do	efined.
Appendix 5. Qualifications to be delivered in 2017 Error! Bookmark not de	efined.
Appendix 6. Signalling of potential new qualifications and subjects for 2018Error! Bookmark defined.	not

Section 1: Introduction

Auckland University of Technology's (AUT) inclusive, outcomes-focussed and contemporary approach to advanced education is distinctive within the New Zealand tertiary education sector. Established in 2000, AUT is New Zealand's second largest and fastest growing university. In 2015, AUT had 28,628 students (19,798 EFTS), of which nearly 4,000 were international.

AUT has three main campuses: City, North and South, and two specialist facilities: AUT Millennium on the North Shore and the Warkworth Radio Astronomical Observatory. Its programmes are delivered from five faculties:

- Faculty of Business, Economics and Law
- Faculty of Culture and Society
- Faculty of Design and Creative Technologies
- Faculty of Health and Environmental Sciences
- Te Ara Poutama, Faculty of Māori and Indigenous Development

The purpose of this Investment Plan is to outline AUT's planned activities over the coming three years and to demonstrate its value to Auckland and New Zealand, and its contribution to meeting the Government's priorities for tertiary education.

The Investment Plan has been informed by:

- AUT's Strategic Plan 2012-2016;
- initial consultations on AUT's Strategic Plan 2017-2021;
- the AUT Digital Plan 2016-2018;
- the AUT International Strategy 2015-2017;
- the Tertiary Education Strategy 2014-2019;
- the Tertiary Education Commission's (TEC) Investment Approach and Plan Guidance; and
- discussions with the TEC's University Investment Manager.

Strategic intent

This section covers the following topics:

- AUT's strategic direction
- Addressing the needs of stakeholders
- Stewardship and capital asset management
- Summary of programmes and activities

Strategic direction

AUT is currently in the process of developing a new strategic plan, which will take effect in January 2017. Based on initial discussions and consultations, the new plan is expected to reflect AUT's primary goal, which is to provide an enriched and expansive student experience of advanced education that leads to highly capable graduates who are ready to contribute to the changing world. This aim will be enabled by:

- staff who are experts in their field and inclusive and collaborative in their approach;
- research that is at the forefront of academic discipline and professional knowledge, and connects students with its impact on the world;
- industry and community connections that benefit students as well as the University and its partners;
- an internationally diverse and engaged student body and learning experiences; and

• responsibly, sustainably managed assets and resources.

As the corresponding delivery programme is yet to be formally articulated, when discussing strategic intent, this Investment Plan will primarily refer to AUT's Strategic Plan 2012-2016. The current plan articulates AUT's values, goals and objectives, charting the course for the University's development over the near to medium term. As the Plan's tenure comes to a close, the University has achieved many of its goals, with resulting benefits for AUT's student outcomes, research performance and reputation. The Strategic Plan includes AUT's Outcomes Framework which outlines how the University's activities contribute towards outcomes for Auckland and New Zealand.

In its Strategic Plan 2012-2016, AUT positions itself as:

"a university for the changing world: an increasingly powerful force for learning and discovery that promotes the wellbeing of people and their environments, and provides them with opportunities to expand and achieve their aspirations."

that aims to be known for:

"our high quality learning experience, inspired by innovative teaching that promotes both educational and career success, stimulated by research that advances intellectual debate, discovery and change"

with graduates who are:

"distinguished by their professionalism, their commitment to ongoing learning and development, their confidence and adaptability, their ability to communicate and collaborate, and their appreciation of the wider contexts in which they live and work"

while being committed to:

"having active relationships, nationally and internationally, with communities, industry, business and the professions, in the creation and exchange of knowledge and in the application of learning and research"

and staff who are:

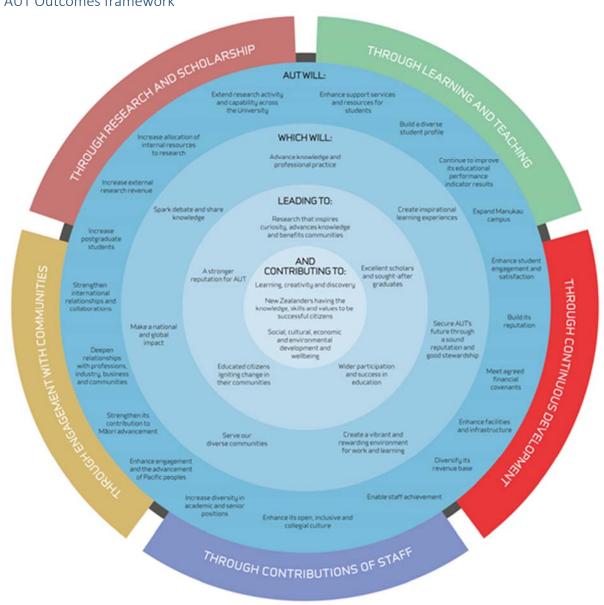
"a source of vibrancy and success within the University,...valued for their expertise and high standards of performance"

AUT's Strategic Plan 2012-2016 identifies five overlapping and mutually reinforcing strategic themes:

- Learning and teaching
- Research and scholarship
- Staff
- Engagement with communities
- Continuous development and capacity building

The current and planned activities outlined in this Investment Plan reflect AUT's distinctive contribution to the sub-sector and respond to Government priorities: learner and graduate outcomes, industry engagement in research and curricula, the expansion of South Campus, the advancement of Māori and Pacific people, and the continued development of New Zealand's international reputation for excellence in research and scholarship.

AUT Outcomes framework



AUT's outcomes framework, depicted above, identifies five key impacts:

- Excellent scholars and sought-after graduates
- Research that inspires curiosity, advances knowledge, and benefits communities
- Wider participation and success in education
- Educated citizens igniting change in their communities
- A stronger reputation for AUT

These impacts contribute to three outcomes that will help New Zealand achieve its economic, sociocultural and environmental goals. These outcomes are:

- Contributing to learning, creativity and discovery
- Contributing to New Zealanders having the knowledge, skills, and values to be successful citizens
- Contributing to cultural, social, economic, and environmental development and well-being

The schematic above depicts how the University's enabling inputs (resources, processes and activities) contribute to these overarching outcomes. It provides a structure for reporting on the University's medium-term goals and annual performance through its Statement of Service Performance.

Stakeholders

AUT identifies its stakeholders through the lens of its institutional strategy, values and priorities, and the TES priorities. These stakeholders include students (both domestic and international), staff, industry and community partners, and local and national government. The University is committed to the advancement of priority groups including Māori, Pacific peoples, women, people with disabilities, those under age 25, those who are first in their family to attend university, and those from high deprivation areas, in particular from South Auckland. To foster the successful transition for students from secondary to tertiary education, AUT has established close relationships with South Auckland schools and seeks to further these during the period of this Investment Plan. AUT also has a strong relationship with a range of overseas partners including the Vietnamese government, InterNZ host organisations in the United States, and international universities which collaborate with AUT on research and teaching initiatives.

As will be demonstrated throughout this Investment Plan, AUT views industry as a key stakeholder and partner in both research and teaching. Industry involvement ensures that graduates are well prepared for employment and that the University conducts relevant, solutions-focussed research where knowledge can be quickly translated into practice. AUT has a number of industry advisory groups, conducted a survey of industry partners in 2014, and continues to build relationships through student placements, consultancy, research and commercialisation. In recent years, AUT has taken steps to better record industry engagement activities through the use of customer relationship management (CRM) tools, participation in world university employability rankings, and the development of engagement networks on campus. AUT's relationships with, and response to, industry partners are discussed more fully under Section 2.

AUT measures the effectiveness of its response to stakeholders by continued engagement and careful planning and reporting on our progress. The partnership with Be.Accessible is an example of the continued engagement approach; at AUT's request Be.Accessible conducted audits of two of AUT's City Campus buildings in 2013, identifying ways the University could improve accessibility for all students. Since that time, the two organisations have worked together on a range of different projects.1

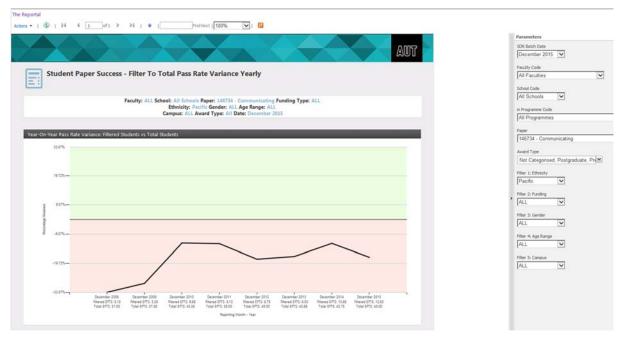
Regular monitoring is also a key aspect of AUT's response to stakeholder needs. The previous Investment Plan introduced a new measure to encourage an increase in the number of new students coming from the Southern Initiative area. These targets highlighted the priority of serving these key stakeholder groups, and as a result AUT has seen increases in new entrants from South Auckland each year. As is discussed later in this Plan, AUT has strong relationships with schools, employers and community groups in South Auckland, which help ensure that provision is relevant, the campus is rowing, and the community's needs are being met.

The previous Investment Plan discussed the Schools' Scorecard, which is another key tool for this regular monitoring. The Scorecard is drawn from the AUT Data Warehouse and presents school-, faculty- and university-level data on success rates, student satisfaction, retention, and the proportion of Māori, Pacific and female academic and senior staff. The University has also added measures showing citations per FTE and the proportion of research outputs with an international co-author, reinforcing the importance of a global mindset when conducting research. Measures under

¹ In 2015, AUT became one of the first organisations to achieve Be.Accessible's platinum accreditation for the Excellence in Business Support Awards Gala dinner.

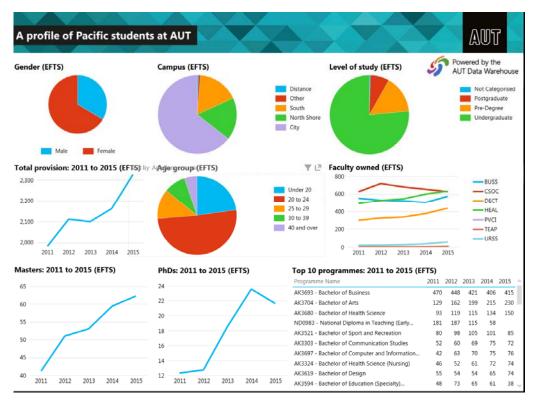
development include revenue from industry and the proportion of students who participate in an international exchange or work placement.

The University has also used the Data Warehouse to develop several other tools focussed on the needs of its stakeholders. The Student Paper Success tool (refer to Picture 1 below) can be used to track the success rate of a group of students over a period of years, in comparison with the average performance for that paper. It is particularly useful for identifying areas of long-term underperformance, which can then be addressed through initiatives such as the Project Parity pilot, which is discussed later in this Investment Plan.



Picture 1. Student paper success tool

The Māori and Pacific student profile tools are another recent innovation based on the AUT Data Warehouse, and can be used to monitor the spread of Māori and Pacific EFTS across the University, in line with AUT's aim to increase participation and success in all discipline areas. These tools identify which AUT programmes are most popular with Māori and Pacific students, and present breakdowns by gender, age, faculty, campus, study level, and enrolments in masters and degree programmes. Picture 2 presents a recent example of the Pacific student profile tool.



Picture 2. Pacific students profile tool

Stewardship and capital asset management

Governance and management

The AUT Council is the University's governing body. AUT Council is empowered to establish committees and delegate authority to committees or officers of the University. It is made up of elected staff and student representatives, and people appointed or co-opted from outside the University. The Council has an in-depth understanding of the University, its activities and performance through the work of Council committees and working groups, reports from senior officers of the University, and through a programme of meetings with students, staff and other stakeholders across all of the University's campuses and satellite facilities. The Council actively focuses on the future of the University through strategy and development, and on monitoring its current performance. Together these activities and engagement with the University provide the basis for Council to carry out its governance responsibilities.

AUT is led by the Vice-Chancellor who appoints the senior officers employed by the University. The officers are responsible for providing the strategic direction for AUT and ensuring that the University is well-managed, its academic standards are maintained, and the various needs of the University's stakeholders are met.

Academic audit

The Academic Quality Office is responsible for monitoring academic offerings and ensures that courses and programmes are relevant and meet CUAP requirements. In late 2015, the Academic Quality Agency for New Zealand Universities undertook its Cycle 5 academic audit of AUT, focussed on all activities related to teaching, learning and student support. The auditors commented that "AUT is characterised by a philosophy that is widely understood by staff and is directly translated into practice. In particular, it is collegial, inclusive, focused on providing opportunity, and genuinely centred on teaching, learning, and student engagement."

Capital asset management

In support of its Strategic Plan and the outcomes it seeks to make for New Zealand, AUT has a comprehensive capital planning and management processes to provide an environment that stimulates staff and student engagement and achievement in the joint enterprise of advanced education. The University's Capital Asset Management Plan (CAMP) provides a long-term view and prioritisation of AUT's current and future planned capital assets. The current CAMP focuses on: creating an attractive and vibrant 'sense of place' on all three campuses; ensuring students and staff are supported by suitable facilities and enabled by technology; and underpinning all our work with environmental sustainability.

As discussed in the CAMP, AUT has three major projects either underway or in the planning stages. MH Building at South Campus will open in 2017 and provide teaching, social and collaborative learning, office and event space, and allow the continued expansion of the campus to 3,000 EFTS. The Engineering, Technology and Design (ETD) building on City Campus will open in 2018 and provide fit-for-purpose facilities and allow expansion of priority programmes in science, technology, engineering and mathematics (STEM) subjects. Finally at North Campus, A1 Building is in the design phase and is intended to provide teaching, office and informal learning space.

AUT also has a Digital Plan 2016-18 which outlines how AUT will respond to digital transformation. Digital objectives were created to align with AUT's five strategic themes, and direct prioritised investment in technology that enhances the student and staff experience, advances research and national and international partnerships and connections.

AUT has a history of strong financial management, with a good track record of managing to its financial covenants. For further information about AUT's capital planning, please refer to its CAMP 2016-2030.

Summary of programmes and activities

While the government is projecting declining EFTS growth in coming years, AUT forecasts ongoing growth based on increased market share, increased exposure in developing markets including South Auckland, growth of Auckland school leavers, and meeting the needs of mature students.

Section 3 of this plan describes several strategic investment opportunities, focussed on South and West Auckland, where the University is working with schools to facilitate successful transitions from secondary school into higher education. These activities include:

- My Future, which works with South Auckland students and communities to establish clear pathways from school through to tertiary education;
- UniPrep expansion, which prepares school leavers, particularly Māori and Pacific people, for university;
- Project Pipeline, which promotes STEM subjects and careers to Year 7 and 8 students at South Auckland primary and intermediate schools;
- South Auckland Schools Partnership, which supports South Auckland secondary school teachers to obtain advanced degrees in education and educational leadership; and
- Engineering Education to Employment partnership with Rutherford College in West Auckland, which exposes Year 13 students to university-level engineering study. This builds on an existing partnership for Year 12 students, and has the opportunity for expansion to Years 10 and 11.

Section 2: AUT's contribution to Government priorities

All AUT's activities are geared towards five impacts outlined in Strategic Plan 2012-2016:

- creating excellent scholars and sought-after graduates;
- conducting research that inspires curiosity, advances knowledge and benefits communities;
- supporting wider participation and success in education;
- inspiring educated citizens who will create change in their communities; and
- developing a stronger reputation for AUT.

This section describes the impacts that AUT makes and how these contribute to the Government priorities outlined in the TES.² It also presents the steps AUT is making to achieve these goals, and how the University will measure its progress towards them.

