



Submission: Inquiry into the indicators of, and impact of, regional inequality in Australia

INTRODUCTION

The University of Wollongong (UOW) welcomes this opportunity to provide input into the Senate Standing Committee on Economics Inquiry into the indicators of, and impact of, regional inequality in Australia.

The University recognises the need to address inequalities which are present in regional areas to help ensure all Australian's have access to equal employment, education, technology, innovation and health opportunities. UOW is deeply embedded in the Illawarra community and is committed to driving regional transformation through the ongoing implementation of a range of initiatives which are helping to drive positive changes in the Illawarra and southern New South Wales (NSW).

This Submission broadly addresses key elements of the Committee Terms of Reference by demonstrating a number of the ways in which it is helping to drive regional transformation, and showcasing to the government innovative examples of initiatives it can support to help generate economic and social benefits to regions, and to more effectively address causes of regional inequality.

ABOUT THE UNIVERSITY OF WOLLONGONG

UOW is a research intensive university that has built a strong international reputation for world-class research and exceptional teaching quality, and is ranked amongst the top 2% of Universities worldwide. In 2016 UOW had over 33,900 total student enrolments across its global campus network.

The University offers more than 400 undergraduate/postgraduate courses and research degrees across a wide range of disciplines through the five broad faculties of:

- Business
- Engineering and Information Sciences
- Law, Humanities and the Arts
- Science, Medicine and Health
- Social Sciences

Since gaining independence from UNSW in 1975, UOW has undergone massive expansion growing from around 12,700 student enrolments in 1998 to 33,900 in 2016 (onshore and offshore combined), which represents around 8.4% average annual growth over this period. UOW is now an international multi-campus university, with three Sydney campuses (at Loftus, Liverpool and Sydney CBD), Wollongong, Shoalhaven, Batemans Bay, Bega, and the Southern Highlands. The University also has campuses in Hong Kong and Dubai.

Our most recent facility is the new South West Sydney Campus in the Liverpool City Centre. This campus started operations in February 2017, to better service the rapidly expanding population of South West Sydney and growing demand for higher education in the region.

UOW has developed the Innovation Campus in Wollongong (with assistance from the NSW Government) which is an education, research and related business precinct. This state of the art facility provides strong linkages between business and research, and complements the University's leading research and innovation institutes, which include:

- iAccelerate (an incubator for new business start-ups)
- Sustainable Buildings Research Centre (which focuses on retrofit technologies)
- Australian Institute for Innovative Materials (a key national laboratory for medical and energy materials)
- Illawarra Health and Medical Research Institute (a joint venture with the Illawarra Shoalhaven Local Health District)
- SMART Infrastructure Facility (a key national laboratory for research on infrastructure)
- Early Start (focusing on early childhood development)

REGIONAL CAMPUSES

Regionally-located universities play important social and economic roles in the economic and social development of the areas in which they are located. It is now commonly accepted that higher levels of educational attainment within populations are associated with an accelerated pace of innovation¹; equally, there is clear evidence that these levels of attainment decrease with distance from metropolitan centres, and that disadvantage increases. Access to universities, VET and other higher education facilities in regions is important to ensure students from regional, rural and remote areas are given opportunity to undertake further education beyond school.

As previously noted, UOW has a number of regional campuses across NSW, including at the Shoalhaven, Southern Highlands, Batemans Bay and Bega. Regional campuses play a significant role in strengthening teaching and learning, outreach, community engagement, social inclusion and indigenous participation.

UOW operates its medical school on a split location basis, with one third of students studying at its Shoalhaven Campus, and two thirds at its Wollongong campus, with students doing their practicum components across a network of rural and regional medical practices and hospitals.

In addition to delivery of its programs, UOW regional campuses also undertake a range of activities and initiatives aimed at working with students in regional and remote parts of NSW and Australia aimed at raising the aspirations, awareness and attainment of individuals from underrepresented backgrounds in higher education.

