



The economic and social value of Torrens University Australia

Torrens University Australia

March 2024

Executive Summary

Universities make a critical contribution to Australia's economy, human capital and social fabric.

As Torrens University Australia ('TUA', 'the University') enters its tenth year, this report considers the University's national contribution to economic and labour market outcomes. This report quantifies the University's contributions to Australia, through its operational activity, teaching and learning outcomes, attraction of international students, and support for underrepresented cohorts to access higher education.

This report is a snapshot of Torrens University Australia's economic and social contribution, quantifying the contributions associated with activity in the 2022 Academic Year. The University also shares sister relationships with Think Education (Australia), and Media Design School (New Zealand). The contribution of Think Education is considered in this report. Media Design School is based and operates in New Zealand and, as a result, is not within the scope of this report.

Cumulative completions from the University have more than doubled since 2019. As of mid-2023, the University has graduated 40,100 students since its inception in 2014.

Torrens University Australia supports the flow of economic activity into four states – South Australia, Victoria, New South Wales and Queensland.

This contribution comprises the University's teaching and learning operations, and the contribution associated with international students and their visiting friends and relatives. This activity provides employment and income flow to primarily workers in the higher education sector, but also the industries which benefit from the University's expenditure on goods and services.

In 2022, the University contributed \$468.9 million in total value added to the Australian economy and supported 3,049 FTE jobs through the University's operations, student spending and induced tourism from students' visiting friends and relatives.

2015



\$171.8m

in total value added to the Australian economy



1,331 FTE

jobs supported by the University's operations and student spending

2018



\$323.1m

in total value added to the Australian economy



2,399 FTE

jobs supported by the University's operations and student spending

2022



\$468.9m

in total value added to the Australian economy



3,049 FTE

jobs supported by the University's operations and student spending

Source: Deloitte Access Economics (2023, 2019), using data from Torrens University Australia, ABS and the Department of Education

Executive Summary

The University's contribution in 2022 includes:¹

- \$248.2 million to the Australian economy associated with the University's operations, which supported 1,325 full time equivalent (FTE) jobs.
- \$220.8 million in value added through the University's international students who were onshore, and the spending associated with their visitors. This contribution supported 1,724 FTE jobs across Australia, through spending on goods and services in 2022.

Torrens University Australia's contribution also includes economic returns of skilled graduates through improved productivity and employment outcomes – with a total economic return of more than \$500m per year in public and private benefits associated with skilled graduates.

Australian universities play a critical role in improving employment outcomes and subsequent returns to broader society and economy through the skilling of graduates.

With greater knowledge and capability, graduates obtain a private benefit in the form of a wage premium associated with

stronger employment, participation and earnings outcomes. For undergraduate students in Australian universities, there is an average wage premium of \$21,900 attributable to attaining a bachelor degree, compared to those with only a high school qualification. TUA's role in supporting non-traditional education attainment makes the impact of this wage premium particularly pertinent.

Through the course of each graduate's employment, there is also a broader public benefit to the Australian economy, given their increased tax and productivity contributions.

Based on sector-wide estimates of graduate mobility and employment, this report estimates that at least 14,400 of the University's 27,071 higher education international and domestic graduates at the bachelor level and above are working in Australia. That cohort of 14,400 graduates is estimated to generate \$593 million in economic activity annually, reflecting both economic returns to the individual (i.e. private benefits) and returns to broader society and the economy (i.e. public benefits).

¹Includes the contribution of Think Education programs. Media Design School is based and operates in New Zealand and, as a result, is not within the scope of this report and enrolments have been omitted from the reporting.



The economic contribution associated with Torren's University's operations and the international students it brings to Australia over 2022

\$468.9 million in total value added to the Australian economy **3,049 FTE** jobs supported by the University's operations and student spending

These contributions include:



\$204.2 million in direct value added through operations, and **\$44.0 million** in indirect value added by supporting Australian suppliers.



\$220.8 million in value added to the Australian economy from the University's international student expenditure.

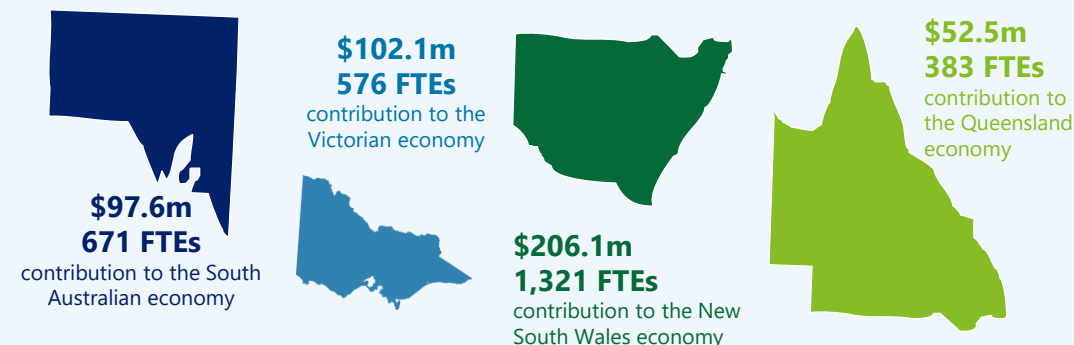


1,325 FTE jobs supported by the University's operations, through direct employment and flow on impact.



1,724 FTE jobs supported by the spending associated with international students on local goods and services.

This contribution from all campuses is spread across four states:



Source: Deloitte Access Economics (2023)

Note: A small volume of direct labour contribution (\$0.6m) flows elsewhere in Australia to reflect a small number of Torrens University Australia staff working remotely from other jurisdictions.

Executive Summary

The social contributions of the University include supporting the representation of priority cohorts of young Australians enrolling in tertiary study – including students from lower socioeconomic backgrounds, First Nations students and those enrolled from regional and remote locations.

The Universities Accord final report sets out a vision for Australia’s future higher education system with a target that 80% of the working age population will have at least one tertiary qualification (Certificate III and above) by 2050 compared with 60% in 2023, more than doubling the number of students in Commonwealth supported places from around 860,000 in 2022 to 1.8 million in 2050 across all age groups.¹

Achieving this goal will require a major uplift in the participation of student cohorts who are traditionally underrepresented in higher education.

The Accord Interim Report indicated that 60% of the enrolment growth to 2035 would comprise key ‘equity’ cohorts, including First Nations students, those from lower socio-economic groups, and rural, remote and regional learners.²

As Australia’s fastest growing university, Torrens University Australia stands to make a

material contribution to this collective goal – with students from these equity cohorts overrepresented relative to average rates seen at other universities including the Group of Eight institutions.

Torrens University Australia actively extends access and promotes education participation to under-served communities, with a high concentration of students from outer-metropolitan areas and regional and remote areas known to have lower rates of existing higher education attainment.

The goals of the Universities Accord, to achieve growth in productivity and to meet the human capital needs of Australian industries, will depend on universities’ capacity to support graduates to obtain qualifications which map to areas of skills need. This report finds that in 2022 alone, Torrens University Australia contributed 7,100 skilled graduates to local labour markets. Since its inception in 2014 until mid-2023, the University has supported 40,100 students to obtain qualifications.

Just over half (53%) of the 2,230 domestic completions in 2022 were estimated to be enrolled in courses which align to employment in occupations which Jobs and Skills Australia identify as experiencing high skills shortages – these programs include Health, Nursing, Hospitality and Education.



The benefits which Torrens University Australia degrees unlock for graduates and their employers, in the form of economic participation and productivity

Public and private benefits from Torrens University Australia

\$593m per year in public and private benefits from an estimated 14,400 alumni in the workforce

Includes **\$338m** per year in public benefits for broader society
This is equivalent to **\$23,800** attributable to each graduate



Productivity spillovers to other economic inputs



Additional taxation revenue

Private benefits for individual graduates

Undergraduates

+\$21,900 average year wage premium compared to school leavers (before tax)
+\$1.7m more over a lifetime (in 2023 dollars)

Postgraduates

+\$7,500 average year wage premium compared to those with an undergraduate qualification
+\$0.34m more over a lifetime (in 2023 dollars)



The contribution which Torrens University Australia makes to economic participation and workforce diversity

TUA excels in targeting participation across equity cohorts (domestic enrolment, 2021²):

	TUA	Australia	Group of Eight
Lower SES	25%	17%	12%
Regional and remote	19%	19%	9%
First Nations	3%	2%	1%



41% of students are part-time (compared to the national average of 32%)



26% of enrolments reflect women in non-traditional courses³ (compared to the national average of 16%)

Source: Deloitte Access Economics (2023), student enrolments and completions from Torrens University Australia (as at 2022) and Department of Education (as at mid-2023), Section 11 – Equity Group from Department of Education (as at 2021)

Note: Enrolment include Think Education programs. Media Design School is based and operates in New Zealand and, as a result, is not within the scope of this report and enrolments have been omitted from the reporting.

¹Department of Education (2024), Australian Universities Accord Final Report, Australian Government

²Department of Education (2023), Australian Universities Accord Interim Report, Australian Government

³Non-traditional courses include STEM and Architecture related studies.

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Torrens University Australia supports the flow of skilled workers to key areas of skills shortages and enrolls a more diverse cohort of international students relative to other Australian higher education institutions.

Migration pathways are also a key lever in navigating change to Australia's employment markets and strengthening a pipeline of skilled workers. The Review of the Migration System sets an aspiration to strengthen retention of global student talent and to target the intake of temporary and permanent residents.

In the last decade, Australia's retention of international students has decreased from 33% in 2015¹ to 17% in 2022² – reflecting significant public benefits which flow out of Australia when students move abroad post-graduation.

Torrens University Australia contributes by supporting a growing cohort of international students to obtain higher education qualifications, including in areas of local skills need.

Torrens University Australia supported a diverse international cohort of 8,700 students originating from 109 countries in mid-2023, with a strong representation from emerging markets.

Diversity across student background and fields of study provides Australia with the opportunity to utilise the skills and attributes of international students and allows for longer-term benefits to the broader Australian society and economy.

Finally, Torrens University Australia continues to grow a distinctive research ecosystem providing a unique position within the national and international research communities.

The research strategy is focused on ensuring its research has wide-ranging impact for society and alignment with the Sustainable Development Goals. Torrens University has five University Research Centres in, AI and health sciences and systems, management sciences and sustainable development, and is a sector leader in Australia for quality impact and research collaboration. Research income has grown by 10% every year since 2020; research partnerships have grown consistently across the decade, and 35 higher degree research students have completed their study. While this report does not consider research impact, Torrens University aims to report on research outcomes and impact in more detail in 2024.



The contribution which Torrens University Australia makes to economic participation and workforce diversity

Torrens University Australia's domestic graduates are equipped with skills aligned to Australia's occupations and areas of critical skill shortage:



93% of TUA graduates in Health (ex Nursing) to practice in roles such as Medical Practitioners and Social and Welfare Professionals



94% of TUA graduates in Hospitality to fill localised skills gaps across Australia's service industry



100% of TUA graduates in Nursing are estimated to be aligned against occupations with critical skill shortage



99% of TUA graduates in Education are estimated to be equipped to practice as Teachers

TUA students studying courses in Design and Business are less aligned with 35% and 57% of enrolments aligned to skills need occupations, however these are also industries that are less represented among the high skills needs occupation.

TUA international students are diverse across country of origin and fields of study

TUA international students originated from **109 different countries** in 2023

TUA is more diverse than the Australian average by 6% based on the Herfindahl-Hirschman index (HHI)

Enrolled in areas of high demand growth – Society and Culture, Health and Information Technology – projected employment demand growth of 13-16% between 2023-28.



The benefits which Torrens University Australia degrees unlock for graduates and their employers, in the form of economic participation and productivity

Since its inception in 2013, Torrens University Australia has supported:

27,071³ graduates

=

11,913 domestic graduates

+

15,158 international graduates

Only 17% (or 2,500) remain working in Australia post-study

+\$60 million of public benefits from TUA if retention of international graduates returned to 2015 levels

¹ Productivity Commission (2015), *Barriers to Growth in Service Exports*, <https://www.pc.gov.au/inquiries/completed/service-exports/report/service-exports.pdf>

² Grattan Institute (2022), *Migrants in the Australian workforce: A guidebook for policy makers*, <https://grattan.edu.au/report/migrants-in-the-australian-workforce/>

³ Excludes VET students. Note: Torrens University Australia provided full year data from 2015 to 2022 and partial year data for 2023. This report and the underlying analysis relies on complete year data (2015 to 2022) and reports cumulative completions and enrolment counts to mid-2023.

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Data used in the report

The data used in this report is from various University and Government sources. In an effort to use the more contemporary data sources for each analytic component, the reporting periods vary:

- Operational and financial data was provided by the University for the 2022 calendar year.
- Enrolment data was provided to match this reporting period, noting that this report also refers to 2023 enrolments and completions data where it is available.
- International student data was provided by the University for the 2022 calendar year.
- Public data on domestic student equity groups was retrieved from the Department of Education for the 2021 calendar year, latest available at the time of writing this report.
- International student and visiting friends and relatives expenditure data was retrieved from Tourism Research Australia for the 2022 calendar year.

