**INVESTMENT PLAN 2013–2015** 





# VISION

TO BE NEW ZEALAND'S DEFINING UNIVERSITY AND A WORLD LEADER IN HIGHER EDUCATION AND SCHOLARSHIP

# MISSION

TO DEFINE THE FUTURE OF OUR NATION AND TO TAKE WHAT IS SPECIAL ABOUT NEW ZEALAND TO THE WORLD

### VALUES

CREATE, INNOVATE, CONNECT

Development of this Investment Plan has been informed by the content of the following documents: (1) The Tertiary Education Strategy 2011–2015; (2) the Plan Guidance for 2013 Plans issued by the Tertiary Education Commission (May, June 2012); (3) the Gazette Notice relating to Investment Plans (23 March 2012); and (4) the University's strategic plan – *The Road to 2020* (2012 Update).

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### **Executive Summary**

In the 2013–2015 Investment Plan for the TEC Massey University provides a clear institutional outline for our continuing strategic engagement with Government priorities for tertiary education. As the defining University of New Zealand, Massey is committed to a now well-advanced change agenda signalled in the University's strategic plan, *The Road to 2020*,<sup>1</sup> which over the last five years has seen:

- the successful re-profiling of our student recruitment and enrolment management systems to align with TEC investment priorities, and management of enrolments down to the negotiated funding cap;
- the creative development of new student pathways underpinned by a major academic reform process to better support our diverse student population and advance key educational performance measures;
- the advancement of educational programmes for Māori and Pasifika which have seen growth in recruitment at all academic levels with concomitant advances in performance (achievement rates)<sup>2,3</sup>;
- the development of an innovative forward-looking stakeholder engagement programme with a proven focus on functional partnerships and outcomes;
- the approval of a new problem-focused and people-oriented research strategy and the successful emergence of a dynamic model for commercialisation and business development which connects Massey directly with those who can make best use of our expertise, our facilities, and our IP;
- the maturation of a capital investment plan supporting major new structural developments on the three campuses on the North Island and upgrading of existing physical assets;
- the development of new technology-mediated infrastructures<sup>4</sup> to advance our distance education provision and support the blended modes of learning for which we are recognised as a world leader; and
- the implementation of an internalisation strategy that has seen sustained growth in international student numbers as well as new opportunities off shore.

These achievements have been realised within a very constrained financial envelope both in terms of overall funding (Government funding has not been commensurate with other universities since 2008) and in the context of the challenges in the wider operating environment (Part 1). This Investment Plan builds on these key outcomes of our agenda for change so that Massey continues to engage with the provision of tertiary education to meet the needs of New Zealand and of those elsewhere who seek advantage and opportunity through access to research and teaching provision, which are benchmarked internationally for quality.<sup>5</sup>

Massey University is valued for the unique contribution it makes across key areas of research, especially where the genesis, integration and application of our intellectual capital enriches the knowledge base and underpins innovation in the business community and industry. Through our unique capability in agri-food science, food technology and agri-business (from 'pasture to plate') we are richly connected with industries, companies and regions, both in New Zealand and internationally (e.g. Global Food Security Alliance<sup>6</sup>). This

<sup>2</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=massey-whanau-to-celebrate-maori-academic-success-12-05-2011

<sup>&</sup>lt;sup>1</sup> http://www.massey.ac.nz/massey/fms/About%20Massey/Documents/Defining-road-to-2020.pdf

<sup>&</sup>lt;sup>3</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=decade-of-maori-mental-health-workforce-leadership-10-02-2009

<sup>&</sup>lt;sup>4</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=video-link-teaching-creates-cross-campus-classroom-31-05-2012

<sup>&</sup>lt;sup>5</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle\_uuid=B1BA92FE-DEDB-C9D7-EE7D-799D9648816E

<sup>&</sup>lt;sup>6</sup> http://riddet.massey.ac.nz/news/minister-launches-proteos-project

contribution will be critical for New Zealand's future economic success and the government's economic growth agenda<sup>7</sup>. The University offers New Zealand's leading food technology degree programme, and hosts the Riddet Institute CoRE.<sup>8</sup> We are leading collaborative innovation in food through the Manawatu Agrifood Innovation Hub, the Food Innovation Network of New Zealand, and the Agri One initiative with Lincoln University.<sup>9</sup> Massey is New Zealand's only tertiary level provider of internationally recognised education in veterinary science, animal science, and conservation biology. The University is therefore uniquely placed to provide research leadership at the interface between human and animal health, and in infectious diseases relevant to public health. The launch of our new College of Health sees the University providing new levels of leadership across the health and well-being agenda that is vital to our nation's future prosperity<sup>10</sup> and will be a signature part of this country's contribution to the global agenda<sup>11</sup> for sustainable communities. Equally significant is our internationally recognised leadership through both research and teaching in engineering and industrial design; here we are well placed to support the Government plans for developing capacity in Engineering, for the new Advanced Technology Institute,<sup>12</sup> and for our growing international alliances<sup>13</sup>.

Massey is also unique in New Zealand as an established university with a strong pedigree for offering mixed modes of learning across all taught academic programmes.<sup>14</sup> The creative provision of blended learning options provides students with greater flexibility in their studies and enables their engagement with a wider mix of academic provision while managing other life challenges. Many of our distance students are reskilling or upskilling whilst in the workforce, contributing to business and the economy. Hence unlike other students, this group often do not have access to student loans, and do not therefore contribute to this growing liability on the Crown's balance sheet. In addition, Maori and Pasifika students as a particular group across the age profiles, are well served by Massey's distance education delivery. We can provide clear evidence of success in this area; for example, many of New Zealand's 2012 Olympic athletes are enrolled in Massey programmes that offer them tailored learning options so that they can train and compete at locations around the world without challenging their academic progress and future career goals.<sup>15</sup> Our distance education provision is also acknowledged by international agencies seeking to address the demand for specialist tertiary level education. For example, the World Health Organization has commissioned this institution to provide postgraduate specialist programmes in 'Biosecurity' to be delivered off shore in multiple locations. It is through the portal of distance education we will see further advances in the internalisation strategy.

Being 'connected' goes to the heart of our operating model and building strong fruitful partnerships is central to our strategic goals. Given our national presence, the formation of focused collaborative models of working in key regions is essential if our contribution to the economic and social development of the country is to be of strategic value. For example, joint 'business development' appointments with regional councils (e.g. Taranaki, Hawke's Bay) and commercial partners (e.g. Fonterra, KPMG) will ensure real measureable progress with both student recruitment and wider commercial and business development opportunities.

Recognising and establishing strategic alliances, has ensured we are linked through mutually beneficial partnerships with lead groups supporting positive outcomes for Māori and Pasifika. New formal agreements

<sup>&</sup>lt;sup>7</sup> http://riddet.massey.ac.nz/news/contribution-to-a-new-zealand-agri-food-strategy-launched "Call to Arms"

<sup>&</sup>lt;sup>8</sup> http://riddet.massey.ac.nz

<sup>&</sup>lt;sup>9</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=massey-joins-lincoln-in-precision-agriculture-push-30-08-2011

<sup>&</sup>lt;sup>10</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=new-massey-college-to-tackle-health-crisis-05-06-2012 <sup>11</sup> http://www.uncsd2012.org/

<sup>&</sup>lt;sup>12</sup> http://www.stuff.co.nz/business/industries/7269103/Advanced-Technology-Institute-unveiled

<sup>&</sup>lt;sup>13</sup> http://www.massey.ac.nz/massey/about-massey/events/event-detail.cfm?event\_id=ED336BBA-A7E9-2B34-0C3C-000B050F2369

<sup>&</sup>lt;sup>14</sup> https://www.massey.ac.nz/massey/learning/distance-learning/

<sup>&</sup>lt;sup>15</sup> http://www.massey.ac.nz/massey/about-massey/news/london-olympics/london-olympics\_home.cfm

with Aotearoa Fisheries Limited,<sup>16</sup> Taiwhenua o Heretaunga, the Waitemata District Health Board, and linkages to Māori business communities through the ecentre<sup>17</sup> and Te Au Rangahau, Māori Business Research Centre, are examples of how the University maximises the value to be gained from our joint resources and that we function as a strong enabler of business growth with Māori communities. Aotearoa Fisheries Limited has agreed to fund a research fellowship at Massey.

The application of these proven models to emerging links with other ethnic and cultural groups seeking to establish themselves as citizens of the new New Zealand<sup>18</sup> will be a priority going forward. Our success in connecting New Zealand to other countries in the world through strong academic linkages has ensured that Massey University is recognised as a global citizen as well as an agent supporting international investment in this country.

Over the last two years we have established the Massey University Albany Campus as an *Innovation* campus. Our intention is to continue developing the Campus in line with economic and population growth in the surrounding community and region. This commitment to structured and responsive growth through the Albany campus has been formally incorporated into Auckland City planning. We intend providing a site for the planned transport hub connecting Auckland City with the north and west corridor, and being the lead developer of the planned ICT hub in Auckland North. With the support of Government, industry, businesses, private sector investors and the local community, our intention is to develop a new science, technology and business innovation centre on the West Precinct of the Albany campus. This includes extending education provision to meet growing enrolment demand in North Shore, Waitakere, Rodney and Northland, and continuing to extend our rapidly growing science, technology and engineering provision from the Albany Campus.

The value of these developments can already be demonstrated and fully supports our future plans. In 2011 the economic and welfare contribution of the Albany Campus on the Auckland region was assessed.<sup>19</sup> This report shows that in 2010, the presence of Massey University (Albany) contributed a total of \$488.8 million to the Auckland regional economy and created a total of 998 full-time equivalent jobs.

Furthermore, a recent independent survey<sup>20</sup> administered to career advisors and Year 11, 12, and 13 students in the North Shore, Waitakere and Rodney areas (Auckland North region) reveals that the students ranked Massey University as their first choice of university more often than any other New Zealand university. Over 80% of student respondents indicated their interest in enrolling at the University, and students who were not considering Massey University were generally seeking a course of study not offered, but would consider Massey if the programme were available. This will require further investment by the University in new subject offerings.

Both students and career advisors indicated that students choose Massey because it is close to home, offers their desired course of study, and has a good reputation overall or in their desired program. Both career advisors and students agreed that the Albany campus is most desirable, and the students admitted they were most influenced by our support for career preparation, our offer of particular qualifications, and our overall reputation. Together, these results support the University's contention that enrolment and funding caps are constraining opportunities for Massey's Albany campus to expand in line with the needs of the local community.

<sup>&</sup>lt;sup>16</sup> http://afl.maori.nz

<sup>&</sup>lt;sup>17</sup> www.ecentre.org.nz/

<sup>&</sup>lt;sup>18</sup> http://www.massey.ac.nz/massey/about-massey/new-zealands-defining-university/engine-of-the-new-new-zealand.cfm

<sup>&</sup>lt;sup>19</sup> Schumacher, C. R. and Parlane, J.D. (2011). Economic and Welfare Contribution of the Albany Campus to the Auckland Region and the Economic Contribution of Extramural Studies to Multiple Regions of New Zealand, Massey University.

<sup>&</sup>lt;sup>20</sup> Hanover School Leavers Survey Summary August 2012

The successful development of our plans for Albany as part of our provision in the North Island leads naturally to the future consideration of plans for building further on our South Island offer. Currently, the University has 3,000 students studying with Massey from the South Island, including 1.275 students resident in the Canterbury Region, which signals a major contribution to the economic and social development of the communities in which they are located.

Massey has been successful over past years in improving its delivery over a range of indicators whilst continuing to achieve surpluses and maintain a strong balance sheet. This has been achieved by a clear and well communicated strategy, a strong focus on delivery and achievement and a culture of cost management. Over the next 3 years, Massey will continue to focus on these areas. These factors, together with achievement of additional revenue, including an equitable funding allocation for demand, will underpin the achievement of the performance commitments noted in this plan.

By developing this Investment Plan Massey clearly proposes a close and purposeful alignment with the priorities for tertiary education and the key areas of focus for New Zealand universities. How we will do this is outlined in the following sections (Part 2) of this Plan.

### Part 1 Plan Context

### 1.1 Massey University

Massey University, Te Kunenga Ki Pūrehuroa, established as a university in 1964, has grown from a small agricultural college, opened in 1928 in Palmerston North, to become New Zealand's national university, with three campuses and a distance education programme that, overall, engages 34,000 students per annum from New Zealand and more than 100 other countries.

The Massey University Act 1963 describes the purpose of the University as existing "for the advancement of knowledge and the dissemination and maintenance thereof by teaching and research". Massey University understands its purpose and recognises that its role within the New Zealand context is further defined in the Education Act 1989 and guided by the Tertiary Education Strategy 2010–2015. Through its vision and mission, Massey continues to deliver on the expectations of universities held by the Government to:

- enable a wide range of students to successfully complete degree and postgraduate qualifications;
- undertake internationally recognised original research and scholarship; and
- create and share knowledge that contributes to the economic and social development and environmental management of the nation.

### **1.2** Distinctive Character

Each of the distinctive entities that have merged to create Massey University has helped shape the lives and communities of people in New Zealand and around the world. Our distinctive range of disciplines, forward-thinking, research-led teaching, and cutting-edge discoveries enable Massey graduates to contribute to the world through creative thought, innovative approaches, and a connectedness with industry, the business community, the professions, and their disciplines. We are distinguished by our applied and research-led approach, our comprehensive educational portfolio (enhanced by distance education and the innovative use of digital media), and our international and lifelong learning focus. This is what makes Massey the defining university of New Zealand.

Massey's research is at the heart of New Zealand's key industries. Our researchers are renowned for taking knowledge and applying it to meet the needs of both business and industry. We are one of the leading agrifood and agri-business universities in the world. As a founding partner of the NZ Food Innovation Network, the host of the NZ CoRE, the Riddet Institute, and as a key partner in the new international Global Food Alliance among other initiatives, we provide as strong underpinning for New Zealand's agrifood industry – a sector Massey has supported since its inception, and one that is key to New Zealand's future economic success and the government's economic growth agenda.<sup>21</sup>

Massey is leading vital New Zealand research and is internationally renowned in design, visual arts, nursing, public health, veterinary science, agriculture, and other applied biological sciences. We rank in the nation's top three universities for engineering and advanced technology, physics, sport science, and applied statistics. The College of Humanities and Social Sciences houses one of the few Centres for Ecological Economics in the world, a Centre for Disaster Research hosted jointly with GNS, and a Centre for Public Health Research that, with the Research Centre for Infectious Diseases in the College of Science, provides a unique capability exploring both human and animal health issues and the cross-species interactions that can be so devastating to economic and community well-being. The New Zealand Institute for Advanced Study allows elite scientists to pursue fundamental scholarship at Massey.

<sup>&</sup>lt;sup>21</sup> http://riddet.massey.ac.nz/news/contribution-to-a-new-zealand-agri-food-strategy-launched "Call to Arms"

We host two Government-funded centres of research excellence:

- The Allan Wilson Centre for Molecular Ecology and Evolution advances knowledge of the evolution and ecology of New Zealand and Pacific plant and animal life, and human history in the Pacific.
- The Riddet Institute specialises in advanced foods and human nutrition sciences, with world-class competency in the areas of biomaterials science and digestive physiology relating to nutrient absorption and metabolism.

Massey University is the only university in New Zealand with a Veterinary School. It has both driven and supported the growth in New Zealand's economy through its contribution to world-class research and provision of graduates who are recognised internationally for their qualifications. Massey University's contribution to animal health, which has underpinned the primary sector, is substantial. Its strong connections to the agri-business sector both in New Zealand and across the world underpin New Zealand's economic growth in the future.

Massey is New Zealand's leading tertiary provider of design and creative arts education delivered from its Wellington Campus where innovative and able domestic and international graduates push the boundaries of artistic expression and product design. In the past seven years, the University has had 84 finalists in the annual Best Awards held by the Design Institute of New Zealand. The University has recently been ranked among the best design schools in the world in the international Red Dot Design Awards.<sup>22</sup> Red Dot has ranked Massey 12<sup>th</sup> in the Asia Pacific region for design concept – the only New Zealand or Australian design school to be so recognised. This ranking recognises Massey as one of the top universities in the region to produce, continuously and progressively, cutting edge and forward-thinking projects and products.