Impact 1: Excellent scholars and sought-after graduates

Priority 1: Delivering skills for industry Priority 6: Grow international linkages

Excellent scholars and sought-after graduates serve the skill needs of industry and expand AUT's international relationships. Combining expert academic knowledge with transferable skills, AUT offers students the opportunity to be an active participant in a university experience that is inspiring, social, supportive and fun. The University is known for its relevant curricula, work-integrated and research-informed learning and teaching, and as a diverse, welcoming and inclusive place to study and work. The recent Academic Audit report commended the University for its "proactive and inclusive approach to enhancing student engagement", and noted that the student-centred ethos was apparent during interviews with both students and staff. Students particularly noted the "friendly relationships between students and academic staff; small class sizes (in some disciplines); skill development; work placements and real-world industry connections; provision of help by teachers if they see a student struggling; and the well-designed student spaces."³

AUT seeks continuous improvement of the classroom experience. The University is investing in an international accreditation scheme for the professional recognition of university teaching. AUT is the first New Zealand institution to achieve a sizeable cohort (15) of staff recognised as senior fellows of the UK Higher Education Academy (HEA). The group were supported by staff from the Australian National University, where there are 300 HEA fellows. The next step is for AUT to develop an internal programme for HEA to accredit. Called Ako Aronui, the programme reflects the adaptation of HEA's framework for the bi-cultural context of Aotearoa. The professional recognition process encourages all staff who support learning to enhance the student experience through innovation, student-centred learning approaches and continuous personal development. In addition, staff and the University gain the value of an international benchmark of teaching competence.

AUT is using a variety of technologies to develop several new approaches to teaching, including the flipped classroom, where students access lectures online and the classroom is used for discussion and

² For an explanation of why these impacts were chosen, please refer to *Investment Plan 2015-2017*

³ Academic Quality Agency (2016, March), *Report of the 2015 Academic Audit of the Auckland University of Technology*, p. 34.

completion of assessments. Students are encouraged to work on issues that are currently faced by industry. Through the partnership with Spark Ventures, students in the CoLab interdisciplinary laboratory work alongside Spark staff to research rapid prototyping for the Internet of Things. AUT recently led an Ako Aotearoa-funded project with five other tertiary institutions to investigate questions about students' use of mobile devices for learning. The findings were coupled with practical lessons learned from more than a hundred projects funded by AUT's Learning and Teaching Development fund, and inform the continued development of digital learning at AUT. Building on these initiatives, the Centre for Learning and Teaching and Te Ara Poutama have established a service to help staff design and produce high-quality e-books and apps that are readily available to students, enhance learning flexibility and reduce the cost of printed materials and textbooks.

The University's approach to learning and teaching extends well beyond the traditional classroom and the value of the work-integrated learning programme is firmly established. Work placements allow students to apply their knowledge in an industry setting, and then reflect on their experience to enhance their understanding and skills and better prepare them for future employment. Since the last Investment Plan, the University has introduced a new emphasis on building students' employability, recognising their extra-curricular contributions to the University and the community, and established the Student Experience Network (SEN). The SEN was one of the significant early outcomes of the Vice-Chancellor's External Engagement Project and seeks to maximise the benefits of the work-integrated learning programme for both staff and students. Through the SEN, staff from across the University share and co-ordinate contacts and placement opportunities and support student entrepreneurship.

InterNZ, the international internship programme profiled in the previous Investment Plan, is another example of AUT's commitment to creating sought-after graduates. Over the past three years, InterNZ has grown from a small, flagship programme aimed at our most outstanding graduates into a university-wide employability development initiative, offering preparation for employment, and international and national internships for students and recent graduates.

CASE STUDY: AUT INTERNZ

InterNZ began in 2013 with nine AUT graduates placed with industry leaders in the United States, growing to 21 placements from 17 companies in 2015/16. New host companies include the Metropolitan Museum of Art, the American Museum of Natural History and consultancy firm rogenSi.

Following a rigorous preparation and selection process, the interns are offered a three-month placement to help them develop their employability, work-readiness and professional skills in a global context. They contribute to AUT's strong international reputation, with many receiving offers of longer term employment. For the 2015/16 graduates who had completed their placement by May 2016, almost half had been offered a role or an extension with their host company, with an additional seven finding jobs through networks formed during their internship.

Following its international success, InterNZ has expanded into the New Zealand employment market, providing a customer-centric tool for employers looking for student or graduate talent. The AUT InterNZ website gives approved employers access to a database of profiles created by students themselves, connecting local employers with students ready to make the transition into paid work. AUT staff work with students to improve their resume and profile to maximise their employability. A new partnership with Be.Accessible means that from 2016 AUT will also be able to offer internships specifically for students with accessibility issues.⁵

⁴ More information is available at https://akoaotearoa.ac.nz/learner-mobile-devices

⁵ https://internz.aut.ac.nz/

Developing well-rounded, well-grounded graduates

The issue of graduate employability has received considerable attention in recent years. While arguably already at the forefront of this field due to the work placement programme, AUT responded swiftly to calls from industry for graduates with a better understanding of the qualities required for successful employment. One of the key outcomes of a 2014 survey of employers and industry partners was a call for more 'well-rounded, well-grounded' graduates. As a result, AUT reviewed its careers advice services to be more student facing, comprehensive and employability focussed. Translating international best practice into a New Zealand context, the Employability Lab opened in 2016. The lab is part of the City Campus Student Hub and supports students from all three campuses. Alongside traditional careers advice, the lab hosts a series of workshops, focussed on issues such as networking and making a successful transition to the workforce. The InterviewStream online tool allows students to record and practice their interview technique. The lab also hosts a speaker series, where employers and industry leaders speak to groups of students on employability, leadership and other relevant topics. More than 1,500 students were involved in the Employability Matters fortnight during May 2016. In conjunction with the Chinese Centre, the Employability Lab hosts specific sessions for Chinese students, and staff recently met with Māori community leaders to better understand the market for Māori graduates. The University will also introduce programmes tailored for the needs of students at North and South Campuses.

These efforts are further supported by the Match Ready programme, which takes a half-day 'boot camp' approach to building students' employability, and the AUT Edge award. AUT Edge was introduced in 2016 to recognise and reward students who improve their employability and contribute to the University and the wider community. Around 500 students attended a workshop and subsequently signed up for the AUT Edge award within its first three weeks.

CASE STUDY: MATCH READY EMPLOYABILITY WORKSHOPS

As part of the InterNZ programme, Match Ready workshops are designed to help students improve their overall employability, understand how to prepare applications, and apply for internship roles or other employment. Match Ready workshops are held quarterly, with each focussed on a specific discipline. On average 140 students per event gain advice on interview skills, resume and cover letter writing and building their personal brand. Participants also have the opportunity to meet employers from relevant industries, and almost all have shown improvement in their self-assessed readiness for employment following their attendance. Past events have focussed on students studying STEM; finance, accounting and law; and marketing, sales, events, communications and design. Two more workshops will be held in late 2016: a second STEM event; and one focussed on the public sector, including health, education, and sport and recreation. Further workshops are planned for 2017.

CASE STUDY: THE AUT EDGE AWARD

The AUT Edge Award recognises students' community spirit, develops leadership skills and helps further build their employability. Introduced in 2016, the award acknowledges the wider contribution students make and fosters a culture of service and life-long learning through four stages: volunteering, employability, leadership and challenge, and reflection.

For the volunteering section of the award, students must complete 50 hours of unpaid work for a recognised charity or community organisation. The employability section requires attendance at four mandatory workshops, where students will produce a resume, prepare their personal 'elevator pitch', create their own LinkedIn profile, and practice their interview skills. Students must also attend another six approved events of their choice, including career fairs, alumni presentations, and industry speakers. The third stage develops leadership skills. Students attend a leadership presentation, then must complete 18 hours in a leadership role either on or off campus. Options include becoming a peer mentor or student ambassador, taking a role within AuSM (the AUT students' association), or captaining a sports team. Finally, the participants must reflect on their experience, articulating the skills they have developed and how this will improve their employability.⁶

The response from employers has so far been overwhelmingly positive. Following the 2014 survey, the University has established strong communication channels with industry representatives. These relationships are important to identify any emerging trends in employability, and for the continued monitoring of the effectiveness of the strategy. The close involvement with industry through Match Ready and InterNZ provides a ready source of feedback that is used to strengthen the programmes.

CASE STUDY: THE AUT GRADUATE PROGRAMME

The AUT Graduate Programme places graduates into rotation-based placements within AUT. Founded in late 2014 with two graduates in ICT, the programme was successfully extended to five graduates in late 2015. This included two new ICT graduates, two graduates from the Bachelor of Communications undertaking programmes across the Vice-Chancellor's Office, Strategy and Planning and Communications departments, and a graduate in Hospitality.

The programme offers an exceptional opportunity for graduates to create a genuine edge in the competitive search for a first job. The experience gained in the programme has already proven invaluable for both of the graduates in the original pilot programme, who each secured permanent roles with new employers before the end of 2015.

Labour market demand

AUT responded quickly to the call for more science, technology, engineering and mathematics (STEM) graduates, increasing provision in key programmes, introducing new pathways and degrees at South Campus, and strengthening ties with industry to ensure graduates are well prepared for employment. For example, the University's emerging strengths and strong industry partnerships in aquaculture, food science and marine biology resulted in enrolment growth of 26% in the Bachelor of Science from 2014 to 2016.

Within the overall funding envelope, AUT is expected to prioritise South growth over other TES priorities. Continued labour market demand means the University could continue to increase provision in STEM fields although this is currently largely based at City and North Campuses and therefore secondary to our commitment to developing South Campus. AUT has both the desire and

⁶ http://www.aut.ac.nz/being-a-student/employability/aut-edge-award

the capability to increase provision in these and other key disciplines should sufficient funding be secured.

The opportunities for growth in Science provision are anticipated to come from Environmental Sciences and the new majors of Food Safety, Applied Conservation, and Geospatial Science, all of which support New Zealand's primary industries. Geospatial Science students, for example, learn to use and interpret data from unmanned aerial vehicles (UAVs) that AUT has been using to measure pasture growth.

Engineering provision increased significantly over the period of the last plan, with enrolments in the Bachelor of Engineering (Honours) up 59% between 2013 and 2016. The Bachelor of Engineering Technology increased at a slightly slower pace, with forecast growth of thirteen percent between 2014 and 2016. For the BEngTech, SAC-funded EFTS are expected to increase around 30% to 609 by 2020, driven by the introduction of the degree at South Campus in 2017. The architectural, construction and maritime engineering majors were introduced to the BEng(Hons) in 2015 to broaden students' study options and respond to high demand within the construction industry in Auckland and Canterbury in particular. Construction engineering quickly established itself as the third most popular major behind mechanical, and electrical and electronic engineering. During their studies, students gain exposure to practices and management systems in some of New Zealand's major infrastructure companies, including Fletcher Building, Hawkins, and Naylor Love Ltd. Maritime engineering is delivered in partnership with the University of Tasmania; students study their first two years at AUT then complete their degree in Australia.

The University has also been successful in its attempts to diversify the engineering cohort. In 2014, nine percent of BEng(Hons) students were female, prompting the University to introduce its Women in Technology initiative. This initiative has already returned significant dividends for the University; this figure had increased to 15% by late May 2016. The annual GirlTech event at South Campus is an important part of Women in Technology and promotes careers in the STEM industry to female secondary students from around South Auckland. GirlTech includes presentations from influential women working in the industry, along with workshops on mathematics and statistics. AUT also hosts the Programming Challenge for Girls, and is in the process of establishing a mentoring programme for female engineering students. Under the AUT Mentoring for Excellence programme, young female engineers will mentor top-performing female students, who will in turn support and mentor first-year students.

The proportion of Pacific students in the BEng(Hons) has also grown, from 3% in 2014 to 7% in 2016. For the Bachelor of Engineering Technology, the proportion of Māori students increased from 4% to 5%, and the proportion of Pacific students grew from 3% to 7% over the same time period. The University expects the diversity of the engineering cohort to increase further in future years as provision at South Campus grows.

Looking ahead, the Ministry of Business, Innovation and Employment (MBIE) predicts that around 26,500 jobs will be added in the ICT profession between 2014 and 2024. This includes 19,300 new programmers, business and systems analysts; 4,100 ICT managers; and 3,100 ICT network and support professionals. AUT has significantly expanded its ICT provision over recent years, with a 57% increase in SAC-funded EFTS between 2011 and 2014. The Bachelor of Computer and Information Science is the University's flagship programme, with provision forecast to continue growing by a further 37% from 2016 to 2020, driven by a doubling of the numbers at South Campus. This programme has a long association with industry through the final-year research and development project, where students work in teams on an innovative project for an industry client. Some projects in 2016 include information security, online gamification, a telemetry system, tracking customer movements, app and website development, and building an online help system. Industry clients include Auckland Council, Fonterra, Pinnacle Life, Datamine and Fisher and Paykel Healthcare. For students at South Campus

who wish to continue their studies upon graduation, the Master of Health Informatics will provide a clear progression pathway.

CASE STUDY: THE BACHELOR OF COMPUTER AND INFORMATION SCIENCE AT SOUTH CAMPUS

The BCIS was one of the early programmes introduced at South Campus and has received strong support from Huawei since 2013. Huawei provides scholarships that includes money for tuition fees, a free phone or tablet, and the opportunity to gain four weeks' work experience at the company's Chinese headquarters.

The BCIS is a popular destination programme for students from local schools with high Pacific rolls, including Papatoetoe and Manurewa High Schools. There is also a clear, South-based pathway for progression from the Certificate in Science and Technology. Pacific students make up approximately one-fifth of the BCIS cohort at South Campus, and in 2015 achieved a course completion rate of 79%. This not only outperformed the average for this programme across AUT (78%), but also represents a significant improvement from 60% in 2013.

Health remains a high-growth occupation, with another 4,700 jobs predicted by 2024. The University anticipates growing undergraduate provision by 18% and postgraduate by around 19% by 2020. Some of this growth is anticipated in the established disciplines of paramedicine, physiotherapy and podiatry, with the remainder to come from the newer majors of health promotion, health administration, case management, managing care of older persons and counselling. In the case of health promotion and counselling, all growth is anticipated at South Campus. Postgraduate provision at the campus is expected to continue growing also; AUT will offer postgraduate diplomas and masters degrees in emergency management and public health at South from 2017.

Around 27,200 new jobs will be required in the advertising, public relations, marketing and sales industry between 2014 and 2024.⁷ In response to demand from the South Auckland region, the University introduced the Communication Design major of the Bachelor of Design at South Campus in 2014. The programme has grown to a forecast 45 EFTS in 2016, with plans to significantly increase provision over the coming years. The University also continues to offer leading qualifications in communications, marketing, retail and sales at its City Campuses.

The evidence base for excellent scholars and sought-after graduates

AUT is a data-driven university that seeks to understand the experiences of its students and graduates. The University intends to continue monitoring students' engagement and learning experiences through a range of surveys including the Annual Programme Survey and the University Experience Survey, and using benchmarking tools such as the Australasian Survey of Student Engagement (AUSSE) and the Postgraduate Survey of Student Engagement (POSSE). The annual Graduate Survey tracks the experiences of graduates over their first six months after leaving the University, and AUT conducts evaluations for each InterNZ cohort, including both the graduates and the host organisations. AUT recently established the Survey Governance Group to provide strategic oversight of the survey calendar and mitigate the risks of over-surveying. Along with implementing a rolling three-year survey plan, the group must approve in advance any new survey that will include a significant proportion of students, or students from more than one faculty.

AUT is also expanding its use of business intelligence tools to identify student behaviour patterns and investigate their impact on attainment through learning analytics. Together, surveys and other

⁷ Ministry of Business, Innovation and Employment (2015, December), *Medium-Long Term Employment Outlook:* Looking ahead to 2024, p.10

business intelligence tools provide a rich source of information on students' interactions with, and experiences of, the University. This builds a strong evidence base from which AUT can identify areas of strength and opportunities to provide students and graduates with additional support, and to better serve the needs of industry.

CASE STUDY: LEARNING ANALYTICS

The Learning Analytics pilot project aims to support students and staff and to deepen AUT's understanding of the drivers of student attainment; longer term, this will feed into improving the effectiveness and efficiency of the University's early intervention strategies. Learning analytics combine information gained on enrolment, such as age and NCEA results, with students' behavioural interactions with the University's systems, including library usage and number of logins to the learning management system. The latter data create a student's 'digital footprint'. In this pilot phase of the project, the digital footprint component is being validated to determine which engagement factors are predictive of a student's success. Over the course of this Investment Plan, intervention strategies and other student support initiatives will be developed to increase attainment. Other related work includes the development of ethical principles supporting the use of student data for the purposes of learning analytics.

