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Jobs and Skills Australia

Vocational education and training in regional, rural and remote Australia

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Acknowledgement

An earlier version of this report was prepared by the National Skills Commission. The National Skills Commission was replaced by Jobs and Skills Australia on 16 November 2022. Jobs and Skills Australia acknowledges the contribution of former National Skills Commissioner Adam Boyton to this report.

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Executive summary

This report examines the provision of – and access to – vocational education and training (VET) in regional, rural and remote areas of Australia. It fulfills one aspect of Jobs and Skills Australia's functions in relation to providing advice on *issues relating to skills and training, and workforce needs, in regional, rural and remote Australia*. The analysis and findings are descriptive in nature, observing activity and supply of VET in regional and remote Australia and drawing comparisons across these regions and major cities.

Proximity of education services can have impacts on education and labour force outcomes.[1] For those seeking post-school opportunities, lack of that proximity may necessitate moving to do further study, thus affecting Australians in regional, rural and remote Australia differently from those living in the major cities. Also, a VET qualification may not bring the same returns in regional and remote areas.[2] This could result in unequal distributional effects between those who can pursue opportunities in other locations and those who cannot.

VET plays an important role in Australia's regions both due to its relevance and applicability to regional-focused industries, and the role that it plays in delivering core skills to those who have not been able to gain these skills in other settings. This may be particularly important in remote areas where, compared to 74% in major cities and 68% in regional areas, 49% of senior school students in remote and very remote areas achieved at or above the benchmark in math, science and reading.[3]

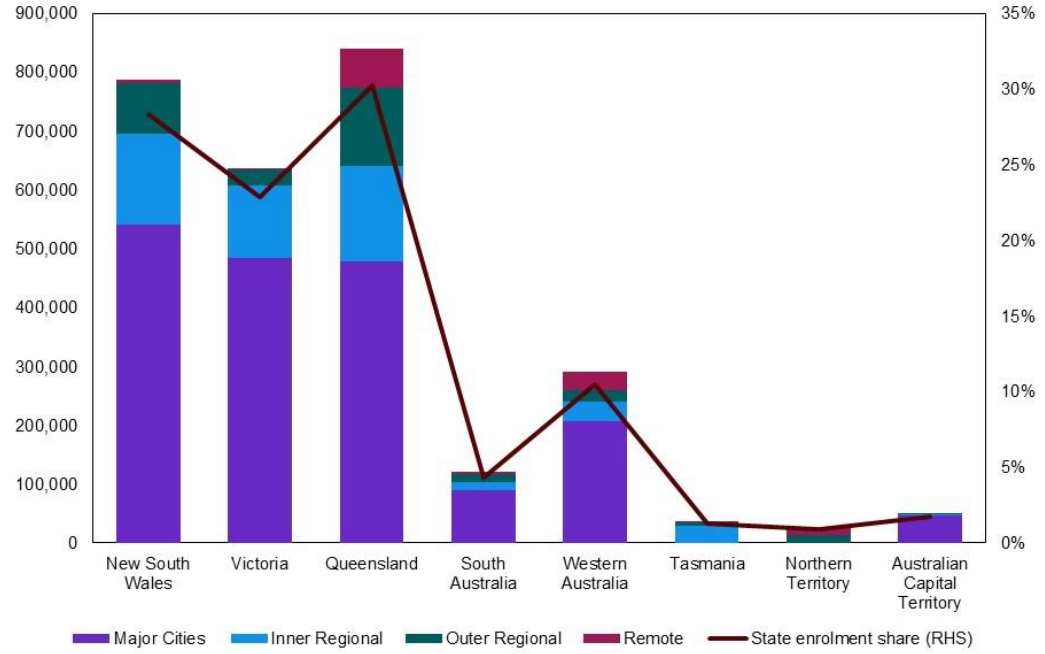
Emerging from the descriptive analysis within this report is a picture of varying engagement with VET. A key finding is that regional VET activity is driven, to a large extent, by local industries, although the analysis does also reveal a relatively equal weighting towards essential service-related training (e.g. health and education). These local labour market and industry factors, as well as the practical constraints on regional and remote delivery, appear to be key drivers of the types of training that are delivered and accessed within Australia's regions.

The split of regional and remote training delivery differs by state and territory

The nature of regional and remote training delivery differs by state, with remote training delivery occurring most commonly in Queensland and Western Australia. This reflects both these states' regional compositions and population sizes. However, as Figure i suggests, where training is delivered may differ from where students live.

[1] Lamb and Glover (2014) 'Educational disadvantage and regional and rural schools'.
[2] K. Hillman and S. Rothman (2007) 'Movement of non-metropolitan youth towards the cities'.
[3] Lamb, S., Huo, S., Walstab, A., Wade, A., Maire, Q., Doecke, E., Jackson, J. & Endekov, Z (2020), Educational opportunity in Australia 2020: who succeeds and who misses out, Centre for International Research on Education Systems, Victoria University, for the Mitchell Institute, Melbourne: Mitchell Institute.

Figure i: VET program enrolments by remoteness, state and territory (delivery location), 2020

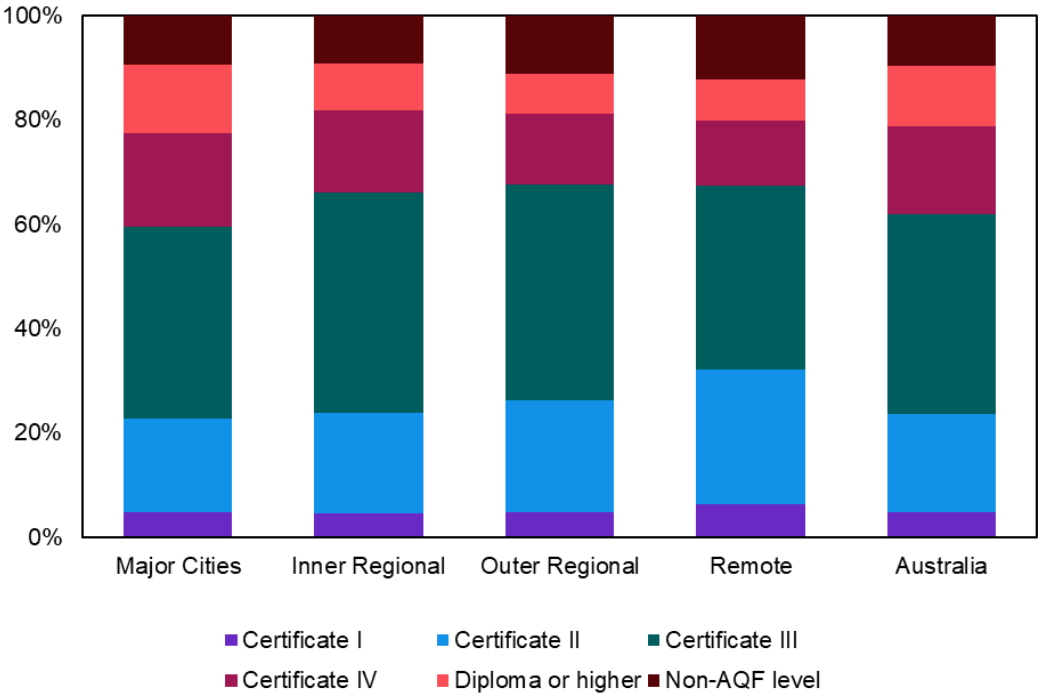


Note: See 1.1.1 for a definitional explanation of remoteness.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Regional and remote students take up different VET options to those in major cities

VET students in regional and remote areas are more likely to undertake lower-level qualifications than those in major cities. In particular, students in remote areas are more likely to undertake qualifications at the Certificate II and below level (32% of all enrolments compared to 24% for all Australia), while those studying a diploma or higher VET qualification in outer regional and remote areas is less than 8%.

Figure ii: VET program enrolments by qualification level (student location), 2020



Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

The prominence of some fields of education in regional and remote areas may reflect the importance of industries to regional economies. For example, the higher-than-average concentration of enrolments in agricultural-related programs correlates to 79% of all people employed in the *Agriculture, Forestry and Fishing* industry working outside greater capital city areas (in 2022).[4] Further, analysis of VET concentration by occupation shows that VET attainment (as the highest qualification) for the same occupation group increases with remoteness. This means that individuals working in regional and remote areas who work in similar roles to those in the city are more likely to be VET qualified than to hold other (e.g. higher education) qualifications, reflecting labour market opportunities and competition.

Enrolments in engineering-related programs are also typically higher in regional and remote areas, likely reflecting a similar trend. Notably, enrolments related to the delivery of essential services such as health and education are represented consistently across remoteness areas.

Table ii: Proportion of total program enrolments by field of education, 2020

	Major Cities	Inner Regional	Outer Regional	Remote	Australia
Society and culture	20%	20%	21%	18%	**20%**
Management and commerce	19%	16%	16%	15%	**18%**
Engineering and related technologies	14%	19%	22%	26%	**16%**
Architecture and building	9%	9%	7%	5%	**9%**
Mixed field programmes	9%	6%	7%	7%	**8%**
Food, hospitality and personal services	7%	8%	8%	6%	**7%**
Health	8%	7%	7%	6%	**7%**
Education	6%	5%	5%	6%	**5%**
Creative arts	3%	2%	1%	1%	**3%**
Agriculture, environmental and related studies	2%	4%	5%	7%	**3%**
Information technology	2%	2%	2%	1%	**2%**
Natural and physical sciences	1%	0%	0%	0%	**1%**

Notes: Australia includes enrolments from Australia's offshore areas as well as those categorised as "unknown" which are not included in the categories of Major Cities, Regional or Remote. Enrolments with no field of education have been excluded from this table. Table is ordered by field of education from highest to lowest proportion of total program enrolments for Australia.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

[4] Australian Bureau of Statistics (2022) 'Labour Force Australia, Detailed, March 2022', https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release.