KPMG demographer Bernard Salt has identified five preconditions to vibrant regions, and each of the local government areas in which UOW' campuses are located have two of these five assets. The presence of a university campus is the only constant across these areas, highlighting UOW's value to the social and economic development of these regions.²

¹ Education Australia Fair: Education Inequality in Australia; Cassels, R., Dockers, M., Dunchan, A., Gao, G., and Seymour, R.; 2017, Perth: Bankwest Curtin Economics Centre.

²IRIS Research, University of Wollongong: Southern NSW Regional Campuses Strategic Direction (Draft), 2017.

UOW's regional campuses are typically well integrated within their region, and provide a valuable link to students and the communities, in which they exist, including schools and businesses.

Given the fewer number of students attending regional education centres there are typically reduced economies of scale and therefore more financial risks associated with operating such centres. It is important that Government recognise the benefits these centres provide to students and the broader economies in regional, remote and rural areas and provide appropriate support to allow them to continue to operate. In doing so, it is important to note the important role of support services at these facilities, who ensure students are supported throughout their studies, and more likely to complete their program.

MEASURES OF REGIONAL DISADVANTAGE

Regional disadvantage starts early, and is readily measured in several ways using available educational data. In education the completion rate for high school acts as a barrier to entry to further education and is much higher in major cities compared to inner or outer regional areas.

NSW: All persons ex remote/very remote Year 12 completions

Year	All demographics	Major cities	Inner regional	Outer regional
2014	73	75	65	65
2015	73	74	67	64
2016	73	74	68	70
Grand Total	73	75	68	70

ACARA year 12 certification data set at <https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia-data-portal/year-12-certification-rates>

Beyond school, the proportion of people in work or study, and also persons with a non-school qualification at certificate III or above falls away with remoteness:

PROPORTION OF PERSONS WHO ARE FULLY ENGAGED IN STUDY OR WORK

Remoteness areas	20–24 years
Major Cities	77.2
Inner Regional	67.4
Outer Regional	63.6
Remote & Very Remote	68.5

(ABS 62270DO026_201705 Education and Work, Australia, May 2017)

PERSONS WITH A NON-SCHOOL QUALIFICATION AT CERTIFICATE LEVEL III OR ABOVE

Remoteness areas	20–64 years
Major Cities	64.1
Inner Regional	56.4
Outer Regional	52.6
Remote & Very Remote	53.7

ABS 62270DO026_201705 Education and Work, Australia, May 2017

A REGION TRANSFORMED

UOW is driving Wollongong's economic and social transition from a steel city towards a more diverse, highly skilled and globally competitive region. A recent economic impact assessment estimated UOW's total direct, indirect and induced economic contribution to Gross Domestic Product in 2015 was \$1.2 billion, while the various activities related to UOW's operations help generate \$2.2 billion in gross output annually.

One main indicator of UOW's economic activity is its "direct value-added", which is an equivalent measure to Australia's GDP. The direct value-added (or economic contribution) of UOW increased, in real terms, from \$532 million in 2011 to \$573 million in 2015. This is an increase of 7.7% in real terms, or almost 2% per year.

Another key indicator of UOW's economic activity is employment. In full-time equivalent terms, the total direct employment from UOW increased from 5,021 in 2011 to 5,224 in 2015. This is an increase of 4%, or 1% per year.

The changing structure of employment in the region over the last 30 years shows the growing importance of UOW's role as a developer of skilled human capital in the region. According to *ABS Census of Population and Housing Time Series Profile, Illawarra/Shoalhaven/Southern Highlands 2016 Census (2016/2011/2006 data) and 2006 Census (2001/1996 data)*, the proportion of the workforce employed in manufacturing fell by 59% from 14.6% of the workforce to 5.9% between 1996 and 2016. This is highlighted in the following table:

Industry	1996 proportion of employed persons aged 15 and over	2016 proportion of employed persons aged 15 and over	Change in proportion of workforce 1996-2016
Agriculture, forestry & fishing	1.8%	1.1%	-38%
Mining	2.0%	1.6%	-20%
Manufacturing	14.6%	5.9%	-59%
Electricity, gas, water & waste services	1.1%	1.0%	-9%
Construction	7.8%	9.8%	27%
Wholesale trade	4.0%	1.9%	-52%
Retail trade	10.7%	10.4%	-3%
Accommodation & food services	7.6%	8.1%	5%
Transport, postal & warehousing	4.5%	4.3%	-4%
Information media & telecommunications	1.9%	1.0%	-46%
Financial & insurance services	2.9%	3.0%	3%
Rental, hiring & real estate services	1.8%	1.6%	-12%
Professional, scientific & technical services	4.9%	5.3%	8%
Administrative & support services	2.4%	3.6%	48%
Public administration & safety	5.7%	7.5%	31%
Education & training	8.2%	10.1%	23%
Health care & social assistance	9.6%	14.5%	51%
Arts & recreation services	1.1%	1.4%	26%
Other services	4.4%	4.0%	-9%
Inadequately described/Not stated	2.9%	3.9%	32%

The proportion of the population with higher education qualifications has similarly shifted within the Illawarra/Southern Highlands/Shoalhaven between 1996 and 2016 as per table below:

Percentage at 1996 census by qualification and age cohort	20-24yrs	25-34yrs	35-44yrs
Postgraduate Degree Level	1%	2%	4%
Graduate Diploma and Graduate Certificate Level	1%	2%	5%
Bachelor Degree Level	17%	17%	16%
Percentage at 2016 census by qualification and age cohort	20-24yrs	25-34yrs	35-44yrs
Postgraduate Degree Level	1%	7%	8%
Graduate Diploma and Graduate Certificate Level	1%	3%	3%
Bachelor Degree Level	21%	26%	24%

UOW REGIONAL/REMOTE PERFORMANCE AND COMMITMENT

In terms of educational provision for regional and remote students, the University of Wollongong outperforms both NSW and national average in success of its students, and those students perform as well or slightly better than the general body of domestic students as highlighted below from the *Australian Government Department of Education and Training, 2017 Institutional Performance Portfolio; University of Wollongong; Final 11 April 2018*

	UOW	NSW	National
Success Rate, ie proportion of subjects passed	90.77%	84.86%	85.76%

In addition, almost 30% of UOW's commencing domestic students and completions originate from rural and remote areas as per below:

Access Rate (Proportion of commencing domestic students)	29.69%
Participation Rate (Proportion of all domestic students enrolled)	28.74%
Attainment Rate (Proportion of all domestic students who completed their studies)	29.83%

BRIDGING AUSTRALIA'S HEALTH DIVIDE

The University of Wollongong's medical program, Graduate Medicine, continues to build our rural and regional outreach to improve the quality of care given to patients in country hospitals and rural practices by addressing the maldistribution of the medical workforce.

The University (UOW) believes that an important part of improving rural and regional health is to ensure that the people affected most – communities, patients and their families – are included in the process.

Graduate Medicine's commitment to partner with other healthcare providers and patients to provide safe and high quality care is at the core of our work in this area. UOW is well placed to work with government, health and university partners to ensure that the most effective approach is taken to address Australia's health divide.

Rural and Regional Health is just one of a number of UOW initiatives within our Health and Wellbeing Strategy to attract and retain postgraduate doctors in rural and regional NSW. A particular strength UOW possesses is our reputation for rural clinical training and the existing rural networks which ensure a collaborative approach in enhancing the pipeline from medical school through to rural or regional practice.

UOW has recently been successful in procuring Australian Government funding, together with the University of Sydney, for the development of a Regional Training Hub on the North Coast region of NSW. Although the two universities will work in close collaboration, UOW will focus on the Clarence Valley region, while the University of Sydney will focus on the Lismore region.

UOW's medical program celebrated its 10th anniversary in 2017, and the following is a summary of the program's success to date:

- 541 medical students (seven cohorts) have graduated from this program with the School of Medicine
- UOW produces a significant proportion of graduates each year who elect to undertake an internship in a rural or regional area, with the intention of completing further training or clinical practice in a rural or regional area (an average of 62 per cent of our seven graduating cohorts)
- UOW has contributed directly or through collaborative partnerships to over \$8 million in rural and regional infrastructure to support clinical education and training
- UOW has an expanded community training network incorporating 22 regional, district and base hospitals and approximately 70 partner teaching medical practices across rural and regional Australia
- UOW named the community of Mudgee as its 2016 UOW Community Fellowship Award recipient in recognition of its support to UOW Graduate Medicine students. In 2010, the Mudgee community initiated a project to build a house for UOW medical students. Opened in 2012, Mudgee House accommodates medical students during their 12-month clinical placement.
- In January 2017, the Australian Medical Council confirmed the accreditation of the UOW medical program for a period of six years until March 2023 (the maximum period available)