Introduction and purpose of report

By delivering training to skill the future workforce and operating campuses across four states, Torrens University Australia ('TUA', 'the University') makes a significant economic contribution to the national economy and workforce capability.

Skilling, reskilling and upskilling increases the employment and wage outcomes for graduates, who in turn play a critical role in supporting Australia's productivity growth and economic recovery. The University's economic and social contribution can also be recognised through meeting national skills and industry needs, delivering training to a range of equity cohorts, and supporting diverse migration pathways.

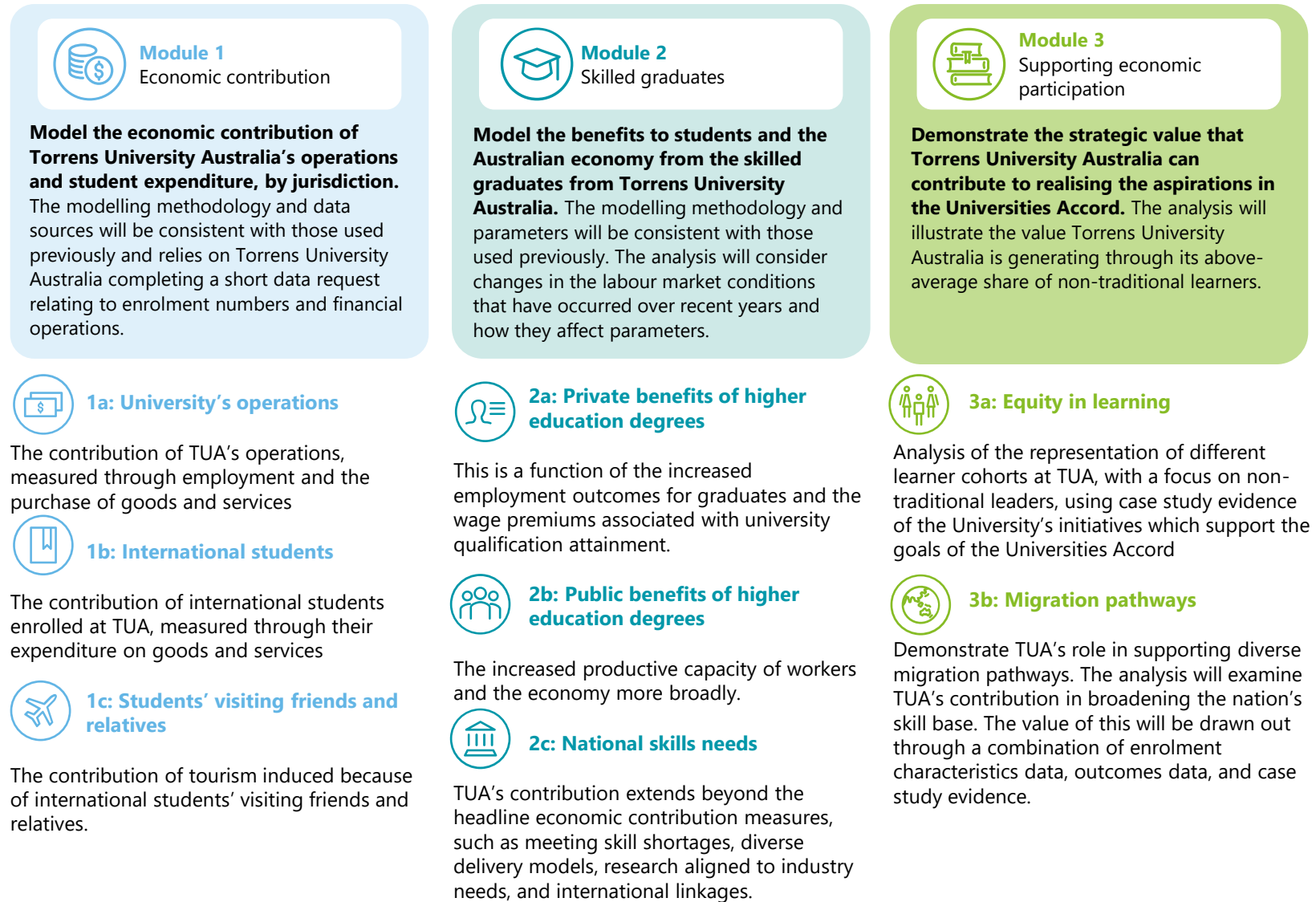
Torrens University Australia was first registered as Australia's first private for-profit university in 2013. The University is a dual sector institution, integrating higher education with vocational and education training (VET) to strategically deliver industry immersive undergraduate, graduate, and specialised degree programs.

With campuses across Queensland, New South Wales, Victoria and South Australia, student enrolments totalled 17,600 in mid-2023, having grown from 12,700 enrolments in 2015.¹

Deloitte Access Economics has been engaged to measure the University's economic contribution and value to Australia and the state jurisdictions in which it operates. The analysis approach and scope of work has been summarised in Figure i.

¹Enrolments include Think Education programs. Media Design School is based and operates in New Zealand and, as a result, is not within the scope of this report and enrolments have been omitted from the reporting.

Figure i: Components of Torrens University Australia's economic contribution



A snapshot of the Torrens University Australia student profile

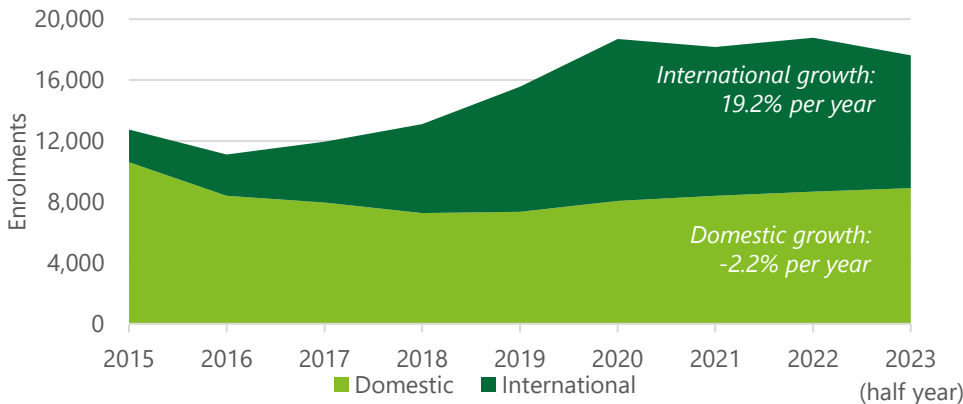
With a national presence, Torrens University Australia is Australia's fastest growing higher education institution

In 2023 (half year) **17,600 total enrolments¹** **8,900 domestic student enrolments** **400 offshore student enrolments** **8,300 international student enrolments** **31% of students attended online** **179 courses delivered**

Torrens University Australia is Australia's fastest growing university

Since 2015, 137,800 students have enrolled in courses at Torrens University Australia campuses across Australia, with enrolments increasing by an average of 4.1% per year. In 2022, enrolments recovered following the disruptions of the pandemic.

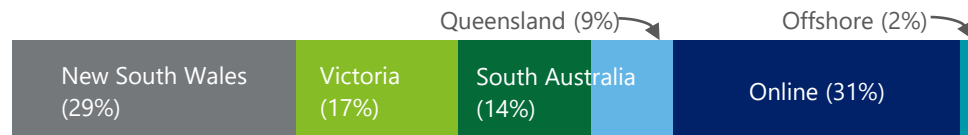
Chart i: Enrolments over time



The University's national presence across 4 states is complemented by a large online cohort

Established in South Australia, TUA now has a national presence with campuses across 4 states.

Chart ii: Enrolments by state and territory (mid-2023)



With a specialisation in business, health and design programs, the University provides courses across fields and levels of study

Chart iii: Enrolments by faculty (mid-2023)

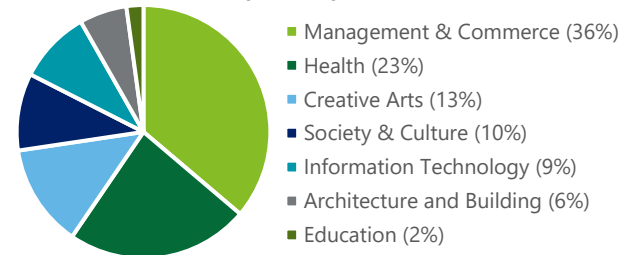
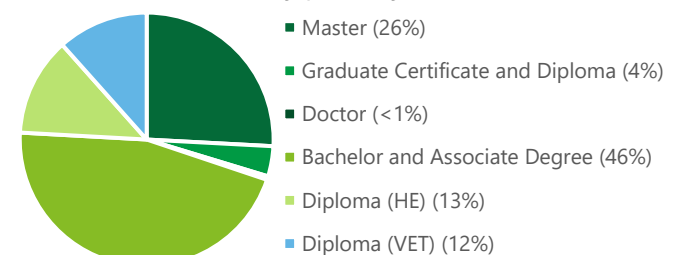
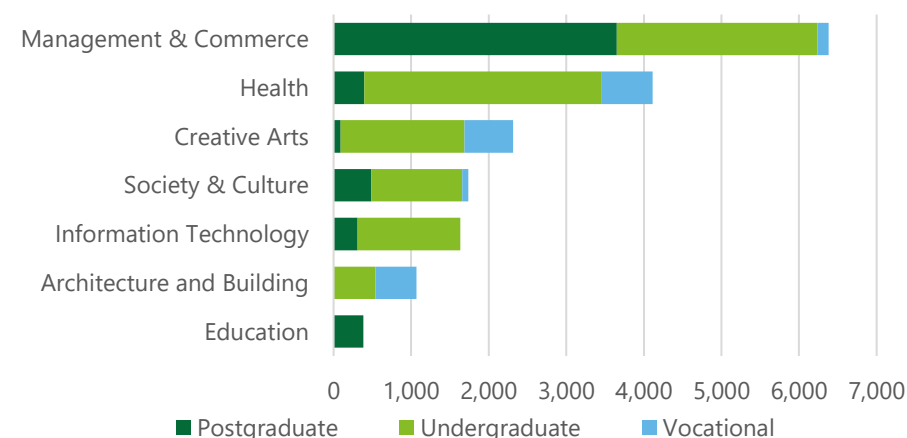


Chart iv: Enrolments by pathway (mid-2023)



A diverse course offering, with recent growth in health and humanities programs

Chart v: Enrolments by faculty and pathway (mid-2023)



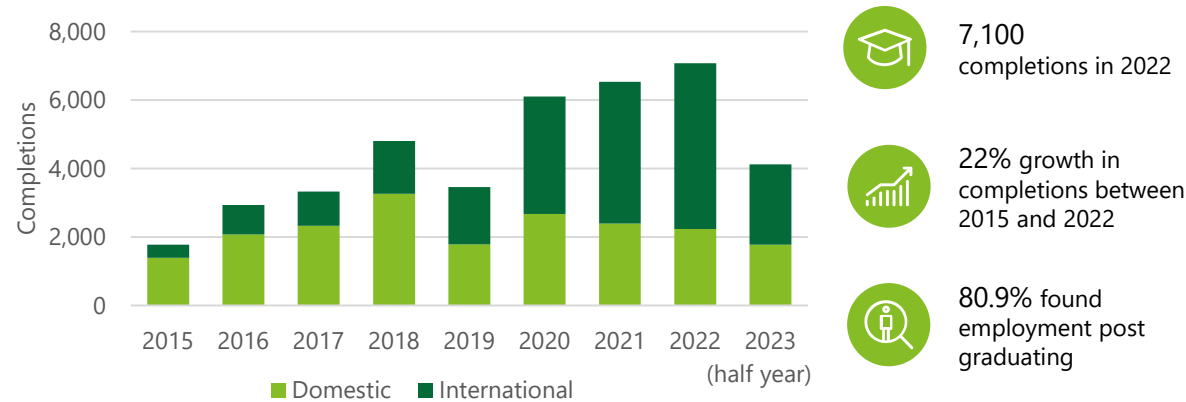
- Most enrolments in Management and Commerce (36%)
- Highest growth since 2019 in Information Technology (68% per year)
- Society & Culture enrolments also grew strongly (48% per year)

A snapshot of the Torrens University Australia student profile

Since enrolments commenced in 2014, the University has supported a diverse cohort of 40,100 graduates obtain degrees.

Torrens University Australia graduated 7,100 students in 2022 and recorded a cumulative total of 40,100 completions by mid-2023.

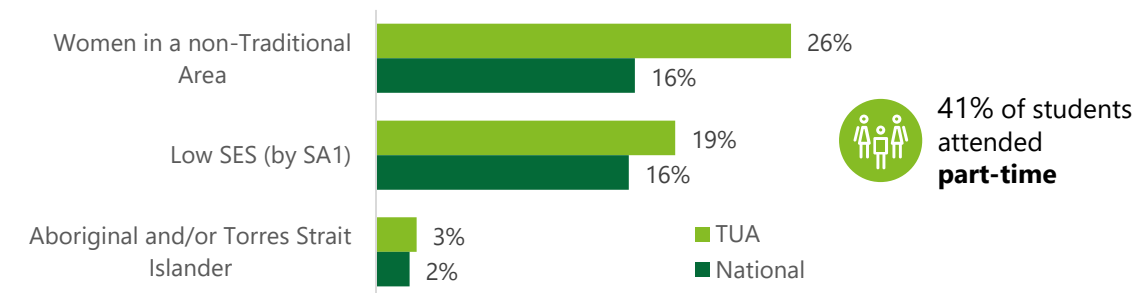
Chart vi: Completions over time



Source (all charts): Torrens University Australia (2023)
 Note: Completions include Think Education programs. Media Design School is based and operates in New Zealand and, as a result, is not within the scope of this report and enrolments have been omitted from the reporting.