As evidence of its dedication to creating employable, work-ready graduates, Investment Plan 2015-2017 introduced two key performance indicators specifically dedicated to measuring AUT's effectiveness in this area: one focussed on the uptake of work placements, and the other that measures employment outcomes for graduates. These measures are maintained in Investment Plan 2017-2018. Since 2013, almost nine in ten bachelors graduates have completed some form of work placement during their degree.⁸ The effectiveness of these placements is monitored through the annual Graduate Survey; the 2015 Graduate Survey revealed that 93% of those who had completed a placement and were working full time believed it had prepared them or enhanced their capability for working in their chosen industry. As further evidence of the quality of AUT graduates, 24% of these respondents had subsequently secured employment with the same organisation and another 12% had received but declined such an offer.

The University will continue to build relationships with industry to ensure a swift response to changes in demand for skills and, as will be discussed further under Impact 5, to place AUT at the forefront of Auckland's social and economic development. The effectiveness of this response will be monitored through graduate employment rates, the value of research with industry, and feedback from student placements. Other external sources, such as the Quacquarelli Symonds (QS) employer survey will also provide a useful barometer of AUT's impact on the surrounding community.

Next steps

Create an excellent student experience: Over the coming years, AUT seeks to build on this solid base to provide an excellent student experience that meets international benchmarks. Learning will expand further beyond the traditional classroom, with plans to increase opportunities for students to have international experiences in their study and to develop their entrepreneurship skills. Greater flexibility in degree structures will allow students to forge their own path through university and into the workforce. In the classroom, structured, meaningful tasks using mainstream and subject-specialised software will improve students' digital literacy and better prepare them for the workforce. This will be supported by anytime access to online- and mobile-based learning activities, and better training in the academic evaluation and use of online sources.⁹

⁸ Results have been consistently at or above 88% since monitoring began in 2013

⁹ AUT Digital Plan 2016-2018

Expand employability initiatives: The University will build on the success of the InterNZ programme, with plans to expand internationally and significantly increase the number of national internships. While some aspects of employability are already included in the curricula, the University will build on this foundation to ensure every programme reinforces the attributes required for graduate success. This will also help students prepare for their work placements well ahead of time. This is a timely move, given the University's intention to further expand the reach of the work-integrated learning programme. There are ambitious plans to increase the number of students participating in AUT Edge, and this will be promoted to employers as a genuine point of difference for recruitment. Graduates of AUT will have challenged themselves, broadened their horizons and will be well prepared for a lifetime of learning, discovery and achievement.







Picture 3. Photos from AUT's ICT and Engineering Careers Fair, July 2016

Impact 2: Research that inspires curiosity, advances knowledge and benefits communities

Priority 3: Boosting achievement of Māori and Pasifika Priority 5: Strengthening researchbased institutions Priority 6: Grow international linkages

AUT conducts research that makes a difference. The investigations and creative activities of our staff and students inform our teaching, enrich the experiences of our students, and create knowledge that is shared with business, industry and the wider community. Students make a valued contribution to this process by conducting industry projects, supporting current partners and identifying future research opportunities. Partnerships with industry create a positive cycle of challenge, improvement and growth, resulting in benefits for all New Zealanders.

While the ultimate aim of AUT's research programme remains the same, the strategy for achieving this goal has changed markedly in recent years. Over the 2014-2015 period, AUT's research office was restructured to include management of commercialisation activity. Now known as the Research and Innovation Office (RIO), RIO has adopted a client portfolio management approach, with outward-facing managers responsible for government, industry and community (including international) partners. This approach is resulting in a wider network of external partners and stronger relationships with government agencies, external business clients, and community organisations, accompanied by a progressive increase in the number of grant and contract applications in the potential revenue pipeline. AUT expects the revenue from negotiated research contracts to increase substantially in future years.

Now that the new structure has been established, attention turns to implementing the second phase of the research strategy over the period of this Investment Plan. This includes the following actions:

- Complete the mapping of AUT's research strengths. AUT has mapped its defined research entities and is in the process of identifying research themes where the University has critical mass and distinctiveness in its research. These include data science, technologies and analytics; design and creative technologies; new media; communications; linguistics; ecology, geoinformatics, and aquaculture; engineering and technology; sport science; human performance; health, wellbeing and rehabilitation; nutrition and food science; economics, finance, and marketing; tourism and hospitality; social sciences and education; work research; and Māori and Pacific research. AUT is particularly known for its Pacific Islands Families Study and its work to revitalise te Reo and endangered languages across the Pacific (see case study below).
- Identify and build on areas of research strength and critical mass, focusing particular investment
 on areas that are distinctive for AUT, offer competitive advantage, or offer opportunities for
 major research partnerships within New Zealand or overseas. The University is also in the process
 of defining its overarching research themes. Although not yet finalised, they are likely to reflect
 creative design and advanced technologies; health and wellbeing; sustainable cultures and
 communities; and transformational digital futures.
- Continue to develop links with research partners, funding agencies and business partners that
 will increase AUT's external research income. This approach led to a significant 17% increase in
 AUT's external research revenue from 2014 to 2015, and is anticipated to result in further gains
 in future years. The partnerships with Cloudy Bay Clams and the Roche Diagnostics Lab,

presented in the case studies below, demonstrate how successful industry partnerships enrich both teaching and research at the University. Broader success in the heavily over-subscribed contestable rounds such as the Marsden Fund and the Ministry of Business, Innovation and Enterprise (MBIE) grants is likely to take some years to develop. In the medium term, AUT's strategy is to pursue substantial numbers of funded research partnerships, alongside large revenues from negotiated research contracts with industry and government agencies.

 Create nationally collaborative, AUT-led centres of research and development excellence focussed on AUT's distinctive strengths. Some current initiatives are the INTERACT Data Technologies Centre of Excellence, and a Sports Technology Hub development at the AUT Millennium campus.

CASE STUDY: THE INTERNATIONAL CENTRE FOR LANGUAGE REVITALISATION

Through the work of Te Ipukarea: the National Māori Language Institute, AUT established international expertise in the use of digital technologies for language revitalisation and learning. Through the International Centre for Language Revitalisation, AUT shares this knowledge with other academics, researchers and practitioners working to rejuvenate endangered languages around the world. The Centre has developed an online platform for learning and teaching languages that can be customised to different cultures, offers an online Master of Arts in Language Revitalisation, and works with Indigenous peoples from the United States, including the Lakhota and Sioux peoples, and around the Pacific. In 2015, the Centre released the Cook Islands Dictionary app, and held a knowledge-sharing summit focussed on the revitalisation of *Ōlelo Hawai'i*, attended by representatives of higher education, government and schools in Hawai'i and the Polynesian Voyaging Society.

CASE STUDY: ROCHE DIAGNOSTICS LAB

The Roche Diagnostics Laboratory is a partnership between AUT and Roche Diagnostics. It provides undergraduate and postgraduate students access to the latest scientific evaluations in chemistry, molecular diagnostics, immunology and haematology. The laboratory is also used for research and development of new molecular tests for the detection of pathogens and their emerging variants.

Furnished with industry-standard machinery and tools, the laboratory gives students crucial handson experience to equip them for the workforce. Recent postgraduate work includes investigating drug resistance in pancreatic cancer treatment and using new high resolution technology to genotype and identify Leptospirosis, an infectious bacterial disease found in animals.

The partnership extends to academic collaboration beyond the laboratory. AUT staff judged the scientific posters at the Roche Diagnostics New Zealand Annual Scientific Meeting, and the two organisations co-sponsored the New Zealand Institute of Medical Laboratory Science poster and teaching session.

CASE STUDY: CLOUDY BAY CLAMS

Ongoing collaboration with AUT has pushed Cloudy Bay Clams' business forward in sustainable harvesting, creating enduring economic benefits for the company as well as New Zealand's seafood industry and fisheries sector at large. The two organisations commenced their partnership in 2011, with AUT researching the biomass and distribution of surf clams. Researchers used data and calculations of growth rates and life cycles to predict the sustainable yield, with the result that the Ministry of Primary Industries increased the clam quota from 1,900 tonnes to 4,800 tonnes per year. This has the potential to increase export earnings for New Zealand by more than \$20 million a year and supports the Cloudy Bay group and 66 other quota-holding entities.

The early success of this relationship has led to its expansion across other areas of the University, including culinary arts, food science, biology, ecology and fisheries. Additional projects include AUT staff and students developing recipes for the clams and showcasing them in our two student-led restaurants. Food scientists have improved the shelf-life and scientifically tested the taste profiles of clam products, while biologists have sought to eliminate pea-crabs from the clams.

Achievement of these aims requires an engaged, outward-focussed and research-active body of academic staff. Strategic Plan 2012-2016 identified a need to increase the number of staff who were actively conducting research, particularly those involved with teaching students. This was echoed by the recent academic audit, which recommended that AUT "continues to explore all other means to support the research activity of its academic staff." AUT's efforts in this area resulted in a modest expansion of research activity (from 56% research active in 2012 to 59% in 2014), although this was followed by a disappointing 57% in 2015. This aim is also supported by another Strategic Plan target, to increase the proportion of academic staff with doctoral qualifications. In an era of low staff turnover, the University has made good strides towards this goal, growing from 38% in 2012 to 51% in 2015.

The Strategic Plan 2012-2016 set ambitious targets for these two aims: 75% research active staff and 60% doctoral-qualified staff by 2016. Although current trends suggest both will be difficult to achieve, AUT has identified a range of ways to increase participation in research and support achievement of doctoral qualifications by building a vibrant internal research culture. The Doctoral Study Awards are a critical part of supporting current staff to complete doctoral study by providing six months' release from teaching duties. As the recent academic audit report states, "In the last seven years over 100 such awards have been made, with a 95% completion rate to date" and "the Panel recommends that the University continues its provision of Doctoral Study Awards". Other initiatives for existing staff include increased mentoring and support, particularly to incorporate research into their teaching, and for engaging with industry. The Vice-Chancellor's Awards for Academic Excellence in Research reward outstanding performance, including one that recognises excellence in knowledge transfer or commercialisation, and provide funding to further build research capability. The University will also seek to build on its areas of strength by recruiting top-performing staff, allocating postgraduate scholarships and post-doctoral fellowships, and targeting investment in capital infrastructure.

Research commercialisation and technology transfer to industry

Commercialisation is an area of intense interest and activity for AUT, and one that has the potential to grow strongly in the coming years. This builds on the outstanding successes of 2015, including the KODE™ Technology licensing deal, the commercialisation of the Stroke Riskometer app and the filing of two patent applications in respiratory therapy. The integrated approach described above has greatly improved the commercialisation and knowledge transfer process at AUT. In particular, RIO's involvement in negotiating major research and development initiatives or research contracts means that potential downstream commercialisation opportunities can be identified and a clear and effective strategy to transfer knowledge or technology can be developed from the outset.

The commercialisation team continues to build up a network of partners outside the University. External partners may be technological sector specialists, private investors, intellectual property management experts or technology incubators and technology investment fund managers. External partner organisations include Astrolab, Powerhouse Ventures, Sparkbox Ventures, and Everedge IP. AUT is also a founding member of KiwiNet through which Government Pre-Seed Accelerator Funding

¹⁰ Academic Quality Agency, p.49

¹¹ Academic Quality Agency, p. 49

is allocated collaboratively across six universities and four crown research institutes. KiwiNet is also currently negotiating entry into the Australasian Medical Research Collaboration Fund.

AUT's commercialisation strategy deliberately prioritises the momentum of knowledge transfer ahead of maximising financial returns to the University itself.¹² In principle, AUT views downstream financial returns as only one aspect of the value to be gained from knowledge transfer, and AUTEL will seek to expedite commercialisation agreements with external partners, licensees and investors wherever possible. Other benefits, such as those described below, are considered to be of equal or greater value:

- achieving a higher rate of knowledge transfer from AUT research and creative activity to industry and the wider community (refer to the case study on the Textile and Design Lab, below);
- developing broader and deeper collaborative relationships with industry;
- creating opportunities for students to work on industry-linked projects, participate in commercialisation and spend time working with industry partners;
- enhancing AUT's reputation as a flexible and collaborative R&D partner; and
- building the University's research and commercial profile and reputation.

This means in practice that AUT adopts a more flexible approach to the ownership of intellectual property (IP) and the sharing of benefits from its commercialisation activities. While some arrangements follow a traditional model where the University receives two-thirds of the benefits and the IP creators one-third, others may include an early transfer of IP to industry in return for other benefits such as doctoral scholarships. Alternatively, a commercialisation project in partnership with an investor syndicate or through a technology incubator may require that the IP creators' share of benefits is 50-70% prior to external seed investment being acquired.

As part of its commercialisation strategy, RIO introduced a facilitation and management service for staff professional consultancy activities in 2014. Revenue from both professional consultancy and research activities has grown steadily, reaching \$1.23 million in 2015. This approach increases the value of consultancy services to the University by providing opportunities for consultancies to translate into research contracts or funded postgraduate research projects in partnership with business and industry. AUTEL also supports student entrepreneurship, holds seminars to educate staff and students in the commercialisation process, delivers networking events linked to industry sectors, and hosts the annual AUTEL Innovation Challenge, which draws prize-winning new ideas into the commercialisation pipeline.

22

¹² AUT asserts a right of ownership and to commercialise intellectual property arising from staff research and creative activity. In some cases, this applies to students also

CASE STUDY: THE TEXTILE AND DESIGN LAB

AUT's Textile and Design Lab (TDL) is a hub for engagement with the fashion industry and is used for research, prototyping, sampling and small-scale production of new fashion and textile technologies. Regular users include students, designers, commercial businesses and research organisations. The lab can also be used for training and education; high-profile retail organisations such as Farmers and The Warehouse have held training courses at the TDL.

A key objective of the TDL is to build capability, create value and contribute to the development and of New Zealand's design and textile industries. The TDL shares its knowledge with the industry through workshops, short courses, master classes, symposia and conferences. The lab has invested in computer-aided design systems, digital textile and garment printing, WholeGarment® and intarsia knitting machinery. Access to the TDL is available to anyone wishing to carry out research or product development in the apparel and textile fields.

Fostering entrepreneurship

AUT aims to provide an opportunity for all students to undertake or to be associated with an entrepreneurial venture during the course of their undergraduate studies. The University supports these activities with mentoring, venture competitions and more formal opportunities such as Co.Starters. This international programme was introduced by AUT in 2016, and is a nine-week course that equips aspiring entrepreneurs with the tools needed to turn business ideas into action. The Kickstart Weekend is a 54-hour event that brings together students, staff and alumni – who may be designers, developers, entrepreneurs, and domain experts – to collectively explore the entrepreneurial potential of business ideas. The AUT Venture Kickstart Fund was established in 2009 and provides competitive seed-funding for student business start-ups. Previous winners and finalists include Kirsten Rose, who established All About Horses; Nick Barrett, who founded Imagistory; and Andy MacDonald, who has gone on to establish two businesses: the Wet Kiwi clothing company and Absolute Wilderness, a provider of quality freeze-dried meals for adventurers. Finally, the STEMpreneurs is a student club which facilitates mentoring and assistance to start-up businesses based on innovations in science, technology, engineering and mathematics (STEM) subjects.

Research degrees

Strategic Plan 2012-2016 aimed to increase the number of doctoral enrolments, and research EFTS. Both initiatives have been highly successful; the number of doctoral students reached 787 in 2015, surpassing the Strategic Plan target of 750 by 2016 a year in advance, and the number of EFTS in PBRF-eligible papers increased by 45% from 594 in 2012 to 859 in 2015. AUT's engagement with industry and the subsequent opportunities to work on industry projects are critical factors in this success. The Design for Health and Wellbeing Lab, discussed below, demonstrates how postgraduate students gain invaluable experience of the design industry while making a genuine contribution to improving the healthcare experience at Auckland City Hospital. Overall, AUT expects a steady increase in research degree completions over the next three years. As demonstrated over the past five years, the University has the capacity, capability and desire to continue the current rate of growth in research programmes at all three campuses.

There were 60 Māori students enrolled in a doctorate at AUT in 2015, up from 43 in 2012, and the number of Pacific candidates increased from 27 to 34 over the same period. The number of doctoral completions has increased accordingly, with 80 completions in 2015 (including 13 Māori and 5 Pacific graduates), up from 68 in 2012. More detail on the initiatives AUT has introduced to support Māori and Pacific postgraduate achievement is provided under Impacts 3 and 4.