Differing levels of access and choice are observed across remoteness areas

Less variation is typically observed in the number of training products and registered training organisations (RTOs) accessed in regional and remote areas compared to major cities. However, at an aggregate level, this does not point towards clear signs of limited access and choice (Table iii). Enrolment data shows smaller class sizes and potential difficulties in attaining economies of scale as remoteness increases, challenges commonly associated with delivering education in these areas.

Table iii: Number of RTOs and qualifications with enrolments by student location, 2020

Remoteness area	Number of RTOs	Number of training products	Average RTO enrolments	Average program enrolments*
Major Cities	2,565	2,121	585	70
Inner Regional	2,338	1,906	205	30
Outer Regional	1,923	1,666	120	15
Remote	1,316	1,177	45	10

Note: Average program enrolments refers to the average enrolments per program per RTO; Enrolments rounded to nearest five.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

The varying impacts of remoteness on access to local study options may be more appropriately considered at a local level. To test this, analysis was conducted at the Statistical Area Level 3 in a variety of locations in all states and the Northern Territory. This analysis showed increased study options for agricultural-related training products in regional (and even remote) Australia compared to major cities, but not to the same extent for health and society, and culture.

Engagement with local study options increases with remoteness, with a higher share of students accessing RTOs in the same Statistical Area Level 2 (as per the Australian Statistical Geography Standard) compared to those located in major cities.[5] This likely reflects a combination of practical proximity, travel and training options. The analysis of access to local training options also shows that often local delivery does not match local demand. This means that students are travelling outside their local region to study their preferred qualification.

Student satisfaction is consistently high across regions and over time

The National Centre for Vocational Education Research (NCVER) Student Outcomes Survey (SOS) collects information on student satisfaction with training in the year post-study. Overall, student satisfaction has been generally stable between 2017 and 2021 at approximately 90%, including across remoteness areas in 2021, with the range of satisfaction remaining within one percentage point.

[5] Statistical Area Level 2 areas represent communities that interact together socially and economically, usually about 10,000 people.

Figure iii: Satisfaction with overall training, 2017 to 2021

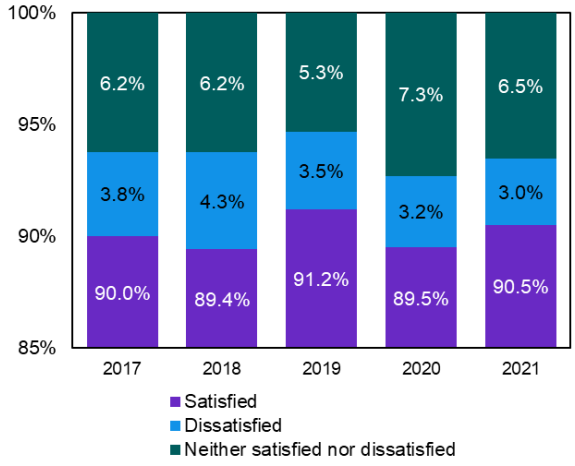
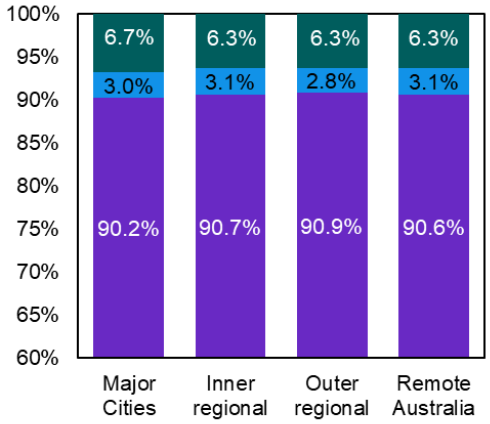


Figure iv: Satisfaction level by remoteness, 2021



Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

1 Introduction

Jobs and Skills Australia (JSA) was established to provide independent advice on current, emerging, and future workforce, skills, and training needs. JSA's functions include providing advice on *issues relating to skills and training, and workforce needs, in regional, rural and remote Australia*.

This report examines the provision of, and access to, vocational education and training (VET) in regional, rural and remote areas of Australia. Its findings will aid further analysis of the accessibility and availability of VET, which have been identified as priorities in prior reviews.[6] This work is complementary to the projects being overseen by the Regional Education Commissioner.[7]

This analysis uses data collected by the National Centre for Vocational Education Research (NCVER) on VET activity and registration data held in the National Register on Vocational Education and Training at training.gov.au.[8] It observes activity and supply of VET in regional, rural and remote Australia in order to develop an understanding of the potential benefits and challenges of delivering VET in these contexts.[9] The analysis is supplemented by NCVER data on student outcomes and satisfaction and in relation to completion rates.

This report covers:

- the differences between Australia's regions and how these interact with access to VET;
- availability of training options in regional, rural and remote areas; and
- VET activity and supply in regional and remote areas, compared to metropolitan areas, in terms of the quantity and type of training accessed, the nature of registered training organisation (RTO) training delivery, and student experience and sentiment.

Throughout the report, methodological explanations, data limitations and nuances are explained in grey boxes. These should be noted when interpreting the data presented. The report is structured as follows:

- Chapter 1 gives a profile of the population;
- Chapter 2 outlines the VET options available to students, including analysis in relation to the type of training delivered in regional and remote areas;
- Chapter 3 provides an overview of VET activity across regions of Australia, including a comparison of what is delivered and accessed within given regions; and
- Chapter 4 includes observational analysis on student attitudes towards VET, and how these vary.

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[6] For instance, the Independent Review into Regional, Rural and Remote Education (commissioned by the Commonwealth Government and conducted by Emeritus Professor John Halsey) made specific recommendations in relation to the availability, affordability and accessibility of VET, and related supports in relation to VET in Australia's regions.

[7] A role for the Regional Education Commissioner was established to oversee and coordinate the effort to implement the National Regional, Rural and Remote Tertiary Education Strategy (the Napthine Review).

[8] training.gov.au is the authoritative source of nationally recognised training (NRT) and registered training organisations (RTOs) approved to deliver NRT. It has the details of all NRT products, including accredited courses, endorsed training package qualifications, units of competency and skill sets. Training.gov.au is managed by the Department of Employment and Workplace Relations on behalf of state and territory governments.

The analysis does not seek to explain the full scope of challenges in relation to educational attainment and skills development in regional, rural and remote areas. Other factors, such as the skill and education requirements, and earning capacity, of available jobs, are potential contributors to educational outcomes in these areas.[10] Nor does this report propose potential policy solutions. Its purpose is to contribute to the evidence base relating to access to VET in regional, rural and remote Australia.

1.1 Background

Access to education and skill development opportunities is vital for delivering a highly skilled and productive workforce. The various levels of Australia's education system play important (and varied) roles in building essential skills and knowledge for use in society generally, and in developing skills and expertise so that people can engage in the workforce to their full capacity. Where individuals live can affect how they engage with the education system.

Australia's geographical dispersion and the clustering around city centres produce challenges for maintaining equity across the education system. It has been shown, however, that proximity to education services helps to improve educational and labour force outcomes in regional, rural and remote Australia.[11]

More than half of students from regional and remote areas were required to move to attend university (often moving within a state) over the decade to 2014.[12] This reflects a longer-term pattern. Research in 2007 using the Longitudinal Surveys of Australian Youth (LSAY) found that the pursuit of post-school educational opportunities increases youth movements towards metropolitan areas. Further, this study found that only 30% of those who relocated to a major city migrated back to a non-metropolitan area within the timeframe analysed, to an average age of 23.[13]

Importance of VET in regional, rural and remote Australia

Australia's regional industries rely on VET-trained workers. This highlights the importance of place-based skill development opportunities for regional, rural and remote Australians. While the more flexible nature of VET delivery may increase the opportunity for regional engagement – relative to higher education, it is not necessarily the case that preferred study options are consistently available. Challenges such as travel distance, small class sizes, access to teaching resources and delivery costs all apply to the regional delivery of VET.

VET not only supplies skilled labour to industries, it also provides a pathway for developing foundational skills to individuals who have not been able to gain these skills in other educational settings. Proximity to these services plays an important role in their efficacy. When accessible, they may support improvement in math, science and reading scores across remoteness areas: 2020 research identified that 49% of senior school students in remote and very remote areas achieved at or above the benchmark in math, science and

[10] Lamb and Glover (2014) 'Educational disadvantage and regional and rural schools'.
[11] Lamb and Glover (2014) 'Educational disadvantage and regional and rural schools'.
[12] Baik et al. (2014) 'The first year experience in Australian universities'.
[13] K. Hillman and S. Rothman (2007) 'Movement of non-metropolitan youth towards the cities'.

reading compared to 68% in regional areas and 74% in major cities.[14] Such improvements also have implications for job quality.

1.1.1 Characterising regional, rural and remote Australia

Defining regional, rural and remote areas

For the purpose of this report, 'regional, rural and remote' areas are the regions outside Australia's major cities, specifically those regions classified by the Australian Bureau of Statistics' (ABS's) Remoteness Structure as *Inner Regional*, *Outer Regional*, *Remote* or *Very Remote*.[15]

The ABS Remoteness Structure is based on the Accessibility and Remoteness Index of Australia (ARIA+), a nationally consistent measure of geographic remoteness, widely used and recognised by Australian researchers and policy makers. ARIA+ generates a remoteness score for 11,000 Australian localities based on the road distances to their nearest service centres, and the population size of these service centres. The ABS uses these scores to divide Australia into five classes – *Major Cities, Inner Regional*, *Outer Regional*, *Remote* or *Very Remote.* This approach classifies the capital cities Hobart and Darwin as inner and outer regional respectively.