Massey is a leader in distance and blended education. Massey's vision for its 21st century classroom is to make higher education available to all its students through blended learning (both on-campus and/or from a distance). More than half its students study part-time and at a distance, and the University has taught more than 250,000 students via distance learning both within New Zealand and globally. Embracing new and emerging technologies to meet the needs of a changing world keeps Massey at the leading edge of tertiary education delivery. Offering a mix of face-to-face and interactive online learning ensures Massey is a truly contemporary university, meeting the needs of its students whether they choose to study on campus, at a distance, part-time or full-time. Successful distance teaching of languages via innovative tools, including voice software, is just one example. Massey has some of the nation's most inspiring teachers as demonstrated by the 15 national Tertiary Teaching Excellence Awards given to our staff in the past ten years. Our staff development programmes have a particular focus on the ongoing improvement of teaching practice which will see the University continue to lead in this area. Through these developments Massey is making significant progress in improving educational achievement for distance learners (refer Section 2.1.3). Massey's students are satisfied students. In its most recent survey, more than 88% of its students reported satisfaction rates in excess of 85% with the courses, facilities, and services provided.

Massey recognises that tertiary education provision must reflect the wider economic and community development context for Māori, Pasifika and New Migrant communities to make a genuine difference(refer Sections 2.1.4 and 2.1.7). *Māori@Massey 2020: KIA MARAMA Strategy* is a statement of how the University will meet the priorities for Māori. Building on its current research, teaching, and professional strengths, previous Massey Māori strategies, and government and Māori development goals, it sets out the themes for Māori achievement and signals the areas where the University will make significant contributions. These are:

<sup>&</sup>lt;sup>22</sup> Red Dot is a global design awards scheme based in Germany and Singapore.

• Theme 1: He ara mātauranga: Forging academic pathways.

We will forge academic pathways to extend the reach and impact of higher education for Māori. Te Rau Whakaara (TRW – Triple A) is working with 24 secondary schools to assist with Māori student education pathways and build linkages for students progressing from secondary school to university.

• Theme 2: He waka mātauranga: Building catalysts for learning and scholarship.

We will build catalysts to promote academic excellence, enhance scholarship, and affirm culture. Massey's partnerships with its Māori stakeholders are important. A Memorandum of Understanding with Te Wānanga o Aotearoa was recently signed, the aims of which are to facilitate articulation between the two institutions, undertake joint research and provide professional development opportunities for staff.

• Theme 3: He puna mātauranga: Generating new knowledge relevant to Māori development.

We will generate and share platforms for developing new knowledge that can be translated into social economic and cultural benefits for Māori. The Māori Research Centre of Research Excellence, Ngā Pae o te Māramatanga, has identified Massey as the lead institute for Te Pa Harakeke, a major research platform concerned with Whānau Research.

Massey is committed to Pacific communities and assisting them to realise their aspirations. Through the Pasifika@Massey Strategy the University aims to make a positive contribution to Pacific communities and nations through teaching, research, and consultancy services. Pasifika engagement with selected schools in the Auckland and Wellington region has the potential to increase student entry to Massey as well as strengthen ongoing support for current students.

Massey also recognises the increasing presence of new migrant clusters within New Zealand and the need to ensure that educational provision engages with, and provides for their special needs as they become increasingly effective and valued economic citizens and community members. Our expertise in this domain is recognised by Auckland City Council, for example, where we are providing specialist advice; our pathways and transition agenda (see for example, Section 2.1.6) will develop further with these groups in mind.

In addition to wide provision across New Zealand, Massey is also part of a global network of higher education and innovators. Each year, over 3,000 international students from more than 100 countries select Massey as their study destination. Internationally recognised for its excellence in teaching and research, the University is regarded as an innovative and progressive institution. Massey receives international accreditation for its unique world-class programmes in Veterinary Science, Business, Engineering and Food Technology. A strong proven international reputation also means that the University is involved in high-level collaborations with tertiary institutions around the world. We have for example, established research links with Germany (e.g. Max Planck, Plon), the Netherlands (e.g. Wageningen), China (e.g. Wuhan), and Malaysia, to name a few of over 200 active offshore engagements that enrich the research culture of Massey and New Zealand and provide pivotal points of contact through which international student recruitment is leveraged into this country. Massey's Centre for Defence and Security Studies delivers professional and military education to the Royal Brunei Armed Forces.

# **1.3** Strategic Context

Massey University's Investment Plan 2013–2015 is developed within the context of the Tertiary Education Strategy for New Zealand, current priorities for tertiary education institutions, and the TEC's Investment Plan guidance. Massey University's Strategic Plan, *The Road to 2020*, also provides framing for this plan.

The Government's vision is for a world-leading education system that equips New Zealanders with the knowledge, skills and values to be successful citizens in the 21st century. To achieve this, the tertiary education system must:

- provide learning opportunities for New Zealanders of all backgrounds to gain world-class skills and knowledge;
- raise the skills and knowledge of the current and future workforce to meet labour market demand and social needs;
- produce high-quality research to build New Zealand's knowledge base and respond to the needs of the economy; and
- enable Māori to enjoy educational success as Māori.

In addition during 2013–2015, the tertiary education system needs to make a bigger contribution to New Zealand's economic growth, and do so within current levels of government investment. This means focusing on outcomes and raising performance.

Massey University's strategic plan addresses these priorities and the need for focused efficiency in all our operations. In this investment plan, we provide details of our proposed engagement with, and delivery of, key actions linked to the Plan Guidance of the TEC by evidencing:

- our distinctive and defining role as a leading New Zealand TEO, which provides a clear choice for prospective students, potential donors, businesses and partner organisations, and ensures that employers are provided with graduates of an appropriate calibre to meet their needs;
- delivery of research-led teaching to proven international standards, in a distinctive manner that supports the development of independent learners and encourages innovation in practice and knowledge genesis which are of value to New Zealand;
- our unique contribution to the skills and economic benefits for New Zealand's current and future workforce through the provision of distance and professional development education for those currently in employment seeking to upgrade their skills and knowledge;
- continual evaluation of our offerings so that our academic programmes are based on a core range of generic qualifications, and a smaller range of specialist qualifications in which Massey has differentiated itself and has particular strengths;
- coordination with other universities and education providers both in New Zealand and offshore to ensure that the University is part of, and contributes to an education system that serves national needs for high-level skills;
- contribution to national and international research on indigenous development and leadership, and provision for the application and translation of this knowledge to the Māori economy and wider needs to indigenous and new migrant communities present in New Zealand;
- working together with businesses, government agencies, public research bodies (for example, Crown Research Institutes and NZ TEC Centres for Research Excellence) and international

research organisations to address technological or knowledge problems faced by society or industry;

- nurturing, growing, and building international networks, exchanging knowledge and expertise and enable the mobility of learners and staff between offshore tertiary providers and research organisations; and
- executing fully our responsibilities as a critic and conscience of society by ensuring that academic staff and students contribute and share their knowledge with the community.

The TEC is looking for eight shifts from TEO's over the next planning period and Massey University is strongly placed to contribute to the strategies and priorities identified by the TEC. Part Two of the Plan explains and shows how we will contribute to all but one of the priorities identified by the TEC, within the current fiscal restraints and environment:

- 1. A bigger and clearer economic contribution to society (refer Section 2.1.1)
- 2. More learners engaged in study toward STEM qualifications (2.1.2)
- 3. Managing for performance (2.1.3)
- 4. Better outcomes for Māori and Pacific learners (2.1.4)
- 5. Information for learners (2.1.5)
- 6. Pathways and transitions (2.1.6)
- 7. Literacy, language and numeracy (LLN) (not applicable to universities)
- 8. International education (2.1.7)

In the above sections we have identified the excellence and distinction of the Massey Mission, a specific focus on Māori and Pacific learners, and growing capability in knowledge exchange via research, through teaching and from links with industry, business and our community. As we enter a new Investment Plan period, Massey University is confident that our contextual understanding, distinctive and defining character, and future focus of key priorities will enable us to exceed the expectations of our stakeholders – especially those of our students, industry, business, our communities and Government.

### **1.4 Outcomes Framework**

Massey's contribution to outcomes for New Zealand, the national vision for the education system, the Tertiary Education priorities, and the priorities for the Plan period can be illustrated in the following diagram (Massey University Outcomes Framework). The Massey University Outcomes Framework is consistent with the framework and guidelines for reporting on outcomes developed by a joint TEC and Universities New Zealand working group and endorsed in June 2010. The framework for the university sector provides a shared view of the universities' national contribution and informs the preparation of this Investment Plan.

The University frames the strategic goals of the institution and the strategy for delivery in *The Road to 2020* through the key activities in our plans and the processes which underpin them. We actively measure our progress against these strategic goals through a series of performance measures under each goal.

The key activities in Massey's plans derive from its commitment to supporting learning through research, education (teaching) and community engagement (public and private sector contribution), and are strongly aligned with the priorities for the sector (from the Tertiary Education Strategy) and for the immediate Plan period (from the 2012 Plan Guidance). By delivering on *The Road to 2020* strategic goals (which are founded on the values of creativity, innovation and connectedness), Massey contributes to outcomes for New Zealand and the overarching vision for education which links this nation to a wider global community.

# MASSEY UNIVERSITY OUTCOMES FRAMEWORK

OUTCOMES FOR NEW ZEALAND								
Economic	onomic Social and Community Environmental Enhancement							
Development	evelopment Development							
OVERARCHING EDUCATION VISION								
A world leading education system that equips all New Zealanders with the knowledge, skills and values to be								
successful citizens in	successful citizens in the 21 <sup>st</sup> century.							
	MASSEY UNIVERSITY'S VISION							
To be New 2	To be New Zealand's defining university and a world leader in Higher Education and scholarship							
$\widehat{\uparrow}$								
	IMPACTS OF TE	RTIARY SYSTEM						
(reflected b	by the VISION FOR TERTIARY EDUCAT	TION and MASSEY UNIVERSITY'S CORE VALUES)						
IMPACTS								
Educated and	Value added	People with critical						
skilled workforce	e to society	thinking skills						
MASSEY UNIVERSITY VALUES								
Create	Innovate	Connect						
	1Î							
Drierity Learner	TERTIARY EDUCATION							
Priority Learner	System Performanc	e Quality Research						
Groups	Performance	Research						
	INVESTMENT PI							
For Tertiary Sector		Focus For Universities Sub-sector						
- A bigger and clear	er economic contribution							
to society		- Māori and Pasifika Participation and						
-	aged in study toward STEM	Achievement						
qualifications		, interventente						
- Managing for perfe	ormance	- Excellence and Distinctiveness of Institutional						
	or Māori and Pacific learners	Mission						
	- Information for learners							
- Pathways and tran	isitions	- Knowledge Transfer						
- International educ								
	$\widehat{1}$							
	MASSEY UNIVERSITY OUTPU	UTS AND STRATEGIC GOALS						
(that contribute to the Tertiary Education Strategy and Investment Plan Priorities)								
OUTPUTS								
Research	Education Co	ommunity						
STRATEGIC GOALS	& STRATEGY (THE ROAD TO 2020)	Enablers:						
Research and		onnections						
Scholarship	Learning R	esponsibility    Enabling Excellence						
Key Activities and Processes (what we are doing to contribute to TES priorities – Our Plans.)								
Borformanco Moa								
Periorinance wiea	sures and Mix of Provision (ho	w progress will be measured - Our Performance						

### **1.5 Operating Environment**

Implementing this Investment Plan will depend on understanding key aspects of the environment within which the University operates. This includes consideration of the economic outlook, shifts in education and funding policy, population demographics, labour market trends, international challenges and opportunities, and finally, our organisational capability and capacity.

### **Economic Outlook**

The Government's latest Budget Policy Statement 2012<sup>23</sup> and Budget 2012<sup>24</sup> indicate that the New Zealand economy is likely to continue to grow steadily over the next decade. The Government has signalled that this is likely to be coupled with lower relative levels of government spending than those of the past decade.

Through the Budget 2012, the Government has clearly illustrated that where additional resources are available they will be targeted at areas where there is a high alignment with Government strategy, rather than increasing the price paid for TEO outputs to offset in whole or part, cost increases incurred in their delivery. The Government has also strongly signalled the need for fiscal constraint across the public sector, particularly in relation to possible settlements as a result of collective bargaining.

Massey University continues to diversify its revenue base with a strong focus on growth in international students, research services, and commercialisation. This is particularly important as revenue from both Government and students is constrained.

In relation to its primary source of Government income, the capped funding environment for student enrolments income relates to the student achievement component. At least in the short term, this income is effectively fixed at current levels for the majority of the services provided, though some re-allocation between TEO's may be available.

Massey University is uniquely positioned to deliver on the Government's growth agenda, particularly in respect to its ability to re-skill and up-skill workers whilst they continue in the workforce, and hence additional student places should be made available to meet this demand. These workers often are unable to access student loans because they are studying part-time and therefore place no additional burden on the Crown's balance sheet with respect to this liability. Similarly, this avenue provides opportunity for Māori, Pasifika and other priority groups who through financial or other constraints are unable to complete their qualification full time and on-campus. These students should be offered places at Massey, and we believe it is vitally important in relation to the Government's growth agenda that this occur. Massey's offerings in agribusiness and in STEM subjects have driven New Zealand's economy in the past and will continue to drive New Zealand's economy in the future. Students are acutely aware of the difficult economic environment and their demand for a Massey qualification is a direct translation of their assessment of the value they will derive from the qualification in the future. That is to say, the added value of a Massey qualification has underpinned the enterprise and growth of the New Zealand economy and will continue to do so into the future.

Funding through the Performance Based Research Fund (PBRF) and contract research income funded by both Government<sup>25</sup> and the private sector is an area where Massey is building its performance through the implementation of its Research Strategy.<sup>26</sup> The announcement this year that the Government is increasing

<sup>&</sup>lt;sup>23</sup> Budget Policy Statement 2012, The Treasury, February 2012

<sup>&</sup>lt;sup>24</sup> Budget 2012, The Treasury, May 2012

<sup>&</sup>lt;sup>25</sup> e.g. Marsden, Health Research Council, Ministry of Science and Innovation funding for research

<sup>&</sup>lt;sup>26</sup>Massey University Research Strategy 2012–2014, approved by Council in May 2012

PBRF by \$100 million over the next four years (to increase the PBRF to \$300 million per annum by 2016), is expected to provide additional funding for Massey to reinvest in its research capability. The overall funding environment from both the public and private sector however is expected to remain challenging over the planning period.

With respect to non-Government revenue, the major component is from student fees. It is expected that the gap between fees charged for many of Massey University's courses and those of other universities (Massey's fees are set below the average) will continue to widen as a result of fee maxima. This will continue to constrain revenue relative to other universities and places an unjustified burden on Massey University as it seeks to operate on relatively less income. Massey will continue to raise this issue with the TEC and the Ministry of Education.

It is important to note that Massey's overall revenue increases from Government have not been commensurate to that of other universities. In the recent budgetary commentary, the Minister announced that government funding<sup>27</sup> for universities had increased by 13.5%<sup>28</sup> (from \$1,229.0 million to \$1,394.3 million) from 2008 to 2011. However, the proportion allocated to Massey University over this time was \$5.9 million, an increase of only 3.3%. The table below shows the increases in Government funding across the university sector since 2008:

University	2008 Audited (\$m)	2009 Audited (\$m)	2010 Audited (\$m)	2011 Audited (\$m)	2008-2011 (\$m)	2008-2011 % increase
Auckland University of Technology	116.9	131.9	138.7	141.6	24.7	21.1%
Lincoln University	26.2	31.4	32.5	41.1	14.9	56.9%
Massey University	176.2	176.2	180.8	182.1	5.9	3.3%
University of Auckland	319.5	337.0	351.1	369.5	50.0	15.6%
University of Canterbury	133.4	140.3	142.7	148.0	14.6	10.9%
University of Otago	233.8	247.5	259.5	265.2	31.4	13.4%
University of Waikato	86.6	90.9	93.6	98.0	11.4	13.2%
Victoria University of Wellington	136.4	142.1	145.9	148.8	12.4	9.1%
Total University Sector	1,229.00	1,297.30	1,344.80	1,394.30	165.30	13.4%

The above is reflective of a myriad of funding decisions; however, the cumulative effect is of concern and has added additional financial challenges and risks for Massey, particularly with respect to the ability to reinvest in key areas which enable the strategic repositioning of the University.

<sup>&</sup>lt;sup>27</sup> Total government funding includes all tuition, teaching income, and research funding, from Vote Tertiary Education. It also includes tuition and teaching-related income from other government sources such as Ministry of Social Development and Ministry of Health. It excludes research funding from agencies other than the Tertiary Education Commission, such as the Ministry of Science and Innovation (previously MoRST)

<sup>&</sup>lt;sup>28</sup> The announcement rounded the funding incorrectly up to 13.5% whereas the figure should have been rounded down to 13.4%

Massey has been very successful and not only improved its delivery on many indicators, but has also maintained a strong balance sheet. However, the target of a 3% return on income has yet to be attained. It is important to note, that significant surpluses could have been delivered had Massey University received the same average increase in funding as other New Zealand universities.