A flexible and practical education offering enables the participation of a more diverse student cohort than other Australian institutions

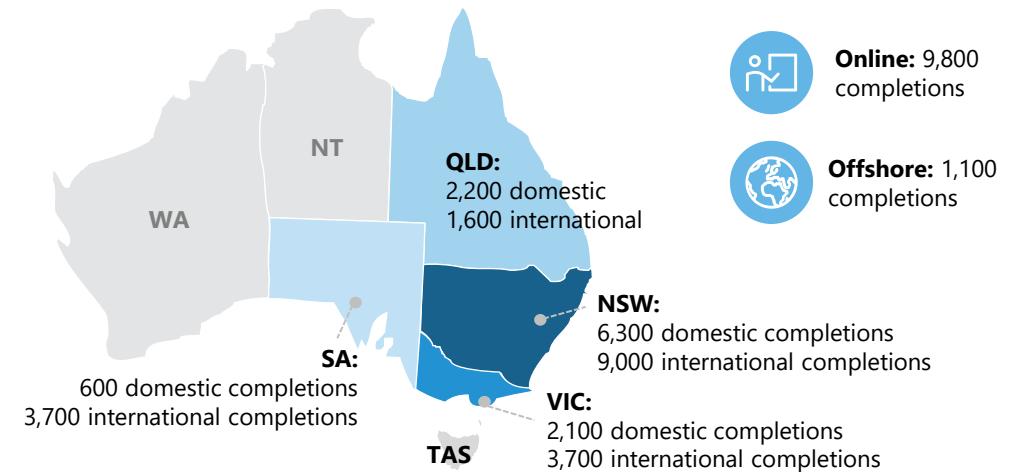
Chart vii: Share of domestic students by key cohort (2021)



The University's national model supports completions through campuses in four states, and an online and offshore presence

Between 2015 and mid-2023, Torrens University Australia has supported 19,900 domestic students and 20,200 international students to obtain degrees.

Figure ii: Cumulative completions across Australia



Source: Enrolment and completion information from TUA and Dept of Education (2023), Student outcomes from QILT Student Experience and Graduate Outcome Surveys (2022), Part-time share from Dept of Education (2021)
 Note: Enrolments include Think Education programs. Media Design School is based and operates in New Zealand and, as a result, is not within the scope of this report and enrolments have been omitted from the reporting.

Note: Figures have been rounded to the nearest 100.

Domestic undergraduate student experience in 2022:





1 | Economic contribution: Key findings

In 2022, Torrens University Australia contributed \$468.9 million in value-added and supported 3,049 jobs across the Australian economy through its operations and the spending associated with its visiting international students.

Total contribution

In total across 2022, the University's operations and students' expenditure led to a \$468.9 million contribution to the Australian economy and supported 3,049 jobs in full time equivalent (FTE) terms.

This included a \$248.2 million contribution associated with operational activity and \$220.8 million contribution associated with student expenditure.

The University's operations

In 2022, Torrens University Australia's operations contributed \$248.2 million in value-added and supported 1,325 jobs across the Australian economy. This includes:

- \$204.2 million in direct value added and 979 direct FTE jobs (table 1.1) through the University's operations and
- \$44.0 million in indirect value added and indirect support for 346 FTE jobs (table 1.2) through the University's expenditure on Australian goods and services.

This contribution represents the economic activity associated with its operations across multiple Australian campuses, and its Australian online offerings. This activity provides employment and income flow to primarily workers in the higher education sector, but also the industries which benefit from the University's expenditure.

The University's international students and their visiting friends and relatives (VFRs)

Following the impacts of the pandemic, Torrens University Australia's international student cohorts have largely returned to Australia, and total enrolments exceed pre-pandemic levels. In 2022, the University's international students who were onshore and their visitors contributed \$220.8 million in value added and supported 1,724 FTE jobs across Australia, through spending on goods and services in their local economies across 2022. This included \$111.4 million in direct value added (table 1.1) through their spending and \$109.3 million in indirect value added.

Direct and indirect components of economic contribution

Torrens University Australia directly contributed \$315.6 million to the Australian economy and supported 2,182 jobs in 2022. This represents the value of economic activity associated with the University's operations and student expenditure in the local economy. The indirect contribution of \$153.3 million and 868 jobs represents the flow-on effects for industries that supply goods and services to the University, and which benefit from the expenditure of students undertaking training at TUA. This includes, for example, the suppliers to services used (i.e. producers to restaurants).

Table 1.1: Total contribution of TUA by jurisdiction, value added, 2022

State	University's operations		International students and visiting friends and relatives		Total contribution	
	Value added (\$m)	Employment (FTE)	Value added (\$m)	Employment (FTE)	Value added (\$m)	Employment (FTE)
New South Wales	\$ 126.5	737	\$ 79.6	584	\$ 206.1	1,321
Victoria	\$ 51.7	216	\$ 50.4	360	\$ 102.1	576
South Australia	\$ 43.5	208	\$ 54.1	463	\$ 97.6	671
Queensland	\$ 26.0	158	\$ 26.5	224	\$ 52.5	383
Other states	\$ 0.5	7	\$ 10.2	93	\$ 10.7	99
Total	\$ 248.2	1,325	\$ 220.8	1,724	\$ 468.9	3,049

Source: Deloitte Access Economics (). Note: While TUA does not have campuses in other states, the contributions capture the impact of student spending and a small number of staff working remotely from other jurisdictions.

Table 1.2: Total contribution of TUA, Value added, 2022

	Direct Contribution (\$m)	Indirect Contribution (\$m)	Total Contribution (\$m)
University's operations	\$204.2m	\$44.0m	\$248.2m
Students & visitors	\$111.4m	\$109.3m	\$220.8m
Total	\$315.6m	\$153.3m	\$468.9m

Table 1.3: Total contribution of TUA, FTE, 2022

	Direct employment (FTE)	Indirect employment (FTE)	Total employment (FTE)
University's operations	979	346	1,325
Students & visitors	1,202	522	1,724
Total	2,182	868	3,049

1 | Economic contribution: operational contribution by jurisdiction in 2022

Across multiple campuses and a national online presence, Torrens University Australia’s operations contribute \$248million in value to the four states which host campuses: New South Wales, Victoria, South Australia and Queensland.

Economic contribution of operations, by jurisdiction

Torrens University Australia’s onshore campuses span four states, plus students enrolled online. Torrens University Australia has a large online campus with students enrolled across Australia. For the purposes of this report, operational activities associated with the online campus are allocated to New South Wales. Torrens University Australia’s operations outside of Australia are excluded from the analysis in this report given its focus on the economic contribution to Australia.

The University’s economic contribution across states reflects the share of enrolments across campuses, noting that a series of centralised supports are delivered across multiple states. Of the total contribution associated with operations (\$248m), the New South Wales economy received 51% of the contribution (\$127m in contribution to GSP), followed by Victoria (21%, \$52m) South Australia (17%, \$44m) and Queensland (10%, \$26m). A small number of employees supporting the Australian campuses reside outside these four states (working remotely). This results in a small direct economic contribution attributable to other states.

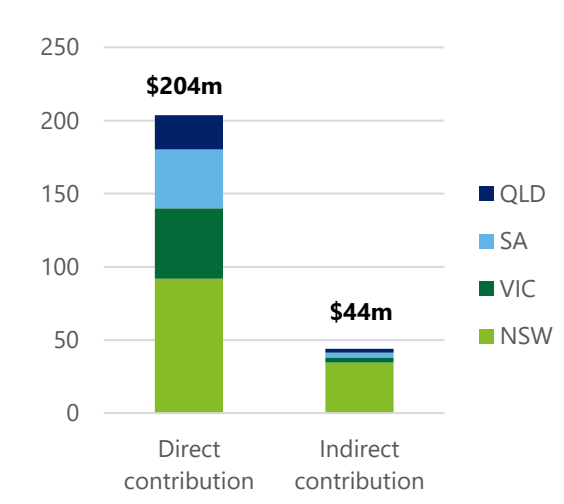
Table 1.4: Total economic contribution of TUA’s operations by jurisdiction, 2022

	Total		Direct		Indirect	
	Value added (\$m)	Employment (FTE)	Value added (\$m)	Employment (FTE)	Value added (\$m)	Employment (FTE)
New South Wales	\$ 126.5	737	\$ 91.9	463	\$ 34.6	273
Victoria	\$ 51.7	216	\$ 48.2	189	\$ 3.5	26
South Australia	\$ 43.5	208	\$ 40.1	182	\$ 3.4	26
Queensland	\$ 26.0	158	\$ 23.5	138	\$ 2.5	20
Other states	\$ 0.5	7	\$ 0.5	7	-	-
Total	\$ 248.2	1,325	\$ 204.2	979	\$ 44.0	346

Source: Deloitte Access Economics (2023)

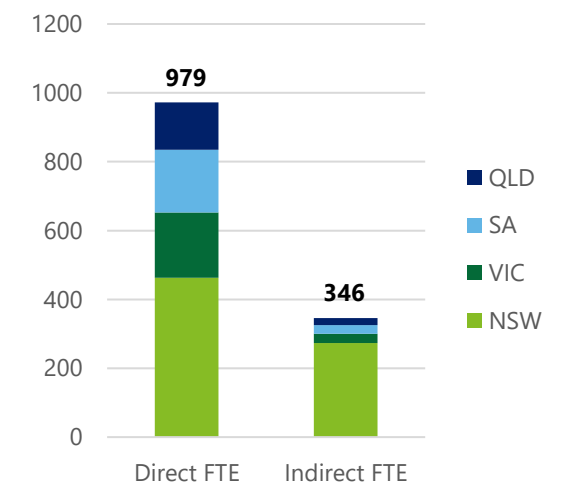
The approach used to develop the estimates is detailed in Appendix A.

Chart 1.1: Economic contribution (\$ million) of the University’s operations by jurisdiction



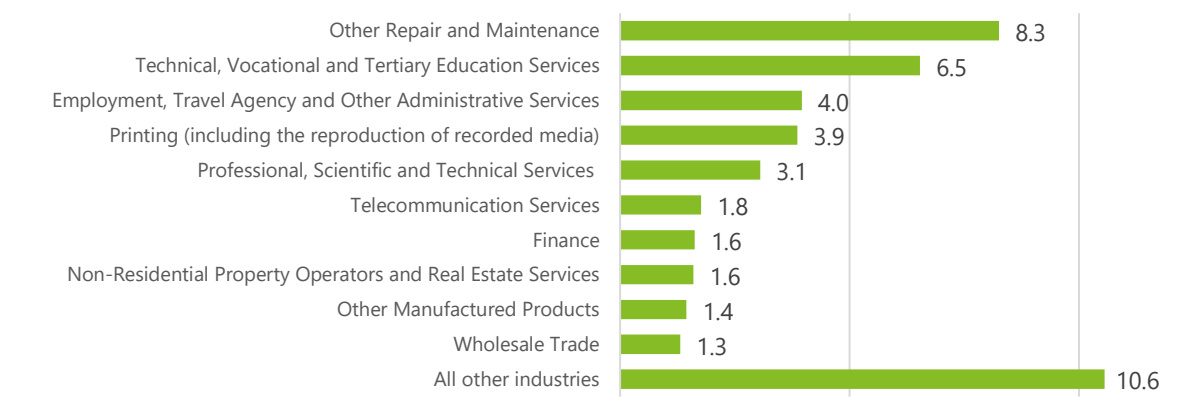
Source: Deloitte Access Economics (2023)

Chart 1.2: Economic contribution (FTE) of the University’s operations by jurisdiction



Source: Deloitte Access Economics (2023)

Chart 1.3: Industry contribution to indirect value added from the University’s operations



Source: Deloitte Access Economics (2023)

1 | Economic contribution (IV)

In 2022, there were 9,418 international students enrolled at Torrens University Australia’s onshore campuses. Their spending in the local economy, and the spending associated with their visiting friends and relatives, supported \$220.8m in value added.

Economic contribution associated with international students, by jurisdiction

The university sector is returning from a period of disruption to student mobility. As at 2022, Torrens University Australia’s international student cohorts have largely returned to Australia, and total enrolments exceed pre-pandemic levels. The University’s international students who were onshore and their visitors are estimated to have contributed \$220.8 million in value added and supported 1,724 FTE jobs across Australia, through spending on goods and services in their local economies across 2022 (Table 1.5). Some of these benefits flow interstate.

Given the continued impacts of the pandemic on tourist mobility across 2022, and a change in the methodology used by Tourism Research Australia (TRA), the estimated number of visiting friends and relatives of Torrens University Australia’s international students is expected to be conservative relative to a ‘typical’ year. Early evidence from TRA research in 2023 indicates a far stronger market for short-term international tourism (the broader category in which visiting friend and relatives of students sits). In mid-2023 short-term international tourism levels had grown 250% on the prior year, suggesting recovery is continuing.