DRIVING REGIONAL TRANSFORMATION

Government has ability to enhance the economic development of regions and address various elements of regional inequalities across Australia. This can be achieved in various ways, including through support for innovative approaches to developing the capabilities of regional Australians, the provision of policy and programs which encourage and support industry activity in regional Australia, and through strong regional partnerships.

Examples of how UOW is already assisting to support regional development and address factors which impact on regional inequality are outlined below.

iAccelerate

iAccelerate is the first and largest facility of its kind in Australia as it supports both early stage businesses and more advanced companies with high growth potential, while providing entrepreneurs with the benefits of working alongside a world-class, research-intensive university.

In July 2016 the new iAccelerate Centre was officially opened to house the growing number of entrepreneurs involved in the program. The three-storey, 4,000 square metre facility at the University's Innovation Campus was constructed with funding of \$16.5 million secured from the NSW Government's Restart Illawarra Infrastructure Fund.

iAccelerate is helping to capture the intellectual capacity of the Illawarra, is facilitating rapid acceleration of new start-ups and is attracting new businesses to the Illawarra. The ambition is for the program to create 500 direct and 1000 indirect jobs by the end of the decade, attracting \$70 million in investment to the regional and state economies. Companies that grow here will also help to reflect and address the unique challenges of regional areas.

iAccelerate has already assisted in creating over 385 new jobs (187 full time jobs, 199 part time jobs and 174 other positions, which includes interns, volunteers and casuals), has seen 124 products launched and currently has 80 additional products under development. There were 77 start-ups supported at iAccelerate during 2017 and these start-ups delivered great results, including:

- Serving more than 1.6 million customers
- Generating over \$27 million in revenue
- Raising \$6.1 million in equity
- Winning \$690,000 in successful grants
- Making 27 successful applications for registration of IP

iAccelerate is now the leading Accelerator / Incubator in the country based on the number of companies that have come through its program, as well as the headline revenue that its companies reached \$27 million in total for the 2017 calendar year. iAccelerate also offers one of the most comprehensive education programs anywhere for start-ups. The offer of a minor for engineers taking the iAccelerate program was a first in Australia. The matching of MBA students with start-ups to assist them was another.

The iAccelerate program will continue to be a key strategic priority for UOW and a catalyst for change in the region. In 2018 the iAccelerate program, with support of the Federal Government Incubator Support Initiative, is looking to be rolled out down the South Coast of NSW to existing innovation hubs and co-working spaces to spread its positive regional economic impact.

Advantage SME

Australian universities and research institutes have relatively poor levels of collaboration with small and medium enterprise's (SME's) compared to many other countries.

Barriers to effective collaboration of SME's and universities in the Illawarra region include resource constraints of SME's, geographic dispersion and, fragmentation and instability of government programs that support innovation.

A recent NSW Government initiative currently being driven by UOW is Advantage SME. Advantage SME is a two year project funded by the NSW Department of Industry to encourage greater interaction between regional SMEs and UOW. It focuses on the regionally significant sectors of advanced manufacturing, knowledge intensive industries in ICT, shared and financial services, engineering technologies and defence.

Under the Program, the University is:

- Providing a one-stop service for regional SMEs to access resources at the University including students and researchers across many different disciplines, labs services such as the Australian National Fabrication Facility Materials Node and the innovation centre at iAccelerate.
- Providing a program of industry events, workshops, development, training sessions with TAFE Illawarra, contract research and consulting services for SMEs in the target industry sectors
- Allowing SMEs to engage with the University to develop new technologies, innovative products and services, improve business capabilities and engage in regional industry collaboration
- Providing opportunities to develop new collaborations and business opportunities by engaging with regional stakeholders in local industry and all levels of government

UOW is supporting SMEs to understand and participate in existing local, national and international collaboration engagements and work to develop new opportunities for access to global supply chains.