Sustaining low levels of year-on-year increases to primary sources of funding will continue to pose challenges, particularly as costs are expected to continue to rise at least at the rate of inflation (with some costs such as insurance exceeding inflation). However Massey has a capable workforce that looks to work in value for money ways to achieve and exceed its goals. This Investment Plan is predicated on this culture of cost management, achievement of efficiency gains, and achievement of additional revenue, including equitable allocation for demand, *whilst maintaining the quality of our teaching, learning and research*. These factors underpin the achievement of the performance commitments noted in this plan.

### **Education Policy and Funding**

A key focus for the tertiary student funding policy is to improve course and qualification completion rates as measured by the Education Performance Indicators (EPIs) and to reduce the number of courses with low completion rates, or poor educational or labour market outcomes. Performance-linked funding is being implemented to reinforce this policy, and the flow-on effects for Massey are significant. The University's commitment to accessible education for diverse groups contributes to a distinctive student demographic where more than half of the Massey students study part-time<sup>29</sup> and at a distance and often part-time while currently in the workforce. This form of education makes a significant and immediate economic contribution benefit through learners enhancing their skills and knowledge. The introduction of performance-linked funding therefore poses significant financial risk to Massey. Although the TEC has recognised that part-time students complete qualifications at a slower (and lower) rate than full-time students (because of competing demands, e.g. family, work, etc.) and introduced a part-time factor for the qualification completion indicator, this part-time factor is currently limited to 50% of the part-time EFTS at any TEO. By only allowing a 50% part-time indicator, the formula-driven, performance-linked funding does not recognise the importance of lifelong learning and 'second-chance' education, often undertaken at a distance, in contributing to building a knowledge base for the nation.

Distance and part-time learning is crucial to skill building and enhancement such that people in employment can study to up-skill or reskill, and gives people at home (for various reasons) the option to study. Distance and part-time learning also enables prison inmates, volunteers working abroad, and athletes training abroad to continue with their studies.

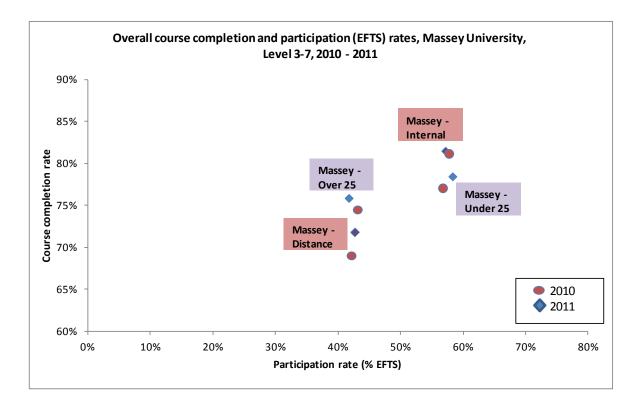
Initial indications<sup>30</sup> are that Massey is at risk of losing up to \$1.6 million in funding with the introduction of performance-linked SAC funding, despite the fact that the University has improved its educational performance from 2010 to 2011. At the institutional level<sup>31</sup> successful course completion has improved from 78% to 80% from 2010 to 2011, and qualification completion from 48% to 49% for the same period, while student retention has been maintained at consistent levels. The impact of part-time study relative to full-time study can be illustrated by separating the course completion indicator into internal and distance modes of study, in the graph<sup>32</sup> below. Course completion rates are considerably lower for distance students who are predominantly aged 25 and over and who, as previously mentioned, have competing demands with their study.

<sup>&</sup>lt;sup>29</sup> Massey University Pocket Statistics: 2011, Office of Strategy Management, June 2012

<sup>&</sup>lt;sup>30</sup> Based on preliminary performance-linked funding information for 2010 to 2011, released by the TEC during 2011 and 2012

 $<sup>^{\</sup>scriptscriptstyle 31}$  Source: EPI information, TEC (2010 closed data, 2011 open data), June 2012

<sup>&</sup>lt;sup>32</sup> Source: Headcount and EFTS Management Information (HEMI) system, Massey University (EFTS by paper mode)



Massey's qualification completion rates compare favourably with appropriate international benchmarks. A report<sup>33</sup> on part-time first degree study in the United Kingdom (UK), which examined the state of completion for a cohort of students attending UK higher education institutions, found that completion rates among entrants studying at and above 30% of a full-time workload were substantially higher than those among entrants studying at lower workload levels. Excluding the Open University, 44% of students commencing qualifications at UK higher education institutions at workloads of 30% or higher go on to complete that programme within 7 academic years (rising to 48% within 11 academic years). The best comparable proportions drawn from the Open University, the major UK distance provider, indicate 17% for degree completion from each year cohort within 7 academic years and 24% for completion within 11 academic years; as with Massey the majority of their students are seeking access to, and benefit from, a particular suite of courses to enhance employability or enable personal development, as opposed to a full qualification.

Massey University continues to recognise that, achieving better outcomes for Māori and Pasifika people, especially younger people, is an important priority for the coming planning period. As part of the University processes to manage its educational performance, lead indicator reporting has been introduced relating to course completion rates. The latest report<sup>34</sup> shows improved performance for Māori (from 67% to 70%) and for Pasifika (from 54% to 56%) since 2010. This improvement in performance has been affirmed by the latest EPI performance data.<sup>35</sup> Massey will continue to pursue strategies (refer section 2.1.4 and 2.1.7) to improve educational performance for Māori and Pasifika peoples and endeavour to meet the targets agreed with the TEC.

<sup>&</sup>lt;sup>33</sup> HEFCE (2009). Part-time first degree study: Entry and completion. Higher Education Council for England.

 $<sup>^{\</sup>rm 34}$  Lead indicators for Course Completion Rates 2011, ITS extract, HEMI, February 2012

<sup>&</sup>lt;sup>35</sup> April SDR data, TEC, June 2012

Massey has also made significant progress in reducing the TEC defined low performing provision (courses with completion rates below 50%). From data<sup>36</sup> provided by the TEC, the University has reduced its low performing provision from \$3.6 million to \$0.8 million since the last planning period. An analysis<sup>36</sup> of courses (degree level provision and below) with enrolments for 2011, shows that only 1% of these courses have successful completion rates below 50% in 2011 and 2% have successful completion rates below 55%. This demonstrates that Massey's strategies for improving student achievement are effective and these and other initiatives will be pursued as outlined in this Investment Plan.

Other policy shifts announced in the Budget 2012 relevant to the Tertiary Sector relate to the targeted increase in funding for science, technology, engineering, and mathematics (STEM) qualifications, which is aimed at ensuring more learners are engaged in study towards these qualifications. Massey's Investment Plan outlines how it intends to meet the TEC's expectations for STEM provision including academic provision in design as part of our support for key national initiatives in food technology and processing, additive and high value manufacturing, and industrial design (including 3D printing). With this breadth of provision the University is exceptionally well placed to support the proposed increase in the number of STEM graduates to better meet workforce demand, as outlined in the National Engineering Education Plan<sup>37</sup> (NEEP) and to provide research capacity and human resources for related government initiatives such as the new Advanced Technology Institute.<sup>38</sup>

Budget 2012 also outlined significant changes for student access to financial support – student loans and student allowances. These changes are likely to have an impact on student enrolments, particularly at postgraduate level.

### Population

The changing demographic profile of New Zealand is clearly a matter to inform the planning processes of both the TEC, and this University. In March 2012, in conjunction with Massey's process to update its 10-year financial plan projections, the University commissioned PricewaterhouseCoopers (PwC) to complete a student and demographic analysis.<sup>39</sup> The purpose of this study was to investigate the profile of Massey's students by campus (with the distance education student body defined as the fourth 'campus') and to compare their profiles with the current and future demographic profile of New Zealand. More recently, Hanover Research has conducted a survey of school leavers in the Auckland North region to ascertain their intentions for university study. This has been carried out to establish the likely enrolment growth in that that Region as it relates to the Albany Campus. In addition to this work, the University has also considered demographic data available from the TEC.

In terms of New Zealand's future demographic profile, determined from Statistics New Zealand medium projections of population trend estimation, the PwC study identified high-level trends in the expected demographic, as follows:

- The proportion of people who are older will increase significantly;
- The ethnic mix will change significantly (by 2021 over 50% of the Auckland population will identify as Asian, Māori or Pacific People);
- Across the country, the absolute number of people identifying as European and who are under 25 will decline; and

<sup>&</sup>lt;sup>36</sup> Source: April SDR data, HEMI, OSM, June 2012

<sup>&</sup>lt;sup>37</sup>NEEP, IPENZ Engineers of NZ, October 2010

<sup>&</sup>lt;sup>38</sup> http://www.msi.govt.nz/update-me/news/2012/new-ati-to-get-innovation-to-market-faster/

<sup>&</sup>lt;sup>39</sup> Student and Demographic Analysis – Massey University (Draft), PWC, May 2012

• In the decade to 2021 the number in this category is expected to fall by 40,000 (10%) and in the subsequent decade by a further 54,000 (15%).

The PWC study recognises that these are very important demographic groups for Massey's current enrolment profile and that the analysis by campus shows a poor match between the current demographic of Massey's new domestic students and expected changes in the overall New Zealand demographics. Not only is the proportion of population in those demographics expected to decline, but also the absolute number of people in each group.

The Hanover Research survey<sup>40</sup> administered to career advisors and Year 11, 12, and 13 students in the North Shore, Waitakere and Rodney areas (Auckland North region) reveals that the students ranked Massey University as their first choice of university more often than any other New Zealand university. Over 80% of student respondents indicated their interest in enrolling at the University, and students who were not considering Massey University were generally seeking a course of study not offered, but would consider Massey if the programme were available. This will require further investment by the university in new subject offerings.

Both students and career advisors indicated that students choose Massey because it is close to home, offers their desired course of study, and has a good reputation overall or in their desired program. Both career advisors and students agreed that the Albany campus is most desirable, and the students admitted they were most influenced by our support for career preparation, our offer of particular qualifications, and our overall reputation. Together, these results support the University's contention that enrolment and funding caps are constraining opportunities for Massey's Albany campus to expand in line with the needs of the local community.

The change in New Zealand's demographic profile presents significant challenges to Massey that will need to be addressed over the planning period. Massey's recruitment strategies will need to align with forecast population changes, particularly where Asian, Māori and Pacific ethnicities are concerned, to ensure the University's population reflects the changing population of the nation. Better access to tertiary education for Māori and Pacific learners will be pursued through Massey's strategies for Māori and Pasifika, as outlined later in the Plan. Strategies for attracting students to the Albany Campus will be important, given the opportunity offered by population changes in the Auckland Region (encouragingly, demand at Albany is starting to increase, with enrolments for the year-to-date showing an increase on the same time last year).

Given its role in New Zealand as the higher education provider that supports lifelong learning, the University will need to take advantage of the fact that in the future more people will be older, live longer, work to later in life, and require on-going education for longer. It must be noted, however, that over the planning period, economic circumstances may have an impact on numbers of students enrolling at a distance. The forecast growth in Gross Domestic Product<sup>41</sup> (GDP) to above 3% over the planning period is likely to have implications for Massey. With the forecast growth in GDP, employment growth is forecast to accelerate and this is likely to impact on Massey's domestic student enrolments, as lower distance education enrolments are usually associated with periods of fuller employment. Overall employment is predicted to fall from 6.3% at the end of 2011 to 4.6% by March 2016.<sup>42</sup>

Over the planning period Massey expects to be able to meet the TEC's requirements to manage enrolments within the domestic funding cap threshold while continuing to support the University's distinctive mission.

<sup>&</sup>lt;sup>40</sup> Hanover School Leavers Survey Summary August 2012

<sup>&</sup>lt;sup>41</sup> 2012 Budget, The Treasury, May 2012

<sup>&</sup>lt;sup>42</sup> Budget Policy Statement, The Treasury, February 2012

#### Labour Market

As a provider of higher education, Massey has a key role to play in meeting the needs of the nation's labour market through linking academic provision to future employer skills needs and in recognising and responding to shifts in employment trends.

At present, approximately 35.9% of New Zealand's workforce is employed in highly skilled occupations and professionals accounted for the largest proportion of employment (20.6%). Knowledge-intensive industries account for 33.2% of the national workforce.

With the growth in the New Zealand economy by around 3% per annum between 2011 and 2016, Infometrics<sup>43</sup> has forecast change in demand of 102,150 positions for degree-level qualifications and above – the qualification level with the largest absolute increase in demand. Fields of study with significant increases for degree level qualification and above include Natural and Physical Sciences, Engineering and related Technologies, Health, Education, Management and Commerce, and Society and Culture<sup>44</sup>.

Massey's academic programmes align closely with this future demand. The University's Teaching and Learning Framework describes our core disciplinary and curricula environments as "signature platforms" and "defining specialisations" and these are listed in the University's Strategic Plan.<sup>45</sup> These two elements form the basis of a qualification portfolio that comprises broad-based and discipline-orientated education, professional degrees, taught and postgraduate degrees, and professional development experiences. Through our qualification portfolio we are able to meet the needs of the national labour market.

Massey has strategies specifically aimed at extending collaborations with other TEOs to address both regional and national skill needs. For example, the University recently signed an agreement with Te Wānanga o Aotearoa to undertake future collaborative opportunities of mutual benefit. These opportunities could take the form of combined research opportunities or developing seamless academic pathways, ultimately aimed at addressing gaps in regional and national skill needs.

An ageing population will mean proportionately fewer people in the workforce. Higher productivity will require increased demands for further investment in education and professional development for people in the workforce. Meeting these challenges through the University' unique blended learning offer and PaCE<sup>46</sup> will become increasingly important to the economic well-being of this nation and those who depend on New Zealand's economic prosperity, particularly for adults who will be contributing productively to the workforce for longer.

Massey will continue to work with its national and regional stakeholders to ensure its qualifications are relevant to their needs and to deliver Massey graduates who are creative, innovative, and connected with industry, the business community, the professions, and their disciplines. Meeting the forecast demand for additional positions will be challenging in a capped funding environment.

<sup>&</sup>lt;sup>43</sup> Labour Market and Economic Profile New Zealand, Infometrics, June 2012

<sup>44</sup> http://riddet.massey.ac.nz/news/contribution-to-a-new-zealand-agri-food-strategy-launched "Call to Arms"

<sup>&</sup>lt;sup>45</sup> *The Road to 2020*, Massey University, 2012 update, issued in February 2012

<sup>&</sup>lt;sup>46</sup> http://www.massey.ac.nz/massey/learning/departments/pace/pace\_home.cfm?q=PaCE

#### **International Engagement**

The strategic context for international education comes from the New Zealand Government's Leadership Statement for International Education.<sup>47</sup> The Statement recognises that international education is an important enabler in strengthening New Zealand's economic, cultural, and social links with the world. New Zealand is a trading nation, and a key objective of the Government's medium-term economic agenda is to shift resources to this part of the economy in order to help earn our way in the world. Growth in the export value of international education is a significant contributor to this objective.

As well as strengthening our education system, international education is expected to contribute to our goals for research, innovation, trade, and tourism. International education also encourages the immigration of highly skilled people, and helps grow links with our major trading partners in Asia, Europe, and the Pacific. These links are crucial to the ongoing success of New Zealand.

The global operating environment presents some significant issues and challenges – sustainable resource use, citizenship in a digital world, community resilience in times of natural and induced environmental challenges, global economic stability, health and well-being and food security, to name a few.

Internationalisation is a critical element of Massey's economic, academic and cultural vitality. It goes well beyond the recruitment of international students, as Massey students and staff benefit from engaging with other cultures and being exposed to a globalised economic and social environment. Internationalisation also extends to our alumni: having had the opportunity to experience a unique education with a distinctive New Zealand flavour, many now represent Massey in all corners of the world. We are committed to helping our staff build internationalised curricula, engage in collaborative international research partnerships, and develop strategic relationships with overseas institutions and governing bodies, as well as extending educational provision through physical (e.g. Food Technology in Singapore, Defence Studies in Brunei) and distance education (e.g. Biosecurity for the World Health Organisation).

Massey's defining specialisations are strongly aligned with the global challenges of today and the future. For example, through our reputation for supporting and building value to the land-based industries, Massey is already contributing to the global agenda for food security, sustainable resource management strategies and advancing precision agriculture. Part of our internationalisation strategy is to grow our international student base. 2011 saw a 13%<sup>48</sup> increase in student enrolments and 2012 is trending similarly.