There is currently no widely accepted approach to separately define rural areas. While communities frequently identify themselves as "rural", sometimes in association with particular rural industries such as agriculture and mining, the term "rural" does not correspond to a specific standardised geographical classification for statistical analysis. This paper considers rural areas as non-metropolitan regions in Australia, collectively part of *Inner Regional*, *Outer Regional*, *Remote* or *Very Remote* regions, though these are not separately geographically defined.

For statistical purposes in this report, the "remote" category includes "remote" and "very remote", unless otherwise specified. Other concepts of regionality referred to in this report use the ABS Australian Statistical Geography Standard. This structure is based on a hierarchy of levels, with each defined as a "function area". This includes analysis at the Statistical Area Level 3, which covers the functional areas of regional towns and cities with a population in excess of 20,000 or clusters of related suburbs connected by urban commercial and transport hubs.

Another concept of regionality referred to in this report is *Greater Capital City Areas and Rest of State*. Greater Capital City Statistical Areas are geographic areas built from Statistical Areas Level 4 (SA4). SA4 boundaries represent labour markets by incorporating both labour supply (where people live) and demand (where people work), and combine to represent the functional area of greater capital cities (e.g. Central Coast is included in Greater Sydney, acknowledging the significant amount of commuting that takes place within this region

The availability of regional data varies by data source and regional classification. This report provides comparisons according to the ABS remoteness categories when current data is available. In some instances, instead of using remoteness area categories, it has been necessary to provide splits between capital city and rest of state. Analysis of specific SA3 regions is provided throughout the report to deepen the analysis by balancing data granularity with currency and to provide an illustration of potential regional differences across Australia. These data do not reflect the VET system in any jurisdiction.

[14] Lamb, S., Huo, S., Walstab, A., Wade, A., Maire, Q., Doecke, E., Jackson, J. & Endekov, Z (2020), Educational opportunity in Australia 2020: who succeeds and who misses out, Centre for International Research on Education Systems, Victoria University, for the Mitchell Institute, Melbourne: Mitchell Institute.

[15] Australian Bureau of Statistics 'The Australian Statistical Geography Standard Remoteness Structure', https://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure. Refer to Appendix A for a map of the Remoteness Structure.

The profile of Australia's regions

Australia's population is characterised by clustering around city centres and regions of varying economies, densities and environments. Approximately 7 million people or 28% of the Australian population live in regional and remote areas (Figure 1).[16] These areas have grown at varying rates over recent decades (see Figure 2). While growth differs across regions, with fewer movements towards major cities since 2020, the majority of Australia's population reside within major cities.

Figure 1: Population by remoteness area, 2021

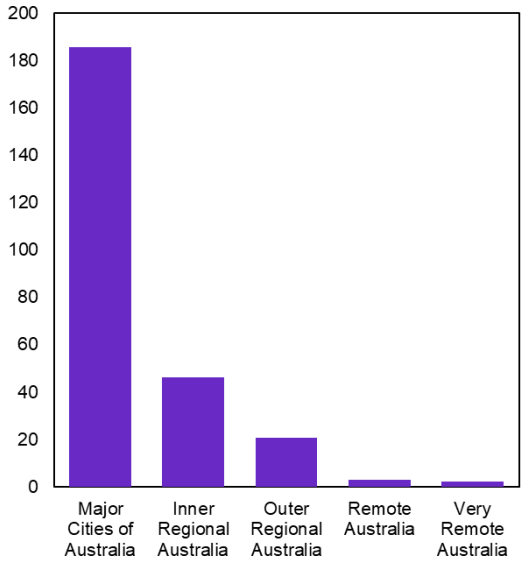
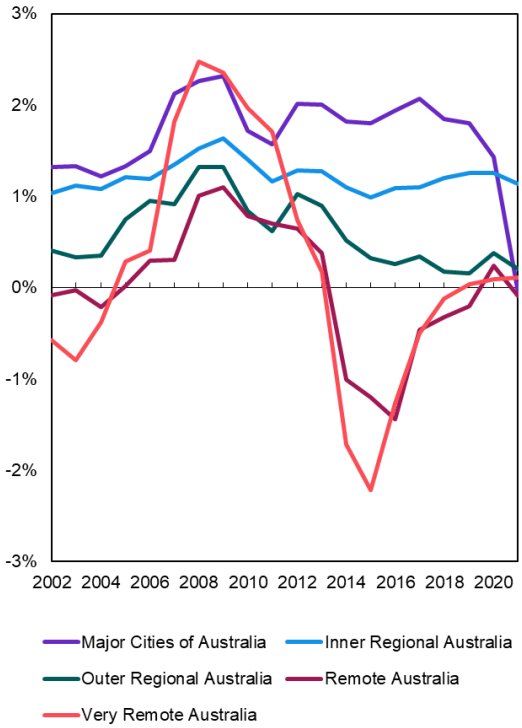


Figure 2: Population by remoteness area, annual growth (%)

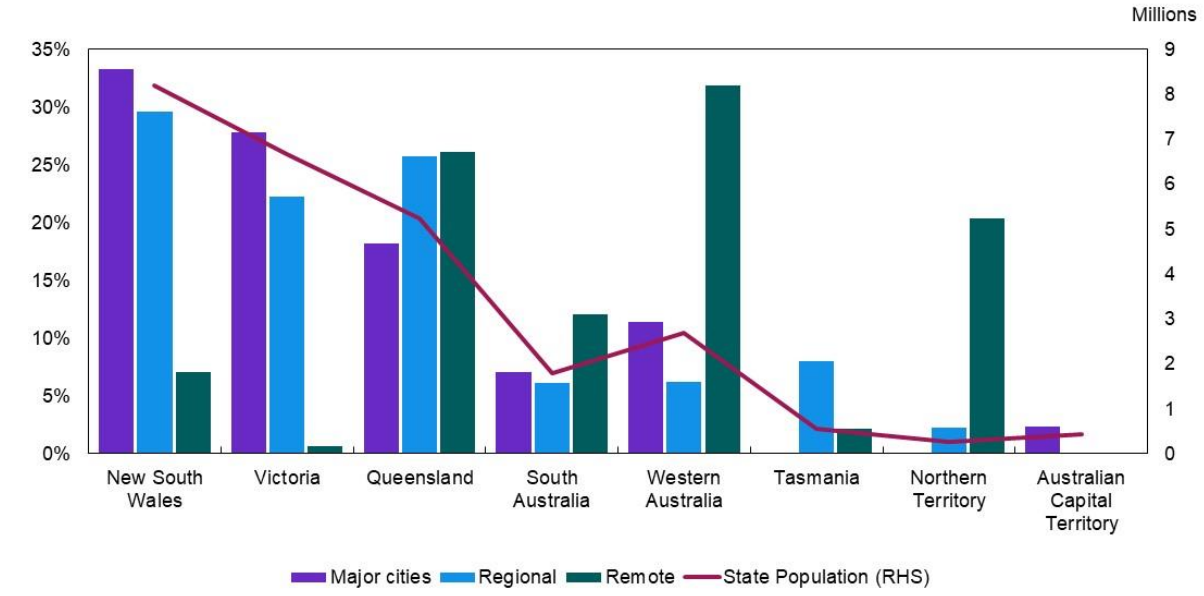


Source: Australian Bureau of Statistics.

When considering state and territory government-led education and service delivery, the representation of regional and remote areas across Australia should be taken into account. Figure 3 shows the share of national metropolitan, regional and remote populations by state and territory. New South Wales and Victoria are highly populated states but represent less than 10% of Australia's remote population. Conversely, Northern Territory makes up 1% of Australia's total population, yet 20% of its remote population.

[16] Australian Bureau of Statistics (2022) 'Regional population, 2020-21 financial year', https://www.abs.gov.au/statistics/people/population/regional-population/latest-release.

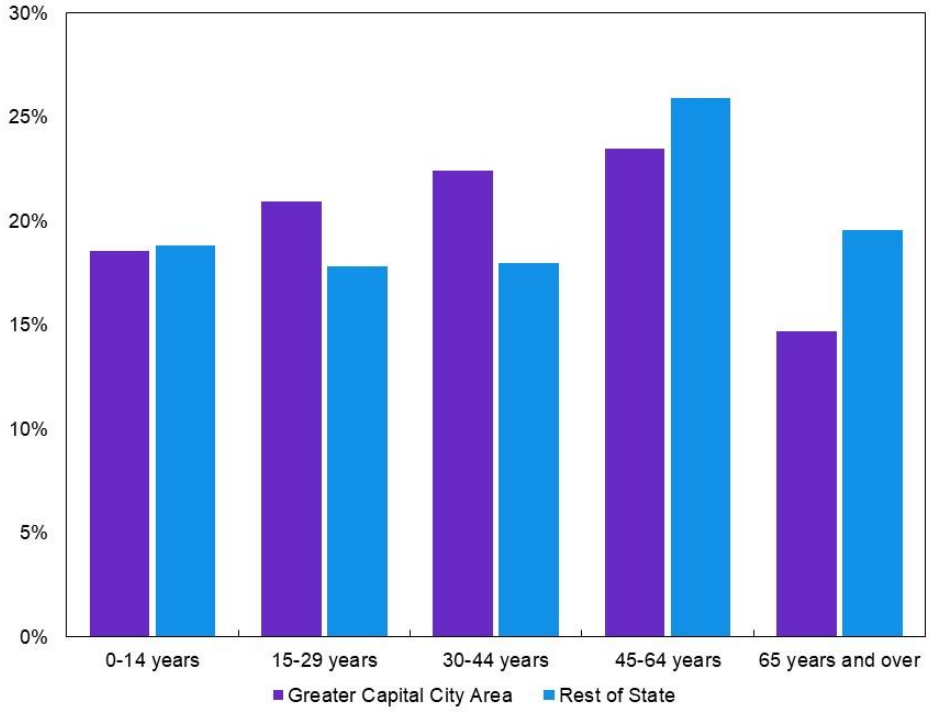
Figure 3: State and territory share of national population by remoteness area, 2021



Source: Australian Bureau of Statistics.