Table 1.5: Economic contribution of TUA’s international students and their visiting friends and relatives, 2022

	Total		Direct		Indirect	
	Value added (\$m)	Employment (FTE)	Value added (\$m)	Employment (FTE)	Value added (\$m)	Employment (FTE)
New South Wales	\$79.6m	584	\$38.8m	395	\$40.9m	189
Victoria	\$50.4m	360	\$25.0m	296	\$25.4m	64
Queensland	\$26.5m	224	\$15.3m	163	\$11.2m	62
South Australia	\$54.1m	463	\$27.0m	281	\$27.1m	182
Other states	\$10.2m	93	\$5.4m	67	\$4.8m	26
Total	\$220.8m	1,724	\$111.4m	1,202	\$109.3m	522

Source: Deloitte Access Economics (2023)

The approach used to develop the estimates is detailed in Appendix B.

Economic contributions associated with international student expenditure:

- 9,418 international students** enrolled in 2022
- \$220.8m in value added** associated with international student spending (including visiting friends and relatives) in 2022
- 1,724 FTEs supported** through international student spending (including visiting friends and relatives) in 2022

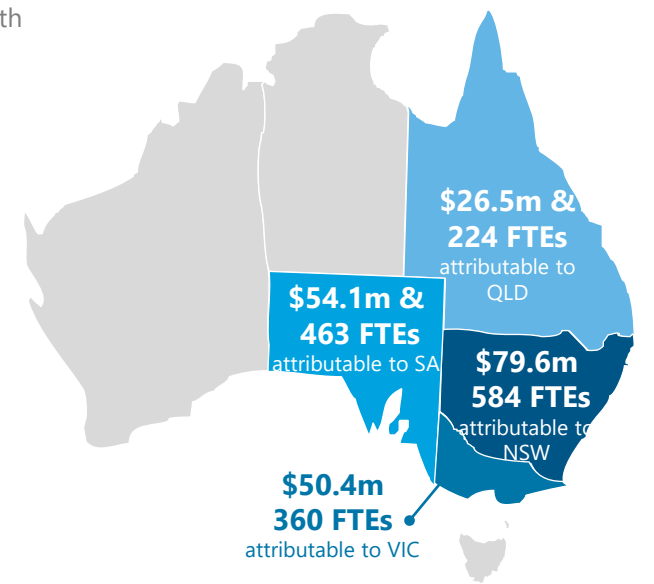
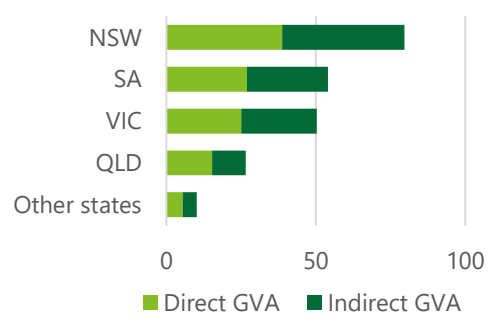
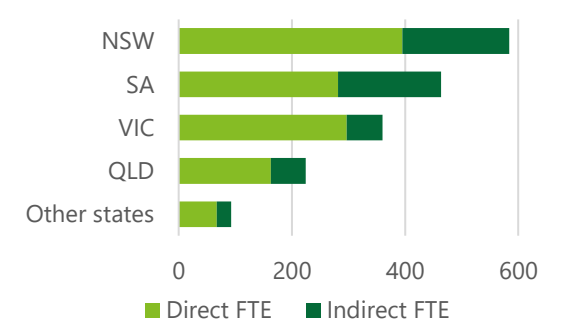


Chart 1.4: Economic contribution (\$ million) of the student expenditure by jurisdiction



Source: Deloitte Access Economics (2023)

Chart 1.5: Economic contribution (FTE) of the student expenditure by jurisdiction



Source: Deloitte Access Economics (2023)

2 | Skilled graduates: Key findings

Torrens University Australia’s skilled graduates support economic returns. The stock of 14,400 graduates working in Australia are estimated to generate \$596 million in public and private benefits per year.

Between 2015 to 2022, Torrens University Australia supported 27,071 higher education graduates – 11,913 domestic and 15,158 international. Of this pool of skilled graduates, an estimated 14,400 are assumed to be working in Australia. This estimation focuses on higher education qualifications, and reflects that on average after 10 years, 17% of international students remain working in Australia post-study (this trend is explored further in Section 3.2).

Graduates from Torrens University Australia bachelor and postgraduate degrees are enrolled across diverse course offerings and apply their skills across a broad range of disciplines and industries (Table 2.1). The contribution enabled by the University’s upskilling can be measured at the individual student level and for the broader society:

- For individual graduates attaining an undergraduate degree, the private benefit reflects a wage premium, estimated at \$21,900 per year compared to those with a high school degree.
- For individual graduates attaining a postgraduate degree, the private benefit reflects an additional wage premium, estimated at \$7,500 per year compared to those with an undergraduate degree.
- Reflecting benefits to broader society, the public benefit is \$338 million per year for the 14,400 alumni graduating between 2015 and 2022.

The economic value generated through the University’s graduates represents one of the most significant sources of economic contribution. Importantly, the benefits estimated in this report represent only the *market benefits* associated with the attainment of higher education. That is, the benefits measures are limited to economic outputs. The non-market benefits of higher education are much broader in nature, though are harder to robustly quantify. The literature suggests there are flow on wellbeing impacts associated with the economic benefits of education attainment, including improved health outcomes and a lower incidence of antisocial behaviours.¹

There are economic benefits associated with the attainment of vocational (VET) qualifications, however the approach used for this analysis did not allow for those impacts to be estimated separately.

\$596 million in economic activity generated annually from 14,400 TUA working alumni across Australia, reflecting both economic returns to the individual (i.e. private benefits) and returns to broader society and the economy (i.e. public returns). This estimate reflects that **each alumni unlocks \$23,800 per year in public benefits** for broader society, on average, reflecting the additional taxation revenue and productivity spillovers to other economic inputs attributable to increasing the supply of highly skills labour. Benefits attributable to vocational education differ from those originating from completing an undergraduate degree by study duration, level and complexity – particularly in the way it is often captured in the data. Therefore, the 7,900 vocational course completions from 2015 to 2022 – representing 22% of all graduates during this period – have not been included in this analysis.

Table 2.1 : Graduates from Torrens University Australia and Think Education, 2015-2022
This table includes Higher Education qualifications only (excluding vocational completions)

	Undergraduate	Postgraduate	Total
Management & Commerce	6,228	9,860	16,088
Health	2,962	1,550	4,512
Creative Arts	3,231	337	3,568
Architecture and Building	1,318	-	1,318
Society & Culture	429	368	797
Education	-	542	542
Information Technology	197	49	246
Total	14,365	12,706	27,071

Source: Torrens University Australia (2023)

¹ Grattan Institute, 2012, *Non-financial benefits of higher education*, <https://grattan.edu.au/wp-content/uploads/2014/04/164_graduate_winners_non-financial_benefits.pdf>

2 | Skilled graduates: Estimating the private benefits of higher education

University degree holders achieve stronger employment and wage outcomes relative to non-degree-holders. This benefit to the individual is estimated at \$21,900 in additional wages on average per year for a bachelor degree graduate.

Defining the 'private benefits' of higher education

The benefits to the individual graduate (the 'private benefit') attributed to higher education attainment can be estimated in terms of higher earnings. These earnings reflect that individuals with higher education are more likely to (1) be participating in the labour market, (2) be employed and (3) attract higher wages; accumulating in increased lifetime earnings compared to those with no or lower post-school qualifications.

For undergraduate students

\$21,900 average annual wages premium attributable to attaining a bachelor degree, compared to those with only a high school qualification.

- This is equivalent to \$1.7 million more over a lifetime.
- It reflects an average of 59% higher lifetime wages for an individual with an undergraduate certification, compared to those with only a high school qualification.

For postgraduate students

\$7,500 average annual wages premium attributable to attaining a postgraduate degree, compared to those with an undergraduate qualification.

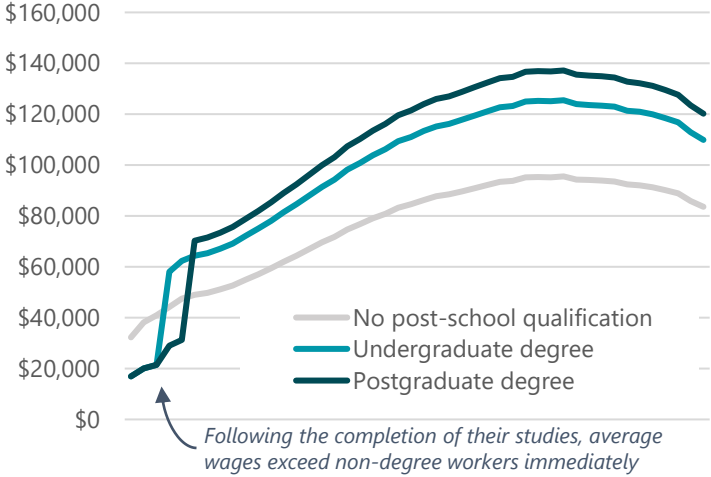
- This is equivalent to \$0.34 million more over a lifetime.
- It reflects an uplift of 28% higher lifetime wages for an individual with a postgraduate degree, compared to those with an undergraduate qualification.

Quantifying private benefits

An individual's labour market outcomes are a result of personal characteristics – cognitive ability, work experience and socio-economic background – and further higher education. Importantly, individuals who participate in higher education are likely to have different underlying characteristics to those who do not study. These differences are accounted for and isolated from the effects of higher education attainment on labour market outcomes using Deloitte Access Economics' econometric regression modelling, informed by data from the Household Income and Labour Dynamics Australia (HILDA) database.

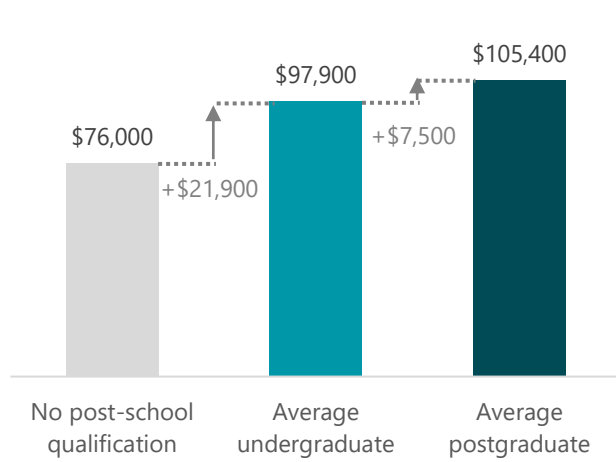
The cumulative impact of this difference over time is illustrated in Chart 2.1, which maps the modelled difference in wages over time. The figures presented in Chart 2.2 communicate the average annual impacts and modelled wage uplift in 2023 dollars.

Chart 2.1: Wages (pre-tax) for average workers over the lifetime



Source: Deloitte Access Economics modelling, using HILDA data

Chart 2.2: Wage premium uplifts, undergraduates and postgraduates relative to no post-school qualification



Source: Deloitte Access Economics modelling, using HILDA data

2 | Skilled graduates: Estimating the public benefits of higher education

Greater higher education attainment provides productivity and tax benefits to the broader Australian society and economy – estimated at \$23,800 per graduate each year.

Defining the ‘public’ benefits of higher education attainment

Public benefits attributed to higher education attainment is accrued to the broader economy and society. Higher education qualifications unlock productivity benefits for graduates and their employers, while their higher earnings also lead to an increased taxation contribution to government.

Benefits to Australia are estimated based on the stock of TUA graduates that are expected to remain employed in Australia post-study. The share of retention to Australia has declined over time, and therefore the model relies on a conservative assumption of 17% of international students remaining and working in Australia post-study.¹

Quantifying public benefits

The effects of labour productivity have flow on effects to the economy through investments which spur economic activity. These public market benefits are modelled using Deloitte Access Economics' in-house Computable General Equilibrium (CGE) model (DAE-RGEM), which projects changes in macroeconomic aggregates such as Gross National Product (GNP), employment, export volumes, investment and private consumption. The CGE model allows the broader economic impacts of higher education to be simulated.

The analysis and modelling of public benefits is built on CGE modelling framework from previous Deloitte Access Economics' higher education public benefit studies, with adjustments made to key parameters (such as completion numbers and profile, and real wage growth) to account for the University's graduate composition.

\$338 million economic activity generated annually from 14,400 TUA working alumni across Australia, reflecting returns to broader society and the economy (i.e. public returns). This is equivalent to an average of **\$23,800 in public benefits for each Torrens University Australia alumni each year**.

This is the benefit to Australia (in terms of Gross National Product) from the human capital developed by these Torrens University Australia graduates as a result of the teaching and learning provided by the institutions. It is noted that TUA has a high volume of delivery in Management and Commerce (59%), which drives a higher public benefit return compared to other fields of study.