The Internationalisation Strategy<sup>49</sup> sets out the aspirations, strategies, and targets that will position Massey University internationally as a contemporary 21<sup>st</sup> century university, and New Zealand's defining university, over the next 5 years. In this respect our goals align with key elements of the Leadership Statement, which identifies a number of opportunities with regard to international education, summarised as follows:

- rapid growth in the international student population over the next decade (6% annual growth) but tempered by strengthening competition for international students;
- demand for English language training;
- New Zealand is an attractive destination for secondary education;
- building education relationships with key partners, e.g. China, India;
- demand for New Zealand's established education expertise and experience; and

<sup>&</sup>lt;sup>47</sup> Leadership Statement for International Education, Version One, NZ Government, Sept 2011

<sup>&</sup>lt;sup>48</sup> Source: Massey University Annual Report, 2011

<sup>&</sup>lt;sup>49</sup> Massey 2011-2015 Internationalisation Strategy

• the need for skilled migrants to replace the expanding number of domestic retirees in New Zealand's ageing population.

### Sustainability and the Environment

Globally we face some significant environmental issues – sustainable resource use and food security, climate change; all of which will become more prevalent as the world's population increases.

As New Zealand's defining university, Massey has a responsibility to act in ways consistent with building a future for our nation. Our Responsibility<sup>50</sup> strategic goals are specifically aimed at contributing to the understanding of, and innovative responses to, social, economic, cultural, and environmental issues. Massey is committed to taking the lead on issues to which we have the knowledge, skills, and experiences to contribute, and making our expertise available to decision-makers and others who need help and advice.

We teach and have produced research of international significance on topics ranging from energy and transport to waste management, life cycle assessment, sustainable design and freshwater solutions. Massey staff contributed formally to the IPCC Climate Change report, which was awarded the 2007 Nobel Peace Prize.<sup>51</sup>

One of our unique strengths in relation to the wider 'responsibility' agenda is our commitment to, and expertise in, sustainability. Recognising that this is an increasingly important concern for New Zealand and the world, we are committed to making sustainability central to everything we do. Capitalising on New Zealand's environmental performance will be a key part of our international trading future, particularly in innovative Agri-food<sup>52</sup> products where Massey University is strongly placed to make a significant contribution in linking agriculture, innovative food production and sustainable environmental management. The recent launch of the 2012 'Living Lab' sustainability programme defines our innovative approach to community engagement with the sustainability challenge<sup>53</sup> and funding of the Human Dimensions of Disasters and Resilience project gives evidence of the breadth and connectedness of our provision in this area.

### Organisational Capability

By implementing the goals in the University's strategic plan<sup>50</sup>, Massey seeks to ensure that it has organisational capability in keeping with its vision "to be New Zealand's defining university and a world leader in higher education and scholarship". Our people strategy<sup>54</sup> focuses on attracting and engaging great people and providing them with an enabling environment which nurtures and rewards high performance.

To meets its goals in research and scholarship, Massey recognises that it needs to sustain an environment where research and scholarship thrive, standards are constantly raised, and cross-disciplinary interactions are encouraged and enabled – where all researchers are inspired to reach their potential in a community dedicated to making a difference to New Zealand and the world. Through its Research Strategy<sup>55</sup>, Massey is pursuing specific strategies aimed at fostering research excellence and building our research community.

<sup>&</sup>lt;sup>50</sup> *The Road to 2020*, Massey University, 2012 update, issued in February 2012

<sup>&</sup>lt;sup>51</sup> Professor Ralph Sims as a member of reporting group of IPPCC joint with Senator Al Gore, 2007 Nobel Peace Prize

<sup>&</sup>lt;sup>52</sup> http://riddet.massey.ac.nz/news/contribution-to-a-new-zealand-agri-food-strategy-launched "Call to Arms"

<sup>&</sup>lt;sup>53</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle\_uuid=8044A469-07DB-155D-EAF3-CCBE8B69CDD9

<sup>&</sup>lt;sup>54</sup> Massey 2012 People Strategy

<sup>&</sup>lt;sup>55</sup> Massey University Research Strategy 2012-2014, approved by Council in May 2012

Massey is currently developing a number of initiatives designed to build on and enhance our academic strengths. These include assessing ways to better align institutes within the College of Sciences with its distinctive academic platforms, and consolidating schools within the College of Humanities and Social Sciences to improve their alignment with teaching programmes and support interdisciplinary developments. In addition, our College of Education will be re-designed as an Institute of Education within the College of Humanities and Social Sciences, with an Initial Teacher Education (ITE) focus on three existing Graduate Diploma programmes (Early Childhood, Primary and Secondary). In each case the new structures underpin stronger more focused research alliances across disciplines and consolidate expertise to ensure competitive critical mass.

The University is establishing a College of Health. New Zealand, like the rest of the world, is facing a rapidly approaching health crisis – we have an ageing population, a tight health budget, and escalating costs of new technologies and pharmaceuticals. There is a growing realisation that medically based solutions will not, by themselves, provide an answer. Massey's College of Health has the potential to make a significant and innovative contribution to New Zealand's health and wellbeing and respond strongly to the Government's priorities for health and disability training as outlined by Health Workforce New Zealand.<sup>56</sup> An especially exciting dimension for the new College of Health is the alignment of Massey's leadership in food and related sectors with health provision and our (global) capability to build an entity with one of its key platforms being advanced foods for human wellness. The University recognises that improving health outcomes and raising the quality of health and disability services, within an environment of large growth in demand for health services at a time of economic constraint, means there must be an integrated education and training approach to life-course challenges, both for health professionals and for individual citizens. The College will combine science and social science disciplines with teaching and research programmes spanning clinical interventions, population-based perspectives, the key determinants of health (including nutrition status, dietary needs, and mobility demands), environmental health, and health equity.

Massey's organisational capabilities in the professional support services area are also being progressed through the University's Enabling Excellence<sup>57</sup> strategic goals. For example, Massey's Student Administration Alignment project is aimed at the establishment of more aligned support services in terms of academic administration, student advice and information, and fees and financial support.

Through its Generating Income<sup>57</sup> strategic goals, Massey is working to increase its income and improve its financial position to enable the University to achieve its vision. Massey is updating its long-term financial plan and associated finance strategy to inform the University's direction over the next decade.

Achieving our organisational goals will become even more challenging over the planning period. Massey's strategies for human resource capacity and capability will need to address the impact of New Zealand's ageing workforce and the increasingly competitive international opportunities available to staff as both globalisation and developed nation demographics shift labour force demands.

### Stakeholder Needs and Priorities

Being strongly connected to our stakeholder communities will continue to be a defining characteristic of Massey University. Our people, our processes and our structures combine to ensure that the University is engaged with stakeholders at all levels of the organization and across all dimensions of institutional business. Engagement with local communities is enhanced by the designated regional offices on each Campus, and central structures facilitate meaningful dialogue with national bodies including Government.

<sup>&</sup>lt;sup>56</sup> Advice to Tertiary Organisations on Health and Disability Sector training priorities (Health Workforce NZ) – June 2012

<sup>&</sup>lt;sup>57</sup> *The Road to 2020*, Massey University, 2012 update, issued in February 2012

The academic and professional networks of our staff provide the basis for the maintenance and improvement of standards in all areas such as research, curriculum development, knowledge exchange, information technology infrastructure, and financial management. Processes that support teaching, research training, and service delivery are inclusive of students and enable them to influence decision-making from the 'classroom' to University Council levels. Our connections with industry and business are extensive and range from representatives on qualification review panels, to professional accreditation, to internships for students and the co-location of key partners (e.g. Fonterra, AgResearch, ecentre) and spin-out companies (e.g. Polybatics<sup>58</sup>) on a Massey campus.

Massey prides itself on being connected with key stakeholders in the national labour market and providing students with the capability and qualifications required. The University has agreements with the New Zealand Defence Force, Customs, and the New Zealand Police, involving qualifications in Defence and Security Studies. Massey has internationally accredited qualifications in Business, Veterinary Science, Food Technology, Business, Veterinary Science, Food Technology, and Engineering which are enabling of New Zealand as a globally competitive employer. We continue to forge closer relationships with regional, and local policy-makers (e.g. Hawke's Bay Regional Council, North Shore Business Leaders, Wellington City Council, Venture Taranaki) to ensure we are aligned both with their needs for knowledge transfer and the educational needs of the regions.

During the 2011–2013 Investment Plan period our focus has been on both developing and cementing our stakeholder connections. Over the next period our focus will be on building stronger connections with local, national, and international partners to gain mutually beneficial outcomes. Our engagement programme will extend throughout our stakeholder community of alumni, business, government, iwi, Pacific peoples, non-governmental organisations, and policy makers, as well as through approved strategic partnerships both on and off shore. We will be strengthening our connections with schools, business and industries, and developing new business development relationships with regional communities in the Hawke's Bay, Taranaki, Manawatu, Wellington, Auckland North, Bay of Plenty and in selected South Island areas. Our alliances with key nations (across South East Asia, China, Malaysia, Europe and US) will be consolidated.

### 1.6 The Engine of the new New Zealand<sup>59,60</sup>

As New Zealand's defining tertiary education institution, Massey University provided the underpinning knowledge for our nation's successful development in much of the 20<sup>th</sup> century. In the 21<sup>st</sup> century we aspire once again to serve and lead as the "engine" of this new New Zealand, as articulated in the University's strategic plan.<sup>57</sup>

We are committed to enhancing student access to the University's academic programmes through ensuring relevance and quality while continuing to embrace digital technologies.

In the next decade, our reputation for supporting and adding value to New Zealand's land-based industries will see the University continue its contribution to the global agenda for food security, the development of sustainable resource management strategies and the advancement of precision agriculture. A new "smart" approach to the use of our nation's natural resources means that Massey is also well placed to lead in the

<sup>58</sup> http://www.polybatics.com/

<sup>&</sup>lt;sup>59</sup> http://definingnz.com/

<sup>&</sup>lt;sup>60</sup> http://www.massey.ac.nz/massey/about-massey/new-zealands-defining-university/engine-of-the-new-new-zealand.cfm

sustainable use of biological and natural materials, and to advance exports of foods, nutraceuticals, and other high-value, post-harvest products<sup>61</sup>.

As host to the only Veterinary School in New Zealand, alongside the Riddet Institute ("New Zealand's food visionary"), the Hopkirk Research Centre, the Centre for Infectious Diseases, and the new College of Health, we have a unique opportunity to contribute to research on animal health and human well-being. Through its potential to generate new knowledge, that research will extend Massey's already extensive contributions to disease prevention and health promotion. Through the Design School's 125-year leadership of design and fine arts, the University is at the forefront of a unique creative arts movement that sees New Zealand design now centre stage in world fashion, industrial design and digital media.

Our commitment to promoting the development of indigenous knowledge and advancing Māori and Pasifika achievement ensures that we are part of a culturally rich community that respects diversity in a modern context for the benefit of this nation and its partner countries. And our wider expertise in applied social sciences will see Massey contribute to changes in urban dynamics that will define growth in New Zealand and contribute to the emerging debate around citizenship and identity in the 21<sup>st</sup> century. As New Zealand and the world have changed, so have we.

Since 2009, Massey has been driven by an ambitious strategy to inspire change in New Zealand and take what is special about our country to the world. The strategy is founded on the values of creativity, innovation and connectedness. With a record of providing one of the most comprehensive teaching and research programmes of any university, we have identified areas in specialisations that define the contribution Massey wants to make.

The 2012 update of the University's strategic plan *The Road to 2020* outlines the new research strategy and the changing portfolio of academic programmes. We will continue to expand our opportunities for lifelong learning and advance our internationalisation strategy. Our branding, marketing and engagement plans are being implemented, and we have identified a number of sustainability-related issues to which University staff will apply their expertise and knowledge. We will work on diversifying our revenue base and improve the support we provide to staff and students, especially through the smart use of information technology (IT) and upgraded campus facilities.<sup>62, 63</sup>

By implementing this Investment Plan over the planning period, Massey will align closely with the priorities for tertiary education and the key areas of focus for New Zealand universities. How we will do this is outlined in the next section of this Plan.

<sup>&</sup>lt;sup>61</sup> http://riddet.massey.ac.nz/news/contribution-to-a-new-zealand-agri-food-strategy-launched "Call to Arms"

<sup>&</sup>lt;sup>62</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=student-centre-to-be-campus-social-hub-08-09-2010

<sup>&</sup>lt;sup>63</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=world-first-building-opens-tomorrow-21-06-2012

# Part 2 Summary of Activity and Performance Commitments

### 2.1 Investment Plan Priorities

The University's summary of activity and performance commitments are outlined by Investment Plan priority as follows:

### 2.1.1 A bigger and clearer economic contribution to society

There is a positive relationship between knowledge transfer, innovation and economic growth, and the proportion of a population with university qualifications has been correlated positively with labour productivity. Universities are expected to drive an innovation system that is closely aligned to the needs of social and business communities. This requires connections with industry, employers, and international organisations for the purposes of knowledge exchange and a clear understanding of the local, national and international contexts as outlined in Part 1 of this Investment Plan. Massey University is uniquely placed to make a major contribution to this priority area.

### **Our Contribution to this Priority**

Massey makes a significant contribution to national and regional economic growth and skills development through our innovative teaching, research and community engagement. The University's contribution is distinguished by educational leadership, especially with respect to:

- enabling wider access to tertiary education;
- research excellence in our key areas of specialisation;
- connectivity across the regions and internationally with key partners, and
- science and technological innovation and knowledge transfer that is recognised internationally and supports national, sector-based, and regional economic growth, and benefits the New Zealand business community by underpinning new knowledge-rich enterprises, and via the connections created through working partnerships with industries, regional communities and sectors.

As New Zealand's most 'connected' university, Massey offers both a physical and virtual presence to enable educational access, innovative opportunities for research and development and ongoing professional development throughout New Zealand, and in communities from Auckland North to the South Island, as well as through off shore hubs in the Asia-Pacific region.

Massey University is valued for:

its unique capability in agri-food science, food technology, agri-business and education (from 'pasture to plate') and knowledge transfer, which is highly connected with industries, companies and regions, both in New Zealand and internationally (e.g. Global Food Security Alliance<sup>64</sup>, China<sup>65</sup>). The University has acknowledged strengths in animal science, soil science, pasture agronomy, and precision agriculture. The University hosts New Zealand's leading food technology degree programme, and the Riddet Institute CoRE;<sup>66</sup>

<sup>&</sup>lt;sup>64</sup> http://riddet.massey.ac.nz/news/minister-launches-proteos-project

<sup>&</sup>lt;sup>65</sup>www.stuff.co.nz/manawatu-standard/rural/662295/The-China-factor;http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=mou-with-china-14-04-2008

<sup>&</sup>lt;sup>66</sup> http://riddet.massey.ac.nz/

- taking a leading role in collaborative innovation in food through the Manawatu Agrifood Innovation Hub in collaboration with Fonterra, AgResearch, Plant & Food, and its contribution to the Food Innovation Network of New Zealand;
- being the New Zealand's only tertiary level provider of internationally recognised education in veterinary science, animal science, and conservation biology. The University is uniquely placed to provide research leadership at the interface between human and animal health, and in infectious diseases relevant to public health;
- research leadership in industrial design, and additive and high value manufacturing supporting zero waste technologies, biomedical sciences and transport;
- internationally recognised capability in advanced software engineering, the applications of ambient and ubiquitous technologies, and haptic design;
- specialist academic expertise to support evidence-informed policy making on 21<sup>st</sup> century citizenship and issues of socio-cultural responsiveness, youth enterprise, new models for societal health and well-being;
- world-leading research capability in emergency and disaster management, and community resilience. The University is NZ co-host with GNS of the Joint Centre for Disaster Research;<sup>67</sup>
- specialist provision supporting 'outreach' and underpinning STEM engagement and recruitment (e.g. VEX Robotics<sup>68</sup>, STEM outreach events on each of our campuses) and a broad knowledge base supporting innovative approaches to resource development and management (water, wind power, etc.) and sustainability.<sup>69</sup>

Being 'connected' goes to the heart of our operating model. Over the last 2 years we have established the Massey University Albany Campus as an Innovation campus. In partnership with the Auckland North business community, we are making a significant contribution to the economic development of one of the fastest growing regions in the country. Our intention is to continue developing the Campus in line with economic and population growth in the surrounding community and region. This includes extending education provision to meet growing enrolment demand in North Shore, Waitakere, Rodney, and Northland, and continuing to extend our rapidly growing science, health, technology, and engineering provision from the Albany Campus. In 2011 the economic and welfare contribution of the Massey University Albany Campus on the Auckland region was assessed.<sup>70</sup> This report shows that in 2010, the Albany Campus contributed a total of \$488.8 million to the Auckland regional economy and created a total of 998 full-time equivalent jobs.