As discussed in Section 1.1, prior research has identified youth movements from regional and remote areas towards cities in pursuit of opportunities.[17] This results in higher shares of those of study and working age (in particular aged 15 to 44) residing in major capital city areas (Figure 4).

Figure 4: Population by age, % of population, 2020

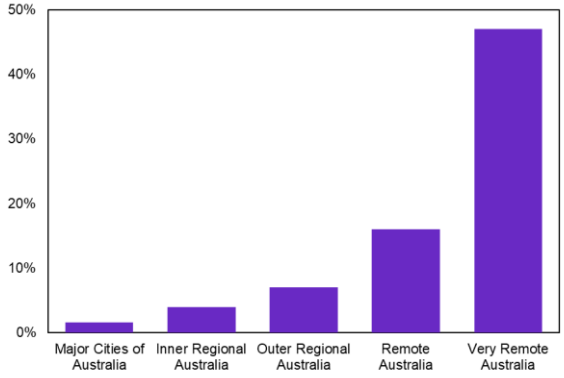


Source: Australian Bureau of Statistics.

[17] K. Hillman and S. Rothman (2007) 'Movement of non-metropolitan youth towards the cities'.

The Indigenous share of the population grows as remoteness increases. Almost 50% of the population in very remote Australia is Indigenous (Figure 5). The data does not show a clear pattern by region for those who self-identify as having a disability (Figure 6).

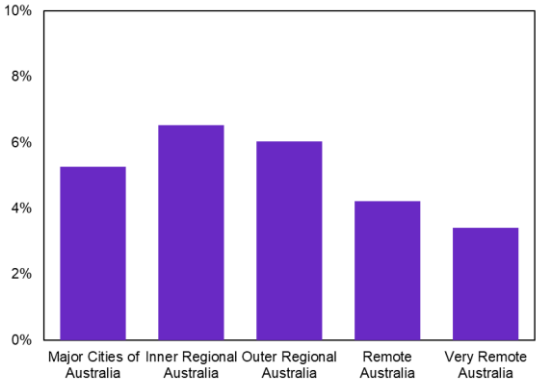
Figure 5: Indigenous population, % population, 2016



Note: Indigenous includes Aboriginal and/or Torres Strait Islander.

Source: Australian Bureau of Statistics, 2016 Census.

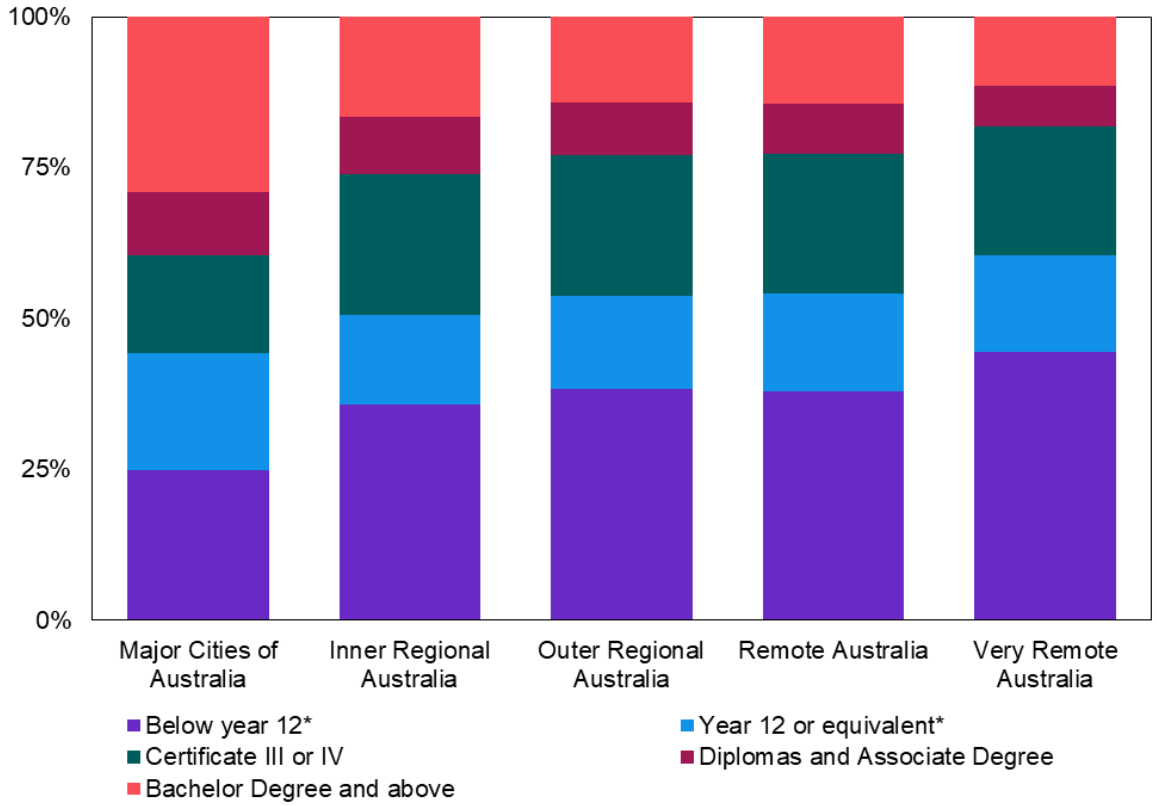
Figure 6: Persons with a disability, % population, 2016



Note: Individuals determined as having a disability have self-nominated, or their carer has nominated, that the individual needs assistance with core activities.

Educational attainment varies across regions, with higher rates of year 12 and above completion observed in major cities (Figure 7). In particular, the transition beyond year 12 coincides with higher rates of diploma and bachelor degree completion in major cities (at 11% and 29% respectively). Beyond year 12, individuals in regional and remote areas are on average more likely to hold a certificate III or certificate IV as their highest qualification. This ranges from 21% in very remote areas to 23% in regional and remote areas compared to 16% in major cities.

Figure 7: Highest level of education attained, 2016, % population



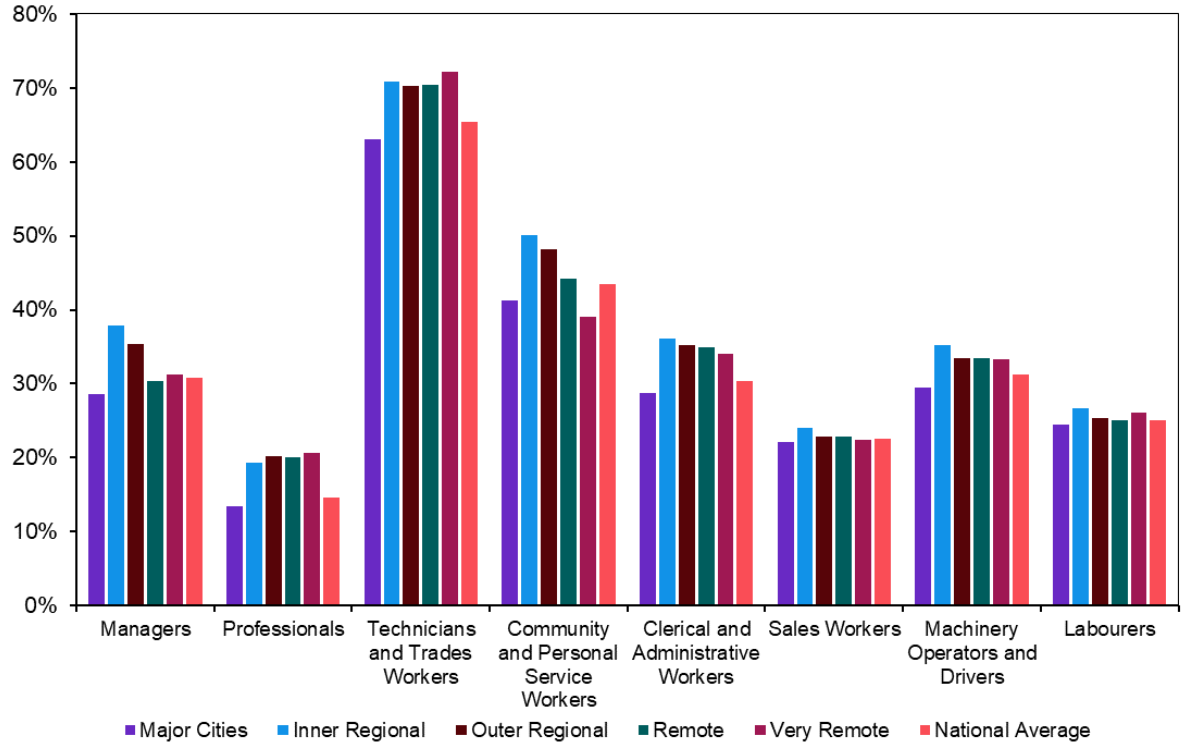
Source: Australian Bureau of Statistics, 2016 Census.

While Figure 7 outlines an individual's highest level of educational attainment, people who have a bachelor degree or above may still have studied in the VET sector. For example, they may also hold a VET qualification, or they may engage with VET following their higher education to acquire new or more vocationally-oriented skills or qualifications.