Whilst the target audience of this project is established SME's, not start-ups, the benefits of boosting collaboration between the University and regional SME's extends to start-up companies. Industry engagement between universities and business provide many benefits to both researchers and business, including start-ups. Researchers benefit from the commercialisation of high quality and relevant research, the production of research which provides social, economic and environmental impacts, the building of valuable networks and, the building of reputation of a high-class research institution. Businesses benefit via the development of new ideas, products and services, the reduction of research costs, the provision of expert advice and access to the latest knowledge, technology and equipment, access to skills and work-ready researchers and, access to national and international networks.

The ongoing provision and expansion of programs such as Advantage SME have the opportunity to support regional development across Australia.

SMART Infrastructure Facility

SMART Infrastructure Facility is one of the largest research institutions in the world dedicated to helping governments and businesses better plan for the future. SMART's work is augmented by collaborations with experts across UOW's faculties in infrastructure-related fields such as energy generation and storage, water sustainability, environmental engineering, spatial geotechnics and social planning.

When the \$62 million SMART building opened in 2011 as Australia's first multi-disciplinary applied infrastructure research and training facility, it represented a commitment by the Australian and NSW Governments to apply a more scientific approach to infrastructure planning.

Since opening, SMART has built an international profile working with government agencies in Australia and around the world, and has developed a strong network of global collaborators. SMART brings together experts from fields such as rail, infrastructure systems, transport, water, energy, economics and modelling and simulation and provides 30 state-of-the-art laboratories to facilitate this important research. It has developed the SMART Infrastructure Dashboard to provide visual, graphical and geospatial data analysis capabilities using publicly available infrastructure utility data and relevant regional, state and national-level demographic and economic data.

SMART is involved in key international partnerships and collaborations addressing some of the big challenges in infrastructure.

Australian Institute for Innovation Materials

The Australian Institute for Innovative Materials (AIIM) is a purpose-built facility at UOW's Innovation Campus to help transform multi-functional materials research into commercial reality.

The researchers at AIIM are at the cutting edge of developing and applying new and innovative materials.

AIIM is the first facility that bridges the gaps between breakthroughs, prototyping and commercialisation.

The multi-disciplinary focus of the Institute brings together biologists, clinicians, chemists, physicists engineers and materials scientists.

AIIM comprises the following research organisations:

- The Intelligent Polymer Research Institute
- The Australian Research Council Centre of Excellence for Electromaterials Science
- The Institute for Superconducting and Electronic Materials
- The University of Wollongong Electron Microscopy Centre

Facility for Intelligent Fabrication

The Facility for Intelligent Fabrication (FIF) is a one-stop-shop that provides expertise, technology, equipment and training in automating steel fabrication to help manufacturing businesses adapt and compete was launched at UOW in March 2018. The FIF combines the knowledge and resources of the UOW, TAFE NSW and the Welding Technology Institute of Australia. FIF was formed in recognition of the changing business climate, as the Illawarra transitions from large-scale heavy manufacturing, and the need for local manufacturers to innovate and adapt to remain competitive.

The facility draws on decades of research-based welding and automation expertise and welding training at both UOW and TAFE NSW, enabling local firms with their own history of fabrication expertise to access specialised knowledge and skills in automation.

FIF will develop and implement solutions to industry challenges and provide demonstrations of technology and proof-of-concept, including prototype development. It will also support the adoption of new technology with technical education, training and certification support.

The facility will help to ensure that manufacturing firms in the Illawarra and across NSW had access to the latest technology, training and certification, and is an example of how governments, businesses, industry and training organisations can work together to promote innovation.

This type of business transformation program will help industry transition to a new future and attract additional investment to the region. A strong economy will mean more jobs and go a long way to ensuring that Australia's manufacturing industry is competitive on the global stage.

The facility is an extension of existing UOW research, consulting and education expertise, combined with TAFE's complementary training and facilities, and WTIA's network of companies in the welding and fabrication space and internationally accredited certification.