In addition to the direct economic impact, the University and its students also contribute to the well-being of the wider community:

• Research and technical expertise: Massey is a centre of research excellence. The research contribution of the University increases the level of knowledge within each region, which may result in higher levels of efficiency and living standards in the community. For example, the Manawatu facilities, combined with Fonterra, The BCC, and other research agencies entities in Palmerston North are the largest hub of biological scientists in the Southern Hemisphere;

 <sup>&</sup>lt;sup>67</sup> www.massey.ac.nz/massey/learning/departments/school-of-psychology/research/disaster-research/disaster-research\_home.cfm
 <sup>68</sup> www.vexrobotics.com

<sup>&</sup>lt;sup>69</sup> www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle\_uuid=8044A469-07DB-155D-EAF3-CCBE8B69CDD9

<sup>&</sup>lt;sup>70</sup> Schumacher, C. R. and Parlane, J.D. (2011). Economic and Welfare Contribution of the Albany Campus to the Auckland Region and the Economic Contribution of Extramural Studies to Multiple Regions of New Zealand, Massey University.

- Physical capital: Massey adds to the infrastructure and physical capital stock of each region through its stock of non-residential property such as library resources, sports amenities, conference facilities and social and cultural buildings;<sup>71,72</sup>
- Human capital: Massey guides and manages human capital by educating students, developing staff and providing a research environment serving all communities;<sup>73, 74</sup> and
- Social capital: Massey contributes to the social capital of the each Region in the form of community activities carried out by staff members and students.

The University makes a distinctive contribution to Māori economic development. New formal agreements with Aotearoa Fisheries Limited,<sup>75</sup> Taiwhenua o Heretaunga, and the Waitemata District Health Board, together with linkages to Māori business communities through the ecentre<sup>76</sup> and Te Au Rangahau, Māori Business Research Centre, are examples of how we maximise the value to be gained from our joint resources and function as a strong enabler of business growth with Māori communities and iwi.

Massey University also makes a unique contribution to the economy as New Zealand's national provider of university-level distance education. The 2010 economic impact analysis<sup>77</sup> showed that in 2010, the distance education programme of Massey University contributed a total of \$470.9 million to the regional economies of New Zealand. Direct expenditure of Massey University on distance education (extramural) courses and on salaries was \$66.1 million. The direct expenditure of students, which would not have occurred if the University did not offer distance courses, was \$70.6 million. After taking into account the direct, indirect, and induced expenditure impacts, Massey University contributed \$238.0 million worth of output focused on the Manawatu, Auckland and Wellington regions. After taking into account the direct, indirect and induced expenditure impacts of the University's distance education students, a further \$232.9 million worth of output was added to regional economies across New Zealand.

Our distance education capability also means we are uniquely positioned to contribute to the recovery and economic development of Christchurch, by enhancing the regions current and future workforce. Currently, the University has 1,275 students resident in the Canterbury Region, part of 3,000 students studying with Massey from the South Island. The University will continue to make a strong contribution to economic development in Christchurch through its research and business development partnerships with Lincoln University, for example, and other communities and industries in the South Island.

Our unique contribution in Auckland has been formally incorporated into Auckland City planning. We intend providing a site for the planned transport hub connecting Auckland City with the north and west corridor, and being the lead developer of the planned ICT hub in Auckland North. With the support of Government, industry and business, private sector investors, and the local community, our intention is to develop a new science, technology and business innovation centre on the West Precinct of the Albany campus. This development will uniquely position the Albany campus of Massey University as the engine room of research, science, and technology for business and industry in the Auckland North Region, and provide an innovative accelerator for economic development in the Region.

It is also noteworthy that Massey staff members continue to make a significant contribution to New Zealand Disaster and Emergency Management capability, building on the work done in Christchurch and Japan in

77 Ibid

<sup>&</sup>lt;sup>71</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=student-centre-to-be-campus-social-hub-08-09-2010

<sup>&</sup>lt;sup>72</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=massey-announces-75m-upgrade-to-vet-school-14-05-2012

<sup>&</sup>lt;sup>73</sup>http://www.massey.ac.nz/massey/learning/colleges/college-creative-arts/latest-coca-news.cfm?mnarticle=landcorp-partnership-brings-ctscanner-to-vet-hospital-20-04-2009

<sup>&</sup>lt;sup>74</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle\_uuid=12B0EEC8-C49F-CC4A-7EFA-38D0A22CD9FB

<sup>&</sup>lt;sup>75</sup> http://afl.maori.nz

<sup>&</sup>lt;sup>76</sup> www.ecentre.org.nz/

2011. The University has also established unique specialist expertise in wildlife rescue, which contributes to New Zealand conservation, as well as emergency responsiveness, demonstrated when the 'Rena' foundered on the Astrolabe Reef in 2011.<sup>78</sup> These unique resources serve as beacons of excellence and place Massey University and New Zealand at the centre of the world stage.

### **Our Plans**

By 2015 we will have progressed a number of key initiatives that will see the University build on these distinctive contributions to national and regional economic development. In particular, throughout the planning period we will:

- develop new commercial partnering arrangements with key sector partners so that recognise Massey as a 'business partner of choice', by
  - i. increasing commercial and business development revenue and growing the Massey Enterprise brand;
  - ii. Increasing research commercialisation activity (e.g. license income, disclosures ,with support from key partners (e.g. The BCC, ecentre, and Grow Wellington);
  - iii. nurturing new partnership agreements through regional, national and internal networks;
- implement targeted initiatives focused on innovation that will see the University identified as a 'key innovation driver' through increasing
  - i. business hosted R & D internships and student placements at Masters level;
  - ii. business-focused PhDs;
  - iii. the scale of our provision in professional skills enhancement to NZ businesses through PaCE, for example.
- work with regional business development agencies is such a way that the University is
  promoted as a key agent in the knowledge exchange/knowledge translation agenda and being
  'connected' across New Zealand as a result of our contributions to regional economic
  development, e.g. Auckland City Council (demographic shifts and population growth ), Hawke's
  Bay Regional Council (water resource management), Taranaki (oil/gas/farming), and Grow
  Wellington (design, biomedical);
- implement strategies for enhanced connectivity that will see the University acknowledged internationally by a range of external providers (e.g. in China, South East Asia, and Europe) and independent quality assurance agencies (e.g. QS Stars<sup>79</sup>) for the quality of our educational offer and the excellence of our research in key areas of specialisation; and
- contribute to competitive wealth generation and business development through the growth of
  - i. international student recruitment;
  - ii. international research partnerships (see also 2.1.7);
  - iii. offshore income generation as measured by student enrolments, (see also 2.1.7); and
  - iv. the diversification of our research income portfolio.

<sup>&</sup>lt;sup>78</sup> www.stuff.co.nz/manawatu-standard/features/5920455/Praise-for-team-in-battle-to-save-birds

<sup>&</sup>lt;sup>79</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle\_uuid=B1BA92FE-DEDB-C9D7-EE7D-799D9648816E

#### **Our Performance Commitments**

Our contribution will be measured through the attainment of key educational performance measures, revenue from contractual, trading, and commercial operations as well as from the commercialisation of intellectual property, and through signature business development outputs for the University and for the regions and businesses we engage with. Other relevant indicators are also included in Sections 2.1.3 (Albany campus growth) and 2.1.7 (international student recruitment).

	2010	2011	2012	2013	2014	2015
	Actual	Actual	Forecast	Target	Target	Target
External Research Income (\$m)						
Vote RS & T	\$23	\$21	\$22	\$22	\$24	\$27
Other Government	\$35	\$29	\$29	\$29	\$29	\$29
Non-Government	\$21	\$23	\$23	\$24	\$27	\$29
Total	\$79	\$73	\$74	\$75	\$80	\$85
PBRF External Research Income (\$m)	\$56	\$54	\$55	\$55	\$58	\$61
Research Degree Completions (Number of)						
All Students	354	334	343	360	345	360
International students	36	44	36	40	40	45
Māori students	32	40	22	25	25	30
Pasifika students	3	2	11	11	12	15
Commercialisation						
New Disclosures (Number of)	26	30	35	40	40	40
Licenses/Commercialisation Deals Executed (Number of)	3	3	7	8	8	10
Licensing Revenue (\$000s)	\$389	\$415	\$450	\$450	\$500	\$500
Postgraduate students						
Student participation by equivalent full-						
time students (EFTS) as a % of total EFTS						
Postgraduate taught <sup>80</sup>	13%	12%	13%	13%	13%	13%
Postgraduate research <sup>81</sup>	8%	8%	8%	8%	8%	8%
Successful Course Completion <sup>82</sup> (%)						
Postgraduate students	86%	86%	86%	85-87%	85-87%	86-88%

<sup>&</sup>lt;sup>80</sup> Postgraduate Taught: Paper enrolments in papers at Funding Category Level 3 as defined by the TEC.

<sup>&</sup>lt;sup>81</sup> Postgraduate Research: Paper enrolments in papers at Funding Category Levels 4 and 5 as defined by the TEC.

<sup>&</sup>lt;sup>82</sup> Successful Course Completion: SAC eligible successful course completion EFTS, as a proportion of the total SAC eligible EFTS delivered.

# 2.1.2 More learners engaged in study toward STEM<sup>83</sup> qualifications

Science, Technology, Engineering, and Mathematics have been identified as Signature Platforms and Defining Specialisations within Massey's Teaching and Learning Framework. The Framework is the result of 2 years of significant reform to the academic portfolio, and signals the University's deep commitment to planning, funding, and improving our capacity, capability and commitment to STEM subjects.

### **Our Contribution to this Priority**

The distinguishing character of the Sciences at Massey is broadly defined by Agriculture, Veterinary and Life Sciences, Land, Water and the Environment, and Industrial Innovation via Engineering and Advanced Technology. A further distinguishing characteristic of our STEM offerings is the inquiry-led and applied approach embedded in their design, and the work-readiness that characterises our graduates. For example, results of the 2011 Graduate Destination Survey on engineering graduates showed an 87% employment rate. Massey University has signalled it is willing and able to expand enrolments in these STEM-related qualifications in response to the Government's recent Budget announcements.

Massey University's Bachelor of Science is now its third largest programme, and the University's largest cohort of doctoral students is registered across the College of Science. Our Science EFTS are predominantly in the 18–25 age group, and the EFTS are increasing. Massey's Veterinary Science programme was the first in the Southern Hemisphere to achieve the highest possible international accreditation and it continues to be internationally esteemed. Similarly, the Bachelor of Food Technology (Honours) is distinguished by being accredited by the US-based Institute of Food Technologists. Massey is one of only two universities outside the Americas to have achieved this recognition.

Our outreach programmes and achievements form a solid foundation for significant student engagement and external recognition. In particular:

- Massey's sponsorship and engagement with events of national significance such as the Central District and National Field Days, the VEX Robotics Championship, and the vital work of the National Oiled Wildlife Response team in the Bay of Plenty;
- Recognised contributions of Massey staff and students at the New Zealand Innovators Awards for the C-Dax Pasture Meter, Polybatics Limited, and Magritek Limited, and at the New Zealand Association of Scientists Awards with Massey staff winning two of the four medals;
- An award-winning Food Safety Knowledge network recognised by the Sloan Consortium in the United States as international effective practice;
- The Annual Massey University *BLOW* festival celebrating innovation and creativity in Design.<sup>84</sup>

We know that while STEM qualifications are highly valued nationally and internationally, prospective students are not always adequately prepared for success in these areas. Consequently, we are focusing our attention, through our Student Success Strategy and First Year Experience Programme, on ensuring that prospective students are academically prepared for numeracy-rich subjects and that our current students are adequately supported and engaged throughout their course of study. In particular, through a major restructure of student administration we are enhancing our approach to course advice, including the development of student-friendly decision support systems, to better ensure that students make appropriate course and qualification decisions.

<sup>&</sup>lt;sup>83</sup> STEM (Science, Technology, Engineering and Mathematics) – Course Classifications 11, 13, 18 as defined by the TEC.

<sup>&</sup>lt;sup>84</sup> http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle=blow-2011-creative-arts-festival-breezes-in-28-10-2011

To enhance pathways into our STEM programmes we have redeveloped a Certificate in Science in Technology (currently awaiting CUAP approval) as an entry point for STEM students. This will be particularly valuable in encouraging Māori and Pasifika students into STEM-related programmes. In 2011–2012 we have also undertaken a complete re-design of our undergraduate engineering programmes to enhance student engagement and to augment the applied learning dimensions of the programme. The Bachelor of Natural Sciences, offered at the Albany Campus for the first time in 2012, is a cutting-edge qualification similar to those offered at leading international universities. The programme provides knowledge across the biological and physical science disciplines and the flexibility to study beyond the classical science subjects.

We have applied for additional student EFTs and funding in our draft Mix of Provision to cater for this growth.

### **Our Plans**

Throughout the 2013–2015 planning period we will:

- Extend our initiatives with new developments in numeracy support including:<sup>85</sup>
  - i. changes to our programme and paper descriptions to include more detailed information on numeracy skills and knowledge requirements;
  - ii. development of an open, self-diagnostic test (for each major discipline) to allow students to assess their knowledge and receive information and advice on available pathways;
  - iii. development of an online numeracy resource to provide self-directed tutorials;
- Offer incentives to enrol in STEM programmes, including
  - i. STEM specific study awards;
  - ii. more short courses, professional development provision, and public lectures in STEMrelated subjects;
  - iii. an augmented multidisciplinary approach through, for example, offering Minors that encourage students to study STEM subjects as a Minor while pursuing other Major subject areas;
  - iv. finalising the establishment of Student Advice Hubs to ensure students are academically prepared to engage successfully in STEM subjects and to enhance student progression through our degree programmes, especially with Māori and Pasifika students (see Section 2.1.4);
- Redesign of the veterinary programme and refurbishment of the Veterinary Tower Complex;
- Expand articulation relationships with prestigious international institutions;
- Expand enrolments in STEM-related qualifications in response to the Government's recent Budget announcements.

### **Our Performance Commitments**

Our commitments reflect our plans to improve student engagement and success in STEM courses as well as to enhance knowledge exchange with local and business communities about STEM developments. Key performance commitments will address student participation in STEM subjects at both degree and short course level.

<sup>&</sup>lt;sup>85</sup> Taken from TLC 2012/51 "Improving student success in first year numeracy-rich papers"

	2010	2011	2012	2013	2014	2015
	Actual	Actual	Forecast	Target	Target	Target
Student participation in STEM <sup>86</sup> qualifications						
by equivalent full-time students (EFTS)						
Domestic Students	5,801	5,786	5,828	5,874	5,941	5,964
International Full Fee students	551	617	622	626	634	636
Māori Students	405	413	416	419	424	426
Pasifika Students	121	117	118	119	120	121
Successful Course Completion (%) in STEM qualifications						
Domestic Students <sup>87</sup>	80%	84%	84%	84–85%	84–86%	85–87%
International Full Fee students <sup>88</sup>	84%	83%	83%	83–84%	83–85%	84–86%
Māori Students <sup>89</sup>	69%	74%	74%	74–75%	74–76%	75–77%
Pasifika Students <sup>90</sup>	57%	60%	62%	62–64%	63–65%	64-68%
Short courses in STEM subjects (Number of)						
Offerings	N/A	12	13	16	18	24
Enrolments	N/A	140	169	208	270	360
Students eligible to graduate with STEM qualifications (Number of)	908	990	990	1,000	1,020	1,040
Domestic Students	802	925	925	934	953	972
International Full Fee students	106	59	59	60	61	62
Māori Students	18	28	28	29	30	35
Pasifika Students	6	6	6	6	7	10

<sup>&</sup>lt;sup>86</sup> STEM (Science, Technology, Engineering and Mathematics) – Course Classifications 11, 13, 18 as defined by the TEC.