Closely linked to individuals' study decisions are the opportunities the labour market presents them to achieve a return on their investment in education. The higher concentration of VET qualified workers in Australia's regions is reflective of the educational compositions within the workforce. Figure 8 shows that, within a similar occupation, workers in regional and remote areas are more likely to be VET qualified compared to major cities. This may indicate both greater engagement with higher education in metropolitan areas as well as labour market competition and opportunities, including demand for higher-level qualifications.

Similarly, in some instances VET concentration appears similar between remoteness areas (e.g. major cities and very remote for community and personal service workers). While in major cities this is likely explained by higher education attainment among those workers, and in more remote areas it could be that workers do not have any post-school qualifications.

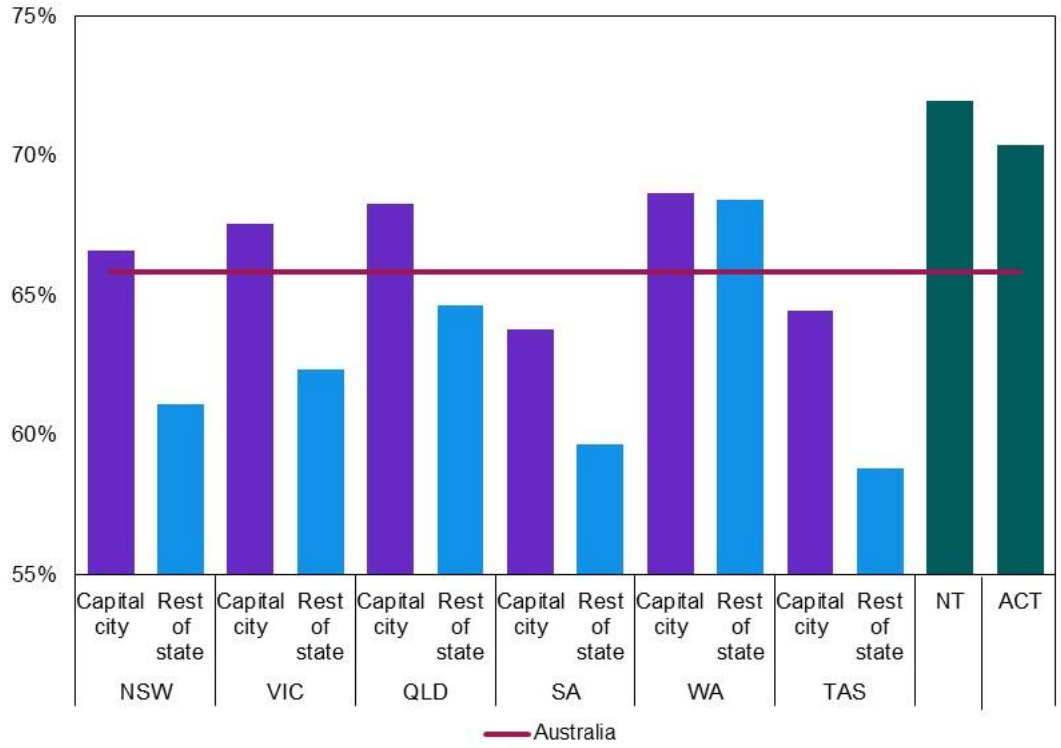
Figure 8: VET concentration (highest qualification) by occupation and remoteness, 2016



Source: ABS Census of Population and Housing, 2016.

Figure 9 shows that labour participation rates are, in general, lower outside capital cities. This may partly reflect the age structure of these areas (Figure 4), where older populations are less likely to be in paid work. Coinciding with higher participation rates, slightly higher unemployment rates have generally been observed in capital cities compared to other areas within the state (with some exceptions) (Figure 10). The disproportionate impact of lockdowns in capital cities should be noted when interpreting these numbers across the 2021 calendar year.

Figure 9: Participation rate, 2021



Source: Australian Bureau of Statistics.

Figure 10: Unemployment rate, 2021

Source: Australian Bureau of Statistics.

2 What VET options are available to students?

Key findings

- While the number of RTOs with head offices located in remote areas is lower compared to major cities, this may not be a true reflection of RTO presence (i.e. their campus or delivery location) in those areas because data on RTO location typically reflects the location of an RTO's head office and not necessarily its teaching locations.
- Analysis of data about what an RTO is approved to deliver (RTO scope) is only one indication of RTO presence in regional and remote areas. In practice, larger RTOs may span several regions to deliver training to both metro and regional/remote students.
- The nature of regional and remote training delivery differs by state, with a higher share of remote training delivery typically occurring in Queensland and Western Australia (due both to their regional compositions and population sizes).
- While a relatively high share of enrolments is held by private training providers, the balance between provider types remains relatively consistent across all categories of remoteness.
- Student choice of field of education and qualification level appears related to local industry and labour market demand, as well as proximity of training.

This chapter explores the availability of VET options to students across Australia. It combines training.gov.au data about RTOs and NCVER activity data to provide a broad picture of student choice and RTO delivery in Australia's regions. In this report, training products refer to nationally recognised training. This includes training package qualifications and skill sets, and accredited qualifications and courses. Program enrolments referred to within this report exclude non-nationally recognised training including locally developed programs and skill sets, and subject-only enrolments.

Training package skill sets and accredited courses are 'non-Australian Qualification Framework (AQF)'-level training that lead to statements of attainment. Accredited courses are included in the field of education analysis within this report and are in most cases assigned a field of education, while training package skill sets are not assigned a field of education and are hence excluded from field of education-related analysis.

Measurements of choice in relation to VET

Several concepts can be considered in relation to student choice based on where they live. For example, in VET:

- it is possible to consider the training products RTOs are approved to deliver (i.e. on an RTO's scope list) as a measure of choice; or
- focus on the range of training products delivered or accessed within a region.

This report combines these measures to consider what is approved for delivery, and the associated activity, within a region measured both by delivery and access location. This analysis has some caveats:

1. The current nature of scope data does not provide complete and accurate coverage of RTO campus and delivery locations. For this reason, an assessment on the availability of RTOs and training products from what is approved for delivery relies solely on RTO head office location. This assessment would therefore not capture those items on scope at an RTO campus location (where this differs to the head office).

2. Enrolment data provides an indication of a match between an RTO, training product and student (noting that if a course is available but not taken up, it is not recorded). These data offer more complete coverage in relation to delivery and student location than the scope of registration data.

This report therefore seeks to provide a picture of choice by considering the training products on scope for delivery by RTO head office location, the training products delivered by delivery location, and what is accessed by student location.

2.1 What is the scope of delivery in regional, rural and remote Australia?

The Australian Skills Quality Authority (ASQA) approves the qualifications, accredited courses and units of competency a RTO can offer; this is termed their 'scope of registration'. This section uses training.gov.au data to develop an understanding of RTO scope and location in respect to regional and remote areas.

Approximately 4,000 RTOs (representing a variety of RTO types: public, private and enterprise-owned) operate across Australia. They deliver more than 2,000 nationally recognised qualifications. Table 1 shows the number of RTOs by remoteness area – based on head office location – and the associated number of training products on scope to deliver. This does not necessarily capture where RTOs may deliver in practice, though may represent RTO activity concentration and RTOs whose focus lies in regional and/or remote areas.

A higher number of RTOs have head offices in major cities. These RTOs also have a higher number of training products on their scope of registration (Table 1). This may reflect the higher levels of activity observed within these areas (to be discussed in Section 2.2 and Section 3). The range of training products available for delivery in regional and remote areas, and the RTOs located in those areas, are discussed in Sections 2.1.1 and 2.1.2 respectively.

Table 1: Number of RTOs and training products approved for delivery, head office location

Region	Population (2021)	Number of RTOs	Number of training products	Training products per RTO (average)
Major Cities of Australia	18,572,000	3,131	4,224	37
Inner Regional Australia	4,608,000	445	2,364	40
Outer Regional Australia	2,067,000	236	1,675	38
Remote Australia	291,000	33	572	36
Very Remote Australia	201,000	5	145	36

Note: Population rounded to the nearest 1,000. The count of RTOs includes RTOs delivering non-nationally recognised training, while columns relating to training products include all nationally recognised training approved for delivery (including non-current status).
Source: Australian Bureau of Statistics, training.gov.au.

Assessing scope does not allow for the variety of ways that training is delivered (e.g. online vs in-person) to be observed, nor where that training takes place (i.e. at a RTO head office or campus location, or elsewhere). The location and scale of training delivery is assessed using activity data in Section 2.2 onwards.

2.1.1 What are training providers approved to deliver?

A higher number of training products are approved to be delivered for RTOs with head office locations in major cities across all fields of education (see Table 2).

Table 2: Training products on scope by field of education, RTO head office location

Field of Education	Major Cities	Inner Regional	Outer Regional	Remote
Agriculture environmental and related studies	164	114	79	29
Architecture and building	139	71	53	16
Creative Arts	113	43	21	14
Education	48	13	15	6
Engineering and related technology	699	339	222	62
Food, hospitality and personal services	71	48	37	12
Health	190	68	48	18
Information technology	50	24	17	6
Management and commerce	340	159	120	48
Mixed field programs	129	66	54	18
Natural and physical sciences	22	13	9	
Society and culture	300	104	84	23

Note: Only nationally recognised training products are included; and training package skill sets and other training products with no field of education are excluded.
Source: training.gov.au. NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Similar patterns are observed for the scope of offerings categorised by AQF level across remoteness areas. At the time of this report, no RTOs with head office locations in remote areas were approved to offer advanced diploma or higher qualifications.