CASE STUDY: THE DESIGN FOR HEALTH AND WELLBEING LAB

In collaboration with Auckland City Hospital, AUT launched the Design for Health and Wellbeing Lab (DHW) in 2015. Design students, mostly at postgraduate level, work in the hospital to better understand how design can improve the experience for patients, visitors and staff. The lab emphasises human-centred design and engages hospital users in the research and design process. Current projects being trialled or implemented include child-friendly medical equipment, a coherent wayfinding system and guides outlining symptoms for various conditions.

Evidence base

Investment Plan 2017-2018 maintains many of the same key performance indicators as the previous version, as these measures are still pertinent indicators of the University's research culture, activity and impact. In addition, this Investment Plan introduces some new measures focussed on commercialisation, including licensing of new intellectual property and the value of consultancy services.

AUT has purchased a regular data feed from Scopus, which is currently used to identify outputs with an international co-author. Areas for development include monitoring citation results, and identifying additional opportunities for industry engagement through co-authored papers.

The Vice-Chancellor's External Engagement project investigated industry engagement practices and policies across AUT. Many of the recommendations arising from the project confirm the path taken by RIO, which include embedding an industry-focussed mindset in all research projects, seeking a more coordinated and consistent approach to engagement across the University, and building an academic culture that places a high value on industry engagement.

Next steps

Complete strengths mapping and establish national research centres: AUT stands on the threshold of significant change and growth in its research activities. As described above, the next major steps are to complete the strengths mapping and formally define AUT's over-arching research themes, and to establish national research centres reflecting these areas. To facilitate this, the Strategic Research Investment Fund (SRIF) will be refocussed to support a small number of initiatives each year, funding each initiative for up to three years. The revised approach will enable greater flexibility over the type of activity funded, and to further increase incentives to form external research partnerships and acquire external research funding.

Extend commercialisation activities: AUT will develop a highly networked core team of research management and commercialisation professionals who will facilitate and negotiate research contracts, license IP, create start-up companies, build commercialisation momentum by leveraging external technical expertise and early stage investment, and foster student entrepreneurship. As part of the recommendations from the first stage of the Vice-Chancellor's External Engagement project, RIO has established a network of researchers involved in external engagement, aiming to provide a more coordinated and consistent approach across the University. The University will analyse the results of new approach, identify areas for improvement and seek additional steps to build a culture that recognises and values external engagement. AUT will raise its research and innovation profile through hosted conferences and meetings, showcase events, and media publicity for our projects, researchers, and inventive activity.

Increase the depth and breadth of research activity across the University: To support these efforts, AUT will seek to increase the engagement of academic staff with the research, knowledge transfer and commercialisation process. The University will build on the areas of strength described above by recruiting top academic staff, providing funding for postgraduate scholarships and post-doctoral fellowships, allocating internal research investment, providing directed mentoring and support,

rewarding excellent performance, and continuing to develop the necessary capital infrastructure. Existing staff will receive additional mentoring, and be supported through grant applications and contract negotiations. RIO will work with faculty staff to build a vibrant and inclusive research community across the University.



Picture 4. Dr Scott Bolton with Professor Sergei Gulyaev, during Dr Bolton's visit to AUT's Warkworth radio telescope site in July 2016. Dr Bolton heads NASA's Juno Mission to Jupiter

Impact 3: Wider participation and success in education

Impact 4: Educated citizens igniting change in their communities

Priority 2: Getting atrisk young people into a career

Priority 3: Boosting achievement of Māori and Pasifika

Priority 4: Improving adult literacy and numeracy

Support participation and achievement of Pacific people in South Auckland

Support participation and achievement of Māori in Northland

AUT is well known for working closely with communities to broaden access to higher education, supporting students to succeed and making a genuine contribution to New Zealand's social and economic development.

Advancing Pacific achievement in South Auckland through South Campus

Over the past six years, the first university campus in South Auckland has grown from 400 EFTS to a projected 1,600 in 2016. On-campus EFTS are forecast to reach 2,400 by 2018 and 3,000 by 2020. The University has established partnerships with local schools, established a unique tertiary transition programme, and is building a community of researchers with strong links to local industry and community groups. Most importantly, however, South Campus has been the catalyst for AUT to reach a broader range of learners, many of whom traditionally experience considerable barriers to accessing higher education. In keeping with the demographic profile of South Auckland a high proportion of these learners are Pacific peoples. Their success at South Campus and at AUT more widely is an important step in the process of individual, whanau/fono, and community transformation.

Profile

The diverse student profile provides an indication of the impact of South Campus. ¹³ Although AUT has traditionally had a higher proportion of students from non-traditional backgrounds, Table 1 demonstrates clear demographic differences between those enrolled at South Campus and their counterparts at City and North campuses. ¹⁴ South Campus students are more likely to be Pacific peoples, to come from lower socio-economic areas, and to have lower NCEA achievement than those at City and North campuses. More than half (56%) of South Campus students come from the Southern Initiative area. This area covers the four local boards of Otara-Papatoetoe, Mangere-Otahuhu, Papakura and Manurewa, and was described by Auckland Council as having significant opportunities for economic growth alongside high social needs. All have high Pacific populations and are a critical barometer of the success of the transformation process championed by the community and supported by AUT, Government and Auckland Council. All parties share similar goals for improved quality of life and well-being, reduced disparities, and increased employment, business and investment opportunities in the region.

¹³ Data for this section are taken from SDR files from the period 2008 – March 2016.

¹⁴ Results for South students from the Southern Initiative area are also included, as this is the particular geographical area of focus for AUT, the Government and Auckland Council

SOUTH CAMPUS	CITY/NORTH CAMPUSES

	All South Campus	From the Southern Initiative area		From the Southern Initiative area	
Ethnicity					
	16 are Asian	14 are Asian	25 are Asian		
	30 are European	10 are European	43 are European		
	14 are Māori	16 are Māori	10 are Māori		
	6 are other ethnicities	4 are other ethnicities	8 are other ethnicities		
	34 are Pacific peoples	56 are Pacific peoples	11 are Pacific peoples		
NCEA achievement					
	2 scored 240 and above	3 scored 240 and above	5 scored 240 and above		
	5 scored between 190 and 239	8 scored between 190 and 239	10 scored between 190 and 239		
	15 scored between 140 and 189	13 scored between 140 and 189	11 scored between 140 and 189		
	31 scored below 140	26 scored below 140	20 scored below 140		
	46 have no NCEA score	49 have no NCEA score	54 have no NCEA score		
Socio-economic status ¹⁵					
	47 come from areas with high deprivation scores	83 come from areas with high deprivation scores	23 come from areas with high deprivation scores		

Table 1. Ethnicity, NCEA and socio-economic profile by campus 2008-2016

South Campus students in general, and from the Southern Initiative area in particular, have faced a series of challenges to access higher education, especially due to socio-economic status and past NCEA achievement. AUT is breaking down these barriers by working with secondary students to increase their academic skills and make appropriate subject choices for their career aspirations, supporting their transition through school into higher education, and providing them with additional assistance while at university.

AUT has strong partnerships with the 22 secondary schools that surround South Campus, covering the area from Mangere to Pukekohe, and works closely with schools that are slightly further afield, including those in Southeast Auckland, Onehunga and One Tree Hill. The My Future and UniPrep programmes were introduced in 2015 to build aspiration for higher education and support students through the transition into higher education. Catering for different groups, My Future is a longer-term programme working with students from Year 10 through to Year 13 to identify career goals, choose appropriate subjects, build academic skills and prepare for NCEA. In the pilot programme over 2015 and 2016, AUT has worked with 100 Year 10/11 students from five low-decile schools and seeks to expand this reach and breadth considerably over the coming years. UniPrep is a shorter course, designed to prepare students for higher education during the summer break before they commence university, and attracts a high proportion of Pacific students. AUT has identified both these programmes as strategic investment opportunities and further detail is provided in Section 3.

Along with secondary schools, AUT is seeking to build strong relationships with local primary and intermediate schools and to support students into STEM-based qualifications from a young age. Project Pipeline is a new initiative being trialled in 2016, working with Year 7 and 8 students and their families to develop an interest in STEM-focussed qualifications and careers. It is expected that up to 800 students from 20 schools could participate in the programme, which will link into AUT's existing outreach programmes at nearby high schools so students remain supported through secondary study.

-

¹⁵ Based on residence within a census area unit with a score of 8, 9 or 10 on the New Zealand Deprivation Index (2013)

As with My Future and UniPrep, this is a strategic investment opportunity and is discussed further under Section 3.

As well as building the pipeline for higher education, AUT works hard to foster success for students while at AUT. Through a partnership with Woolf Fisher Trust, AUT offers scholarships for students who are the first in their family to attend university. Up to thirteen scholarships are available each year, which provide up to three years of tuition fees. Many of the current recipients are now being mentored as part of the joint AUT-Kea mentoring programme, which was introduced in 2016. Kea is an organisation dedicated to fostering the success of New Zealanders at home and abroad, and AUT is the official global education partner. Fifteen first-in-family students are being mentored by leaders who have achieved national or international success in the students' chosen areas of study. The mentors include the London-based sales director for Orion Health, along with journalists, a youth services advisor, an internationally renowned chef and a health researcher. A mentoring initiative for Pacific midwifery students is discussed in the case study below.

CASE STUDY: MENTORS FOR PACIFIC MIDWIFERY STUDENTS

AUT has joined with Pacific Midwives Aotearoa to provide mentors for Pacific midwifery students at South Campus. Students are paired with experienced Pacific midwives, known as aunties, to provide additional pastoral care and to support them through their studies. As most of the aunties are based in South Auckland, this is an initiative made possible by the shift of midwifery from North to South Campus. The course completion rate for Pacific midwifery students at South Campus is 85%.

Course completion rates for South students have been increasing steadily in recent years, from 78% in 2013 to 80% in 2015. For Māori students, the rate of improvement has been much faster; the completion rate has grown from 68% in 2013 to 75% in 2015. Unfortunately results for Pacific students have not followed the same trajectory, although there are several outstanding qualifications, including the BCIS, the BHSc (Midwifery), and the Bachelor of Pasifika Education (Early Childhood Teaching), which has a course completion rate of 87%. Project Parity (discussed below) is part of a University-wide strategy to address under-performance for Pacific students and is expected to result in higher completion rates for students in the Bachelor of Business and Bachelor of Health Science, which collectively constitute one third of all Pacific enrolments at South Campus.

Partnerships with MIT and other providers

AUT has continued to seek closer relationships with other providers in the South Auckland region to create clear pathways for students and ensure a region-wide approach to the mix of provision. Talks with Manukau Institute of Technology (MIT) continue to progress and several opportunities for closer collaboration have been identified, along with some constraining factors. For example, MIT currently teaches 19 different subject areas, of which 14 have degree qualifications, so formal opportunities for progression from pre-degree to undergraduate study at AUT are limited. MIT also has a long-standing strategic relationship with the University of Auckland. As a result, AUT and MIT have agreed that postgraduate study is the most likely option for students progressing from MIT to South Campus, although this is likely to involve a gap of several years as most MIT students seek employment immediately after graduation. There have also been discussions on specific subject areas, including health provision, design, engineering, foundation studies and hospitality. Some recent developments include:

- AUT staff will present postgraduate pathways to final-year MIT nursing students, and staff are looking to align their curricula to ensure a clear progression pathway into postgraduate health science at AUT;
- AUT and MIT staff are considering the introduction of collaborative projects for students in their undergraduate design programmes; and

 MIT have offered to provide subject-specific foundation programmes to prepare students for entry into degrees at South.

Analysis of students' self-reported previous activity data suggests that in recent years, around 70 students per year progress from MIT to South Campus.¹⁶ Since 2011, 43% of former MIT students at South Campus have enrolled in either health science or midwifery degrees, or the Postgraduate Certificate in Health Sciences. Other key destination programmes for MIT students include the Bachelor of Business (19%), Pacific early childhood education (ECE) programmes (8%),¹⁷ and the Certificate in Science and Technology (7%).

South Campus has a higher proportion of students who have progressed from study at a PTE. ¹⁸ As evidence of the importance of campus proximity, these students from the Southern Initiative area especially tend to have much higher success rates at South Campus than at other campuses. ¹⁹ Again based on students' self-reported data, the New Zealand Career College (NZCC) and the Best Pacific Institute of Education (BPIE) are the two largest source providers, collectively providing around 45-50 students per annum in 2014 and 2015. The majority of students from BPIE enrol in the Bachelor of Business, while former NZCC students tend to enrol in health sciences or midwifery. This is due to an arrangement whereby NZCC now offers a former AUT programme, the Level 4 Certificate in Health Care Support. ²⁰ Other source organisations include the New Zealand Institute of Sport, the New Zealand School of Education, and the New Zealand Management Academies. The University is also exploring opportunities for partnership with Te Wānanga o Aotearoa, which is currently a small but growing source organisation for South Campus.

Partnerships with industry and the community

For the long term success of South Campus, it is critical that AUT becomes an integral part of the local community and builds effective industry partnerships. AUT representatives are active members of all local business associations and attend local board network meetings. South Campus has hosted a number of summits, such as the Careers New Zealand summit, and sponsored community and industry events, including the Westpac South Auckland Business Awards. AUT also has partnerships with key employers in the region, including Counties Manukau District Health Board (CMDHB) and Huawei.

Partnerships with local iwi and Pacific groups are also crucial. In 2015, the University held its first whānau day at Te Puea Memorial Marae, sharing information on educational pathways with the Mangere community. This was the first of several such events planned for Auckland marae. AUT is well known for its groundbreaking Pacific Islands Families Study, which is the world's first longitudinal study of Pacific children and their families. To date, findings from the study have been used to improve Pacific children's oral health, hearing, and nutrition, among other positive outcomes.

Evidence base

AUT monitors closely the growth of EFTS at South Campus, and tracks the progress of current and former South students through their time at AUT and after graduation. While student numbers have fallen some way short of initial targets, the success of the Campus is undisputed, particularly in its

¹⁶ Based on self-reported data only; actual figures are likely to be higher

¹⁷ Pacific ECE programmes includes the Bachelor of Pasifika Education (Teaching) and the National Diploma in Teaching (Early Childhood Education Pasifika)

¹⁸ According to self-reported previous activity data taken from the SDR files for 2008-March 2016, three percent of South students (and five percent of those from the Southern Initiative area) were enrolled at a PTE before starting at AUT, compared with one percent at City and North campuses

¹⁹ Former PTE students from the Southern Initiative area have an 85% course completion rate at South Campus, compared with 65% at City/North Campuses

²⁰ The NZ Career College advertise this programme as "the only recognised domestic student foundation pathway ... to AUT health programmes[;] this course is ideal preparation for future studies in health at AUT and other tertiary providers" http://www.nzcc.ac.nz/programmes/health/

impact on Māori and Pacific residents of the Southern Initiative area. As is shown in Table 2, Māori student enrolments doubled at South Campus from 2012 to 2015, leading to a 15% increase at AUT overall.

Table 2. Māori enrolments (distinct students) 2012-2015

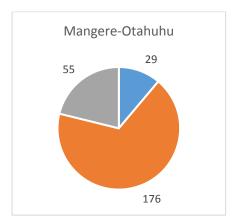
Campus	2012	2015	Growth 2012-2015
South Campus	147	321	118%
All other campuses	1,948	2,078	7%
Total	2,095	2,399	15%

For Pacific peoples, the number of enrolments at South Campus increased by 41% over the same period. As Table 3 demonstrates, this resulted in a 9% increase across the University.

Table 3. Pacific enrolments (distinct students) 2012-2015

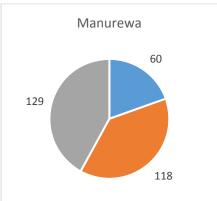
Campus	2012	2015	Growth 2012-2015
South Campus	488	686	41%
All other campuses	2,337	2,404	3%
Total	2,825	3,090	9%

As Figure 1 shows, in 2015 alone, between 58% and 79% of all new students from Mangere-Otahuhu, Otara-Papatoetoe and Manurewa were of either Māori or Pacific descent, along with 44% of those from Papakura.