 <sup>&</sup>lt;sup>87</sup> Successful Course Completions: SAC eligible successful course completions EFTS, as a proportion of the total SAC eligible EFTS delivered
 <sup>88</sup> Successful Course Completion: International Full Fee successful course completion EFTS, as a proportion of total International Full Fee EFTS delivered

<sup>&</sup>lt;sup>89</sup> Successful Course Completion: Maori students successful course completion EFTS, as a proportion of total Maori EFTS delivered

<sup>&</sup>lt;sup>90</sup> Successful Course Completion: Pasifika students successful course completion EFTS, as a proportion of total Pasifika EFTS delivered

### 2.1.3 Managing for performance

Quality in research, teaching, and all aspects of service is central to the University's performance management strategies. Our performance assessment and improvement processes are founded on evidence-based decision making in relation to both the financial and educational aspects of the University's operations. The financial operating environment for universities throughout the planning period is expected to be particularly challenging (see also Section 1.5). Massey acknowledges the financial performance expectation for TEOs of 3% return on revenue.

The capability to deliver on the Investment Plan and to meet performance commitments is the basis for managing for performance, as set out in the following section.

### **Our Contribution to this Priority**

#### **Educational Performance**

For the past three years Massey has undertaken a comprehensive programme of academic reform to position the University with sustainable and defining programmes of study that are delivered in distinctive, innovative, and accessible ways. Broad objectives and achievements include providing students with an academic experience that builds graduates distinguished by what they learn, how they learn, and their ability to apply their learning in real-world contexts.

We have rationalised the breadth of our qualification portfolio to better enable the application of human and financial resources to building the quality and attractiveness of our qualifications. We have renewed academic policies and guidelines that build and maintain high academic standards in a sustainable suite of qualifications and established the evidence bases needed to support the continuous improvement of our academic portfolio.

The outcomes to date of the Academic Reform Project include a Teaching and Learning Framework that articulates Massey's Signature Platforms, Defining Specialisations, and the Massey Model of Teaching and Learning. The 'Massey Model' articulates our key characteristics in both orientation and operation. It emphasises our applied and research-led approach, comprehensive educational portfolio, defining capability and provision in distance education, innovative use of digital media, and our international and lifelong learning approaches. Each dimension of the Framework is underpinned by a complete or evolving strategy that will guide our development, focus and renewal of the academic portfolio.

All these reform and review processes have secured for Massey a place in the ranking of the world's elite (Top 200) institutions in eight subjects featured in this year's QS (Quacquarelli Symonds) World University Rankings by Subject<sup>91</sup> (ranked in the top 50 for Education.), and in 2012 Massey was identified in the Times Higher Education list of the top 100 universities in the world under the age of 50. In 2011 we received an overall institutional rating of 4 stars out of 5, and 5 stars for the specific areas of Research, Teaching, Innovation, and Infrastructure in the QS Stars benchmarking project. The QS Star achievement project features an innovative new ratings system for academic institutions that uses a more comprehensive set of indicators in addition to those used in the QS World University Rankings.

Massey enjoys an outstanding national and international reputation as a high quality and innovative distance education provider. Feedback provided in the Student Experience Survey tells us that over 90% of our distance students rate our services as good or very good, and our 'Stream' (online learning environment) is regularly rated extremely highly. In addition, feedback<sup>92</sup> indicates that distance students

<sup>&</sup>lt;sup>91</sup> References

QS (Quacquarelli Symonds) World University Rankings by Subject - July 2012.

<sup>&</sup>lt;sup>92</sup> Australasian Survey of Student Engagement, 2010.

feel they are more 'engaged' with their learning, their lecturers, and the University than is indicated in benchmark data related to New Zealand's campus-based students.

Expanding access to tertiary education has always been central to Massey's mission. More than most modern universities, we are committed to promoting development and life-long learning. Massey understands the transformative potential of distance education for inspiring people to better themselves, for building capacity for change within communities, and for promoting wider societal benefits. The reach of our impact is evidenced in domestic demand as well as in our rapidly increasing international distance student enrolments, particularly cohorts of students through partnerships with other institutions.

This key area of focus for us going forward builds our own international student enrolments and income, as well as profiling New Zealand's higher education capability and quality more generally. The Stream environment has also allowed us to set sustainable targets for the reduction of printed material provision – something that students appreciate as well as reducing our print expenses.

In summary, blended and distance education is a driver for our success nationally and internationally, and digitisation of teaching and learning is a driver for promoting student engagement and success. Massey's capability in both these areas is world-leading, as evidenced by recent awards from the Distance Education Association of New Zealand (DEANZ) and the US-based National University Technology Network (NUTN).

Another key area of focus during the planning period is further development of clear pathways for enrolment management. These include further improvement in advice to students on course and qualification choices, and greater sophistication in our capability for enrolment management, planning, and monitoring. Delivery of student services are being reviewed in line with changes to legislation relating to voluntary membership of student associations and compulsory student services fees. Enrolment management and student life services are being delivered as an integral part of the University's Student Success Strategy and framework for engagement with students. All will be supported and reinforced by the continual improvement of our evidence and evaluation processes to manage and improve performance across all aspects of our research, teaching, and service provision.

In practice this is evident in a comprehensive suite of renewed templates for new programme proposals and for programme reviews. These require market research to be undertaken and a sound indication of viability. We have significantly augmented our capacity to undertake these activities through the engagement of Hanover Research services. The University will also be augmenting its capacity for institutional research and evidence-based decision making with an enterprise-level data and reporting system to ensure staff at all levels of the University can readily access strategic, management, and operational reporting.

### **Financial Performance**

Council and Senior Management will continue to have a strong focus on the financial performance and sustainability of the University over the planning period. This focus will need to be balanced with the need to continue ensuring the University's high quality and distinctive provision of research, teaching, and services is maintained in a way that responds to the educational needs of our learners, creates and applies knowledge that has scholarly and economic impact and benefits and produces academics who contribute their knowledge and skills to the wider society.

Massey is implementing a number of new strategies that will contribute to maintaining its financial sustainability. We are in the process of completing the Financial Strategy/Plan and the Capital Asset Management Plan to ensure that the University:

- has strong financial controls and risk management;
- maintains and renews its infrastructure;
- allocates resources wisely, operates efficiently and improves processes;
- rationalises expenditure;

- diversifies revenue;
- maximises the returns on its SAC funding; and
- maximises the outcomes of PBRF funding for research and research-led teaching.

Diversifying income streams from non-state sources continues to be an important component of the University's strategy. This is a particular focus under Section 2.1.1. While recognising the importance of Government funding, Massey will endeavour to diversify its range of income sources to draw on, as demonstrated by the above initiatives.

#### **Our Plans**

#### **Educational Performance**

Our plans are intended to build our capacity and enable us to realise more fully Massey's unique capabilities. Throughout the 2013–2015 planning period we will:

- Enhance institutional information management capability for tacking and supporting student progression and success by:
  - i. completing the Massey Enterprise Reporting Project to align data sources across the University and enable ready access to data to support informed decision-making and review;
  - ii. enhancing our current student management system and developing plans to implement a new SMS;
  - iii. developing Institutional Dashboards with more detailed information for Colleges, Campuses and Priority Student Groups;
  - iv. enhancing capacity for Strategic Enrolment Management and developing sophisticated tools for enrolment management and monitoring that will support decision-making in relation to our medium- to long-term mix of provision for funded and unfunded delivery.
- Implement our Student Success Strategy within the context of the Student Engagement Framework
- Improve access provision by:
  - i. expanding our video-linked teaching capability so that all campuses are able to link classes;
  - ii. exploring potential for Open Educational Resource (open access to selected courses as part of our marketing and recruitment strategy) offerings;
  - iii. undertaking regular upgrades (every 2–3 years) of our Stream (Moodle) software.
- Significantly build our international distance student enrolments and augment our technical and human capacity to efficiently and effectively recruit, teach and support them.
- Deliver student services in line with the Ministerial Direction on Compulsory Student Services Fees.

### **Financial Performance**

Over the 2013–2015 planning period we will:

- Develop initiatives to improve financial stability which will include:
  - i. diversifying our income streams with less dependence on government funding;

- ii. raising \$8–10 million of external funding through the Massey University Foundation;
- iii. implementing property divestment Massey will be looking to dispose of Crown owned property that is surplus to educational and research requirements, and transfer the balance of crown assets into Massey titles.
- Take steps and develop mechanisms to control our costs:
  - i. pursuing efficiencies in both teaching and related professional service areas;
  - ii. building 'best practice' business case principles into the approval processes;
  - iii. investigating shared service provision and procurement efficiencies with other TEOs, schools, industry and businesses in the region.
- Advance Capital Asset Management planning with detailed update of the 10 year rolling capital plan to identify key infrastructure and other asset development needs.

## **Our Performance Commitments**<sup>93</sup>

Progress in achieving this priority will be measured through EPIs that reflect student participation, retention, and progression as well as completions at course and qualification level. Key Financial Performance Measures will include standard TEC indicators.

<sup>&</sup>lt;sup>93</sup> Financial Performance Commitments: These performance commitments will be updated following the completion of the University's Budget for 2013 and 10 Year Financial Plan.

	2010	2011	2012	2013	2014	2015
	Actual	Actual	Forecast	Target	Target	Target
Educational Performance						
Student Participation <sup>94</sup>						
Student participation by						
equivalent full-time students						
(EFTS) as a% of total EFTS						
Domestic students under 25	53.6%	54.3%	52.9%	53.0%	53.1%	53.2%
Domestic students 25 and above	46.4%	45.7%	47.1%	47.0%	46.9%	46.8%
Albany Campus	20.5%	19.4%	19.4%	19.9%	20.2%	20.4%
95 (0()						
Student Retention <sup>95</sup> (%)	700/	600/	6.00/	60.600/	60 700/	60.740/
All students	70%	68%	68%	68–69%	68-70%	69-71%
Domestic students	69%	67%	73%	73–74%	73–74%	74–75%
Domestic students under 25	78%	76%	76%	76–77%	76–78%	77–79%
Domestic students 25 and over	64%	62%	62%	62–63%	63–64%	63–65%
Successful Course Completion <sup>96</sup> (%)						
All students <sup>97</sup>	78%	79%	81%	81–82%	81-83%	82-84%
Domestic students	78%	78%	80%	80-81%	81-82%	81-83%
Domestic students under 25	80%	80%	82%	82–83%	82-84%	83-85%
Domestic students 25 and over	76%	76%	79%	79–80%	80-81%	80-82%
Distance students	69%	70%	72%	72–73%	72–74%	73–75%
Internal students	83%	83%	84%	84–85%	84–85%	84–85%
Qualification Completion <sup>98</sup> (%)						
• • •						
Domestic students	57%	48%	47%	47–50%	47–52%	50–55%
Domestic students under 25	54%	47%	45%	45–50%	47–52%	50–55%
Domestic students 25 and over	61%	50%	52%	50–55%	50–55%	50–55%
Student Progression <sup>99</sup> (%)	13%	12%	13%	13–14%	13–14%	13–15%

 <sup>&</sup>lt;sup>94</sup> Student Participation: SAC Eligible EFTS only as defined by the TEC
 <sup>95</sup> Student Retention: The proportion of SAC eligible students in a year who either re-enrol in the next year or complete a qualification.
 <sup>96</sup> Successful Course Completion: SAC eligible successful course completion EFTS, as a proportion of the total SAC eligible EFTS delivered.

<sup>&</sup>lt;sup>97</sup> Successful Course Completion: Includes all students, i.e. SAC eligible and International Full Fee students

<sup>&</sup>lt;sup>98</sup> Qualification Completions: Qualifications completed by SAC eligible students, weighted by the EFTS value of the qualification, as a proportion of total SAC eligible EFTS enrolled in qualifications.

<sup>&</sup>lt;sup>99</sup> Student Progression: Progression to higher levels of study in the tertiary sector by SAC eligible students (by students at qualification levels 1–4).

	2010	2011	2012	2013	2014	2015
	Actual	Actual	Forecast	Target	Target	Target
<b>Overall Student Satisfaction</b> <sup>100</sup>						
with educational experience (%)						
Distance students	81%	81%	81%	80–82%	80–84%	80–85%
Internal students	84%	84%	84%	80–85%	80–85%	80–85%
Māori students	82%	82%	82%	80–82%	80–83%	80–84%
Pasifika students	82%	82%	82%	80–82%	80–83%	80–84%
Overall Student						
satisfaction <sup>101</sup> with services and						
facilities						
(% of students rating services						
good/very good)	85%	88%	88%	85–90%	85–90%	85–90%
Financial						
Surplus as a percentage of income	2.39%	1.75%	2.05%	1.53%	1.75%	2%
(%)	2.39%	1.75%	2.05%	1.35%	1.75%	۷/۵
Working capital ratio (%)	141%	129%	100%	90%	91%	91%
Debt to debt plus equity ratio (%)	2.5%	2.38%	1.59%	1.52%	2.04%	2.11%
University risk rating	М	М	М	М	М	L

<sup>&</sup>lt;sup>100</sup> Student satisfaction with educational experience: As measured by the Australasian Survey of Student Engagement (AUSSE)

<sup>&</sup>lt;sup>101</sup> Student satisfaction with services and facilities.

# 2.1.4 Better outcomes for Māori and Pasifika learners

Providing an educational environment that advances Māori and Pasifika students' participation and achievement on a par with other learners is a bold ambition that will require significant investment in all parts of the education system. This priority provides clear direction and encourages more initiatives that will ensure capability building within Māori and Pasifika communities and consequent contribution to the New Zealand economy.

# **Our Contribution to this Priority**

Massey University has the largest number of Māori students of all universities, 22% or approximately 3,400 Māori students and 11% or approximately 1,100, Pasifika students (Education Counts, 2011<sup>102</sup>). Within Massey, school leavers are about 6% of the Māori and Pasifika student population, with approx. 56% of students over the age of 26. Over 50% study part-time and over 50% study via the distance learning mode. The number of doctoral students is increasing, and approximately 20% of Māori and Pasifika students are studying at postgraduate level. Māori and Pasifika students study predominantly in programmes within Humanities and Social Sciences and Business. University study is held in high regard by the Māori and Pasifika community, and students can be the 'first in the family' to attend university.

Massey understands its Māori and Pasifika student profile. We know mature Māori and Pasifika students choose to study part-time and via distance learning to cater for current commitments with family or work, undertake tertiary study for the first time, and/or up-skill, especially in professional areas such as social work. These students provide role models for future generations and are key influencers within their family, community, and professions.

The focus on whānau is a key point. Whānau have been recognised in government, social, and economic discussions as a critical investment point (Māori Economic Development Panel, 2012<sup>103</sup>). Influence of families, combined with government policy and institutional support are key drivers for successful outcomes for Māori and Pasifika students (Anae et al. 2002<sup>104</sup>).

Massey is committed to an excellent educational experience and successful outcomes for all students. As a result of the Shared Services Review implemented in 2011, there has been progress in developing 'joined up' services: approving the *Student Success Strategy*, developing distance learning resources, strengthening course planning advice, increasing monitoring of student progress, and trialling initiatives to support positive student outcomes. For Māori and Pasifika students the key focus to achieving better educational outcomes is a coherent student-centred approach from participation to graduation, across the range of disciplines, e.g. in STEM-related subjects (see Section 2.1.2), and at a critical mass.

Qualification completion for young Māori and Pasifika students has the potential to ensure more robust and resilient economic futures (Ministry of Education, 2005<sup>105</sup>). Massey has planned and excelled in increasing students studying at the postgraduate level as we know that research and developing new knowledge is a great benefit to education and business as well as to Māori and Pasifika communities. We are keen to increase the numbers of Māori and Pasifika students studying a breadth of qualifications especially to

<sup>&</sup>lt;sup>102</sup> Education Counts. (2011). Provider-based enrolments [Excel spreadsheet]. Retrieved July 18, 2012 from:

http://www.educationcounts.govt.nz/statistics/tertiary\_education/participation

<sup>&</sup>lt;sup>103</sup> Māori Economic Development Panel. (2012). Māori Economic Development Panel: Discussion document. Wellington, New Zealand: Te Puni Kōkiri. P. 7.

<sup>&</sup>lt;sup>104</sup> Anae, M., Anderson, H., Benseman, J. and Coxon, E. (2002). Pacific Peoples and Tertiary Education: Issues of participation. Auckland, New Zealand. Pp. 20–21.

Auckland Uniservices Limited.

<sup>&</sup>lt;sup>105</sup> Ministry of Education. (2005). Economic outcomes for Māori from tertiary education. Wellington, New Zealand, Ministry of Education. P. 2.

develop positive approaches in areas such as health and whānau development, to strengthen Māori and Pasifika relevant programmes such as Te Reo Māori immersion teaching and Pasifika community development and in disciplines that have been signalled as key to development priorities such as business innovation and science (Nana, Stokes & Molano 2011<sup>106</sup>). We are committed to increasing school leavers' transition to university to ensure that economic, educational, social, and health benefits accrue from an earlier age, increasing the resilience of Māori and Pasifika communities. We understand the prestige of attaining a university qualification, and the expectations of families. Massey intends to meet Māori and Pasifika educational and cultural expectations as an integral part of student, and community, success.

