JCU Impact Report 2018

Examining the impact of JCU's operations on the Townsville, Cairns and Queensland economies.
### JCU Economic Impact: Queensland (2016)

<table>
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<th>Economic Impact</th>
<th>Growth in Regional Economic Impact Since 2012</th>
<th>Human Capital Impact of 2016 Cohort of Graduates</th>
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<td>$827 Million</td>
<td>40.1% (8.9% Annualised Average Rate)</td>
<td>$1.75 Billion</td>
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- **5,450 Full Time Jobs** Created Directly and Indirectly
- **$513 Million** Contribution to Household Income
- **$682.2 Million** JCU Operating Expenditure Impact
- **$109.1 Million** JCU Capital Expenditure Impact
- **$35.5 Million** Student Expenditure Impact
- **$67 Million** Research Income

*Townsville and Cairns figures do not add to give Queensland figures as other regions are included in the Queensland figures.*
James Cook University is a remarkable university recognised today as one of the best modern universities in the world.¹

As a leading tertiary institution in Australia, and our Asia-Pacific region, we measure our success in research and teaching excellence that makes a difference through the development of human capital.

This contribution to human capital is an important catalyst for growth, economic activity and wellbeing in regional areas and is quantified in the 2018 JCU Economic Impact and Human Capital Report² at $1.75 billion.

JCU’s success in developing human capital in North and Far North Queensland draws on its interconnectedness – with one another, the natural world and built environments. JCU is proudly committed to serving regional and remote communities and has committed a further $1.9 billion in investment over next 20 years, in addition to JCU’s existing asset base of $1.3 billion. This asset base includes places of significance like the JCU Cairns Institute, JCU Science Place and JCU’s Australian Institute of Tropical Health and Medicine (AITHM).

The 2018 JCU Economic Impact and Human Capital Report also highlights JCU’s ability to amplify its income, converting $0.464 billion in revenue to an economic impact of $0.827 billion.

The 2018 JCU Economic Impact and Human Capital Report does not include JCU’s Singapore operations.

We acknowledge Australian Aboriginal and Torres Strait Islander People as the first inhabitants of the nation and acknowledge Traditional Owners of the lands where our staff and students live, learn and work.

Approximately 4,000 students, including more than 470 international students, study at JCU Cairns. The main campus is surrounded on three sides by rainforest-covered mountains and located near the northern beaches in the suburb of Smithfield, 15 kilometres north of the city centre. JCU opened a Cairns City campus in 2016.

JCU Cairns houses state-of-the-art teaching and research facilities including the Australian Institute of Tropical Health & Medicine (AITHM), the Cairns Institute, an impressive library, JCU’s Dentistry teaching facilities and dental clinic, and other health and science laboratories and teaching spaces.

JCU Cairns is a major economic driving force of the Cairns local government area, contributing 2.17% of the region’s employment.

2.10% of Cairns’ Gross Regional Product was derived from the direct and flow on activities of JCU.

$183.3 MILLION
1,332 FULL TIME JOBS
16% INCREASE IN EMPLOYMENT CREATED BY JCU SINCE 2012
33% INCREASE IN ECONOMIC IMPACT SINCE 2012
Since 2009 JCU has invested $205m in completed and planned building projects in Cairns, an increase of $68.5m since the 2012 impact report.

- JCU/AITHM Cairns (completed 2017) $25m
- Student Accommodation (completed 2018) $40m
More than 13,000 students, including 1,500 international students, study at JCU Townsville which was established almost 50 years ago. The main campus is located in the suburb of Douglas, in a 386-hectare natural bush and parkland setting, 13 kilometres from the central business district. JCU opened a Townsville City campus in 2015.

JCU Townsville’s facilities include the Australian Institute of Tropical Health & Medicine, Education Central, the Australian Tropical Science and Innovation Precinct, the Eddie Koiki Mabo Library, a multitude of other science, computing, health science, medical and veterinary teaching spaces, cafes, fitness, sporting and accommodation facilities.

JCU Townsville is an increasingly important driving force of the Townsville economy, contributing 5.6% of the region’s employment.