Graduate completions and private/public splits by qualification sourced from Torrens University Australia (2023)
 Note: Modelling approach and methodology was updated in 2021 to account for more recent and accessible data. As such, the results are not directly comparable to those presented in Deloitte Access Economics' 2019 study for Torrens University Australia.
¹ Grattan Institute, 2022, *Migrants in the Australian workforce: A guidebook for policy makers*, <https://grattan.edu.au/report/migrants-in-the-australian-workforce/>

Public benefits of higher education attainment accounts for the profile of graduates at Torrens University Australia between 2015 and 2022 (Table 2.2) and allocates the respective share of public benefits attributable to a graduate in the field (Table 2.3).

Table 2.2: Graduates from Torrens University Australia and Think Education, 2015-2022

	Undergraduate	Postgraduate	Total
Management & Commerce	6,228	9,860	16,088
Health	2,962	1,550	4,512
Creative Arts	3,231	337	3,568
Architecture and Building	1,318	-	1,318
Society & Culture	429	368	797
Education	-	542	542
Information Technology	197	49	246
Total	14,365	12,706	27,071

Source: Deloitte Access Economics (2020)

Table 2.3: Private/Public benefit splits by qualification and field of education

	Undergraduate		Postgraduate	
	Public	Private	Public	Private
<i>Average</i>	53%	44%	52%	44%
Management & Commerce	56%	44%	56%	44%
Health	50%	50%	49%	51%
Creative Arts	52%	48%	50%	50%
Architecture and Building	55%	45%	53%	47%
Society & Culture	52%	48%	50%	50%
Education	49%	51%	48%	52%
Information Technology	55%	45%	55%	45%

Source: Deloitte Access Economics (2020)

2 | Skilled graduates: contributions to national skills needs

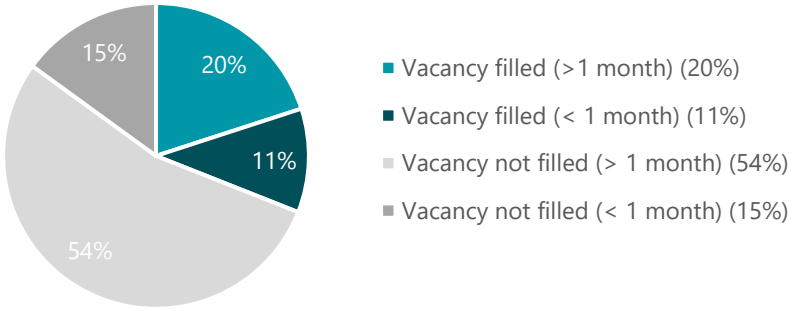
Torrens University Australia delivers skilled labour to areas of critical skill shortages, particularly in Health, Nursing, Hospitality and Education, where more than 90% of course completions can be mapped to occupations on the Skills Priority List.

Demand for professional skilled workers

Torrens University Australia plays a critical role in local labour markets through supporting higher education attainment in areas of high skills needs and demand in the Australian economy. Through its Australian campuses, the University supplies skilled graduates to local labour markets. Ongoing recruitment challenges have continued against the backdrop of a persistent tightening labour market, with 36% of occupations in national shortage relative to 31% in 2022.¹ Many of these occupations in skills shortage will rely on workers with higher education and higher-level VET qualifications – 73% of managers and 91% of professionals in Australia hold higher education or higher-level VET qualifications.²

The rate of recruitment difficulty reported by employers is consistently higher in non-capital cities and regional areas, relative to capital cities in metropolitan regions. Recruitment challenges are reflected in Chart 2.3, with 74% of employers with positions remaining vacant for more than one month.³

Chart 2.3: Australian employers' recruitment experience



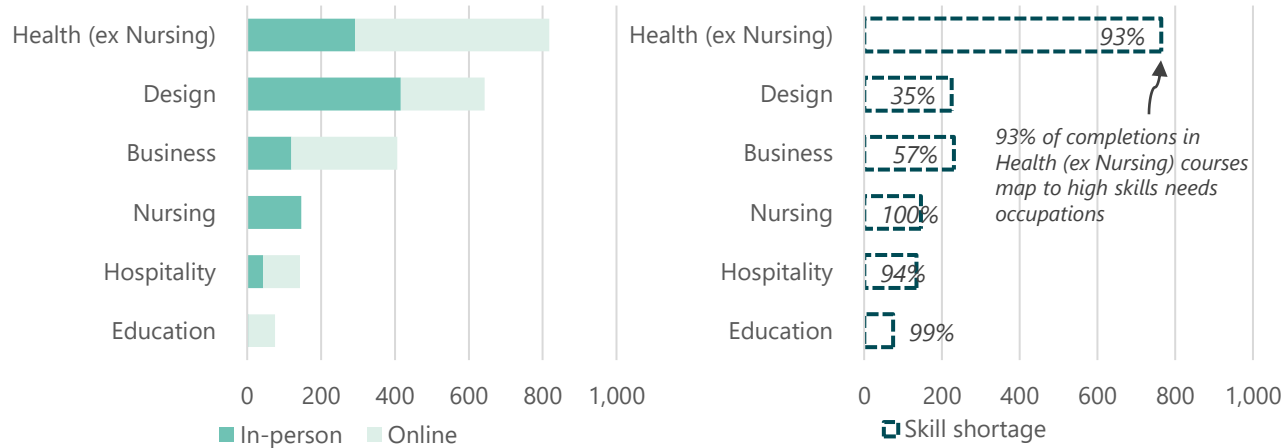
¹ Jobs and Skills Australia, 2023, *Skills Priority List*, <https://www.jobsandskills.gov.au/data/skills-priority-list>
² Australian Bureau of Statistics, 2021 Census
³ Jobs and Skills Australia, 2022, *Labour Market Update*, <https://www.jobsandskills.gov.au/publications/labour-market-update-december-2022>

Torrens University Australia's contribution to skill shortages

In 2022, Torrens University Australia supported 7,100 graduates (2,230 domestic students and 4,840 international students) to obtain degrees. Of the 2,230 domestic completions, more than half (53%) of completions are in faculties aligned with Australia's largest professional occupations and areas of high skills shortage – particularly in the care sector (in Health and Nursing), Hospitality and Education (Chart 2.4). State-level results are presented over the page.

Importantly, there is unlikely to be a 1:1 match between higher education course completions and employing occupations, especially as graduates move into work and their roles evolve over time. To provide a stylised sense of the alignment between completions and skills needs, the charts in this section use a bespoke mapping of TUA courses to ANZSCO 3-digit occupations, with the Skills Priority List used to identify occupations in shortage. Results are grouped by faculty.

Chart 2.4: Torrens University Australia domestic student completions, 2022



In-person and online domestic student completions by university verticals sourced from Torrens University Australia (2023) and skill shortage indicators informed from 2023 Skills Priority List published by Jobs and Skills Australia (JSA)

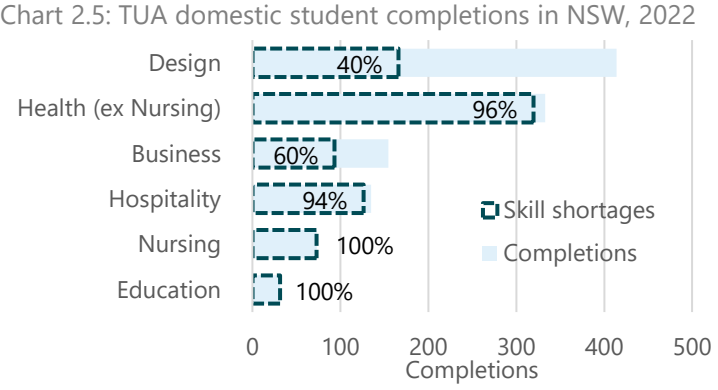
Note: Mapping occupations from the Skills Priority List against the University's faculties ('verticals') are based on aligning ANZSCO 3-digit occupations with against individual courses.

2 | Skilled graduates: contributions to local skills needs

In New South Wales, TUA graduates will contribute to closing skills gaps in Health, Hospitality and Nursing.

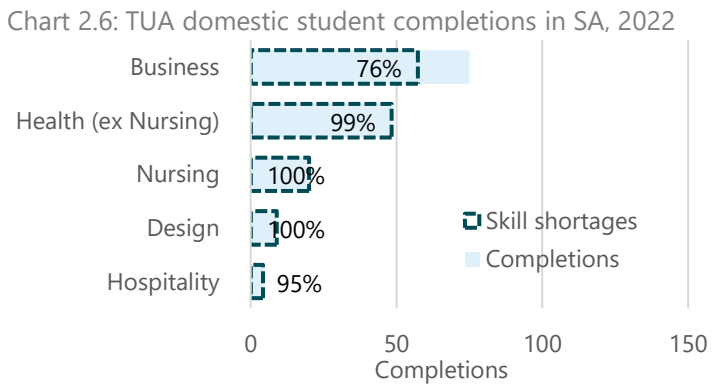
In NSW, 96% of Health degree completions are aligned with occupations experiencing skills shortages in the state, including Medical Practitioners, and Social and Welfare Professionals.

The Blue Mountains International Hotel Management School supports the local hospitality and tourism industries to access business professionals with tailored training.



In South Australia, the University's largest cohort of graduates is in Business with 48% of completing students, and 76% of these align with a skill shortage.

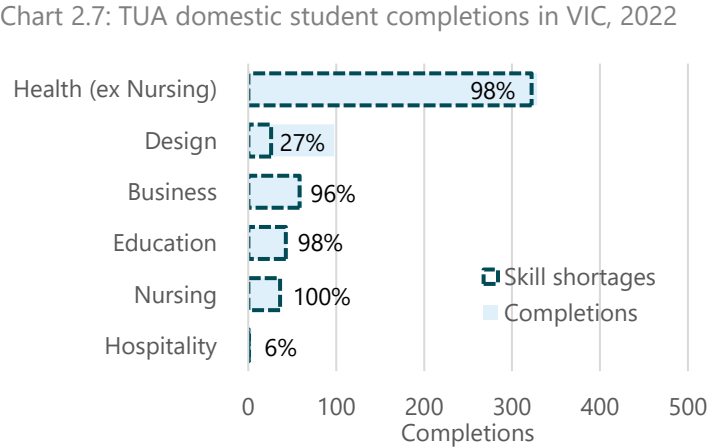
Courses delivered within the Business faculty at TUA aligns against occupation skill gaps such as Business and System Analysts, Accommodation and Hospitality Managers, and ICT Network and Support Professionals.



In Victoria, 58% of completions in 2022 have been in Health, with 98% of completing Health students skilled in occupations experiencing skill shortages.

Torrens University Australia graduates in Health are largely equipped to fill gaps as Medical Practitioners, and Social and Welfare Professionals.

Students completing studies in Education are skilled to practice as Teachers, an area of critical shortage in the state.

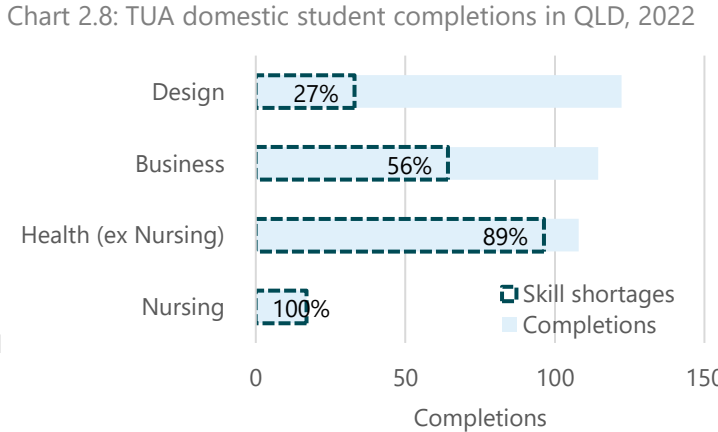


In Queensland, the greatest alignment of skills needs is in Nursing with 100% and Health with 89% of graduating TUA students aligned with a skill shortage.

In 2022, TUA graduated 362 students – 122 in Design, 114 in Business and 108 in Health.

One-third (27%) of Design graduates will provide skills as Architects, Designers, and Advertising and Sales Managers.

Health graduates from Torrens University Australia will be equipped to practice as Social and Welfare Professionals and Medical Practitioners.



Source: Completions from Torrens University Australia (2023) and state-specific skill shortages by occupation from Jobs and Skills Australia (2023)
Note: These charts include online completions, allocated to each state based on the locations of graduation.

3.1 | Supporting economic participation: Engaging non-traditional learners

Strengthening participation for regional and suburban learners is critical to achieving the goals of the Universities Accord. Torrens University Australia’s campus locations and major online offerings reach and support these cohorts.

The need to bolster educational participation in the regions

The Universities Accord final report sets out a vision for Australia’s future higher education system with an ambitious target that 80% of the working age population will have at least one tertiary qualification (Certificate III and above) by 2050 compared with 60% in 2023, more than doubling the number of students in Commonwealth supported places from around 860,000 in 2022 to 1.8 million in 2050 across all age groups. It is estimated that more than half (53%) of the new growth in higher education enrolments would need to be from regional and remote areas.¹

Creating visible and local access to higher education in suburban and regional locations will be critical to the success of *bringing university education to under-serviced communities*. Localised place-based education services is a vital component to improving participation, retention and completion for students in outer metropolitan and regional and remote areas.