Massey University is committed to contributing to Māori development and advancing the aspirations of Pacific peoples. The strategies that guide these developments are the *Māori@Massey 2020: KIA MARAMA Strategy* and the *Pasifika@Massey Strategy*. Clear commitments to student success are signalled in these strategies specifically in relation to:

- increasing the number of school leavers attending Massey;
- maintaining and strengthening multi-modal education;
- increasing student success including participation, retention and completion through robust course advice on enrolment, monitoring student progress, implementing interventions earlier in the programme of study, and establishing learning communities and providing ongoing contact with distance learning students;
- increasing qualifications with high Māori and Pasifika content and relevance;
- increasing students participating and completing postgraduate study;
- increasing bursary, scholarship, and awards support; and
- ensuring the cultural dimension is reflected.

In refreshing the approaches for students we have implemented pre-tertiary Pasifika learning communities in Auckland and Wellington engaging with key decision makers such as parents, grandparents, church leaders, and school teachers and coordinated the dedicated Pasifika student advisors at Massey. For Māori students we have developed an approach, Triple A – Accelerated Academic Achievement. This team of Māori student advisors engages with students and families at school, provides assistance to lecturers of core papers, and connects with graduates to maintain relationships for current students with Massey Māori alumni.

Future initiatives with Māori and Pasifika students will include: proactive provision of course advice to all new students, monitoring students' performance in core papers, developing intensive skill workshops to increase students mastery of academic writing and reading, providing systematic contact with distance students to ensure they stay engaged in their studies, and continuing to contribute to research articles and conferences such as Tuia Te Ako to share progress with assisting student success. Providing Māori and Pasifika students with positive cultural experiences that enhance these students' academic opportunities will be an integral part of these initiatives.

While individual achievement is the immediate goal, contribution to growing sustainable Māori and Pasifika communities is the longer term investment and test of true success (Skill New Zealand, 2001<sup>107</sup>). With

<sup>&</sup>lt;sup>106</sup> Nana, G., Stokes, F. and Molano, W. (2011). The Māori economy, science and innovation. Wellington, New Zealand, Business and Economic Research Limited and Te Puni Kōkiri.

<sup>&</sup>lt;sup>107</sup> Skill New Zealand. (2001). Sharing for success: Good practice and issues for Māori education. Wellington, New Zealand: Skill New Zealand.

increasing the capacity and capability of Māori and Pasifika communities, it is expected that there will be definite employment, health, social, and educational gains within New Zealand and beyond.

# Our Plans

It will be important to concentrate programme interventions at key points that will make a difference for Māori and Pasifika students. Over the 2013–2015 planning period we will:

- Strengthen access routes to tertiary education provision by:
  - i. increasing current relationships with leaders in communities, schools and families, and students on enrolment with Massey;
  - ii. increasing investment in bursaries and scholarships as pathways to tertiary education;
  - iii. ensuring that all new Māori and Pasifika students have appropriate course advice before their programme confirmation;
  - iv. developing the administration of bursaries and scholarships to also enable closer monitoring of progress, and the introduction of mentoring and other activities to further develop their academic potential.
- Enhance progression and completions of Māori and Pasifika students by:
  - i. proactively monitoring enrolments, especially in key programmes, and engagement in key papers;
  - ii. proactively monitoring student performance in core papers for key programmes, and progression to completion;
  - iii. ensuring appropriate interventions are introduced at an early stage to avoid failure and increase chances of success for Māori and Pasifika students;
  - iv. developing intensive workshops for Māori and Pasifika students to gain mastery of key academic skills.
- Foster the development of support communities by:
  - i. encouraging all Māori and Pasifika students to participate in on-line or on-campus communities of learning organised on subject areas, modes of education, or affiliations such as iwi or professional membership;
  - ii. developing services to ensure Māori and Pasifika distance learning students are engaged and progressing with their studies;
  - iii. committing to building postgraduate forums that will lead to strong cohorts of Māori and Pasifika leaders with higher academic qualifications and strong associations within each of their Māori and Pasifika communities.
- Lead research and present findings from the implementation of Māori and Pasifika programme interventions.

# **Our Performance Commitments**

Progress in achieving this priority over the planning period will be measured through the performance commitments listed below.

	2010	2011	2012	2013	2014	2015
	Actual	Actual	Forecast	Target	Target	Target
Student Participation <sup>108</sup>						
Student participation by equivalent full-time students (EFTS) as a % of total EFTS						
Māori	10.8%	10.7%	11.0%	11–12%	12–13%	13–15%
Pasifika	3.3%	3.4%	3.3%	3.5–4%	3.8–5%	4.4–7%
Student participation by headcount as % of total headcount						
Māori	10.7%	10.7%	11.1%	11.5–12%	12–13%	13–15%
Pasifika	3.1%	3.4%	3.3%	3.5–4%	3.8–5%	4.5–7%
Student commencements <sup>109</sup> by headcount as a % of domestic students commencements						
Māori	11.3%	11.5%	13.3%	13.5–14%	14–15%	15–17%
Pasifika % increase/ (decrease) in School Leavers by headcount	4.1%	4.8%	5.1%	5.5–6%	6–7%	6.5–8.5%
Māori	-3.0%	9.6%	13.4%	5.3%	4.6%	5.1%
Pasifika	20.8%	0.0%	3.1%	5.0%	6.7%	7.9%
Postgraduate <sup>110</sup> enrolments by equivalent full-time students (EFTS) as a % of total postgraduate EFTS.						
Māori	18.2%	18.0%	18.0%	18–20%	20–22%	22–25%
Pasifika	17.2%	16.6%	15.7%	16.5–18%	18–20%	21–23%
Student Retention <sup>111</sup> (%)						
All students	70.0%	68.0%	68.0%	68–69%	68–70%	69–71%
Māori	62.0%	61.0%	62.0%	62–63%	63–65%	64–67%
Pasifika	55.0%	56.0%	57.0%	57–58%	58–60%	60–65%

 $<sup>^{\</sup>rm 108}$  Student Participation: SAC Eligible EFTS only as defined by the TEC

 <sup>&</sup>lt;sup>109</sup> Student commencements: Students new to study at Massey University.
 <sup>110</sup> Postgraduate enrolments: SAC eligible paper enrolments at Funding Category Levels 3-4 as defined by the TEC.
 <sup>111</sup> Student Retention: The proportion of SAC eligible students in a year who either re-enrol in the next year or complete a qualification.

	2010 Actual	2011 Actual	2012 Forecast	2013 Target	2014 Target	2015 Target
Successful Course Completion <sup>112</sup> (%)				0	0	0
All students	78.0%	79.0%	81.0%	81–82%	81–83%	82–84%
Māori	67.0%	67.0%	69.0%	70–73%	72–76%	75–79%
Pasifika	52.0%	54.0%	55.0%	56–60%	58–64%	62–68%
Qualification Completion <sup>113</sup>						
All Domestic students	57.0%	48.0%	47.0%	47–50%	47–52%	50–55%
Māori	43.0%	38.0%	47.0%	47–50%	47–52%	50–55%
Pasifika	28.0%	24.0%	24.0%	24–30%	26–32%	30–35%

<sup>&</sup>lt;sup>112</sup> Successful Course Completion: SAC eligible successful course completion EFTS, as a proportion of the total SAC eligible EFTS Delivered. <sup>113</sup> Qualification Completions: Qualifications completed by SAC eligible students, weighted by the EFTS value of the qualification, as a proportion of total SAC eligible EFTS enrolled in qualifications.

# 2.1.5 Information for Learners

This is an area of significant focus for the University in 2013–2015. By the end of 2015 the information provided to current and prospective students about our papers and our qualifications will be more comprehensive, consistent, relevant, and accessible. Work in this area is well underway with major restructuring of our approach to student administration and the management of academic quality assurance. Our institutional data capability is also the subject of the Enterprise Reporting project.

## **Our Contribution to this Priority**

Our commitment to capturing student feedback is underlined by the establishment in late 2010 of a new Student Engagement and Evaluation Unit. The Unit is dedicated to aligning and augmenting our use of student surveys and other feedback mechanisms to improve teaching, learning, and the services that support them. In addition to online surveys carried out via the Massey Online Survey Tool (MOST) the University's student experience survey, the AUSSE and the International Student Barometer, we are introducing a Graduate Destination Survey in 2012 (piloted in 2011) to be administered annually.

The University is also committed to the use of this feedback, and closing the feedback loop with those students who respond to the surveys. Indeed, a key feature of MOST is that it reports summary course results directly to students and includes a facility for teachers to respond to the student feedback provided. Perhaps most significantly we are developing a student evaluation policy within an overarching quality assurance framework that sets out clear expectations for administering surveys (and other evaluation methods) and accountability for the use of evaluation to improve teaching and learning.

Comprehensive, consistent, relevant, and accessible information for learners is predicated on effective systems for information management, quality assurance, and data integrity. Massey has improved its capacity in these important areas with the establishment and integration of three interrelated units and is now focusing on systematically improving the related services and support for both staff and students. Specifically, the units span:

Academic Policy and Regulations – the Academic Policy and Regulations Unit (APRU), established in 2010, provides University-wide advisory services on academic policy, regulations, and accreditation, and is responsible for quality assurance of the University's academic portfolio. Its core responsibilities are related to academic policy development and coordinating compliance with external (TEC, NZQA, CUAP) regulatory frameworks, as well as aligning and improving those that apply internal to the University, and providing academic advice and support to College staff.

**Student Administration** – carries out the core student-facing operational functions that support teaching and learning and that underpin the contractual relationships between the University, students and government agencies. Its primary areas include:

- The National Contact Centre a multi-channel in-bound/out-bound communication service processing a million interactions per year;
- Academic Services Unit carrying out the functions required to admit, enrol, and advise students, to maintain academic records and graduation processes, and to maintain the annual schedule of fees;
- The Student Information Unit (SIU) providing editorial pre-production services for Stream course materials as well as online and print-based study resources. The SIU also maintains online and print-based student advisory and administrative information;
- Assessment and Distribution Unit administration of all final examinations both on-campus and at regional and international centres, assignment handling and distribution of study materials to distance students.

**Student Management Support and Development** – established in 2012, this new unit is focussed on business process improvement for Student Management (and related) business activity. This includes system development and configuration, quality assurance and monitoring of student and related business processes against service standards and KPIs, data integrity and business support, training, and education.

# **Our Plans**

During the 2013–2015 planning period we will:

- Improve the academic support services and provision to staff and students on each campus through:
  - i. establishing student Advice Hubs on each campus that utilise comprehensive programme manuals to improve the quality of information provided to our current and prospective students and the efficiency with which it is provided;
  - ii. continuously improving business processes and services for both staff and students including appropriate support, training and education via the SSS Unit;
  - iii. implementing a new policy relating to paper information and study resources.
- Improve the student evaluation frameworks which underpin the quality assurance of our academic programmes by :
  - i. implementing a new policy relating to student evaluation including promulgation of student survey results and clear accountability for using them to improve the student experience;
  - ii. expanding use of graduate profiles, progressively informed by our graduate surveys and alumni;
  - iii. implementing the Student Success Strategy (refer 2.1.3);
  - iv. continuously improving through the implementation of the University's qualification framework, including templates for programme and paper approval that capture information for students.
- Develop and report on signature performance measures.

# **Our Performance Commitments**

As noted above, appropriate performance measures for the activities supporting this priority will be developed and reported on during the planning period.

# 2.1.6 Pathways and transitions

Academic preparedness is a priority area for Massey during the planning period. We intend ensuring our prospective students have the right information to make good enrolment choices, and are academically prepared for success in the courses they select. This commitment also extends to our foundation and English language programmes, where greater use of online and collaborative delivery with partners on and offshore will provide students with effective academic preparation for successful engagement in university study.

Our Qualifications Framework supports the articulation of students within and across Massey's qualifications, while improvements to our publicly accessible paper and programme information will increasingly ensure that other providers nationally and internationally will be more able to assess the capabilities of our students and graduates.

## Our Contribution to this Priority

Massey is significantly expanding non-SAC funded International and Professional and Continuing Education programmes, including those that support transition to university study from other providers. To this end we have:

- established the Centre for Professional and Continuing Education (PaCE) in 2010, which has consistently exceeded revenue and enrolment targets. PaCE offers fully customised professional development courses and training packages. Our clients come from local, national and international partners, businesses and industries. Services include:
  - Campus passport courses
  - Professional development courses
  - University preparation courses
  - English language courses
  - International short courses
  - IELTS practice and strategy courses;
- advanced the development of key relationships and franchising with other providers in the New Zealand tertiary sector, building on the examples with WITT, UCOL and Unitec;
- further developed relationships for stair-casing students from on and offshore providers;
- developed an Internationalisation Strategy<sup>114</sup> and restructured our International operations (see also Section 2.1.7).

To enhance educational pathways, we will continue to provide short courses and professional development opportunities relevant to Māori and Pasifika business, industry, communities, iwi, and service providers. We will also continue to explore collaborative pathways with other TEO to facilitate greater access to degree programmes at undergraduate and postgraduate levels. We will encourage exchanges with indigenous scholars to ensure Māori and Pasifika students are able to take advantage of global learning and gain access to international networks.

## Our Plans

Low Performing Provision

<sup>&</sup>lt;sup>114</sup> 2011–2015 Massey Internationalisation Strategy

In addition to previous references to existing and planned strategies<sup>115</sup> that have been to address low performing provision, we will:

During the 2013–2015 planning period we will:

- Enhance primary support for student engagement with tertiary education by:
  - i. establishing centralised Student Advice Hubs on each campus as one-stop-shops for information and student services;
  - ii. implementing the Student Success Strategy with particular focus on early intervention systems that support student achievement;
  - iii. offering a broader suite of 'Taster courses';
  - iv. expanding online tools for assessing academic preparedness.
- Build on and develop relationships with key partners by:
  - i. carefully expanding Franchising and Licensing foundation courses as feeder pathways to our programmes;
  - ii. expanding international student pathways (See also Section 2.1.7).

## **Our Performance Commitments**

Progress in achieving this priority will be measured against performance commitments to increase the number of PaCE-supported offerings, monitoring student transitions from partners organisations, and tracking the population of school leavers registering to study at Massey.

	2010	2011	2012	2013	2014	2015
	Actual	Actual	Forecast	Target	Target	Target
PaCE <sup>116</sup> mediated bridging programmes (Number of)	N/A	2	2	4	5	6
Students (Number of) who transition to Massey from a pathway provider in New Zealand	N/A	10	23	50	80	100
% increase/ decrease in School leavers by headcount	-2.4%	-7.0%	3.0%	2.0%	2.4%	1.1%

<sup>&</sup>lt;sup>115</sup> See pages 32, 36, 41, 45, 46

<sup>&</sup>lt;sup>116</sup> PaCE: Massey University Centre for Professional and Continuing Education

# 2.1.7 International Education

The University acknowledges and recognises the leadership statement for international education that sets out the Government's policy objectives and goals for international education. International education has consistently been a cornerstone of Massey's contribution to New Zealand's education system. This contribution now extends well beyond the traditional delivery of learning for full fee-paying international students studying in New Zealand, to a range of innovative offshore delivery arrangements and partnerships that will make a significant contribution to the Government's inspirational goal of doubling the annual economic value of New Zealand's international education services to \$5 billion over the next 15 years.

## **Our Contribution to this Priority**

In 2011 Massey approved a comprehensive Internationalisation Strategy (the only NZ university to have a comprehensive Internationalisation Strategy) to 2015, and restructured its International operation to align capability with the key goals of the Strategy. The 2011–2015 Internationalisation Strategy sets out the aspirations, strategies and targets that will position Massey University internationally as a contemporary 21st century university, and New Zealand's Defining University, over the next five years. A key goal of the Strategy is to take Massey to the world in areas of discipline strength where international students, whether onshore or offshore, can experience a unique education with a distinctive New Zealand flavour. The Strategy has six key strands:

- International Student Marketing, Recruitment, and Admission
- International Relations
- International student support, engagement, and retention
- Building capacity
- Internationalising the academic environment and learning experience
- Transnational and Offshore-Distance Education

Internationalisation at Massey University is defined by a complementary range of activities that go far beyond the attraction of international students to Massey's teaching and research programmes. While international student recruitment is critical to Massey's economic, academic and cultural vitality, internationalisation that integrates an international/intercultural dimension into the teaching, research and service functions of the University is fundamental to Massey's endeavours. This includes the engagement of New Zealand students with other cultures, exposure to a globalised economic and social environment, student mobility, strategic relationships with overseas institutions and governing bodies, engagement with Massey alumni overseas, and high-quality pastoral care and support for international students studying both on campus and at a distance.