$622.3 million
4,200 full time jobs
32% increase in employment created by JCU since 2012
56% increase in economic impact since 2012

5.6% of the Townsville LGA Gross Regional Product was derived from the direct and flow on activities of JCU, an increase of 1.2% since 2012.
Since 2009 JCU has invested $446m in completed and planned building projects in Townsville, an increase of $105.3m since the 2012 impact report.
ECONOMIC IMPACT OF JCU’S 2016 GRADUATES

Human Capital

Universities are crucial in developing human capital. The presence of graduates in a region demonstrably contributes higher wages and lower unemployment rates, and provides an educated workforce. This contribution to human capital is an important catalyst for growth, economic activity and wellbeing in regional areas. The ongoing graduation of students from JCU creates a pipeline of human capital supporting the region’s economic development and sustainability. JCU produced 2,477 graduates in 2016.

Total Human Capital Impact of JCU’s 2016 Graduates

- **Private Value:**
  - Bachelor: $400m
  - Master: $602m
  - PhD: $937m

- **Public Value:**
  - Bachelor: $1.75bn
  - Master: $102m
  - PhD: $47m

Annualised Human Capital Impact of JCU’s 2016 Graduates

- **Private Value:**
  - Bachelor: $55m
  - Master: $47m
  - PhD: $946m

- **Public Value:**
  - Bachelor: $799m
  - Master: $102m
  - PhD: $400m

Private value is the additional earnings JCU’s graduates may expect to receive over their lifetime, discounted to present values. Public value is an estimate of the productivity and profitability gains of business employing JCU’s graduates.
$67 MILLION
ADDITIONAL EXPENDITURE IN 2016 FROM STUDENTS MOVING TO NORTHERN QUEENSLAND

2039 INTERNATIONAL STUDENTS FROM 108 COUNTRIES CONTRIBUTED

$40M IN INTERNATIONAL TUITION FEES

Developing the workforce of the region

JCU aspires to develop graduates who have the knowledge, skills and disposition to succeed in a global workforce by increasing our focus on authentic learning experiences, global citizenship, Work Integrated Learning and innovation.

More than a decade of doctors

JCU has been graduating doctors since 2005. In 12 years, JCU’s medical program has produced more than 1,500 graduates. Two thirds of JCU’s graduates in medicine are serving communities of regional remote Australia, with half of them in the Tropical North.

The JCU model has been recognised as an exemplar of what the World Health Organization defines as ‘socially accountable medical education’ – an institution accepting its responsibility to align teaching, research and service to the priority needs of communities it has a mandate to serve.
The Science Place

James Cook University’s landmark The Science Place building has become the first educational building in Australia to achieve a prestigious LEED® Gold rating for its environmentally sustainable design. The Science Place is a four level, 12,000m² joint teaching and research facility, that combines state-of-the-art laboratories and technology-enabled active learning spaces.

Leadership in Energy and Environmental Design (LEED) is the most widely used green building rating system in the world, and is devised by the United States Green Building Council to evaluate the environmental performance of a building and encourage sustainable design. The President and CEO of USGBC, Mahesh Ramanujam, said The Science Place’s LEED certification demonstrates tremendous green building leadership.

“LEED was created to make the world a better place and revolutionise the built environment by providing everyone with a healthy, green and high performing building. The Science Place serves as a prime example of how the work of innovative building projects can use local solutions to make a global impact on the environment.”

The building has a range of sustainable design features including:

- A 25kW solar photovoltaic energy system on the roof which generates an average of 125kWh of renewable energy each day.
- Daylight sensitive lighting that reduces power consumption when natural daylight is available.
- Smart metering and circuits to ensure building data is available to the building and energy management systems, to optimise its performance and comfort for occupants.
- Recycled plastic fibre technology in concrete path reinforcement, to replace steel thereby reducing the environmental impact.
- Sustainable Certified Wood used in construction.
A new Master Plan for JCU Townsville successfully embraces the opportunities and challenges of the 21st century and envisions a lively and vibrant urban space that sits elegantly in its natural environment. JCU Townsville is envisaged as a place of academic excellence as well as a home to staff, students and broader community residents seeking the unique combination of campus lifestyle and natural setting. The Master Plan reinforces the University’s commitment to the economy and community of the Townsville region and aims to create a globally significant knowledge and innovation hub. The Central Plaza is designed to be the new academic and social heart at the centre of the Douglas campus. Major new buildings with important social, student and community functions will surround and activate this important new civic space.
JCU is committed to making a positive difference in the lives of regional, remote and very remote communities in the tropics through research, knowledge infrastructure, and commercialisation of research findings, which support its aspirations as a centre of excellence for tropical health and medical research. This commitment finds expression through the JCU Australian Institute of Tropical Health and Medicine (AITHM).

JCU AITHM is focused on Australia’s health security and collaborative partnerships with neighbours in the Asia Pacific region, particularly in Papua New Guinea, the South Pacific and Southeast Asia.

In Australia, JCU AITHM partnerships include the Tropical Australian Academic Health Centre or TAAHC and the Northern Queensland Primary Health Network.

TAAHC is unique in that it successfully embeds research into health service delivery in five hospital and health services in northern Queensland. This delivery service aims to improve the quality and efficiency of care across a total area of over 950,000km². It also seeks to enhance workforce development through the recruitment and retention of professionals in regional, remote and very remote communities.
JCU is a world leader in new and innovative solutions to some of the world’s most challenging issues.

In one example bioremediation of wastewater through algal technologies represents commercial potential in Australia’s $1.3 billion aquaculture industry and through a partnership between JCU and VietUC, Vietnam’s largest producer of juvenile shrimp ($20+ billion pa).

Prof Rocky de Nys, from JCU’s Centre for Macroalgal Resources and Biotechnology, and MBD Industries have collaboratively developed technologies to farm marine (seaweed) and freshwater macroalgae for the bioremediation of wastewater. Cleaning wastewater through the assimilation of nutrients including nitrogen and phosphorous by seaweed, also provides a mechanism by which industry can meet environmental compliance of zero-net discharge of nutrients as required by the Great Barrier Reef Marine Park Authority (GBRMPA).

The opportunity for the commercialisation of algal technologies extends to agriculture, municipal treatment plants, and mining and mineral processing industries in Australia and South East Asia.
JCU is committed to research of excellence and high impact, particularly on issues of importance to the Tropics. Our unique geographic location is an essential constituent of what JCU has become, particularly our close proximity to the World-Heritage listed Great Barrier Reef and Wet Tropics rainforest. Our links with rural, remote and Indigenous communities and industries of the Australian north are strong. Outstanding research is the basis of our performance in world rankings, placing us in the top two per cent of universities world-wide. JCU has 78% of fields of research rated at world standard or above, with eight fields of research receiving the highest possible rating, or well above world standard. These are:

- Ecological applications
- Ecology
- Environmental science and management
- Geology
- Medical microbiology
- Neurosciences
- Physical geography and environmental geoscience
- Plant biology

**Research Impact**

- **Ranked No 1**
  - In the World for Marine Biology
  - In the Centre for World University Rankings (CWUR) 2017

- **Ranked No 2**
  - In the World for Biodiversity Conservation Research

- 18.2% of JCU’s publications are in the top 10% most cited, which is 8th highest in Australia

- 49.8% of JCU’s publications have an international co-author, which is 6th highest in Australia.

Source: Scopus via SciVal, 2012–16
Source: Scopus via SciVal, 2013–17
JCU IN NUMBERS (2017)

$464 MILLION INCOME

$1.9 BILLION CAPITAL INVESTMENT OVER THE NEXT 20 YEARS

$1.278 BILLION ASSETS

TOP 2% ACADEMIC RANKING OF WORLD UNIVERSITIES

201 to 250 TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS – GLOBAL RANKINGS

21,975 STUDENTS AT ALL CAMPUSES

12,831 TOWNSVILLE

3,931 CAIRNS

4,698 OTHER PLACES

4,913 STAFF

3,483 TOWNSVILLE

1,187 CAIRNS
Be ready for the jobs of the future