Table 3: Training products on scope by AQF level, RTO head office location

Qualification level	Major Cities	Inner Regional	Outer Regional	Remote
Certificate I	51	40	41	27
Certificate II	255	162	122	60
Certificate III	519	325	234	65
Certificate IV	403	223	146	49
Diploma	312	133	88	28
Advanced Diploma	131	32	22	0
Graduate Certificate	21	3	1	0
Graduate Diploma	20	1	3	0

Source: training.gov.au.

An assessment of the number of training products available by RTO head office location alone suggests decreased training options available for students in regional and remote Australia, especially in relation to higher-level qualifications. Where, in practice, training may be delivered or accessed is discussed in Sections 2.2 and 3, in which activity data are analysed.

2.1.2 What training provider options are available?

An initial assessment of choice is provided according to two dimensions – availability of product options (i.e. training products) and sellers (i.e. RTOs).

Although there are more than 2,000 nationally recognised training products, VET activity is relatively highly concentrated. For example, in 2020, 47% of program enrolments were in the top 50 qualifications.[18] Table 4 shows from how many RTOs students can choose to study the top 10 qualifications across Australia. There is relatively low availability, measured by RTO head office location, in remote Australia. It is likely that remote delivery is serviced mainly by RTOs with head office locations in major cities (e.g. larger private RTOs or technical and further education (TAFE) institutes with multiple campus locations).

Table 4: Number of RTOs approved to deliver the top 10 qualifications, head office location

Qualification	Major Cities	Inner Regional	Outer Regional	Remote
Certificate III in Individual Support	379	59	31	2
Certificate III in Early Childhood Education and Care	321	40	20	3
Certificate II in Skills for Work and Vocational Pathways	365	100	70	8
Certificate III in Business	497	78	50	5
Diploma of Early Childhood Education and Care	315	29	17	2
Certificate IV in Training and Assessment	82	24	9	1
Certificate II in Hospitality	268	78	42	5
Certificate III in Electrotechnology Electrician	46	9	5	1
Certificate III in Fitness	79	13	6	1
Certificate III in Carpentry	214	19	18	6

Source: training.gov.au.

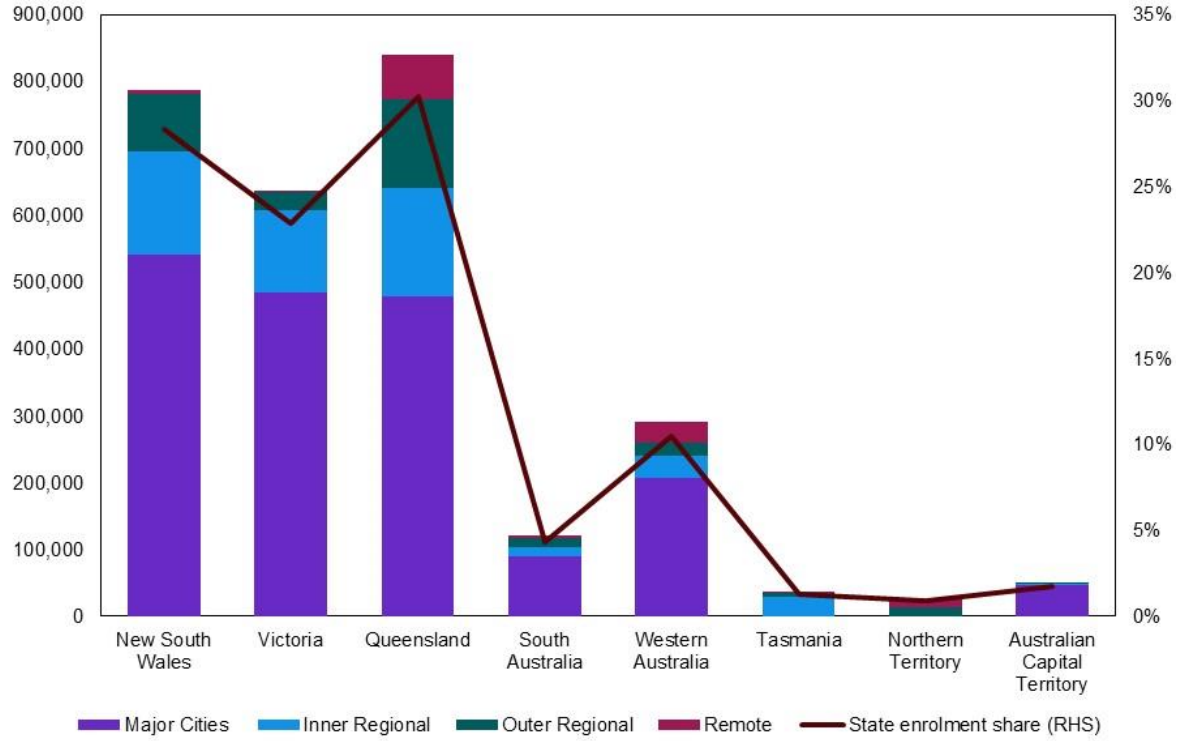
2.2 What VET is delivered in regional, rural and remote Australia?

The NCVER Total VET students and courses collection comprises data on nationally recognised training delivered by RTOs. It complements information on what is approved for delivery by considering what is delivered (i.e. an enrolment).

The nature of RTO delivery by remoteness varies across state and territory, largely due to population and geographical structures (as highlighted in Section 1.1.1). The varying nature of regional and remote delivery by state and territory is shown in Figure 11. In general, this aligns with the population and geographical distributions observed across Australia.

[18] Program enrolments include accredited courses, training package qualifications and non-AQF programs such as skill sets.

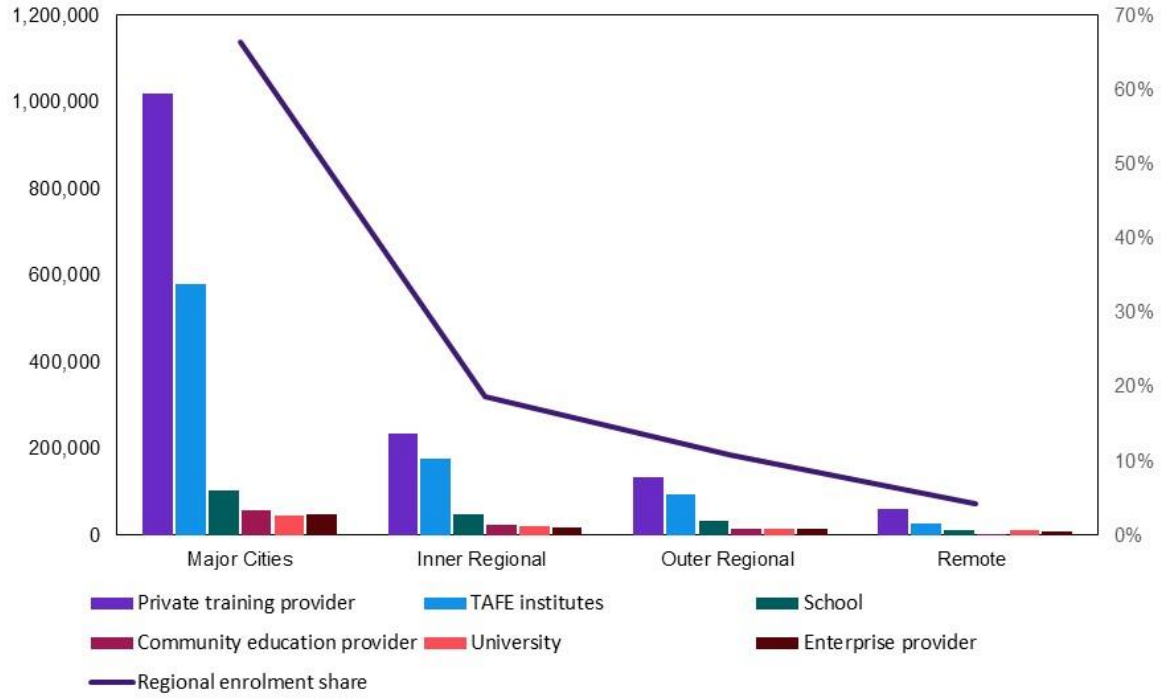
Figure 11: VET enrolments by remoteness, state and territory (delivery location), 2020



Note: Students may attend more than one delivery location. These figures assign one delivery location per program enrolment.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

VET is delivered in a range of contexts by both private and public providers, operating to differing extents across the country. Figure 12 shows the relative size of activity by provider type and remoteness area (with a focus on delivery location). This shows both activity concentration in major cities, and the prevalence of private RTOs and TAFE institutes in delivering VET enrolments across the regions.

Figure 12: Program enrolments by provider type, delivery location, 2020



Note: Students may attend more than one delivery location. These figures assign one delivery location per program enrolment.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Fewer RTOs deliver VET in regional and remote areas compared to major cities, declining as remoteness increases. Excluding from the analysis RTOs exclusively delivering online-only subjects produces a smaller number of RTOs across all regions. Similarly for the training products on offer, the range decreases with remoteness and exclusion of online-only study.

Table 5: Number of RTOs and training products by delivery location, 2020

Remoteness area	Number of RTOs (including RTOs exclusively delivering online only subjects)	Number of training products (including online only subjects)	Number of RTOs (excluding RTOs exclusively delivering online only subjects)	Number of training products (excluding online only subjects)
Major Cities	2,253	1,990	2,151	1,871
Inner Regional	1,154	1,204	1,117	1,141
Outer Regional	856	982	827	933
Remote	421	530	405	493

Note: The number of RTOs and training products is based on subject enrolments, though calculated at the program level. This excludes 'Not applicable' (RPL or credit transfer) and non-nationally recognised training enrolments.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

2.3 What choice of training options do students have?

Considering the breadth of training at an aggregate level may not provide an accurate picture of the choice available to a given student. That person is likely to look for training options close to where they live. For that reason, analysis was conducted of selected areas at the SA3 level for all states and the Northern Territory to consider both choice of, and access to (see section 3), training.