Early Start

UOW also has strong foundations in early childhood education and care, and is committed to becoming a world leader in the early years through its \$44 million investment in the Early Start initiative. Early Start was founded in response to the educational, health and welfare needs of children growing up in 21st Century Australia. Funded with \$31 million from the Federal Government's Education Investment Fund, \$7 million in philanthropic funding through the Abbott Foundation, and the balance from UOW, Early Start is a unique combination of research, community outreach and education initiatives, brought together under one roof with the aim of helping children flourish and realise their potential. Core elements of Early Start are outlined below.

Early Start's research is one of UOW's research strengths. Researchers and students are engaged in multidisciplinary evidence-based research across the spectrum of children's educational, developmental, physical, cognitive, social and emotional development. Interdisciplinary research operating across these themes involves collaborations among eminent scholars from Australian and international institutions who aim to inform policy and practice in the early years of life.

The Early Start Discovery Space is a purpose-built, hands-on learning space located at UOW's Wollongong campus that allows all children, carers and educators to explore, create and play together. Open to the public six days a week, the Discovery Space is filled with interactive, evolving playful experiences designed to spark imagination and ignite a love of learning. It is a place where children and adults can explore together.

Since opening in May 2015, the Early Start Discovery Space has welcomed more than 200,000 visitors spanning across every state and territory in the country. Early Start is connecting families with resources and experiences they would otherwise struggle to access through programs like 'Let's Eat, Let's Play', a collaboration between Family Services Illawarra seeking to catalyse change in food choices made by vulnerable community members.

Early Start is committed to working with families in regional and remote communities. Central to this commitment are the long-term partnerships with 41 Early Start Engagement Centres. These early childhood education and care centres are often isolated and under-resourced and serve some of the most vulnerable communities across NSW and the ACT.

MIND the GAP

The new purpose-built \$2.5 million MIND the GaP facility to be located at UOW's Shoalhaven Campus in Nowra, will address the high rate of mental health needs in the Shoalhaven community, particularly amongst younger people, and will focus on improving the prevention, early recognition and treatment of mental health issues, including suicide prevention.

The MIND the GaP facility will bring together health care professionals, researchers and frontline support services, such as Lifeline, to create an integrated mental health and wellbeing precinct to promote new 'best practice' mental health care initiatives.

The initiative, which is jointly funded by the Commonwealth Government's National Stronger Regions Fund and the UOW, will be led by Shoalhaven City Council and UOW, and delivered in partnership with Lifeline South Coast, Lifeline Australia Research Foundation, COORDINARE, Nowra Medicare Local, the Illawarra and Shoalhaven Local Health District, Noah's Shoalhaven, and the Illawarra Health and Medical Research Institute. Located adjacent to the existing buildings at UOW's Shoalhaven Campus at West Nowra, MIND the GaP will include research, consultation and assessment rooms, meeting spaces, a conference and training room, outdoor courtyard and children's play area as well as provision for a future expansion.

MIND the GaP will bring together health care professionals, researchers and frontline support services to create an integrated mental health and wellbeing facility to apply 'best practice' mental health care initiatives that will support the community and help improve the prevention, early recognition and treatment of mental health issues, including suicide prevention and trauma recovery. Construction of the purpose-built facility at the University's Shoalhaven Campus in Nowra began in March 2017 and will be completed in 2018.

Health and Wellbeing Precinct

UOW recently announced it is developing a unique Health and Wellbeing Precinct at its Innovation Campus. The hub of the precinct is intoHealth, a \$44 million community health clinic, which will be a centre of excellence in integrated healthcare to address key health issues facing the Illawarra, including chronic lifestyle diseases, mental health, disability and mortality rates.

With an emphasis on patient-centred care and social equity of access to healthcare, intoHealth will be an innovative clinical model, providing diagnostic facilities for both public and private patients.

It is modelled on the patient-centred approach of successful established models of care such as the Mayo Clinic in the United States. An Australian-first, the centre will provide a one-stop shop model of care with the central focus being the needs of the patient and their family.