The role of Torrens University Australia’s online and blended learning offerings

By providing localised and visible access to higher education through multiple domestic campuses and a large online offering, Torrens University Australia is contributing to the participation of non-traditional learner cohorts who would otherwise unlikely engage with higher education.

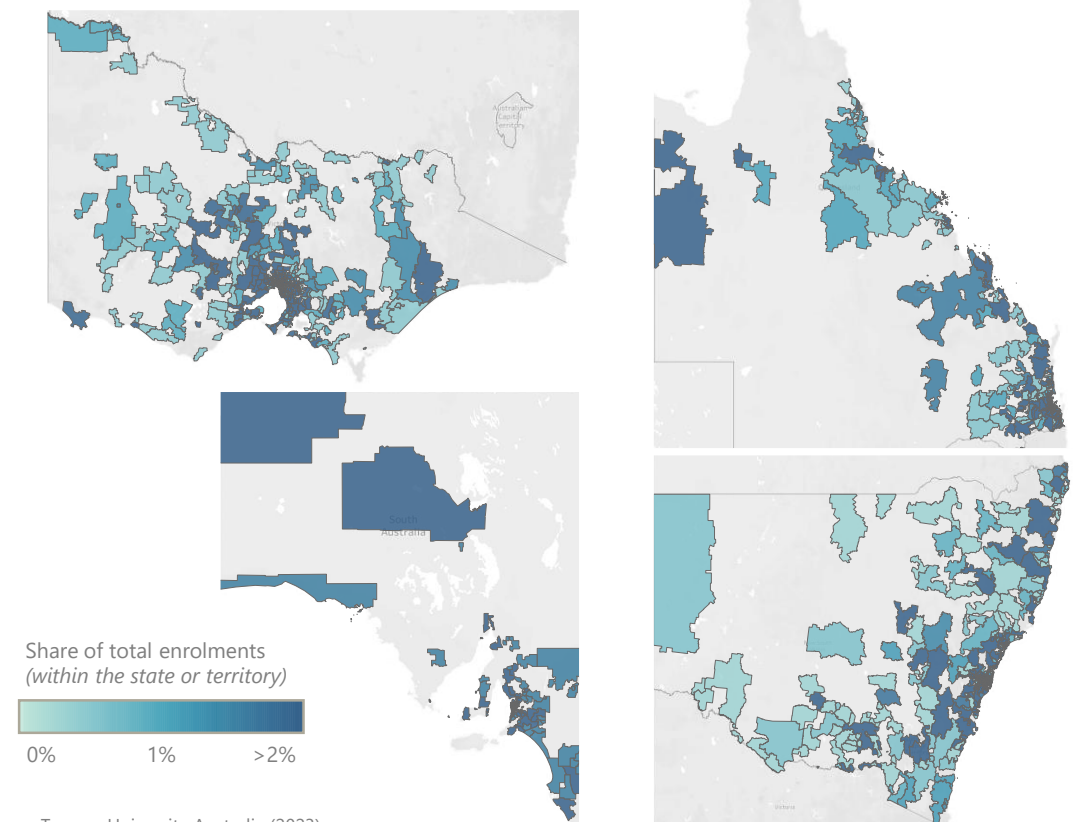
Across Australia, higher education attainment is highest in metro areas, with higher education attainment reaching 60% of the most urban SA3 regions in Victoria and New South Wales. This is vastly different to the outer metropolitan SA3 regions which have attainment as low as 20%.²

Torrens University Australia’s domestic enrolments by residential address (Figure 3.1) demonstrates the institutional reach enabled by the blended and online learning modes offered by the University and in some states, its outer-metropolitan campuses.

The Universities Accord interim report makes recommendations for investment in strengthening access to university for cohorts in suburban and regional areas. Given the lower rates of educational attainment among the Australian population in these areas, these learners are more likely to be the first in their family to enrol in or complete university. Alongside the distinct challenges for first in family (FIF) learners entering higher education, there are also geographic barriers for these cohorts, including transport³, physical barriers (such as limited access to a quiet study space)⁴, and social and cultural isolation from peers and limited wraparound supports. These known barriers can affect education participation and outcomes.

Torrens University Australia contributes to minimising these barriers to education through a well-established online presence and its many physical campus locations.

Figure 3.1: Geographic spread of enrolment across Australia



Source: Torrens University Australia (2023)
Note: Figures illustrate the share of total domestic, in-person enrolments by postcode (for each state and territory separately). 5,200 online and 270 overseas campus enrolments are not included in the figures.

¹ Department of Education, 2023, *Australian Universities Accord Interim Report*, <https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report>
² Australian Bureau of Statistics, ABS (2021)
³ Productivity Commission, 2021, *Public transport pricing research paper*, <https://www.pc.gov.au/research/completed/public-transport/public-transport.pdf>
⁴ University of Sydney, 2023, *Response to Consultation paper: Implementing Suburban University Study Hubs*, <https://www.sydney.edu.au/content/dam/corporate/documents/about-us/governance-and-structure/university-policies/2023/suburban-study-hubs-consultation-paper---submission.pdf>

3.1 | Supporting economic participation: Engaging non-traditional learners

As Australia’s fastest growing university, Torrens University Australia has had historical success in engaging students from lower SES, regional and remote regions, and First Nation students, relative to national averages and to the Group of Eight.

The importance of strengthening diverse participation in Australia’s universities

To meet the targets of the Universities Accord in lifting tertiary education attainment, Australia’s universities will need to actively seek out students and support students from underrepresented backgrounds. Based on the Department of Education’s analysis, Commonwealth supported enrolments will need to increase by 33% relative to 2021, and 60% of these additional students are expected to be from low socio-economic status (SES) backgrounds.

Torrens University Australia’s contribution to educational participation

Torrens University Australia is well positioned to support the sector to achieve this bold objective. As Australia’s fastest growing university, Torrens University Australia has excelled in reaching non-traditional learner cohorts, often at rates exceeding Australia’s largest institutions.

Torrens University Australia has historically excelled in targeting three key equity cohorts: students from lower SES backgrounds, students based in regional and remote areas, and First Nations students. In 2021¹, Torrens University Australia’s domestic student enrolment profile was as follows:

- 1 in 4 (25%) of students were from a lower socio-economic status, relative to 17% nationally or 12% amongst the Group of Eight institutions.
- Regional and remote students comprised 19% of enrolments, in line with national average and more than double the 9% amongst the Group of Eight.
- First Nations students accounted for 3% of enrolments, relative to 2% nationally

TUA’s growth in the intake of students in these cohorts has exceeded that of other universities in recent years. Since 2015, TUA has enrolled:

- +1,700 students from a low SES cohort, equivalent to 8.1% of national growth
- +1,900 students in regional and remote areas, equivalent to 44.2% of national growth
- +240 First Nations students, equivalent to 3.7% of national growth.

¹ 2021 data used for comparison with 2021 public data from the Department of Education

Chart 3.1: Lower SES participation and access at TUA

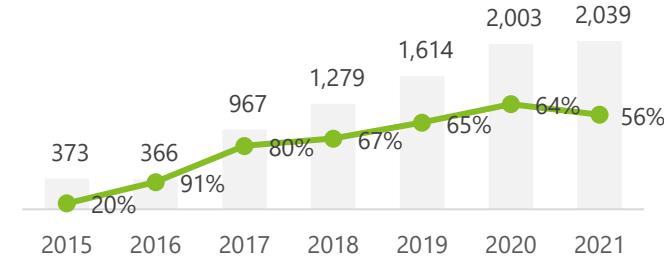


Chart 3.2 Lower SES share of participation

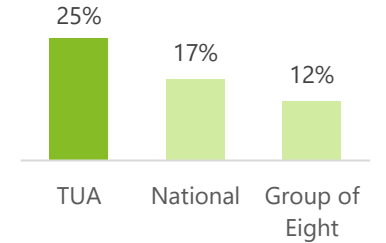


Chart 3.3: Regional and remote participation and access at TUA

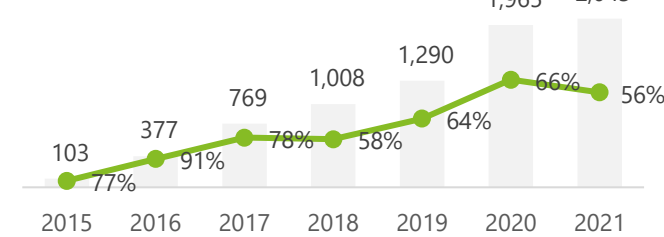


Chart 3.4: Regional and remote share of participation

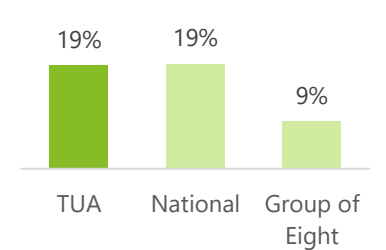


Chart 3.5: First Nations participation and access at TUA

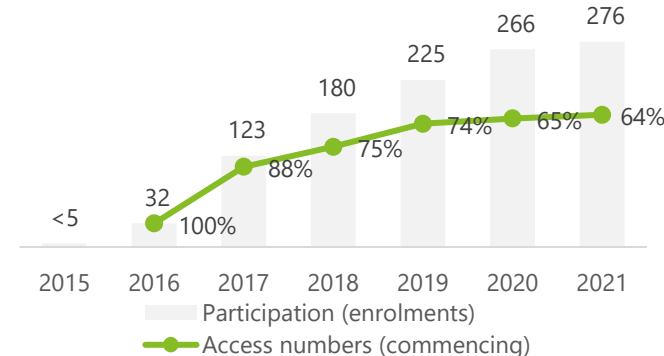
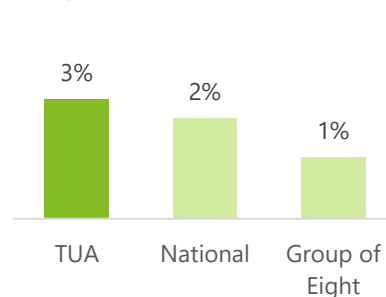


Chart 3.6: First Nations share of participation



Source: Equity cohort data from Department of Education (2021)

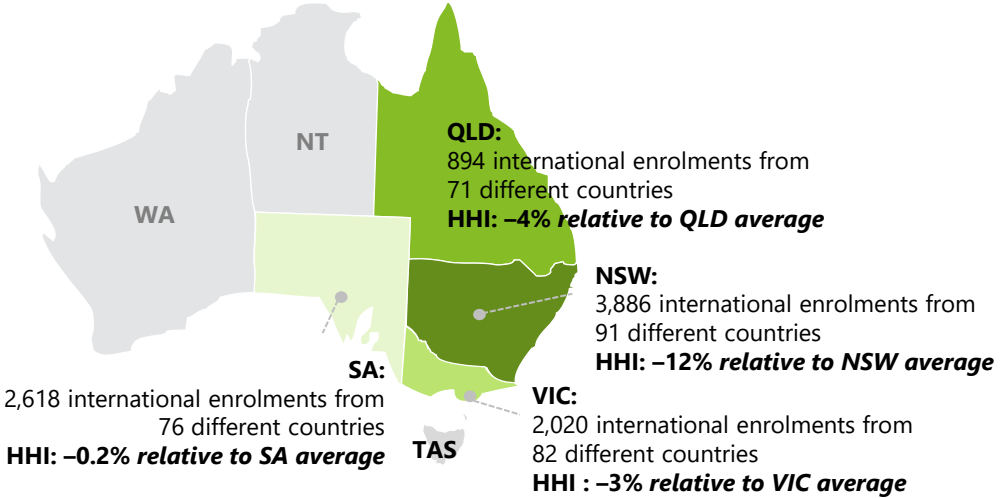
3.2 | Supporting economic diversity: International student outcomes

Torrens University Australia contributes to the strengthening of diverse migration pathways through international education, particularly from emerging markets.

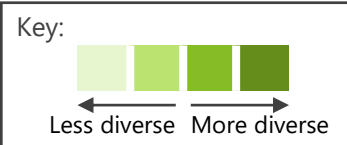
International students studying at Torrens University Australia are less concentrated in metropolitan areas relative to the national and state averages

Facilitating global connections enables Australia’s workforce diversity and strengthens its position in global markets. The University enrolls a large volume of international students across a diversity of backgrounds – with **9,418 international students originating from 109 countries** as at mid-2023. Relative to the Australian states, the level of source market diversity in the University, calculated using the Herfindahl-Hirschman index (HHI), is lower. The lower the HHI, the more diverse enrolments are across markets. Figure 3.2 compares the HHI of Torrens University Australia to the average national and state markets.