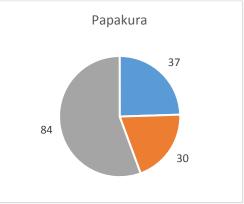


Figure 1. New enrolments at AUT by ethnicity and local board area 2015 (distinct students)

Looking more long term, the data suggest that AUT's presence in South Auckland, along with other central and local government initiatives, may be having a positive effect on the community. At AUT as a whole, the number of school leavers from the Southern Initiative area enrolling at AUT each year

grew from 353 in 2010 to 467 in 2015. Of these, the number at South Campus increased from 43 to 130 over the same time period. In absolute terms, this represents growth of 113 students in total, and 86 at South Campus. Moreover, as Figure 2 shows, the proportion of new South Campus students with a higher NCEA rank score is increasing over time. In 2010, only 1% of new South students had a rank score above 240. By 2015, this was 7%. The proportion of new Māori and Pacific students with a high NCEA rank score is also increasing, up from zero to three percent for both groups over the same time period. At the same time, the proportion of new students with no NCEA score is decreasing rapidly.

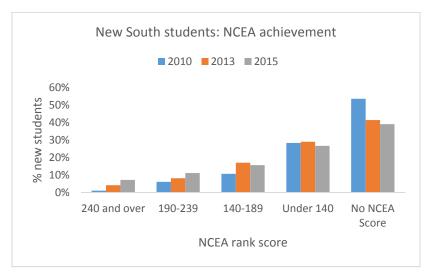


Figure 2. NCEA achievement of new South students 2010-2015

With continued involvement at the school level, and through an expanded My Future programme, AUT is confident this trend will continue into the future, with resultant benefits for students, the University and the community.

Investment Plan 2015-2017 introduced two new KPIs designed to measure AUT's effectiveness at creating educational opportunities. One KPI reports the proportion of students from areas with high deprivation scores, and the other tracks the number of new students from the Southern Initiative area. To date, the results have exceeded AUT's targets, with close to 3,000 new students from this area enrolled from 2013 to 2015. More than a quarter (27%) of AUT students come from areas with high deprivation scores, and these figures increase dramatically for those at South Campus and from the Southern Initiative area. These KPIs are maintained in Investment Plan 2017-2018.

In addition, the University continues to monitor the uptake and outcomes for students from the UniPrep programme. Around 85% of the 2015 cohort subsequently enrolled at AUT, in a range of predegree and undergraduate programmes. Enrolments were somewhat lower for the 2016 cohort, with 68% enrolling at AUT in Semester 1. The University is using data from the Tertiary Data Warehouse to investigate whether many of the 2016 cohort progressed to study at other institutions. As part of the plan to expand My Future, the University intends to seek permission to follow participants' progress from school into tertiary study. This data will build on the experience gained through the Agents of Change programme, and increase the knowledge base for supporting successful secondary-tertiary transitions.

The success of South Campus is inextricably linked to the success of its graduates and the 2015 Graduate Survey reveals some positive results for graduates from South Campus. Approximately six months after graduation, 75% of those who were available for full-time employment were working

full-time, and another 14% were employed part time.²¹ While a strong result, this was below that of the other campuses (82% full time, 11% part-time). By contrast, South graduates were more likely to be enrolled in further study; 31% had continued on to either full- or part-time study, in comparison with 24% of those at other campuses. Close to two-thirds (61%) of South graduates reported that they had completed a work placement, of which 93% felt it had prepared them for working in their chosen industry. In a result which testifies to the quality of these graduates, more than a quarter (27%) had subsequently gained employment with the same organisation.

Māori in Northland

AUT has many strong relationships with schools, iwi and community groups in Northland and has made an appreciable contribution to the region over many years. Ngā Puhi are the single largest iwi represented amongst AUT students by a considerable margin (20% of all Māori students in 2016). The University works closely with Northland schools and offers the Te Tai Tokerau scholarship in conjunction with McDonald's. A second scholarship was recently established for students from five Poverty Bay schools. The Te Tai Tokerau scholarship programme was established in 1993 and supports students from Northland who may otherwise experience difficulty in accessing higher education. Over the years, 88 students have attended AUT on this scholarship. AUT is part of the Northland and Whangarei Hikoi, a group of five tertiary institutions who visit schools in Whangarei and the Far North each year, discussing issues such as preparing for university, finances and costs, and entry requirements. AUT is committed to building iwi-based educational relationships and held a tertiary summit for Ngāti Whatua in 2015 and 2016. AUT will invite Ngā Puhi and Waikato elders to attend the 2016 event, with the intention of offering a similar programme for each of these iwi. For this initiative, senior secondary students from Ngāti Whatua spend a night on the Orakei marae, followed by a day of speakers and workshops organised by AUT. The workshops focus on different streams in higher education, including digital and creative technologies, sciences, and traditional pathways.

The University is strongly involved in the Urutapu Tamāhine programme, which was established in 2016 with funding from Foundation North. Urutapu is a leadership and personal development programme for young Māori women between 16 and 19 years of age from Tāmaki Makaurau and Te Tai Tokerau. Students attend noho and workshops and are mentored by strong Māori female role models. As the education partner, AUT's role is to host events and provide educational oversight, and will potentially host a weekend session focussed on leadership. The University may also have a role to play in identifying participants for the wider Urutapu network through events in both Northland and Auckland.

Finally, recognising the important role played by teachers of young Māori, AUT holds professional development sessions and discussion groups with teachers around the North Island. In 2015 an AUT representative participated in a community evening with counsellors and youth workers in the Far North to discuss leadership and higher education as a gateway to the future, and held discussions with principals and Year 13 students from several Far North schools, including Kaitaia College, Taipa Area School and Te Kura Kaupapa o Pukemiro.

Increasing Māori and Pacific success

Along with improved participation and success at the pre-degree and undergraduate levels, AUT seeks to increase Māori and Pacific enrolments in postgraduate programmes. Alongside the wider societal benefits of advanced education, this is part of the University's policy of 'growing our own' future Māori and Pacific academic staff. The University supports Māori and Pacific postgraduate students through the Wānanga Series, a year-long programme including writing retreats, discussion and networking

²¹ Results for this section are taken from the 2015 Graduate Survey, which presents the destinations of 2014 graduates approximately six months after graduation. South graduates are defined as those who studied the majority of their papers at South Campus throughout their qualification. The 'available graduates' result discussed above shows the proportion of domestic graduates who are available for full-time employment and are working full time.

weekends, and workshops. The Faculty of Business, Economics and Law also has a Māori and Pacific Emerging Scholars programme, which included the inaugural Path Less Travelled day in 2015. This event provided a platform for Māori and Pacific postgraduate students to share experiences and advice with their undergraduate counterparts. As Figure 3 shows, postgraduate enrolments for Māori have increased 19% since 2013, while Pacific enrolments have grown by 44%.

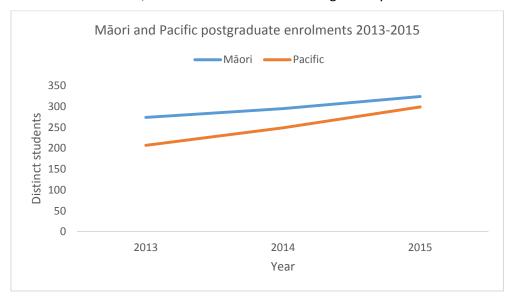


Figure 3. Māori and Pacific postgraduate enrolments 2013-2015

The benefits are also being experienced at the highest levels. AUT celebrated with 13 Māori and five Pacific doctoral graduates in 2015, with many more to come. There were 60 Māori and 34 Pacific doctoral candidates in 2015, up from 50 and 27 respectively in 2013.

Such results at the highest level are built on a solid foundation of initiatives designed to support Māori and Pacific success across all campuses. Alongside the standard peer support services, He Korowai Manakē is a peer mentoring programmes specifically designed to support Māori students. This programme grew out of the previous He Korowai Mātauranga initiative, and is offered to all first-year Māori students. Participants are mentored by high-achieving second- and third-year students, and in the pilot 2015 year, 78% of participants passed at least 75% of their courses. In response to the move towards increasing students' employability, the Māori liaison team have introduced a pilot programme that includes opportunities for students to experience psychometric testing and networking with Māori professionals from large employers. Staff work with other student-facing employees to build their understanding of mātauranga Māori, and the team is currently investigating the introduction of regular breakfasts to support students experiencing financial hardship.

For Pacific peoples, Project Parity is a new initiative introduced in 2016 and designed to assist Pacific students to enjoy the same level of success as all students.

CASE STUDY: PROJECT PARITY

Project Parity was introduced by the Office of Pacific Advancement in 2016. It aims to significantly improve the performance of Pacific students at AUT within the next two years, with the ultimate aim of achieving parity in success rates for Pacific learners. In this pilot stage of the project, the University has identified 11 first-year degree papers where enrolment is high but achievement is low for Pacific learners in comparison with other students. They are taken from the first-year programmes for the Bachelor of Arts, Bachelor of Business, Bachelor of International Hospitality Management, Bachelor of Health Science and Bachelor of Tourism Management, and cover all three main campuses. In Semester 1 2016, the University trialled a range of additional support initiatives, tailored to the requirements of the students and the programme. In the Health and Environmental

Sciences faculty, staff used assessment results to identify those students at risk of failure and create an individual learning plan for each person. Staff held additional tutorials focussed on particular learning outcomes, and formed students into study groups to support each other. In the Faculties of Design and Creative Technologies, Culture and Society and Te Ara Poutama, at-risk students were identified through the Blackboard retention and grade centre, and offered additional tutorials and peer mentoring. Design and Creative Technologies also introduced a diagnostic test into an introductory programming paper, which is used to identify those students who may need additional support in maths. In Business, Economics and Law, students were encouraged to take part in existing initiatives designed to support Māori and Pacific students, Inspiring Māori and Pacific Success (iMAPS) and Inspiring Business Student Success (iBSS).

Initial results suggest that the initiatives were broadly successful and Pacific pass rates increased from 2015 to 2016 in all but two of the targeted papers in Semester 1. A particularly pleasing result was noted in COMM590 Communication and Presentation Systems, where the pass rate increased from 59% in Semester 1 2015 to 82% in 2016, bringing Pacific student success into line with the average for the paper. The performance gap for Pacific students also narrowed significantly for the five Business papers in the pilot, down from 18% in 2015 to 11% in 2016, with all five papers recording improved Pacific success rates. Pass rates increased for both STEM papers (Programming 1 and Programming for Engineering Initiatives), although they remain well below the targeted range and a significant performance gap still exists.

The University is aware these are just initial results, and a longer-term evaluation is needed to identify the most effective interventions. Over time, a range of data will be used in this assessment, which could include assignment scores, attendance rates and final results. Such lessons can then be expanded more widely across the University.

Other initiatives

The structure and initiatives under Project Parity are informed by AUT's success in improving success rates in other key programmes, including the Certificate in Science and Technology. The CertSciTech is a strong feeder programme for degrees in the STEM fields and of the 381 students enrolled in this programme in 2015 across both City and South Campuses, 17% were Pacific and 8% were Māori. The University has demonstrated strong growth in success rates for this programme, and is particularly proud of the results achieved by Māori and Pacific students. Course completion data show that the overall success rate for this programme has increased from 65% in 2012 to 77% in 2015, following the introduction of weekly skills workshops and the adoption of an increased pastoral role by teaching staff. There was, moreover, a significant performance gap for Māori and Pacific students in 2012, with course completion rates of 51% and 52% respectively. This gap has now closed for Māori students, who achieved a 77% success rate in 2015. There has also been a marked improvement for Pacific students, with a course completion rate of 73%.

Through the long-standing provision of on-arrival refugee education, AUT has a special relationship with New Zealand's former refugee communities. With TEC's support, the University provides continuing English literacy, language and numeracy education through the ILN Targeted ESOL programmes and the Refugee English Grants. These courses support former refugees through the resettlement process through preparation for employment and further education.

Finally, the relationship with Lifewise is another example of how studying at AUT helps students connect with the community and develop their social conscience. This long-standing partnership began after concerns were raised over behaviour at the City Campus, and now includes students and staff working with Lifewise to support Auckland's homeless. In addition to the AUT-hosted annual Big Sleep Out, the School of Hospitality and Tourism provided specialist assistance when Lifewise were establishing their hub and community café. Lifewise hosts work placements for students studying health sciences, occupational therapy, violence and trauma studies, communications and public

relations. Radio NFA (No Fixed Abode) is a joint project with Auckland Council, members of the homeless community, and staff and students from the Faculty of Design and Creative Technologies.

Evidence base

There is a broad-ranging evidence base by which to measure AUT's effectiveness as a university of opportunity, the success of its efforts at South Campus and its contribution to Māori and Pacific advancement. Investment Plan 2015-2017 introduced two new KPIs to quantify some of this impact: one that tracks the number of students from areas with high deprivation scores; and the other that measures the number of new students from the Southern Initiative area. Both KPIs have been retained for this Investment Plan.

EFTS growth is another measure of the success of South Campus, particularly when considered alongside consumption of SAC funding, given the higher cost profile of the Campus. However, the full story of South Campus can only be viewed through a wider lens; one that considers the diverse faces of the campus, the barriers overcome by many students, and ultimately, the brighter future faced by the region. In the short term, the campus profile demonstrates its efficacy at attracting those learners targeted by Government, Council and AUT when the campus was established. The improving success rate suggests AUT is effective at supporting those learners through their studies, expecting and facilitating their success. Over the longer term, the success of South Campus will be part of a larger story of social and economic growth and development in South Auckland, as more students will achieve NCEA, the number of degree-qualified residents will increase, and other socio-economic factors such as employment rates and benefit dependency will improve.

Next steps

South Campus expansion: The next steps for AUT include the expansion of South Campus to 3,000 EFTS by 2020. As discussed earlier, the University will introduce the Bachelor of Engineering Technology and postgraduate programmes in emergency management and public health to support this aim, alongside a rapid expansion of existing programmes following the opening of MH Building in 2017, which will take the Campus through to 3,000 EFTS. The University will continue to extend the postgraduate programme at South Campus, with particular emphasis on doctoral students. This supports further growth of the research programme, and the South Campus Research Symposia will remain a critical method for sharing knowledge with the community.

Grow programmes that support a successful transition to university: With TEC's support, AUT seeks to expand both My Future and UniPrep. In the short term, My Future could expand to 15 schools in the South Auckland region, with a future expansion into West Auckland also a possibility. UniPrep could increase from its current 300 places to 400 in 2018, once the current space constraints are removed. Further details of these plans are provided in Section 3.

Māori and Pacific success: AUT will continue its efforts to boost Māori and Pacific achievement. The first stage of Project Parity will take place over 2016 and 2017, after which the results will be analysed and successful initiatives will be extended more widely across the University. AUT will continue to offer programmes such as Māori and Pacific Emerging Scholars and the postgraduate wānanga series to support students through the transition to postgraduate study, provide mentoring and support, and identify those with the potential for an academic career.

Impact 5: A stronger reputation for AUT

Priority 6: Grow international linkages Priority 1: Delivering skills for industry

AUT's reputation is built on the success of its graduates, the impact of its research, and its influence in Auckland, New Zealand and the world. As a future-focussed organisation, AUT looks to expand this influence through strategic partnerships at home and overseas, attract a greater number of international students, and to further demonstrate its sustainability, viability and vitality.

International Strategy 2015-2017

The International Strategy 2015-2017 summarises AUT's international mission as "to have an international profile and an international outlook in education and research as a key contributor to New Zealand universities' internationalisation strategy, and as a university for the changing world." The strategy is grouped under three themes: international recognition, international research and research collaboration, and internationalisation of education and the student experience.

International recognition

AUT seeks recognition as a contributor to education and research on the global stage, and as a university with an international outlook in all its activities. Rankings and accreditations are a key element of this theme, and one where the University has made significant strides in recent years. AUT was named in the top three percent of world universities by Quacquarelli Symonds (QS) in 2015. The same year, Times Higher Education (THE) placed AUT within the top four percent, and identified AUT as the world's 12th most international university. In comparison with other young universities, AUT was named in the top 80 under the age of 50 by QS, and within the top 150 by THE. At the subject level, QS ranked AUT in the world's top 100 for Art and Design, top 150 for Accounting and Finance, and Communication and Media Studies, and in the top 250 for Computer Science and Information Systems, and Education. Such external recognition is critically important to off-shore students when considering study options, and helps attract a growing number of international students, particularly at the postgraduate level.