The Strategy offers both educational and wider social and economic benefits. Educational benefits include establishing cross-cultural familiarity and understanding, providing opportunities for multi-cultural diversity, collaboration through projects, and opportunities for commercialisation of research that could be applied in New Zealand and/or overseas, with support from Massey's academics and greater exposure to real-world issues and international perspectives on social, cultural, and economic issues. Further benefits include building greater awareness of New Zealand as a 'destination of choice' for tertiary education. The branding and profile of the University at the international level will help develop linkages that may lead to commercial outcomes (for example, Massey's presence in Singapore has led to links with Nestle and a potential project in Mexico).

Massey is the only New Zealand university with three onshore campuses, and hence offers prospective students and partners three geographical options. In addition, Massey is the only New Zealand university to have an offshore presence in Singapore that helps build New Zealand's profile and brand in Southeast Asia.

As a leader in distance education and in the use of educational technology to deliver its programmes, it has a unique and significant role to play.

At doctorate level Massey is continuing to grow its provision of doctoral programmes for international students, particularly in STEM-oriented expertise in the range of agri-business, food technology, veterinary sciences, indigenous cultures and conservation/biodiversity. The University's doctoral programme is making a significant contribution to higher skills development for New Zealand through its graduates employed by New Zealand firms operating in international markets.

As noted in detail elsewhere, the University is developing international partnerships that will add real value to New Zealand's national economy (see 1.2 and 2.1.1, for examples).

## **Our Plans**

During the 2013–2015 planning period we will:

- Continue ongoing work based on the Internationalisation Strategy but refined to ensure we address variables in world economy by:
  - i. working to refine international partnerships (i.e. MOU) to ensure a greater emphasis on commercial viability and sustainability;
  - ii. profiling Massey in targeted regions (with aim to develop stronger footprint);
  - iii. developing more home, government and federal aid relationships so as to obtain more international scholarship students;
  - iv. benchmarking international best practices to ensure we anticipate changes in global consumer demand for tertiary education.
- Place greater emphasis on pathway programmes (see also Section 2.1.6).
- Build and strengthen research collaborations by:
  - i. focusing on Higher Degree Research recruitment linked directly to formal research partnerships and capacity enhancement;
  - ii. providing clearer profiling of the opportunities available for international doctoral candidates.

Marketing plans have developed to ensure we cater to the following segments:

- International undergraduate (UG) segment (categorized into pathways, i.e. English and Foundation programme then UG, and direct entry into UG)
- International postgraduate segment
- Short courses and professional development
- Programmes developed offshore (e.g. Singapore Polytechnic)
- Twinning programmes
- Leveraging on existing MOUs to develop partnership programmes
- Benchmarking other local and regional providers to ensure we are cost and programme (value) competitive.

# **Our Performance Commitments**

Progress in achieving this priority will be measured against the following performance commitments.

	2010	2011	2012	2013	2014	2015
	Actual	Actual	Forecast	Target	Target	Target
Student participation						
Student participation by equivalent						
full-time students (EFTS) as a % of						
total EFTS						
International Full Fee <sup>117</sup>	9.4%	10.5%	11.3%	12–13%	13–14%	13.5–16%
All International students <sup>118</sup>	11.7%	13.2%	14.1%	15–16%	16–17%	17–20%
Student participation by headcount						
as a% of total headcount						
International Full Fee	8.5%	9.9%	10.6%	11.2–12%	11.9–13%	12.5–15%
All International students	10.0%	11.6%	12.4%	13.1–14%	14–15%	15–18%
Student Commencements <sup>119</sup> by headcount as % of total students commencements						
All International students	15.0%	19.8%	18.3%	20.4–21%	22.8–25%	24.7–27%
Successful Course Completion <sup>120</sup> (%)						
International Full-Fee students	79%	81%	82%	81–83%	81–83%	82–84%
Active International Partnerships <sup>121</sup> (Number of)	182	192	208	224	240	256

<sup>&</sup>lt;sup>117</sup> International Full Fee: Students that pay full international fees.

<sup>&</sup>lt;sup>118</sup> All International Students: Students that pay full international fees and subsidised and international students, e.g. Foreign wholly research students.

<sup>&</sup>lt;sup>119</sup> Student Commencements: Students new to study at Massey University.

<sup>&</sup>lt;sup>120</sup> Successful Courses Completions: International Full Fee successful course completions EFTS, as a proportion of the total international Full Fee EFTS

delivered. <sup>121</sup> Active International Partnerships: Only those partnerships where Massey University is the first party (the lead contractor) to the

# 2.2 Funding Summary and Mix of Provision

Massey's Funding Summary and Mix of Provision are attached in Appendix Two of the Investment Plan. The Funding Summary includes the total Student Achievement Component (SAC) funding that the University has been allocated by the Tertiary Education Commission (TEC) for 2013, based on the University's mix of provision and funded student numbers for 2013–2015. Supplementary information on student participation is provided in Appendix Two to support the mix of provision data and the University's performance commitments provided in Section 2.1 above.

The University's Mix of Provision data reflects Massey's current forecasts of student participation for 2013–2015, which are based on underlying pipeline growth and the TEC's priorities relating to STEM provision and Māori and Pasifika participation.

**Please note** that the University is undergoing significant organisational change over the planning period, as outlined in the section on Organisational Capability in Part 1 of the Investment Plan. While every effort has been made to reflect this change in the University's Mix of Provision, it is expected that the organisational reforms will mean further changes in the actual mix of provision by course classification for 2013–2015. The University will, however, manage overall enrolments within the domestic funding cap threshold over the planning period.

It is also important to note that the changes in the enrolments predicted for the course classifications relating to Education (course classifications 19.1.19.2 and 20) do not mean a reduction in the number of teaching graduates for the University, but reflect the focussing of Initial Teacher Education qualifications at graduate/postgraduate level as part of the organisational changes relating to the College of Education.

The information provided in Appendix Two is provided commercially in confidence to the TEC.

# Appendices

- 1. Statement of Forecast Service Performance 2013
- 2. Funding Summary and Mix of Provision (Confidential)

# Appendix 1: Statement of Forecast Service Performance 2013

The Massey University Act 1963 describes the purpose of the University as existing "for the advancement of knowledge and the dissemination and maintenance thereof by teaching and research". Massey University understands its purpose and recognises that its role within the New Zealand context is further defined in the Education Act 1989 and guided by the Tertiary Education Strategy 2010–2015. Through its vision and mission, Massey continues to deliver on the expectations of universities held by the Government to:

- enable a wide range of students to successfully complete degree and postgraduate qualifications;
- undertake internationally recognised original research and scholarship; and
- create and share knowledge that contributes to the economic and social development and environmental management of the nation.

Massey's contribution to outcomes for New Zealand, the national vision for the education system, the Tertiary Education priorities, and the priorities for the Investment Plan period is outlined in Section 1.4 (Outcomes Framework) of the University's Investment Plan. The diagram (Massey University Outcomes Framework) in this section illustrates the links between Massey University's outputs, strategic goals and vision, the priorities for tertiary education, the overarching vision for education in New Zealand and at the highest level, outcomes for New Zealand. The Framework is consistent with the framework and guidelines for reporting on outcomes developed by a joint TEC and Universities New Zealand working group and endorsed in June 2010. The framework for the university sector provides a shared view of the universities' national contribution and informs the preparation of the University's Investment Plan.

The University frames the strategic goals of the institution and the strategy for delivery in *The Road to 2020* through the key activities in our plans and the processes which underpin them. We actively measure our progress against these strategic goals through a series of performance measures under each goal. Massey University's key outputs (Research, Education and Service to the Community) contribute to the impacts sought from the tertiary system (an educated and skilled workforce; adding value to society; and developing people with critical thinking skills) to meet the Government's vision of a world-leading tertiary education system that equips New Zealanders with the knowledge, skills and values to be successful citizens in the 21<sup>st</sup> century.

The key activities in Massey's plans derive from its commitment to supporting learning through research, education (teaching) and community engagement (public and private sector contribution), and are strongly aligned with the priorities for the sector (from the Tertiary Education Strategy). By delivering on *The Road to 2020* strategic goals (which are founded on the values of creativity, innovation and connectedness), Massey contributes to outcomes for New Zealand and the overarching vision for education which links this nation to a wider global community.

# OUTPUTS

Universities generally provide three key core services or outputs – research, education and services to the community. Massey University's distinctive contribution to these outputs is outlined in the Investment Plan (in the Executive Summary and the Distinctive Character sections of the Plan).

# 1. RESEARCH

Massey will promote the highest standards of research and scholarship and will be a world leader in its areas of specialisation.

Massey's research outputs will drive innovation, knowledge transfer and economic development both regionally and nationally. Such research will also enhance educational outcomes for the students.

## Activities

Activities contributing to this output include:

- Project-based contractual research for the private and public sector
- Teaching-related research
- Commercialisation of research outputs
- Supervision of research-based Masters and Doctoral students
- Participation in and hosting Centres of Research Excellence

#### **Output Measures**

	2011	2012	2013
	Actual	Forecast	Target
External Research Income (\$m)	\$73	\$74	\$75
PBRF External Research Income (\$m)	\$54	\$55	\$55
Research Outputs (Number of) <sup>122</sup>	1,433	1,450	To increase
			by 5%
Research Degree Completions (number of)	334	343	360
Commercialisation			
New Disclosures (Number of)	30	35	40
Licenses/Commercialisation Deals Executed (Number of)	3	7	8
Licensing Revenue (\$000s)	\$415	\$450	\$450
Postgraduate students			
Student participation by equivalent full-time students			
(EFTS) as a % of total EFTS			
Postgraduate research <sup>123</sup>	8%	8%	8%
Successful Course Completion <sup>124</sup> (%)			
Postgraduate students	86%	86%	85-87%
<b>Overall Student Satisfaction</b> <sup>125</sup> with educational experience (%)			
Postgraduate students	New	New	80-82%
	Measure	Measure	

<sup>&</sup>lt;sup>122</sup> Research Outputs: Rolling three-year average of publications (includes papers published in externally reviewed journals, series or books; referred conference papers and abstracts; books and monographs; and non-text based research outputs)

<sup>&</sup>lt;sup>123</sup> Postgraduate Research: Paper enrolments in papers at Funding Category Levels 4 and 5 as defined by the TEC.

<sup>&</sup>lt;sup>124</sup> Successful Course Completion: Successful course completion EFTS, as a proportion of the total EFTS delivered.

<sup>&</sup>lt;sup>125</sup> Student satisfaction with educational experience: New measure-data to be collected.

# 2. EDUCATION

Massey will ensure an exceptional and distinctive learning experience for all students.

An educated and skilled workforce is necessary to contribute to the economic development of New Zealand. Massey contributes to this by ensuring that its students are taught by dedicated and skilled academics in a stimulating environment that is conducive to active learning. Massey's Teaching and Learning framework identifies the key characteristics of Massey's teaching and learning environment as Research-led, Applied, International, Distance and Lifelong, and Digital. Each of these dimensions is supported by a strategy to fully realise the potential of each area.

## Activities

Activities contributing to this output include:

- Higher Level Tertiary Education (teaching, learning and assessment)<sup>126</sup>
- Foundation Level Tertiary Education<sup>127</sup>
- Comprehensive portfolio of education offerings including:
  - Professional degrees (for professional groups e.g. Veterinary, Nursing, Accounting, Engineering etc).
  - Degrees developed in partnership with business and industry (e.g. Defence and Security, Food, Agriculture, Design and Fine Arts etc) and to meet the needs of community groups (regional and ethnic communities including Maori, Pasifika, New Migrant communities).
  - Professional and Continuing Education short course programmes
  - Distance and blended education (New Zealand's leading university)
  - International education (both on-shore and off-shore)
- Student support services including residential and social.

## **Output Measures**

	2011	2012	2013
	Actual	Forecast	Target
Student Participation By Equivalent Full-			
Time Students (EFTS)			
Total University EFTS delivered	19,519	19,850	20,281
Student participation by equivalent full-time			
students (EFTS) as a % of total EFTS			
All International students <sup>128</sup>	13.2%	14.1%	15–16%
Postgraduate taught <sup>129</sup>	12%	13%	13%

<sup>&</sup>lt;sup>126</sup> Higher level tertiary education: primarily degree level (undergraduate and postgraduate) education at qualification levels 7 and above

<sup>&</sup>lt;sup>127</sup> Foundation level tertiary education: sub-degree level education at qualification levels 5 and 6

<sup>128</sup> All International Students: Students that pay full international fees and subsidised international students, e.g. Foreign wholly research students.

<sup>&</sup>lt;sup>129</sup> Postgraduate Taught: Paper enrolments in papers at Funding Category Level 3 as defined by the TEC

	2011	2012	2013
	Actual	Forecast	Target
Student Retention-all students <sup>130</sup> (%)	68%	68%	68–69%
Successful Course Completion-all students <sup>131</sup> (%)	79%	81%	81-82%
Internal Students	83%	84%	84-85%
Distance students	70%	72%	72-73%
Qualification Completion-all students <sup>132</sup> (%)	48%	47%	47-50%
Student Progression <sup>133</sup> (%)	12%	13%	13–14%
<b>Overall Student Satisfaction<sup>134</sup> with</b> educational experience (%)	81%	81%	80-82%
Overall Student satisfaction with services and facilities (% of students rating services good/very good)	88%	88%	85-90%
Graduate Outcomes <sup>135</sup>			
Progression to employment (%)	New Measure	82%	80-85%
Engaged in further study (%)	New Measure	9%	8-10%

## **3. SERVICES TO THE COMMUNITY**

Massey will enhance its reputation as New Zealand's defining university by contributing to an understanding of, and innovative responses to, social, economic, cultural and environmental issues, and will promote and value citizenship and leadership across Massey staff and students.

Massey will strengthen connections with local, national and international partners and stakeholders to gain beneficial outcomes.

Academic staff and students contribute to the community with their advanced critical thinking on matters relevant to society, including providing expert commentary and advice locally, nationally and internationally.

#### Activities

Activities contributing to this output include:

<sup>&</sup>lt;sup>130</sup> Student Retention: The proportion of SAC eligible students in a year who either re-enrol in the next year or complete a qualification.

<sup>&</sup>lt;sup>131</sup> Successful Course Completion: SAC eligible successful course completion EFTS, as a proportion of the total SAC eligible EFTS delivered.

<sup>&</sup>lt;sup>132</sup> Qualification Completions: Qualifications completed by students, weighted by the EFTS value of the qualification, as a proportion of total SAC eligible EFTS enrolled in qualifications.

<sup>&</sup>lt;sup>133</sup> Student Progression: Progression to higher levels of study in the tertiary sector by students (by students at qualification levels 1–4).

<sup>&</sup>lt;sup>134</sup> Student satisfaction with educational experience: As measured by the Australasian Survey of Student Engagement (AUSSE)

<sup>&</sup>lt;sup>135</sup> Graduate Outcomes-Progression to employment: New Measure-data collected from 2012 Graduate Destination Survey.

- Engagement with all our stakeholder communities including business and industry, government (local and central), iwi, Pacific peoples, new migrant communities, and schools.
- Maintaining an ongoing relationship with Massey alumni.
- Provision of advanced critical thinking on matters relevant to society, including providing expert commentary and advice locally, nationally and internationally.
- Sharing the academic and professional expertise of staff, particularly on issues of national and regional significance and on research which is of benefit to the community.
- Holding and/or participating in regional and national events.
- Hosting conferences and public lectures.
- Supporting and contributing to a diverse range of community-oriented programmes and initiatives.

## **Output Measures**

	2011 Actual	2012 Forecast	2013 Target
Active International Partnerships <sup>136</sup> (Number of)	192	208	224
University academic staff involved in	New	New	>80%
community service activities <sup>137</sup> (%)	Measure	Measure	
University academic staff serving on advisory	New	New	>20%
boards and committees <sup>138</sup> (%)	Measure	Measure	>20%

<sup>&</sup>lt;sup>136</sup> Active International Partnerships: Only those partnerships where Massey University is the first party (the lead contractor) to the programme/contract.

<sup>&</sup>lt;sup>137</sup>University academic staff involved in community service activities: New Measure-data to be collected from staff survey

<sup>&</sup>lt;sup>138</sup> University academic staff serving on advisory boards and committees: New Measure-data to be collected from staff survey