Figure 3.2: Distribution of diversity (by number of countries) across Australia



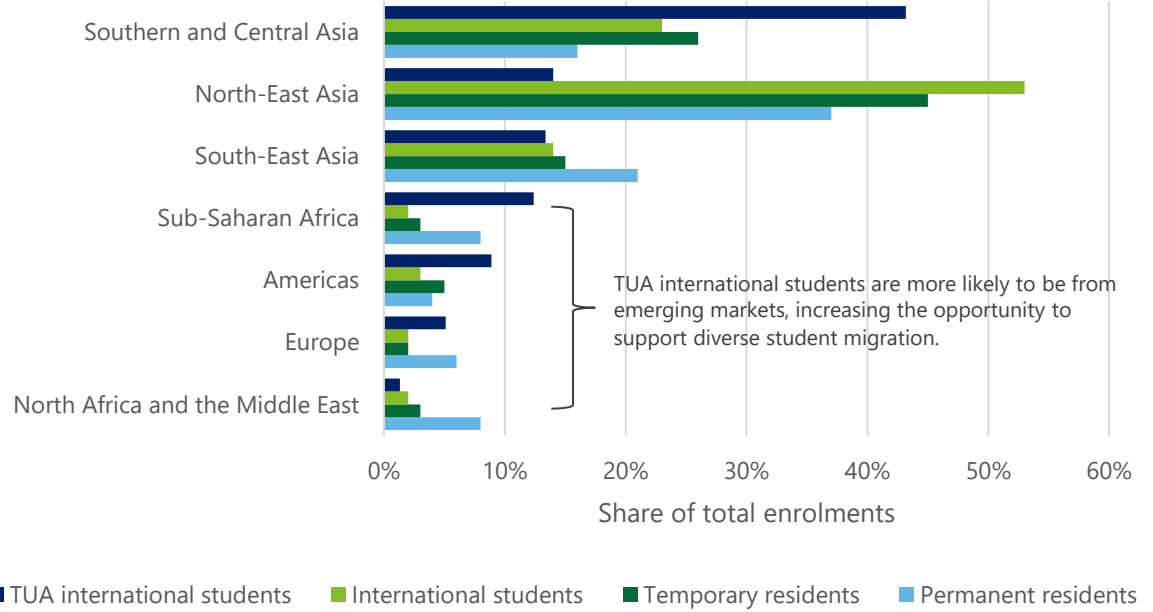
Torrens University Australia:
9,418 international enrolments from 109 countries
HHI: -6% relative to Australian average



Torrens University Australia enrolments by demography support emerging markets for student migration

Torrens University Australia has a larger proportion of students from emerging international source markets (Chart 3.8) compared to the national average, including in Sub-Saharan Africa, Americas, and Europe. In addition to demographic diversity, Torrens supports greater diversity of skills and fields of education (page 21).

Chart 3.7: Regions of citizenship for TUA and Australia’s international students, temporary residents and permanent residents



Source: Student enrolments from Torrens University Australia (2023), national enrolments from Dept of Education (2023) and ABS Characteristics of Recent Migrants (2019)

3.2 | Supporting economic diversity: International student outcomes

Torrens University Australia supports international student pathways through delivering training in fields aligned with areas of high demand growth, including Society and Culture, Health and Information Technology.

TUA enrolments by demography support emerging markets for student migration

In the last decade, the share of international students remaining in Australia to work after completing their students has decreased significantly. According to Grattan Institute, an average of 17%¹ of international students across Australia stay and work compared to 33% in 2015².

The public benefits estimated and reported in Chapter 2 demonstrate the additional economic value to Australia's GDP for every skilled graduate. With retention of international graduates decreasing, the flow of public benefits remaining in the Australian economy is also estimated to decrease.

The University has concentrated high volumes of delivery in areas of high demand growth, including Society and Culture, Health, and Information Technology (Chart 3.10). This reflects the critical areas of skills shortages in Australia and demonstrates pathways to Permanent Residency.

Chart 3.8: TUA international student enrolments (mid-2023) by Field of Education

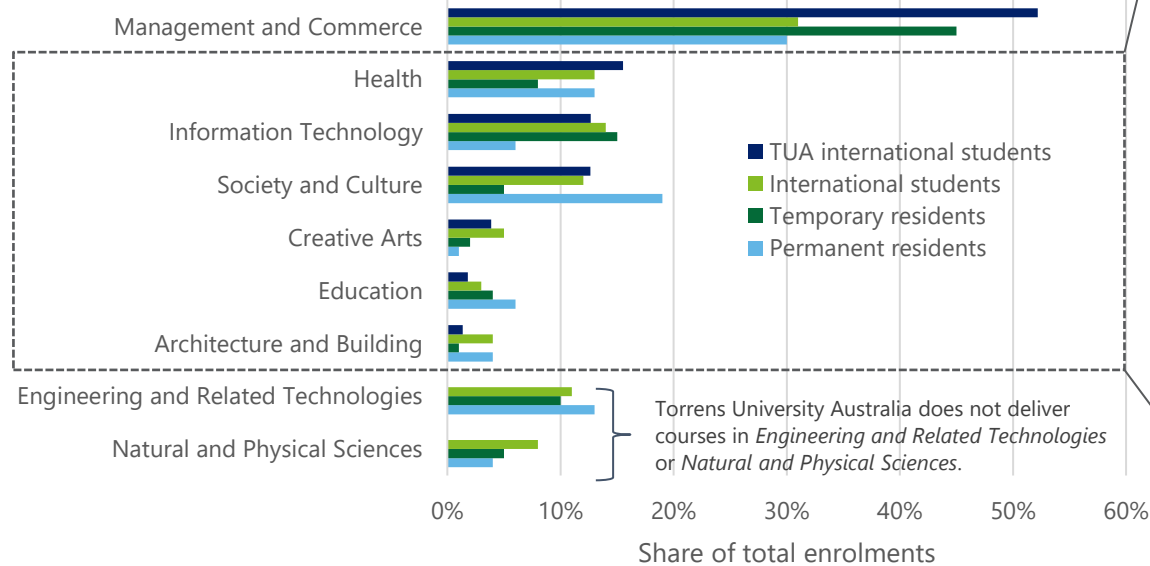
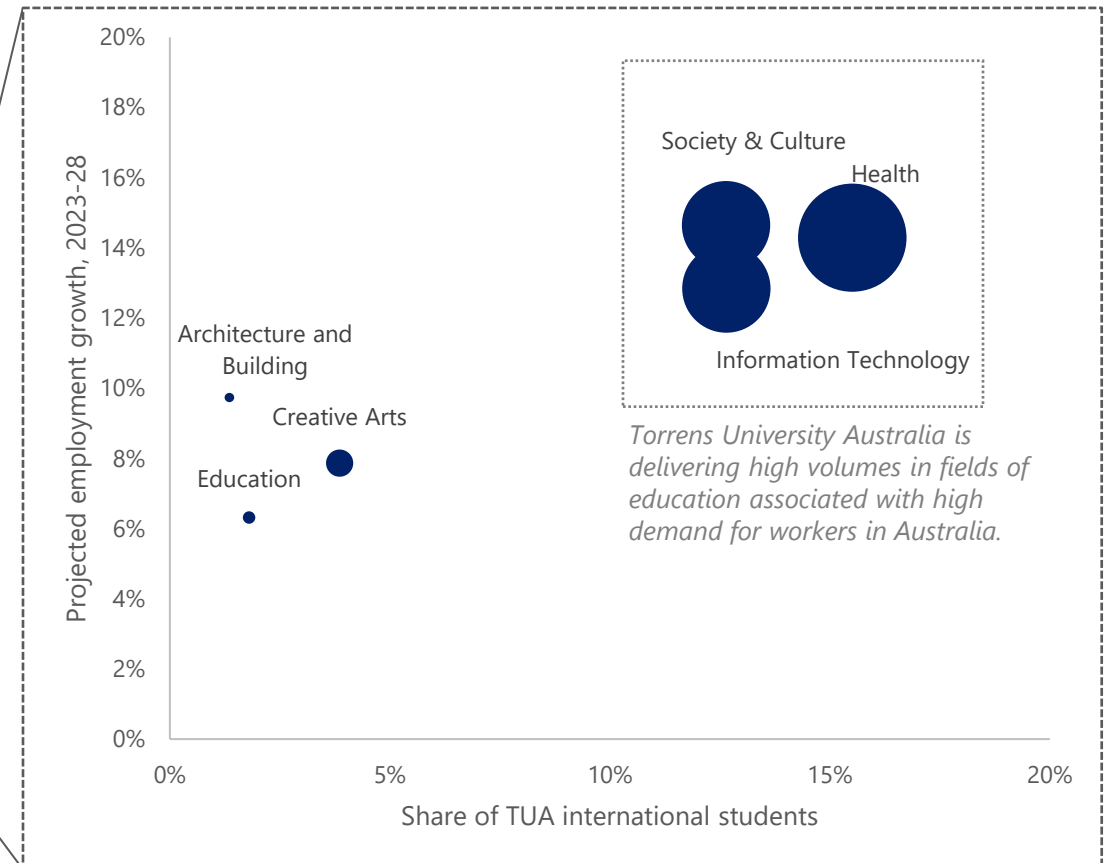


Chart 3.9: Torrens University Australia international student enrolments (mid-2023) by fields of education relative to Australia



Source: Enrolments from Torrens University Australia (2023), national enrolments from ABS Characteristics of Recent Migrants (2019) and employment projections from Jobs and Skills Australia (2023).

Note: Management and Commerce has been omitted from the chart (52% share of TUA international student enrolments and 11% of projected employment growth between 2023 and 2028)

¹ Grattan Institute (2022), *Migrants in the Australian workforce: A guidebook for policy makers*, <https://grattan.edu.au/report/migrants-in-the-australian-workforce/>

² Productivity Commission (2015), *Barriers to Growth in Service Exports*, <https://www.pc.gov.au/inquiries/completed/service-exports/report/service-exports.pdf>

Conclusion

The contributions of Torrens University Australia are economically material, for graduates and their employers and the Australian society more broadly. The University's contribution to Australia's growing stock of higher education graduates from non-traditional backgrounds will be essential to achieving the goals of the Australian Universities Accord.

This report has presented and quantified the contribution by Torrens University Australia each year to the Australian economy and broader society. This includes a contribution to Australia's economic activity through its business operations across campuses in four states, attracting and training skilled graduates in line with national skills needs and diverse across key equity cohorts, and enabling global connections.

Since its establishment, the University has demonstrated significant growth, with enrolments growing from 12,700 in 2015 to 17,600 in mid-2023. In 2022, Torrens University Australia contributed \$468.9 million in total value added to the Australian economy and supported 3,049 FTE jobs through the University's operations, student spending and induced tourism from students' visiting friends and relatives.

The contribution of Torrens University Australia extended through its teaching and learning operations, supplying Australian industry with graduates that have capability to meet skills needs in priority occupations for Australia. The University contributed 7,100 skilled graduates to local labour markets in 2022 and supported a cumulative 40,100 students to graduate with higher education or vocational qualifications from 2015 to mid-2023. The graduating students also gain benefits through improved labour market outcomes, resulting from stronger employment opportunities, participation and earnings outcomes. There are also flow on public benefits through greater taxation revenue and higher productivity across businesses and industries.

In addition to the quantifiable returns and benefits, there are material non-market benefits of higher education participation and attainment. These known wellbeing impacts and benefits are broader in nature and include improved health outcomes and a lower incidence of antisocial behaviours.¹

Torrens University Australia's commitment to delivering higher education to a diverse student cohort has increased participation of and access for non-traditional learners, who otherwise would be unlikely to engage with further studies. Importantly, this is a critical component of the enrolment targets and access goals set out in the University Accord report.

As Australia's fastest growing university, TUA has and continues to make a material impact to

this collective goal, with students from key equity cohorts – lower socio-economic groups, First Nations people and those from rural, remote and regional areas – overrepresented relative to average participation seen at other universities including the largest Group of Eight institutions.

The University also actively extends access to under-served communities and locations through their online-delivery and established campuses in outer-metropolitan areas – with a high concentration of students from outer-metropolitan, regional and remote areas.

Migration pathways for international students is a key steer in navigating the growing needs of Australia's dynamic employment market – Torrens University Australia supports a growing cohort of international students in obtaining higher education qualifications. The Review of the Migration System has set out the national aspirations to continue support of student diversity and strengthen retention of international talent in the intake of temporary and permanent residents.²

Over the past decade, Torrens University Australia has contributed to the national workforce capability, advanced progress towards a more equitable education system and labour market outcomes, improved access to under-served communities, and fostered local and global economic connections. Torrens University Australia plays a critical role in realising individual returns from education attainment for students and progressing broader sector and national goals, and thereby contributes significantly to both the economic and social welfare of local communities and the wider Australian economy and society,

¹ Grattan Institute, 2012, *Non-financial benefits of higher education*, <https://grattan.edu.au/wp-content/uploads/2014/04/164_graduate_winners_non-financial_benefits.pdf>

² Productivity Commission (2015), *Barriers to Growth in Service Exports*, <https://www.pc.gov.au/inquiries/completed/service-exports/report/service-exports.pdf>

Appendix A: Detailed economic contribution methodology, university operations

Key metrics of economic contribution

The economic contribution is an estimate of how much economic activity an entity (e.g. sector, industry etc) contributes to an economy in a defined period of time. Two metrics are used to estimate an entities contribution to an economy:

- Gross Value Added (GVA): A measure of the entities' return on capital and labour (Figure A.1). It is the indication of the entity's value and contribution to an economy.
- Employment: The number of jobs supported by the entity in full-time equivalent (FTE) terms.

For both measures of economic contribution, a direct and indirect contribution component is estimated:

- Direct contribution: Represents the flow from labour and capital involved in direct economic activity.
- Indirect contribution: Measures the demand for goods and services produced in other sectors as a result of demand generated by the direct economic activity.