International research and research collaboration

This theme focusses on increasing AUT's contribution to international research through the volume and impact of its research activities. This can be measured in a range of ways, including projects with international collaboration and partnerships between institutions and researchers. More than half (51.2%) of AUT's 2015 research outputs had an international co-author, a figure the University is seeking to increase.²² AUT has a plethora of inter-institution memoranda of understanding covering shared research activities and other features such as jointly operated postgraduate programmes, with a further layer of partnerships between individual researchers. AUT intends to review its institutional research relationships by late 2016 to ensure the focus is on building partnerships that reinforce AUT's major research strengths. Examples include the Centre for Social Data Analytics (discussed below) and may also include the creation of joint research centres and specific research programmes, and staff and student exchanges. One such example is the sports science collaboration agreement signed with the University of Victoria in Melbourne in December 2015. The two organisations have complementary strengths in research and teaching and similarly strong international reputations in this discipline. Later in 2016, AUT will participate in a visit sponsored by the French Government to

36

²² Based on data for all outputs recorded in Scopus

explore stronger links with a selected group of existing partner universities in France. The partnerships established through InterNZ have also drawn attention to several international research opportunities, which are currently being investigated.

CASE STUDY: CENTRE FOR SOCIAL DATA ANALYTICS

Launched in 2016, AUT's Centre for Social Data Analytics (CSDA) focuses on data analytics for social impact. Centre researchers take on work with the potential to address and inform social issues or challenges in core policy areas including health, education, justice and social services. The CSDA assists with policy setting and front-line decision making by using sets of linked data, such as the Integrated Data Infrastructure, to evaluate the effectiveness of existing policies and programmes and create tools that can predict the likelihood of future outcomes. The Government's 'Family Start' home visiting programme recently received an additional \$7.3 million per year after a CSDA evaluation found it was effective in improving outcomes for at-risk families.

CSDA researchers are working on a number of international projects, including two with United States-based partners. The first is a partnership with Allegheny County, Pennsylvania, which involves developing a predictive risk model for child abuse to be used by frontline staff. The second is a project with the Children's Data Network at the University of Southern California, to explore why some communities achieve better outcomes than anticipated by predictive risk modelling tools, and whether those differences can be replicated elsewhere.

Internationalisation of education and the student experience

International students make a significant contribution to the AUT's culture, vitality and financial strength; revenue from international tuition fees contributed 43% of student-derived income, and 19% of total revenue in 2015. Both figures have increased by one percentage point since 2013. International students tend to achieve excellent success rates, with an average course completion rate of 90% overall, including 88% for students at Level 7 and 96% for those at Levels 8 and above.

The international student population continues to grow, with EFTS in mainstream programmes increasing ten percent from 2012 to 2015. Despite this, the overall proportion of international students at AUT has remained at 16% since 2013 due to continued growth in domestic enrolments. As evidence of AUT's increasing stature, international postgraduate EFTS increased 64% from 674 in 2012 to 1,107 in 2015, with growth shared between taught and research programmes. There were 258 EFTS in PBRF-eligible papers in 2015, an increase of 58% from 2012. The number of international students enrolled in a doctorate has almost doubled over the same period, from 150 to 287.

While the international student market is more volatile, AUT anticipates stable undergraduate enrolments and continued growth in international postgraduate EFTS. The move to 180-point masters degrees is attracting a greater number of students to postgraduate study, and the University is seeking to further increase its cohort of international doctoral candidates. At undergraduate level, AUT is actively recruiting more students for qualifications in engineering and ICT, a move supported by the commencement of construction of the Engineering, Technology and Design building earlier this year.

AUT recognises the importance of building an international mindset within its domestic students. International content and perspectives are frequently incorporated into the curricula and AUT has a diverse staff drawn from around the world. Exchanges, overseas placements and study abroad play an important role in expanding students' worldview, and will be promoted more heavily over the coming years. InterNZ provides a unique opportunity for outstanding graduates to gain international work experience, returning to New Zealand with a wider perspective and a head start into the job market.

Partnerships

AUT has a wide international influence, particularly in South East Asia and the Pacific. The University's relationship with Viet Nam spans more than 20 years, and was enhanced by the signing of an partnership with the People's Committee of Ho Chi Minh City in June 2016. This follows two significant agreements signed in 2015, with the government of Quang Ninh Province and the New Zealand-Vietnam Strategic Engagement on Education. More than 300 Vietnamese officials studied at AUT in 2014 and 2015, as part of existing relationships with the Vietnamese Government. AUT is also leading a consortium of three New Zealand universities through negotiations for Project Taman, a partnership with the Government of Indonesia for teacher training. The agreement is expected to be signed later in 2016.

Alongside the international strategy, AUT also seeks to increase its influence within Auckland and New Zealand. The University actively seeks mutually supportive agreements with companies whose values align with AUT's, creating a nexus of industry, government, academia and community working together. Following these guidelines, AUT has established several influential partnerships with industry in recent years, such as the relationship with Orion Health and the ng Connect agreement that includes Spark, Chorus and Alcatel-Lucent. AUT has been working with Orion Health for a number of years, identifying research opportunities, student projects and graduate placements. The Government's recent investment of \$37 million in Orion for precision-driven health research presents a range of new opportunities which are currently being explored. The University was also named as one of Auckland Council's strategic partners, in recognition of AUT's contribution to Auckland and the importance of the South Campus development.

To build on these relationships, AUT has established the AUTers Auckland Influencer Network. The University invited senior executives and other people of influence in Auckland to join the network, which features executives from some of New Zealand's largest organisations, including Orion Health, Spark Ventures, Colenso, Green Cross, Westpac, the Tindall Foundation and Vector Stock, along with Dame Diane Robertson, Graham Dingle and senior representatives of government agencies such as Auckland Tourism, Events and Economic Development (ATEED), the New Zealand Super Fund and the New Zealand Transport Agency. The network's aim is to create a 30-year sustainable communities plan to support Council's vision of Auckland as the world's most liveable city. AUT's role is to establish and facilitate the network, and identify research opportunities for academics, placement opportunities for students and potential graduate roles.

Sustainability

AUT seeks to advance the cause of sustainability through research, to share sustainable principles through the curricula, and to be a good corporate citizen with a minimal environmental impact. As part of this last aim, the University has held waste audits at all three campuses, installed an in-vessel composting unit in its teaching restaurant kitchen, established a beehive, incorporated sustainability into its procurement practices, participated in clean-ups of South Auckland coastlines and rivers, and conducted a computer sleep trial, which could save up to 32,000 kWh per year when extended across all three campuses. Students enrolled in the Bachelor of Business degree can choose to major or minor in Sustainability, while a minor is also open to students in Bachelor of Visual Arts and the Bachelor of Design. To support teaching staff, the Vice-Chancellor's Taskforce for Sustainability held learning and teaching fora for staff and postgraduate students in 2015, and conducted a University-wide audit of sustainability in the curricula. A second audit focussed on sustainability in research, and both provided useful baselines for measuring progress in future.

Recently, AUT joined the United Nations Sustainable Development Solutions Network (SDSN), which was launched to mobilise scientific and technical expertise from academia, civil society and the private sector through the implementation of the sustainable development goals. Some of the benefits of

this membership include participating in sustainability research with world-leading universities, publishing papers in the SDSN working paper series, and participating in national and regional SDSNs.

Next steps

International rankings: AUT will apply for QS Stars accreditation, following on from its first successful application in 2013. The University will continue to submit annual applications to QS, THE and Thomson Reuters international rankings agencies and look to improve its rankings for all three agencies.

Partnerships: Continue to build partnerships with like-minded organisations in New Zealand and abroad, that will foster a culture of research excellence and industry engagement, and have additional benefits such as placement opportunities for students and graduates. AUT will also look to deepen its involvement in Viet Nam, Indonesia and Thailand.

International students: Continue to recruit international students with an increased emphasis on engineering and ICT, and for advanced postgraduate programmes, and to build the number of Study Abroad students, particularly from North America. AUT will also increase opportunities for students to add an international dimension to their qualification through exchanges, study abroad, placements and internship opportunities.

Sustainability: Leverage benefits of involvement in the United Nations' SDSN, particularly for joint research projects and publishing papers.



Picture 5. Students at AUT City Campus

Section 3: Strategic investment opportunities

AUT has identified several strategic investment opportunities, focussed on South and West Auckland, where the University is working with schools to facilitate successful transitions from secondary school into higher education.

My Future

My Future is a personal and academic development programme that works with South Auckland secondary students, their schools, families and communities. It supports regional development goals by establishing clear pathways from secondary school into higher education. Starting in Year 10 and continuing through to Year 13, My Future helps participants increase their academic skills, investigate future career prospects and build aspiration for higher education. Participants are encouraged to prepare for higher education from a younger age and supported to choose appropriate subjects for their career aspirations. Regular visits to South Campus help to break down perceived barriers to higher education, and establish relationships with student ambassadors who will act as role models.

The pilot programme began with 100 Year 10 students at the end of 2015, and has continued working with the same cohort through 2016. The response from students, schools and parents has been overwhelmingly positive. Through My Future, AUT works with low-decile schools (Tamaki College, Tangaroa College, James Cook High School, Papakura High School, and Alfriston College). In Year 10, participants cover issues such as teamwork, leadership, career and subject selection, and gain an introduction to university life. This is supported by the My Future app, which presents videos of South Campus and profiles of student ambassadors, and highlights the workshops available. The Year 11 programme builds on this foundation, with students and their parents attending four in-school and on-campus workshops focussed on personal and academic development, subject choices and future goals, study skills, and NCEA revision. The Year 12 and 13 components are still under development, with input from a group of ten South Auckland secondary students, along with careers advisors and school principals and deans.

With all four years included, AUT anticipates that My Future will cost \$32,000 per school, per annum. AUT seeks to TEC's support to expand the reach of My Future to a total of fifteen local schools, to establish a wider partnership with those schools (discussed below) and to further develop the app with content appropriate for Years 11-13.²⁴

South Auckland Schools partnership

The South Auckland Schools partnership builds on the success of My Future and offers a comprehensive engagement opportunity for students, their families and school staff. Alongside the full My Future programme, the package will include a Masters of Educational Leadership (MEdLead) scholarship for a senior staff member to study at South Campus and a Polyfest sponsorship. The University anticipates the cost of this programme to be \$37,000 per annum per school, which includes:

- \$32,000 per school for the full My Future programme
- \$4,000 per MEdLead scholarship
- \$1,000 per Polyfest sponsorship.

²³ Tamaki College, Tangaroa College and James Cook High School are Decile 1, Papakura High School is Decile 2, and Alfriston College is Decile 3

²⁴ In addition to the schools already involved in My Future, these are: Aorere College, De La Salle College, Mangere College, Manurewa High School, McAuley High School, Otahuhu College, Papatoetoe High School, Rosehill College, Sir Edmund Hillary Collegiate Senior School and Southern Cross Campus. These schools have been chosen for their proximity to the campus, number of applicants to AUT, mix of deciles, strength of existing relationships with AUT and for having principals with influence within South Auckland

The University intends that the partnerships will be mutually beneficial and contribute to longer term goals for the development of South Auckland. Participants will be better prepared for higher education and therefore likely to experience a more successful transition. From the schools' perspective, the MEdLead scholarship will help to increase the skill base of their senior leaders. AUT will benefit from closer relationships with local schools and increased recruitment opportunities.

Project Pipeline

Along with secondary schools, AUT seeks to build strong relationships with local primary and intermediate schools, and to support students into STEM-based qualifications from a young age. Project Pipeline is being trialled with four schools in 2016: Sutton Park and Viscount Primary (both based in Mangere), Redoubt North Primary (Manukau), and Manurewa Intermediate School. All four feed into six key low-decile South Auckland high schools²⁵ and AUT intends to expand the programme's reach to up to 20 such schools in future years. In this pilot phase, around 40 Year 7/8 students from each school are participating in the project, which includes ten in-school robotics sessions throughout the year. Each session is delivered by an AUT student mentor, supported by the school's science and technology teachers. The mentors are studying a related qualification (such as engineering or computer science), and preference is given to those resident in South Auckland. The sessions are supported by a whānau engagement programme that introduces families to employment opportunities in the STEM industry. A week-long summer workshop will support Year 8 students through the transition to secondary school. While the final costs of the programme are still being determined, it is intended that Project Pipeline include STEM bursaries to support top-performing students through high school, covering expenses such as uniforms and stationery. During their high school years, Project Pipeline students will link in with My Future, Women in STEM, UniPrep and other AUT outreach programmes. Those who go on to AUT will have the opportunity to act as mentors to younger students coming through the system. This is an exciting project with the potential to make a significant difference in the South Auckland community.







Picture 6. Photos from the July Project Pipeline session, with students from the four pilot schools

Expansion of UniPrep

The University continues to seek new ways to engage with local communities and offer programmes tailored for South Campus. UniPrep is a fees-free programme that was introduced in 2015 with 136 students, growing to 254 in 2016. UniPrep is held during the summer break and aims to support students through the transition from school to university. Participants are mentored by high-achieving Māori and Pacific students currently enrolled at AUT. They complete papers in academic

²⁵ These are: Aorere, Mangere, Otahuhu and Tangaroa Colleges, Manurewa High School and the Southern Cross Campus

literacies and foundation mathematics and experience a wider development programme designed to build their understanding of university study and their ability to be successful in their learning. Of the 2016 cohort 196 were Pacific people and 16 were Māori. Feedback remained highly positive, with 96% reporting they were satisfied with the programme. More than two-thirds (68%) enrolled at AUT in Semester 1.

AUT seeks TEC's support to further expand UniPrep in the coming years. To date, AUT has funded the entire programme, at a cost of approximately \$1,000 per place. Space constraints mean that the 2017 offering will be limited to approximately 300 places. However, the opening of MH Building will allow the programme to increase to 400 places in 2018.

EE2E application with Rutherford College

AUT has commenced negotiations for an Engineering Education to Employment (EE2E) initiative with Rutherford College in West Auckland. The two organisations formed a partnership in 2016 whereby Year 12 students in Rutherford's Level 2 Mechatronics Academy will complete one paper from the Certificate in Science and Technology alongside their standard academic programme. Exact details have not yet been finalised but broadly, the EE2E partnership will be focussed on Year 13 students, allowing them to study specific courses of interest such as Foundation Problem Solving or Introduction to Engineering. Students who have already achieved University Entrance may be able to start studying a paper towards the Bachelor of Engineering Technology in the second semester. It also offers a second chance to those who wish to study engineering at university but did not achieve Level 2 Physics. These students may be able to meet the entry requirements by completing papers from the Certificate in Science and Technology. While the current and intended partnerships are focussed on Year 12 and 13 students, AUT and Rutherford will discuss opportunities to support Year 10 and 11 students into engineering careers.



Picture 7. UniPrep participants

Section 4: Performance commitments

This section considers AUT's achievements against its Strategic Plan and Investment Plan goals, outlines the performance commitments for the next three years, and presents the forecast Statement of Service Performance.

Achievement against Strategic Plan goals

The University has made large strides during the tenure of the Strategic Plan 2012-2016. Some key highlights discussed throughout this Investment Plan include a significant increase in postgraduate provision; strong growth at South Campus; a significant increase in the proportion of academic staff with doctoral qualifications; continued growth in international EFTS, particularly at the postgraduate level; and the emergence of a culture that values external engagement as an essential component of both research and teaching. The proportion of EFTS in higher education grew from 88% in 2012 to 91% to date in 2016, and the number of doctoral students exceeded even the ambitious targets set in the Strategic Plan.

AUT is making some significant investments in its physical and virtual infrastructure, including the Engineering, Technology and Design precinct on City Campus and the MH Building at South Campus. The use of Blackboard and other learning technologies has increased across the University, and new pedagogies such as the flipped classroom are being trialled.

In terms of student success, AUT has continued to improve its educational performance indicator (EPI) results. AUT's course completion rate was 85% in 2015, up from 84% in 2012 and placing the University fifth on the sub-sector league table and just one percentage point below the sub-sector median. Pacific completion rates have improved from 71% to 72%, while Māori have remained at 81%. These results are expected to improve with the introduction of Project Parity over the next two years. The number of Māori and Pacific postgraduate students has increased significantly in recent years and there are particularly pleasing increases in doctoral qualifications.