It will be the first time truly integrated health delivery with intergenerational connectivity will be delivered in Australia, providing everything from paediatric care, respite, rehabilitation, disability, aged-care services, and mental health services in the one precinct. It will bring together a range of health professionals including doctors, physiotherapists, psychologists, dieticians, dentists, pharmacists, academics and pathologists.

The Health and Wellbeing Precinct will complement existing health services in the Illawarra by offering non-surgical care focused on preventative health issues to maintain overall physical and mental wellbeing. The precinct will have a strong focus on teaching and research, which will see research translated into practice to improve patient experience and outcomes.

In addition, intoHealth will enable people to receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, according to their needs throughout their life in a technology enabled context.

The precinct will also include an innovative and integrated aged care and senior living village. In partnership with an aged living provider, this initiative will see aged-care services link research, teaching and learning on a daily basis.

Services will enable the ageing community to be part of an intergenerational and vibrant community. Residents will be able to become part of Innovation Campus life through involvement in clubs, groups, academic courses, and accessing swimming/gym facilities, theatre performances, museums and the restaurants and cafés.

The NUW Alliance

UOW also recently entered into the *NUW Alliance*, a commitment by the University of Newcastle, the University of New South Wales and UOW, which aims to explore some of the short and long-term challenges impacting NSW to generate benefits for the State and the Australian economy.

The NUW Alliance looks to provide smart solutions to the issues impacting NSW by working together. By combining the multidisciplinary research, educational and innovation clusters of these institutions, the NUW Alliance has the skills and resources to tackle some of the biggest challenges and deliver smart solutions for NSW.

The Alliance will provide opportunity to extend the capability and capacity of these institutions to effectively address a range of issues impacting the NSW economy, including health, education, and cyber security. By harnessing the benefits of this collaboration opportunity exists to pass on positive regional outcomes.

UOW Outreach and Pathways Programs

To date, Australian Federal Government policy has had a strong focus on increasing the participation of students from under-represented backgrounds in higher education. This has resulted in Higher Education Participation and Partnerships Program (HEPPP) funding being distributed to universities to implement outreach programs with schools and community groups that aim to increase aspirations, attainment and access to higher education. These programs are of high value to school students, particularly those from equity groups, including students from rural and remote areas, to help increase awareness of their post-school options and their aspirations towards higher education.

HEPPP funding also supports students within University to successfully complete their chosen area of study and make successful transitions into the workforce. Examples of ways in which HEPPP funding is utilised by UOW to deliver important programs to students from regional, rural and remote areas are outlined below.

UOW Outreach and Pathways activities work closely with targeted Vocational Education and Training (VET) providers and sponsored schools in the Batemans Bay, Bega, Illawarra, Shoalhaven and Southern Highlands regions to deliver a range of programs to students in these regions. Programs are delivered to students and individuals from Year 1 to Year 12 and post-school, in targeted schools and communities to

build their awareness of higher education, and to help provide participants with the motivation, knowledge and skills to get there.

Programs are refined to meet the diverse needs of learners with varying levels of awareness and aspirations towards higher education. Amongst these programs is the Rural In2Uni Project, which is currently being piloted by UOW after it was awarded a National Priority Pool grant, funded through the 2016 HEPPP.

The Program involves three schools from NSW and Victoria from areas experiencing high levels of social and educational disadvantage. The Program recognises that schools in rural locations such as these have high numbers of disadvantaged students and only minimal resources to cover the costs associated with sending students away to attend on-campus programs. The Rural In2Uni Program will identify and address the specific needs in each community through mentor delivered outreach workshops held both within the school environment and on the Bega and Batemans Bay Campuses throughout 2017.

Students in the Program will receive vital resources and information through interactive sessions designed to increase learners' awareness and confidence towards higher education, while also building the bridges to help them get into university. The outcome of the program is to develop a resource package that is transferable to other schools which high numbers of disadvantaged students in regional and remote areas. The development of such packages will change the focus of university outreach in target areas, empowering rural schools to lead such initiatives in partnership with a university.

Another HEPPP funded program which has proven effective in lifting the number of school students from rural and remote areas that go on to study at tertiary level is the In2Uni Regional Outreach Program. In 2014 UOW's Batemans Bay and Bega campuses won an Australian Rural Education Award for their In2Uni Regional Outreach Program, in recognition of projects that build links between schools and the rural community. This was the result of contributions by UOW's Bega and Batemans Bay campuses to the success of In2Uni's Rural Outreach efforts on the New South Wales South Coast region.