It should be noted that even at the SA3 level, travel distances vary from a metropolitan SA3 and one in remote Australia. More populated regions have smaller geographical SA3s, with geographical size typically increasing with remoteness. Similarly, SA3s differ within a region and across states and territories with different population and labour market dynamics. This SA3 analysis is provided as an illustration of potential differences between regions within a state and territory. It remains illustrative only and does not account for the practical differences within these regions and is not a reflection on the VET system in any jurisdiction.

Four fields of education supplying workforces across major city, regional and remote areas were used in this analysis. This provides a consistent framework for considering access and choice, while also recognising the breadth of VET. The analysis considers training delivered within these regions (i.e. by delivery location) and may differ to what students residing in these areas access (either through travel or online delivery).

The analysis required the selection of SA3s within each state and territory. These were chosen to reflect the varying remoteness classifications. Where possible, they were also chosen around communities accessing VET or with industries with skill linkages to the VET sector. In major cities, SA3s with populations accessing VET were included in the analysis.

What emerges from the analysis is that the nature of industry and labour market demand can affect training options. Further, choice expands according to proximity to capital cities and inner regional areas, except in those circumstances when industries, for example agricultural and mining, have significant rural and remote operations. That said, the presence of RTOs across regional and remote areas differs by qualification, potentially reflecting the varying presence of the related occupations across Australia's regions, with widespread offerings of qualifications supporting roles that are broadly distributed across Australia. For example, across many of the regional SA3s, there were at least three RTOs delivering the Certificate III in Individual Support qualification that provides the main pathway into roles in the aged care and disability care sectors.

3 How are students engaging with VET in regional and remote Australia?

Key findings

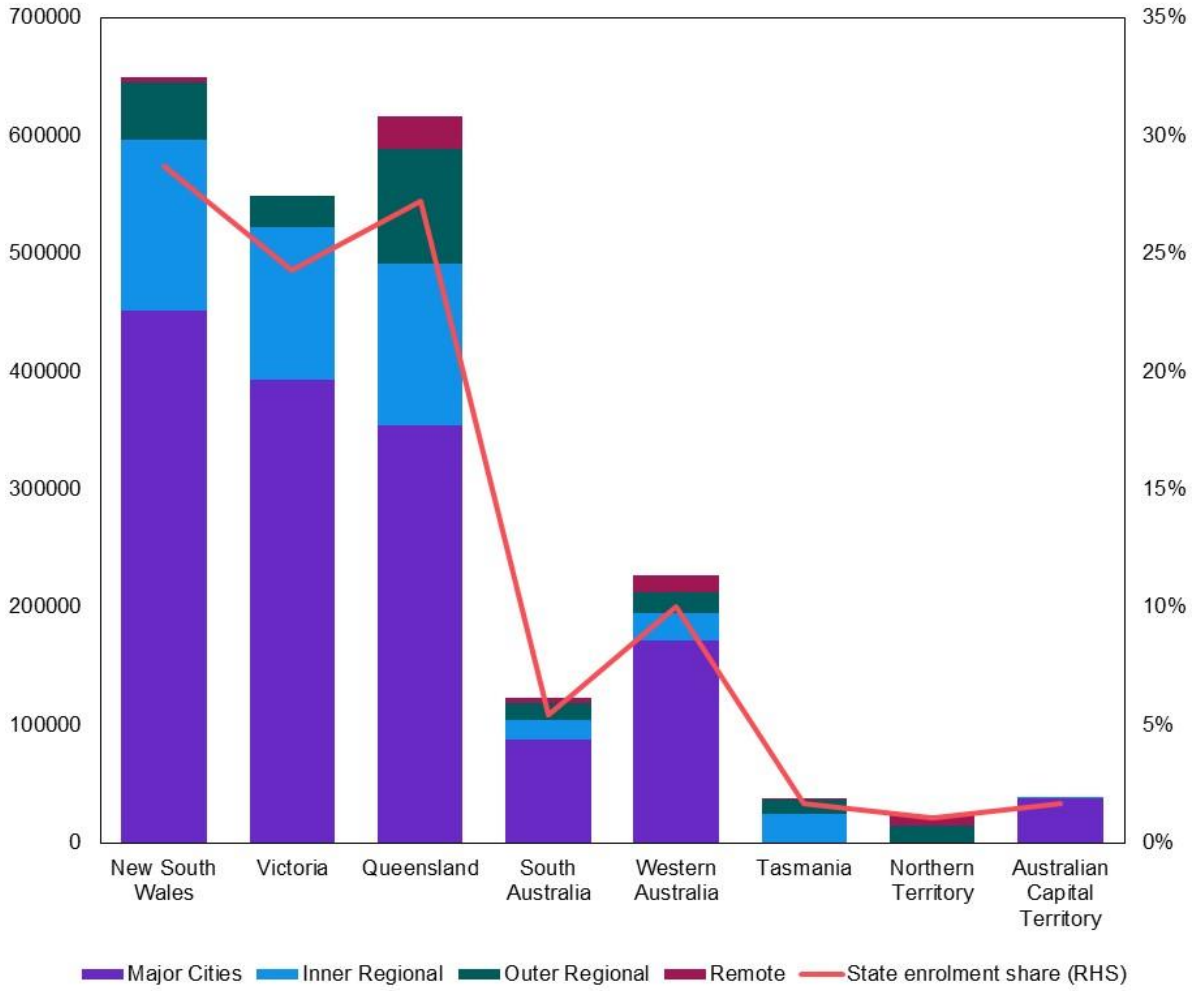
- Approximately two-thirds of VET program enrolments are students residing in major cities, though this varies significantly on a state-by-state basis.
- VET students in regional and remote areas are more likely to undertake studies at lower AQF levels, typically at the Certificate III level, than those in major cities.
- Higher concentration of enrolments in agriculture, engineering and related studies is observed in regional and remote areas of Australia which may reflect industry compositions in these regions.
- While less variation in the number of training products accessed is generally observed as remoteness increases, analysis at an aggregate level does not point towards significant issues in relation to access to VET study options.
- Differing impacts of remoteness are observed using field of education and qualification data at the SA3 level. For example, increased study options for agricultural-related courses are observed in regional (and even remote) Australia compared to major cities. Conversely, government and essential service-related fields (e.g. society and culture, and health) tend to be more reflective of population distributions across regions than fields linked to industries in a region.
- Engagement with local study options increases with remoteness, with a higher share of students accessing RTOs in the same SA2 compared to those located in major cities. This likely reflects a combination of proximity (where a regional or remote SA2 can require travel across a much larger distance than a typically-suburb sized city SA2), travel options and training choices.
- There may be latent demand for training that is not being met because people lack access to transport or because of the absence of a local provider.

3.1 What VET is accessed in regional and remote Australia?

The distribution of enrolments by remoteness area varies across Australia. VET students from regional and remote areas made up 34% of all program enrolments in 2020, while accounting for 28% of Australia's population (noting the higher concentration of VET qualified workers highlighted in Section 1.1.1).[19] Figure 13 also shows that enrolments in VET vary by state and territory, with Queensland having a higher proportion of enrolments relative to its total population.

[19] Australian Bureau of Statistics (2022), 'Regional population, 2020-21 financial year', https://www.abs.gov.au/statistics/people/population/regional-population/latest-release.

Figure 13: VET enrolments by remoteness, state and territory, 2020



Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

The breakdown of enrolments by remoteness show the regional and remote composition of the Tasmania and Northern Territory populations (and hence student enrolments). This contrasts strongly with more populated states such as New South Wales and Victoria where the majority of enrolments are students residing in major cities.

Table 6: Share of VET program enrolments by remoteness area, state and territory, 2020

	Major Cities	Inner Regional	Outer Regional	Remote
New South Wales	69%	22%	7%	1%
Victoria	71%	24%	5%	0%
Queensland	58%	22%	16%	4%
South Australia	71%	14%	12%	3%
Western Australia	76%	10%	8%	6%
Tasmania	0%	65%	32%	3%
Northern Territory	0%	0%	63%	37%
Australian Capital Territory	100%	0%	0%	0%
Australia	**66%**	**21%**	**10%**	**3%**

Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

The states and territories determine eligibility for government funding for training. The proportion of enrolments in government-funded VET is therefore impacted by jurisdiction-specific priorities. These relate to industry and labour market conditions, skill development priorities (e.g. foundation skills) and VET funding policy. The distribution of government-funded enrolments within a state therefore generally reflects the type of training taking place, rather than specific policies targeted at regional and remote delivery.

The dynamics in Table 7 may reflect the varying uptake of training eligible for government funding within a jurisdiction. State and territory governments do also play a role in supporting delivery in regional and remote areas through additional funding for thin markets, for delivery in higher-cost contexts and student support services. These are not captured in Table 7, which presents the proportion of program enrolments that are government-funded by region.