External research revenue remained stable for several years and then increased significantly from 2014 to 2015, with further gains expected in 2016. Research activity in general was flat for several years until an upswing in 2015, a result largely reflective of the effects of the PBRF cycle. The University has research plans in place for each faculty and is working to increase the depth and breadth of research activity across the University. A new emphasis on commercialisation and industry engagement has seen a different approach to research and is likely to result in significant gains in the coming years.

AUT's international reputation has grown with recognition from two major world university rankings agencies. The University has extended its relationships in the Pacific and South East Asia, and expanded further into the United States through the InterNZ programme and the CSDA studies.

Financially, AUT has managed its resources carefully and remains in a sustainable, viable position. The University has met all financial covenants, and has a steadily increasing revenue base that is more diverse than that of 2012. The University is well-placed for further expansion under the next Strategic Plan.

Achievement against Investment Plan 2015-2017 goals

In addition to the Strategic Plan goals, AUT has made significant strides towards many of the steps outlined in Investment Plan 2015-2017. These are summarised below:

Industry engagement: completed the initial phase of the Vice-Chancellor's external engagement project, which has resulted in the establishment of the Student Experience Network and the Research Network. The project confirmed the direction taken by RIO for research, and AUT has developed a

clear plan to improve co-ordination and communication of industry engagement activities across the University.

Baseline employer survey: the University's shift to an employability-centred approach is one of the major outcomes of this survey, which was conducted in 2014.

Strategic Research Investment Fund: This commenced in 2014 and has been successful in encouraging research and innovation to date. As was discussed under Impact 2, the SRIF will be reshaped in 2017 to provide longer-term funding for a smaller number of projects, in line with RIO's new approach to investment in research and engagement.

Strengthening AUT's research infrastructure: As was shown under Impact 2, the new structure and approach to research and commercialisation management resulted in a significant increase in external research revenue in 2015, with more growth anticipated in 2016 and future years. In terms of commercialisation, 2015 was AUT's most successful year to date.

Boosting Māori and Pacific achievement: AUT continues to seek ways to boost achievement of Māori and Pacific students. These have been generally successful at the postgraduate level, while sustained improvement in undergraduate success rates tends to be more difficult to achieve. Initiatives such as He Korowai Manakē, learning mentors and Project Parity will continue to support students to reach their full potential.

Building South Campus: South Campus has continued to grow, both in terms of enrolments and in its influence on the surrounding community. New programmes or subjects introduced include the Bachelor of Laws, Doctor of Health Science, and the counselling and health promotion majors of the Bachelor of Health Science, to be followed by the Bachelor of Engineering Technology and postgraduate emergency management in 2017. Initiatives such as UniPrep and My Future support successful transitions into higher education, and the University works closely with iwi, industry and community groups to ensure provision is relevant and the correct support services are in place.

International rankings: As has been discussed previously, AUT's international rankings have improved considerably in recent years. This has assisted the University's efforts to recruit an increasing number of international students, particularly at postgraduate level.

International strategy: This was adopted in 2015. The Strategy is discussed under Impact 5 and will be revised in 207 in line with the new Strategic Plan.

InterNZ: This programme has expanded considerably and now provides national placements for students as part of the University-wide employability initiative. InterNZ is an important adjunct to the work-integrated learning programme and another point of difference for AUT students. The international graduate programme remains the flagship for the University and is now presenting some important research opportunities with the host organisations.

Employment outcomes of tertiary education (EOTE)

Based on the available EOTE data, it is clear that AUT only has a small amount of provision in the areas TEC has identified as low performing, primarily in psychology and creative arts. Psychology is currently offered as part of two programmes, the Bachelor of Health Science and the Bachelor of Arts. In the absence of specific data for AUT graduates, AUT has no evidence upon to which make any specific changes to provision. Instead, AUT will continue to monitor employment outcomes for these disciplines through the data released by TEC and through our own Graduate Survey.

Provision with pass rates below 60%

AUT had 18 papers with five or more EFTS and a completion rate below 60% in 2015, with associated EFTS of 251, and SAC funding of \$2.27 million. It should also be noted that of these papers, five had a completion rate between 59.0% and 59.9% in 2015 (with 77 associated EFTS and \$0.58 million in SAC).

However, the University remains committed to improving success rates in these papers, particularly the five that were also below 60% in 2014.

It is also pleasing to note that only two papers remain in this category from 2013, and both have remained in the 55%-59% range throughout this time. Both these papers were pre-degree applied science courses (Foundation Chemistry and Foundation Human Anatomy and Physiology), and the University is taking a number of steps to improve completion rates across the Certificate in Applied Sciences. This includes improving scheduling of classes; designing requirements and programme delivery to prioritise attendance; developing the new 'Environment Aotearoa' paper, which is designed to include a wider group of students; and employing additional staff to support student learning. Other initiatives include a review of entry and selection criteria, recognising that many students who enrol in this programme do not have a background in science, and identifying and managing students who are at risk of failure.

Mathematics and engineering are two other subject areas where students frequently experience difficulties. The University has closed one low-performing course (Programming for Engineering Applications) and replaced it with an introductory paper. For the remaining papers, the University has introduced a range of initiatives including additional learning support and peer-mentoring for at-risk students, and a change in assessment structure. One paper, Programming 1, now includes a reflective journal as part of its assessment requirements to help teaching staff identify areas where additional support could be required.

Social sciences is another area where success rates can be lower than average. The Bachelor of Arts in Social Sciences has undergone a curriculum review and as a result, AUT will submit a proposal for a reorganised curriculum to CUAP later in 2016. The new curriculum will replace the Level 5 Introduction to Economics and New Zealand Political Studies papers (which had completion rates of 57.4% and 59.5% respectively in 2015), with Level 6 papers. Other initiatives introduced include compulsory tutorials, revised assessments, additional timetabled classes, and in one case, involvement in Project Parity.

Progress towards performance commitments

AUT has made steady progress towards the performance commitments outlined in Investment Plan 2015-2017. In 2015, the University achieved all participation and retention targets, three course completion targets (and was close to achieving two more), and three qualification completion targets. The improvement in course and qualification completion for under-25s was particularly pleasing. Qualification completion rates fell for Māori and Pacific students between 2014 and 2015, although these results may have been affected by strong enrolment growth. The University has adjusted its targets for 2017 and the following years to reflect the new trajectory, although some qualification completion targets may remain challenging should these trends continue.

Participation targets remain largely unchanged and only minor growth is predicted from 2017 to 2019. Although AUT predicts that Māori and Pacific enrolments will continue to grow in terms of absolute numbers, percentage increases may be more difficult to achieve given the sustained growth AUT is experiencing.²⁷ Under the existing methodology, this growth is also expected to affect qualification completion rates, particularly given the rapid expansion plans for South Campus during this period.

²⁷ From 2014 to 2015, enrolments for Māori students at Level 4 and above (L4+) grew 8%, while enrolments at L8+ grew 12%. For Pacific students, enrolments at L4+ increased 9%, while enrolments at L8+ increased an impressive 28%. Despite this, as Table 4 shows, in percentage terms participation remained static for Māori at L8+ and only increased slightly for Pacific

²⁶ The number of Māori in the qualification completion rate denominator grew 5.4% from 2015 to 2016, while Pacific students grew 6.8%

Although the course completion rate for Māori and Pacific students at Level 4 and above has increased in recent years, the pace of change has been much slower than that anticipated in the previous performance commitments. As discussed earlier in this Investment Plan, there are a number of standout qualifications, such as the BCIS, the BHSc (Midwifery) and the Bachelor of Pacific Education (ECE Teaching), where Pacific students achieve excellent completion rates. For Māori, the high-performing qualifications include the Bachelor of Communication Studies (91%), BHSc (Physiotherapy) (98%), BHSc (Oral Health) (93%), and the Bachelor of Design (90%). Although AUT has not yet successfully closed the gap in performance for all Māori and Pacific students, the University remains committed to doing so. Alongside the learning analytics initiative, Project Parity is the University's main emphasis for the coming two years, along with the existing peer mentoring and other student support initiatives. Although specifically focussed on Pacific students, experience in recent years suggests that initiatives to improve success for one group frequently result in better outcomes for all.

The performance commitments presented in Table 4 below outline AUT's aims for improving Māori and Pacific completion rates over the coming years. Based on the trajectory established over recent years, the University anticipates slow but steady increases in success rates from the 2015 baseline. As EFTS growth will be largely be centred on South Campus for the foreseeable future, and considering the demographic nature and significant latent demand in the region, AUT anticipates that many new Māori and Pacific students will come from the Southern Initiative area. As discussed earlier, these students tend to face considerable barriers to success at tertiary level. The University is determined to assist these students and enhance their achievement through mentoring, Project Parity, UniPrep and other support services. Early indications from Project Parity are positive, and AUT anticipates that the pace of improvement for Pacific students will increase over time as the lessons are implemented more widely, and the effects of the University's work with key South Auckland schools begin to materialise. This is likely to be reflected in the performance commitments for the next Investment Plan. As was discussed earlier, NCEA achievement levels are already increasing and long-term engagement programmes such as My Future and Project Pipeline have the potential to create a substantial cohort of South Auckland school leavers and their families who are well prepared for the demands of higher education.

Table 4. Performance commitments 2017-2019²⁸

Description	2013 Actuals	2014 Actuals	2015 Actuals	2016 Commitments	2017 Commitments	2018 Commitments	2019 Commitments
	%	%	%	%	%	%	%
The successful course completion rate for all students (SAC Eligible EFTS) at level 4 and above	84.5%	84.8%	84.8%	86.0%	85.0%	85.5%	86.0%
The successful course completion rate for all students (SAC Eligible EFTS) at level 8 and above	89.6%	89.3%	88.2%	90.0%	90.0%	90.0%	90.0%
The successful course completion rate for Māori students (SAC Eligible EFTS) at level 4 and above	80.2%	82.1%	81.5%	84.0%	82.0%	83.0%	84.0%
The successful course completion rate for Māori students (SAC Eligible EFTS) at level 8 and above	85.3%	85.6%	81.6%	84.0%	82.0%	83.0%	84.0%
The successful course completion rate for Pasifika students (SAC Eligible EFTS) at Level 4 and above	71.3%	72.1%	71.9%	75.0%	72.5%	73.0%	73.5%
The successful course completion rate for Pasifika students (SAC Eligible EFTS) at level 8 and above	79.0%	77.7%	78.7%	79.0%	79.5%	80.0%	80.5%
The successful course completion rate for students (SAC Eligible EFTS) aged under 25 at Level 4 and above	83.4%	83.8%	84.2%	86.0%	84.5%	85.0%	85.0%
The successful course completion rate for students (SAC Eligible EFTS) aged under 25 at level 8 and above	86.5%	86.6%	88.6%	87.0%	87.5%	88.0%	88.0%
The qualification completion rate for all students (SAC Eligible EFTS) at level 4 and above	78.6%	78.6%	75.2%	82.0%	76.0%	78.0%	79.0%
The qualification completion rate for all students (SAC Eligible EFTS) at level 8 and above	87.0%	83.5%	72.2%	82.0%	75.0%	76.0%	77.0%
The qualification completion rate for Māori students (SAC Eligible EFTS) at level 4 and above	69.5%	71.7%	66.1%	71.0%	68.0%	69.0%	70.0%
The qualification completion rate for Māori students (SAC Eligible EFTS) at level 8 and above	77.6%	64.9%	85.0%	77.0%	78.0%	79.0%	80.0%
The qualification completion rate for Pasifika students (SAC Eligible EFTS) at level 4 and above	64.7%	65.2%	56.2%	68.0%	65.0%	66.0%	67.0%
The qualification completion rate for Pasifika students (SAC Eligible EFTS) at level 8 and above	79.8%	53.0%	58.5%	81.0%	70.0%	72.0%	74.0%
The qualification completion rate for students (SAC Eligible EFTS) aged under 25 at level 4 and above	68.3%	69.6%	66.8%	63.0%	67.0%	68.0%	69.0%
The qualification completion rate for students (SAC Eligible EFTS) aged under 25 at level 8 and above	59.8%	65.0%	58.6%	57.0%	59.0%	60.0%	61.0%
The student retention rate for all students (SAC Eligible student count) at level 3 and above	83.1%	83.7%	84.5%	85.0%	85.5%	86.0%	86.5%
The student retention rate for Māori students (SAC Eligible student count) at level 3 and above	78.2%	77.4%	80.5%	79.0%	81.0%	81.5%	82.0%
The student retention rate for Pasifika students (SAC Eligible student count) at level 3 and above	75.9%	77.4%	76.9%	78.0%	77.0%	77.5%	78.0%
The proportion of SAC Eligible EFTS enrolled at the TEO who are Māori at level 4 and above	9.9%	10.1%	10.5%	10.5%	10.6%	10.7%	10.8%

Note that previous years' figures are supplied by TEC and are based on the open educational performance indicator results, which includes all results submitted in the subsequent years. As a result, 2013 and 2014 figures may appear higher than 2015. This particularly affects qualification completion rates and results for students at Level 8 and above. AUT's 2017-2019 targets are based on the closed 2015 results, which are derived from the data submitted in the April 2016 Single Data Return, as these reflect the data that will be available when our performance is measured

Description (continued)	2013 Actuals	2014 Actuals	2015 Actuals	2016 Commitments	2017 Commitments	2018 Commitments	2019 Commitments
	%	%	%	%	%	%	%
The proportion of SAC Eligible EFTS enrolled at the TEO who are Māori at level 8 and above	0.8%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%
The proportion of SAC Eligible EFTS enrolled at the TEO who are Pasifika at level 4 and above	14.8%	15.1%	15.9%	15.5%	16.0%	16.2%	16.5%
The proportion of SAC Eligible EFTS enrolled at the TEO who are Pasifika at level 8 and above	0.8%	1.0%	1.2%	1.0%	1.0%	1.0%	1.0%
The proportion of SAC Eligible EFTS enrolled at the TEO who are aged under 25 at level 4 and above	71.3%	72.3%	72.9%	72.0%	73.0%	73.5%	74.0%
The proportion of SAC Eligible EFTS enrolled at the TEO who are aged under 25 at level 8 and above	3.4%	3.8%	4.3%	3.6%	5.0%	5.1%	5.2%
The number of international student EFTS	3,101.49	3,292.28	3,166.35	3,680.00	3,200	3,300	3,400
The amount of External Research Income earned	\$8,540.97	\$9,143.89	\$10,697.91	\$14,600.00	\$16,000	\$18,000	\$19,000
The number of Research Degrees completed	275.00	298.00		310.00	320	330	340

Forecast Statement of Service Performance

Impact 1: Excellent scholars and sought-after graduates

1.1 Create employable, work-ready graduates

	Actual 2015	Target 2016 ²⁹	Target 2017	Target 2018
1.1.1 Percentage of bachelors graduates who completed a work placement ³⁰ while studying	89%	>80%	>85%	>85%
1.1.2 Percentage of available graduates who are working full time	82%	85%	83%	84%

1.2 Increase postgraduate provision

	Actual 2015	Target 2016	Target 2017	Target 2018
1.2.1 More than 15% of EFTS in postgraduate study	16%	17%	17%	17%
1.2.2 Increase the number of doctoral students	787	750	800	850

1.3 Enhance engagement and satisfaction of students

	Actual	Target	Target	Target
	2015	2016	2017	2018
1.3.1 Percentage of students who would recommend AUT to others	88%	88%	>85%	>85%

Impact 2: Research that inspires curiosity, advances knowledge and benefits communities

	Actual 2015	Target 2016	Target 2017	Target 2018
2.1 Increase the number of quality-assured research outputs ³¹	1,855	1,860	2,000	2,000
2.2 Increase the proportion of academic staff contributing verified research outputs to 75% by 2016	57%	75%	64%	66%

²⁹ In Annual Report 2016, AUT is required to report on the 2016 targets from Investment Plan 2015-2017, so these have been retained for all KPIs that were carried over into this Statement of Service Performance (SSP). They may, therefore, not be in line with the trajectory outlined for 2017-2018

³⁰ Work placements include co-operative education, clinical placements, teaching practica, internships and other forms of industry-based learning.