The program helped build awareness and aspirations toward higher education and supported students when they arrived at university. Through the Program, in 2014, the In2Uni program reached 33 schools in the Bega and Batemans Bay regions, engaging with more than 1700 students across eight programs. In addition, more than 30 UOW students from the Bega and Eurobodalla areas volunteered to be mentors in their former high schools.

OTHER FACTORS FOR CONSIDERATION

In relation to regional transformation, UOW also wishes to highlight the ability of government procurement policies and regional partnerships in helping to generate positive changes within regions, including the generation of new cash flow, employment opportunities and, helping to drive business innovation and development.

By way of example, leading global technology solutions and services company NEC Australia signed an agreement with UOW in November 2014 involving NEC setting up a new corporate office at UOW's Innovation Campus and triggered an investment of \$25 million in the Illawarra region and the creation of more than 100 jobs. The investment was achieved through assistance of Advantage Wollongong, a partnership between the NSW Government, UOW and Wollongong City Council which promotes Wollongong as a place to do business and invest, with the aim of creating jobs and bringing investment to the region. It provides an example of the significant benefits government contracts can provide to regions.

NEC Australia officially opened its new corporate office at the Innovation Campus in September 2016. NEC has built a world-class IT Customer Service Management Centre at the Innovation Campus and the opening also presents opportunities for collaboration with leading researchers. The service desk technology platform delivers productivity gains through automation and is to support Transport for NSW.

The company's close relationship with the Advantage Wollongong partnership has helped in establishing the corporate office in Wollongong. NEC benefited from the collaboration through in numerous ways, including access to a strong contact centre industry and support organisation, local skilled labour pool, including access to UOW's ICT graduates. The facilities on the Innovation Campus assisted NEC with bulk recruitment training facilities, 24x7 security arrangements and business continuity planning. Much of this was achieved with greater ease that would have been experienced in a typical metropolitan commercial environment.

In selecting the Illawarra for its operation, NEC identified that the Illawarra represented the best opportunity to expand its east coast service capabilities and support its major customers, which include Transport for NSW. The success of NEC demonstrates the success of an effective regional partnership with state and local governments and UOW.

The NEC case study is a strong example of the benefits that government procurement policy and activities can provide to both business and regions.

SUMMARY

In summary, UOW emphasises the need for the Federal Government to help develop, implement and support initiatives which assist regional development and address inequalities across Australia.

It is important that the Federal Government continue to recognise and support the role of regional universities in developing highly skilled university graduates who can connect regional Australia with the global, innovative economy.

Collaboration with universities should be at the forefront in the effort to address some of the major issues facing our communities, including various facets of regional inequalities such as policy and health care responses required to meet the needs of the rapidly ageing population. Collaboration with and across government, not for profits, health boards, universities, and business will be necessary to meet these challenges.

To do so, it encourages the Commonwealth to:

- Address the provision of health care to cater for regional lack of services and changing demographics, as without suitable health provision being available health care costs will cripple regions, in particular regions with growing numbers of older persons. Working with regional universities allows hubs of services to be supported. As the Commonwealth notes the proportion of adults engaging in behaviours associated with poorer health, such as tobacco smoking and alcohol misuse, are also higher in these areas. (<https://www.aihw.gov.au/reports/rural-health/rural-remote-health/contents/rural-health>);

- Address post compulsory educational provision in an integrated and coherent framework, taking into account the changing nature of work and the changing nature of regional populations, together with the current lower levels of year twelve and post compulsory education as highlighted on *page 3*.
- Prepare the policy framework to allow the regions to cope with, and benefit from, the changes in automation / robotics / artificial intelligence and the impacts these will have on future work and industry sectors.

Further Information

The University would welcome further opportunities to elaborate upon, or further clarify, the matters raised within this submission. To do so, please do not hesitate to contact the UOW Director Government Relations (Mr Canio Fierravanti) on [REDACTED]