The total contribution is the sum of the direct and indirect components.

Overview of the approach

The two metrics of economic contribution (i.e. value added and employment) are estimated using an economic contribution model. Value added is the most appropriate measure of the economic contribution of the University to gross state product (GSP). Export revenue (i.e output) captures where

international students are based and spend their money. Economic contribution (GVA and employment) captures where the economic activity resultant from international student spending occurs.

Estimation of the indirect economic contribution is undertaken in an input-output (IO) framework using Australian Bureau of Statistics input-output tables which report the inputs and outputs of specific sectors of the economy (ABS 2022).

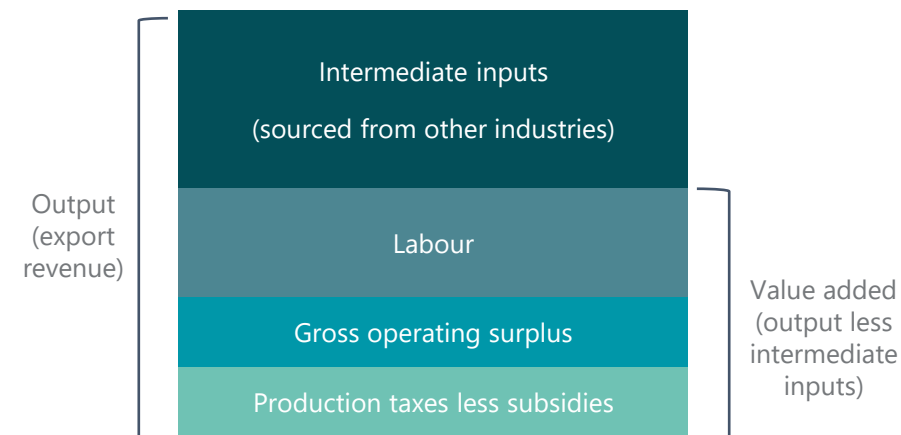
IO tables are required to account for the intermediate flows between sectors. These tables measure the direct economic activity of every sector in the economy at the national level. Importantly, these tables allow intermediate inputs to be further broken down by source. These detailed intermediate flows can be used to derive the total change in economic activity for a given sector.

Using the economic contribution results

For consistency in reporting, value added and employment (rather than export revenue) are the appropriate metrics to use in measuring the significance of the IET sector to a region. While it is appropriate to refer to the *total* value added and employment when referring to the overall size or contribution of the IET sector in a particular region, only the *direct* value added and employment figures should be used when comparing the IET sector against other industries within the same region.

1 Visitors who specifically indicate in the International Visitor Survey that they are visiting each state for the purpose of visiting an international student.

Figure A.1: Economic activity accounting framework



Source: Deloitte Access Economics

Limitations of economic contribution studies

In a fundamental sense, economic contribution studies are simply historical accounting exercises. The analysis discussed in the report relies on a national input-output table modelling framework and there are some limitations to this modelling framework.

The analysis assumes that goods and services provided to the sector are produced by factors of production that are located completely within the state or region defined and that income flows do not leak to other states.

The IO framework and the derivation of the multipliers also assume that the relevant economic activity takes place within an unconstrained environment. That is, an increase in economic activity in one area of the economy does not increase prices and subsequently crowd out economic activity in another area of the economy. As a result, the modelled total and indirect contribution can be regarded as an upper-bound estimate of the contribution made by the supply of intermediate inputs.

Appendix B: International student contribution

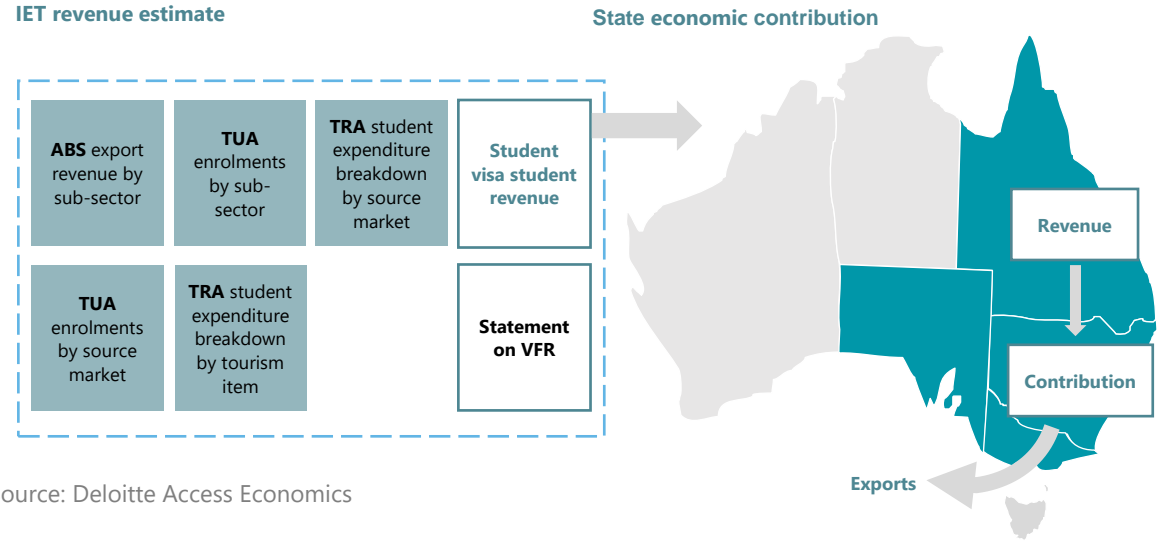
Detailed economic contribution methodology

Model overview

The economic contribution estimates presented in module 1b and 1c of this report (including both value added and employment) represent the total economic contribution of Torrens University Australia’s international students on Australian student visas. The economic contribution estimates also account for the economic activity associated with international students’ visiting friends and relatives. Economic contribution estimates are produced using modelling assumptions consistent with Tourism Research Australia’s Regional Tourism Satellite Account (RTSA) model. This model is the most contemporary and sophisticated of its kind in Australia and been applied in a wide range of contexts to understand the economic contribution of tourism related industries.

These are Deloitte Access Economics’ estimates for international student enrolments and contribution based on the best available data. The results do not include the contribution to Queensland, New South Wales, Victoria or South Australia from international students studying elsewhere in Australia.

Figure B.1: Economic contribution modelling overview



Source: Deloitte Access Economics

Key data sources

The contribution analysis in this report has been informed by publicly available data (Figure 6) including: enrolment and commencement data from the Australian Government Department of Education (DoE), student visa data from the Department of Home Affairs (DoHA), export revenue data from the Australian Bureau of Statistics (ABS) and expenditure item and visiting friends and relatives data from Tourism Research Australia (TRA). The frequency of data publication is dependent on the data custodian where some data is published on a monthly basis¹ (e.g. enrolment and commencement data) while other data is published on an annual basis (e.g. ABS and TRA data).

During COVID-19 there was an increase in the number of international students studying offshore. The ABS accounts for the impact of COVID-19 on IET export revenue by:

1. capturing the course fee of students studying offshore through ‘correspondence courses’ rather than ‘education-related personal travel’,
2. reflecting lower expenditure resultant from any students that have deferred their enrolments, and
3. reflecting any potential changes in students’ expenditure on goods and services by using the latest TRA data on student expenditure. Offshore export revenue (i.e. offshore tuition fees) is estimated using the ABS correspondence course data.

Tourism Research Australia data is used to estimate the expenditure of international students visiting friends and relatives (VFRs). VFRs are visitors who specifically indicate in the International Visitor Survey (IVS) that they are visiting each state for the purpose of visiting an international student in their stopover purpose.

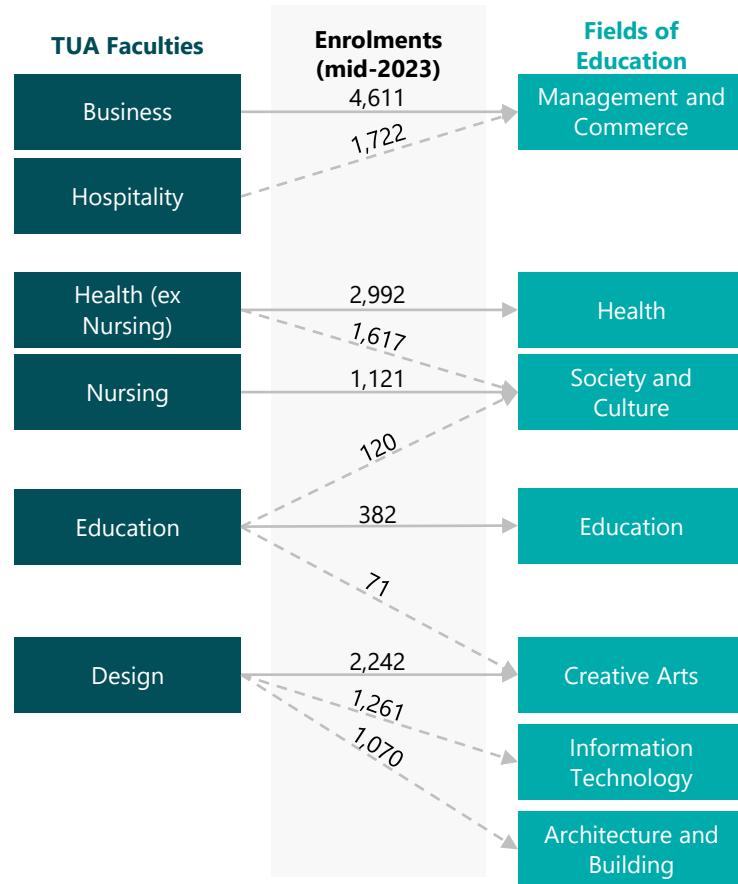
During the COVID-19 pandemic, limited IVS data was collected. Due to changes in data availability, there has been methodological changes in the estimation of VFR expenditure over time. In 2021, VFR expenditure was estimated using national level data as Queensland observed insufficient sample sizes across key IVS variables. In 2022, Queensland observed sufficient sample sizes across key variables meaning Queensland data was used and hence there has been a methodological change in the estimation of IET related VFR expenditure from 2021 to 2022.

1. Enrolment data is updated in each data release, meaning that historical enrolment counts may change over time.

Appendix C: Mapping TUA faculties against Fields of Education and occupations

Detailed concordance tables

Figure C.1: Mapping of TUA faculties against Fields of Education



Source: Student enrolment from Torrens University Australia (2023)

Table C.1: Mapping of occupations by TUA faculties

TUA Faculties	Occupation
Business	<ul style="list-style-type: none"> Business and Systems Analysts, and Programmers Advertising, Public Relations and Sales Mangers Miscellaneous Specialist Managers Accountants, Auditors and Company Secretaries Information and Organisation Professionals ICT Network and Support Professionals Education, Health and Welfare Services Managers* Accommodation and Hospitality Managers Engineering Professionals* Miscellaneous Education Professionals
Design	<ul style="list-style-type: none"> Arts Professionals Architects, Designers, Planners and Surveyors Media Professionals Advertising, Public Relations and Sales Managers ICT Network and Support Professionals Business and Systems Analysts, and Programmers
Education	<ul style="list-style-type: none"> School Teachers Art Professionals*
Health (ex-Nursing)	<ul style="list-style-type: none"> Social and Welfare Professionals Education, Health and Welfare Services Managers Medical Practitioners Miscellaneous Specialist Managers
Nursing	<ul style="list-style-type: none"> Midwifery and Nursing Professionals
Hospitality	<ul style="list-style-type: none"> Accommodation and Hospitality Managers Miscellaneous Hospitality, Retail and Service Managers

Table C.2: Mapping of occupations by Fields of Education

Fields of Education	Occupation
Management & Commerce	<ul style="list-style-type: none"> Business and Systems Analysts, and Programmers Advertising, Public Relations and Sales Managers Miscellaneous Specialist Managers Accountants, Auditors and Company Secretaries Information and Organisation Professionals Education, Health and Welfare Service Mangers Accommodation and Hospitality Managers Miscellaneous Hospitality, Retail and Service Managers Engineering Professionals
Informational Technology	<ul style="list-style-type: none"> ICT Network and Support Professionals Media Professionals Business and Systems Analysts, and Programmers
Creative Arts	<ul style="list-style-type: none"> Arts Professionals Advertising, Public Relations and Sale Managers
Architecture and Building	<ul style="list-style-type: none"> Architects, Designers, Planners and Surveyors
Society & Culture	<ul style="list-style-type: none"> Social and Welfare Professionals Miscellaneous Specialist Managers
Education	<ul style="list-style-type: none"> School Teachers Miscellaneous Specialist Managers
Health	<ul style="list-style-type: none"> Education, Health and Welfare Services Managers Medical Practitioners Social and Welfare Professionals Midwifery and Nursing Professionals

Source: Course-to-TUA faculties and to PRISMs Fields of Education concordance from Torrens University Australia (2023)

*Note: Some occupations align to multiple faculties or align to unexpected faculties. For example, Engineering Professionals are aligned against Business and Management & Commerce because it is concorded against a Masters of Engineering Management.



Limitations of our Work

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