³¹ Targets reflect the nature of the PBRF quality evaluation cycle and its impact on publications

KPI 2.3 Increase external research revenue

	Actual 2015	Target 2016	Target 2017	Target 2018
2.3.1 Total external research revenue	\$11.1M	\$14.6M	\$16.0M	\$18.0M
2.3.2 External research revenue from research with industry	\$3.8M	\$4.9M	\$5.4M	\$6.2M

2.4 Increase commercialisation and industry engagement activities

	Actual 2015	Target 2016	Target 2017	Target 2018
2.4.1 New intellectual property licensed to industry	2	3	3	3
2.4.2 Staff consultancy revenue	\$1.2M	\$0.8M	\$1.0M	\$1.2M

Impact 3: Widening participation and success in education

3.1 Increase educational opportunities

	Actual 2015	Target 2016	Target 2017	Target 2018
3.1.1 Proportion of students from areas with high deprivation scores ³²	27%	26.5%	27%	27.5%
3.1.2 Number of new students from the Southern Initiative area ³³	1,060	1,100	1,200	1,250

3.2 Increase participation and success for Māori

	Actual 2015	Target 2016	Target 2017	Target 2018
3.2.1 Number of Māori graduates from bachelors degrees	272	370	330	350
3.2.2 Number of postgraduate students that are Māori	324	330	350	370

 $^{^{32}}$ Areas with high deprivation scores are defined as the census area units with a New Zealand Deprivation Index rating of 8, 9 or 10

³³ The Southern Initiative area covers the local board areas of Mangere-Otahuhu, Manurewa, Papakura, and Otara-Papatoetoe

3.3 Increase participation and success for Pacific peoples

	Actual 2015	Target 2016	Target 2017	Target 2018
3.3.1 Number of Pacific graduates from bachelors degrees	336	435	360	380
3.3.2 Number of Pacific postgraduate students	299	250	320	340

Impact 4: Educated citizens igniting change in their communities

- 4.1 Strengthen the contribution to Māori advancement
- 4.2 Strengthen the contribution to the advancement of Pacific peoples

Impact 5: A stronger reputation for AUT

5.1 Continue to build and benchmark the University's national and international reputation

	Actual 2015	Target 2016	Target 2017	Target 2018
5.2 Increase the proportion of international EFTS	16%	20%	16.5%	16.5%
5.3 Increase international postgraduate EFTS	1,107	870	1,175	1,200

	Actual	Target	Target	Target
	2015	2016	2017	2018
5.4 Increase the proportion of academic staff with doctoral qualifications	51%	60%	53%	54%

5.5 Continue to develop an open, inclusive and consultative staff culture

	Actual	Actual	Target	Target
	2015	2016	2017	2018
5.5.1 Overall employee engagement index score	*	71.6%	*	72.0%

5.6 Increase senior academic and allied appointments of Māori, Pacific peoples and women

	Actual 2015	Target 2016	Target 2017	Target 2018
5.6.1 Senior Māori and Pacific staff	15	Annual	Annual	Annual
5.6.2 Senior female staff	97	increase	increase	increase

5.7 Continue to diversify the University's revenue base

	Actual	Target	Target	Target
	2015	2016	2017	2018
5.7.1 Increase third stream revenues	\$33.5M	\$30.4M	\$31.0M	\$31.6M

Appendix 1. TES Priority commitments

TES Priority Commitments					
TEO Name: Auckland University	y of Technology		EDUMIS Number: 7008		
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)	
	Increased provision in science	Primary industries are emerging areas of expertise for AUT, particularly in the fields of aquaculture, food science and marine biology. Science provision at AUT has grown strongly in recent years. Continued labour market demand means this could continue	A modest amount of growth is forecast for science from 2016 to 2020. However, the demand and capability exist to expand this further	This potential for growth is driven by demand for the Environmental Sciences, Food Safety, Applied Conservation, and Geospatial Science majors.	
Priority 1 Delivering skills for industry	Increased provision in engineering	AUT increased engineering provision, with 59% growth in BEng(Hons) EFTS between 2013 and 2016. AUT will introduce the BEngTech at South Campus in 2017.	The BEngTech is forecast to grow from 442 SAC-funded EFTS in 2016 to 609 in 2020. All growth will be at South Campus. The Bachelor of Engineering (Hons) is forecast to grow another 6% to 521 SAC-funded EFTS by 2020.	Introducing the Bachelor of Engineering Technology at South Campus responds to industry demand and provides a STEM-focussed option for students. The CertSciTech at South has a high proportion of Pacific students, as does the BCIS, and it is anticipated that the BEngTech will do also. The initial phase of construction for the Engineering, Technology and Design building commenced in 2016. Along with fit-for-purpose facilities, the new building will accommodate additional growth in the engineering programmes.	

TES Priority Commitments					
TEO Name: Auckland University of Technology			EDUMIS Number: 7008		
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)	
	Increased provision in health	Health is a long-term strength of AUT and continued growth is forecast over the coming years. Some of this growth is anticipated in the established disciplines of paramedicine, podiatry and physiotherapy, with the remainder to come from the newer majors of health promotion, health administration, case management, managing care of older persons and counselling.	The University anticipates growing undergraduate provision by 18% and postgraduate by 19% by 2020.	Building the health programme at South Campus responds to the regional need for more Māori and Pacific health workers. In mid-July 2016, 13% of health science students (including midwifery) at South Campus are Māori and 16% are Pacific peoples, compared with 11% and 12% respectively at North Campus Growth in paramedicine, health promotion and counselling will be focussed on South Campus. AUT will also offer postgraduate diplomas and masters degrees in emergency management and public health at South Campus from 2017	
	Increased emphasis on student/graduate employability	Augmenting work-integrated learning programme with expansion of InterNZ, establishment of the Employability Lab, Match Ready workshops, AUT Edge Award and other employability-focussed initiatives	Measured through SSP KPIs 1.1.1 and 1.1.2, which are focussed on graduate employment and uptake of work placements. Also monitored through annual Graduate Survey, InterNZ evaluations (students and employers) and other internal surveys	Established employability-focussed industry relationships to ensure the programme is relevant and useful for both employers and students	

TES Priority Commitments					
TEO Name: Auckland University of Technology			EDUMIS Number: 7008		
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)	
	Response to EOTE data	AUT has only a small amount of provision in the affected areas, particularly psychology (under the Bachelor of Health Science and Bachelor of Arts) and creative arts (under the Bachelor of Visual Arts). AUT will continue to monitor the employment outcomes for these programmes	At this stage, the University anticipates some growth in psychology and a small amount of growth in visual arts by 2020.	The University will continue to monitor the situation.	
Priority 2	Working with other institutions in South Auckland to establish clear pathways from school to tertiary study	Established relationships with Best Pacific Institute of Education and NZ Career College	N/a	NZ Career College now offers a former AUT qualification, Certificate in Health Care Support, which has a direct pathway into health science at AUT. In 2015, 28 students from NZ Career College enrolled in Health Science degrees at South Campus	
Getting at-risk young people into a career	Offering programmes to support students as they transition from secondary to tertiary study	UniPrep is a fees-free summer programme that helps prepare students for higher education. It covers foundation mathematics and academic skills, and provides students with high-achieving Māori and Pacific mentors	AUT seeks TEC's support to increase UniPrep to 400 places in 2018	Offered at South Campus	

TES Priority Commitments					
TEO Name: Auckland University	y of Technology		EDUMIS Number: 7008		
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)	
				16% of South Campus students are Māori and another 34% are Pacific peoples There were more than 1,060 new	
			Forecast growth to 2,400 EFTS by 2018, and 3,000 EFTS by 2020	students from the Southern Initiative area at AUT in 2015.	
	South Campus peoples. The University has a	contribution to boosting achievement for Māori and Pacific peoples. The University has a particular focus on the Southern Initiative area identified by	LLB degree introduced in 2016, to be followed by the Bachelor of Engineering Technology and postgraduate programmes in emergency management and public health in 2017 The Forecast SSP measures the proportion of students from areas with high deprivation scores and new students from the Southern Initiative area	Overall, 27% of AUT students come from areas with high deprivation scores. At South Campus this increases to 47%, and to 83% for those from the Southern Initiative area	
Priority 3 Roosting achievement for Māori and				The GirlTech event is held at South Campus and promotes STEM careers to female secondary students.	
Boosting achievement for Māori and Pasifika				Project Pipeline is a longitudinal programme beginning with Year 7/8 students in South Auckland. It uses robotics sessions to introduce students to STEM subjects, then supports them through high school and university, and into STEM careers	
	My Future	Partnership with South Auckland high schools. A personal and academic development programme that works with students from Year 10 to Year 13 to prepare them for higher education through appropriate subject selection and developing academic skills	N/a	Currently in five schools; seeking TEC's support to increase to 15. Discussed further under Section 3: Strategic investment opportunities	

chnology		EDUMIS Number: 7008		
ty Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)	
ер	A summer programme to support school leavers through the transition to higher education	Approximately 62 EFTS in 3 A1 category in 2016; up to 75 EFTS anticipated in 2017	300 places to be offered in 2017. AUT seeks TEC's support to increase this to 400 in 2018	
ct Pipeline	An in-school and whānau engagement programme that uses robotics to promote STEM qualifications and careers to Year 7 and 8 students from South Auckland schools.	N/a	This programme is being trialled in 2016, and up to 800 students from 20 South Auckland primary and intermediate schools could participate. The schools are those that feed into key low-decile secondary schools where AUT already has strong relationships, including Aorere, Mangere, Otahuhu and Tangaroa Colleges, and Manurewa High School and the Southern Cross Campus. Discussed further under Section 3	
ct Parity	Working towards parity in success rates for Pacific students by trialling additional support initiatives in 11 key first-year degree papers with high Pacific enrolments but low achievement	The performance commitments show AUT's aims for continued improvement in the course completion for Pacific peoples	Some papers taught at South Campus, including four from the BBus and one from the BHSc	

chnology		EDUMIS Number: 7008		
ty Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)	
Campus research osia	Continuing free series sharing the results of latest research with the South Auckland community ³⁴	N/a	Based at South Campus, aimed at community leaders.	
orting the success chievement of Māori rthland	AUT has long-standing relationships with Northland schools and with the support of McDonald's, offers the Te Tai Tokerau scholarships; the scholarships have supported 88 students to attend AUT since 1993 AUT has invited Ngā Puhi leaders to its 2016 Ngāti Whatua Day, with the intention of offering a similar programme for Ngā Puhi in 2017 The University is a strong supporter of the Urutapu Tamāhine programme and holds professional development and discussion sessions for principals, teachers, youth workers and counsellors in the Far North	The performance commitments show AUT's aims for continued improvement in the course completion for Māori	Offer support services such as learning mentors, He Korowai Manakē, the postgraduate wānanga series and the Māori and Pacific Emerging Scholars programme 20% of Māori students at AUT are of Ngā Puhi descent	

TES Priority Commitments					
TEO Name: Auckland University	y of Technology		EDUMIS Number: 7008		
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)	
Priority 4 Improving adult literacy and numeracy	With TEC's support, continue to support former refugees with English literacy, language and numeracy	AUT receives funding from TEC for Refugee English Grants and ILN Targeted ESOL programmes, all of which are primarily aimed at building the literacy, language and numeracy skills of former refugees, in preparation for further study or employment	AUT seeks a total of 280 places for the ILN Targeted ESOL fund for 2017 The University wishes to obtain funding for 130 places under the Refugee English Grants in 2017	There is high demand and a significant waitlist for places in the ILN Targeted ESOL programme	
Priority 5 Strengthening research-based institutions	Identify and build on areas of distinctive strength for AUT	Focus investment on areas with significant opportunities for international partnerships, support national priorities such as the primary industries, or that offer a competitive advantage.	N/a	Areas of strength include: data science, technologies and analytics; design and creative technologies; new media; communications; linguistics; ecology, geoinformatics, and aquaculture; engineering and technology; sport science; human performance; health, wellbeing and rehabilitation; nutrition and food science; economics, finance, and marketing; tourism and hospitality; social sciences and education; work research; and Māori and Pacific research.	
	Increase external research income	Continue to implement client portfolio management approach, which has already resulted in a 17% increase in external research income from 2014-2015.	The targets for KPIs 2.3.1 and 2.3.2 reflect AUT's expectations of a significant annual increase in external research income, including that from industry, over the coming years	AUT intends to establish nationally collaborative, industry-linked centres of research and development in its areas of strength	

TES Priority Commitments				
TEO Name: Auckland University	y of Technology		EDUMIS Number: 7008	
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)
	Increase commercialisation and industry engagement activities	Involve RIO staff from the outset of research contracts to identify potential commercialisation/technology transfer opportunities. Prioritise the momentum of knowledge transfer ahead of maximising financial returns. Value can also be gained from rapid knowledge transfer to industry, placement opportunities for students, and other options such as doctoral scholarships. AUT also seeks to increase revenue from staff consultancy, and build research projects off consultancy services where appropriate. Foster student entrepreneurship through Co.Starters, the Kickstart weekend and other initiatives	KPI 2.4.1 is a new KPI that measures the transfer of intellectual property to industry; KPI 2.4.2 measures the value of consultancy services	External partner organisations include Astrolab, Powerhouse Ventures, Sparkbox Ventures, and Everedge IP Entrepreneurship supported through Co.Starters group, Kickstart weekend, AUT Venture Fund and STEMpreneurs groups
	Increase doctoral enrolments and the number of Māori, Pacific and international students in postgraduate study	Maintain momentum for growth in doctoral enrolments and increases in Māori, Pacific and international postgraduate enrolments through targeted recruitment and support for students to advance from undergraduate study	KPIs 1.2.2, 3.2.2, 3.3.1 and 5.3 measure AUT's progress towards these aims.	Pacific postgraduate enrolments increased 44% from 2013 to 2015, while Māori increased 18%. There were 13 Māori and 5 Pacific doctoral graduates from AUT in 2015. The number of international postgraduate EFTS grew 37% from 2013 to 2015

TES Priority Commitments						
TEO Name: Auckland University of Technology			EDUMIS Number: 7008			
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)		
	Increase proportion of academic staff who are research active	An area for development for AUT. This will be supported by additional mentoring and support for non-research-active staff, including integrating industry engagement and research as critical elements of teaching, targeted recruitment, and provision of postgraduate scholarships and post-doctoral fellowships	KPI 2.2 states AUT's aims for increasing research activity over the coming years			
	Increase proportion of academic staff who have a doctorate	AUT has achieved steady progress on this aim since 2012 and seeks to continue this momentum. AUT will achieve this through targeted recruitment of new staff and doctoral study awards and other support services for current staff to complete their doctoral study	KPI 5.4 states AUT's aims for increasing the proportion of academic staff with a doctoral qualification over the coming years			
Priority 6 Growing international linkages	Build international reputation	AUT is building recognition as a contributor to international research and education, and as a university with an international mindset. AUT will continue to monitor and apply for university world rankings, including QS, THE and Thompson Reuters.	AUT aims to improve its world rankings for all three agencies over the coming years.	AUT was placed in the top 3% of world universities by QS and top 4% by THE in 2015. THE also named AUT as the 12 th most international university		

TES Priority Commitments						
TEO Name: Auckland University of Technology			EDUMIS Number: 7008			
TES Priority Areas	Priority Commitments	Description of the related activities	How this area is reflected in the mix of provision, and/or the EPI commitments	Additional Information (e.g. where is this taking place - region, industry sector, etc.)		
	Build international research partnerships	Review international research partnerships and focus on those that build reputation in AUT's major discipline strengths. As part of its internal monitoring, AUT tracks the proportion of outputs that include an international co-author.	AUT seeks to increase the proportion of outputs that have an international coauthor over the coming years.	Approximately half of all research outputs in 2015 had an international co-author.		
	Increase international enrolments and internationalise the student experience	AUT has experienced strong growth in international student EFTS for a number of years. While undergraduate EFTS are expected to remain stable, postgraduate EFTS are forecast to continue growing. Over the coming years, AUT plans to promote and increase the uptake of student exchanges, overseas placements, and Study Abroad options	The performance commitments and KPIs 5.2 and 5.3 state AUT's aims for increasing international provision. Note that KPI 5.2 (proportion of international EFTS) remains stable due to anticipated growth in domestic EFTS.	InterNZ is an international graduate placement programme providing outstanding graduates with work experience in leading organisations in the United States. AUT is also seeking to support an increased number of students to complete their work placement overseas.		