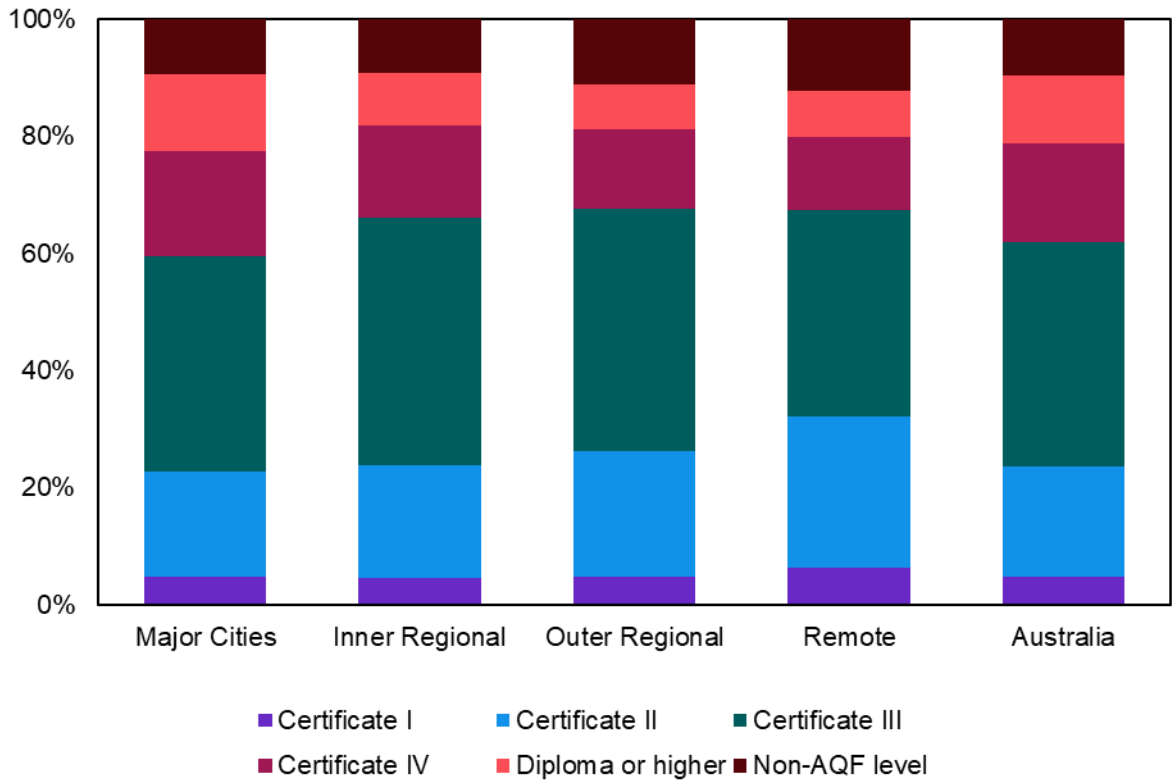
Table 7: Proportion of program enrolments that are government funded by remoteness, state and territory, 2020

	Major cities	Inner Regional	Outer Regional	Remote	Total
New South Wales	65%	71%	71%	71%	**67%**
Victoria	64%	62%	58%		**63%**
Queensland	57%	53%	51%	47%	**55%**
South Australia	55%	60%	63%	64%	**57%**
Western Australia	51%	54%	60%	65%	**53%**
Tasmania		62%	66%	62%	**63%**
Northern Territory			51%	63%	**56%**
Australian Capital Territory	57%				**57%**
Australia	**60%**	**62%**	**58%**	**57%**	**60%**

Note: Red text indicates the proportion is below the total state or territory-wide proportion; Inner regional in the Australian Capital Territory has been suppressed due to low enrolment counts.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

VET students in regional and remote areas are more likely to undertake lower-level qualifications than those training in major cities (Figure 14). In remote areas they are more likely to undertake qualifications at the certificate I and II level (32% of all enrolments compared to 24% for all Australia), while those studying a diploma or higher VET qualification in outer regional and remote areas is less than 8%.[20]

Figure 14: VET program enrolments by qualification level, 2020



Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

The most prominent fields of education differ according to remoteness. In 2020, engineering and related technologies and agriculture, environmental and related studies accounted for a higher proportion of total program enrolments in regional and remote areas, increasing with remoteness. Notably, program enrolments related to the delivery of essential services such as health and education are represented consistently across remoteness areas.

The prominence of some fields of education in these areas reflects the importance of certain industries to regional economies. For example, 79% of all people employed in the *Agriculture, Forestry and Fishing* industry work outside greater capital city areas (in 2022).[21]

[20] The reasons for the nature of this lower-level engagement with education in remote areas are complex. They extend beyond the scope of this study into access to VET.
[21] Australian Bureau of Statistics (2022) 'Labour Force Australia, Detailed, March 2022', https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release.

Table 8: Proportion of total program enrolments by field of education, 2020

	Major Cities	Inner Regional	Outer Regional	Remote	Australia
Society and culture	20%	20%	21%	18%	**20%**
Management and commerce	19%	16%	16%	15%	**18%**
Engineering and related technologies	14%	19%	22%	26%	**16%**
Architecture and building	9%	9%	7%	5%	**9%**
Mixed field programmes	9%	6%	7%	7%	**8%**
Food, hospitality and personal services	7%	8%	8%	6%	**7%**
Health	8%	7%	7%	6%	**7%**
Education	6%	5%	5%	6%	**5%**
Creative arts	3%	2%	1%	1%	**3%**
Agriculture, environmental and related studies	2%	4%	5%	7%	**3%**
Information technology	2%	2%	2%	1%	**2%**
Natural and physical sciences	1%	0%	0%	0%	**1%**

Notes: Australia includes enrolments from Australia's offshore areas as well as those categorised as "unknown" which are not included in the categories of Major Cities, Regional or Remote. Enrolments with no field of education have been excluded from this table. Table is ordered by field of education from highest to lowest proportion of total program enrolments for Australia.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

VET enrolments overall are highly concentrated in a relatively small number of training products. The top 10 qualifications explain between 18% and 20% of total program enrolments, depending on remoteness (see Table 9).

The most popular qualifications in terms of enrolments are very similar across remoteness area. This demonstrates the sustained need for these types of qualifications – despite differences in industry and population compositions – across regions. This is shown in particular for the Certificate III in Individual Support and early childhood related qualifications.

Remote areas see a higher number of enrolments in trade-related qualifications associated with mining and other extractive industries, reflecting the local industry represented in these geographies. These mining-related qualifications (one of which is also high volume in outer regional areas) replace qualifications popular in other regions, such as Certificate III in Fitness, Certificate III in Carpentry and Certificate II in Hospitality.

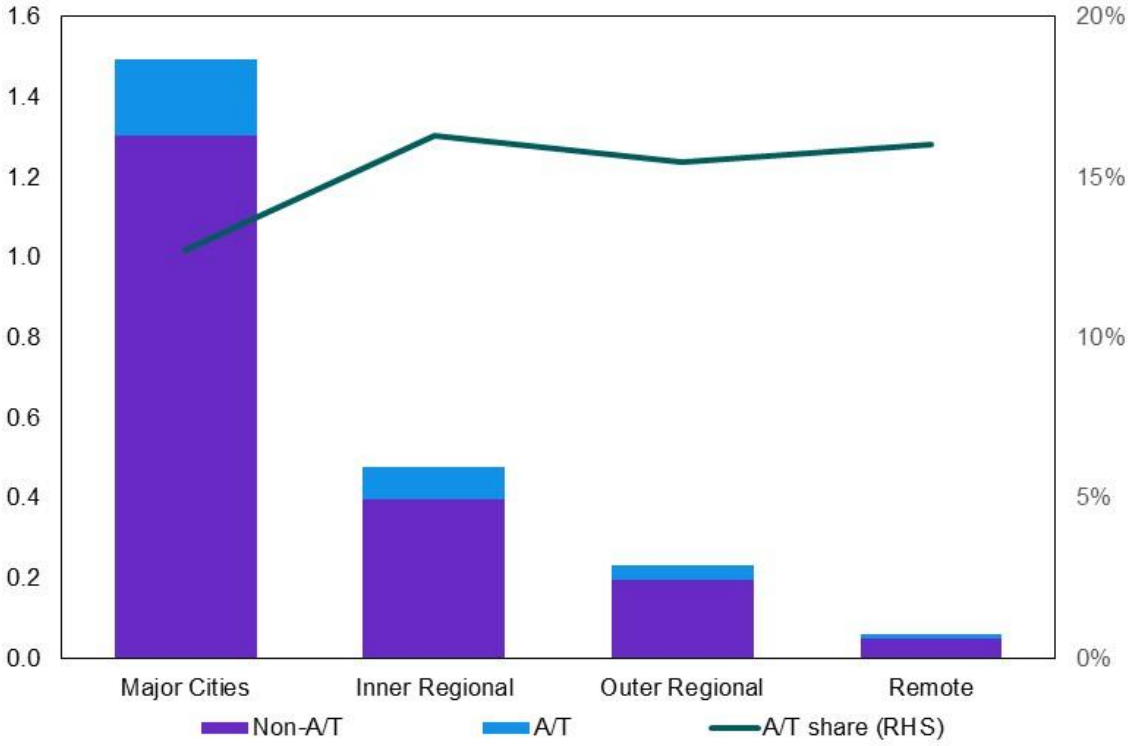
Table 9: Top 10 qualifications by remoteness area, 2020

Qualification name	Major Cities	Inner Regional	Outer Regional	Remote	Australia
	Rank	*Rank*	*Rank*	*Rank*	*Rank*
Certificate III in Individual Support	1	1	1	2	1
Certificate III in Early Childhood Education and Care	2	2	3	1	2
Diploma of Early Childhood Education and Care	3	8	11	9	5
Certificate II in Skills for Work and Vocational Pathways	4	4	2	3	3
Certificate III in Business	5	6	4	8	4
Certificate IV in Training and Assessment	6	5	6	5	6
Certificate III in Electrotechnology Electrician	7	7	9	11	8
Certificate III in Fitness	8	12	8	16	9
Certificate III in Carpentry	9	3	16	28	10
Certificate II in Hospitality	10	9	5	20	7
Other qualifications in the Top 10 by remoteness					
Certificate III in Retail	13	10	13	41	13
Certificate III in Community Services	18	11	10	21	14
Certificate III in Civil Construction Plant Operations	34	15	7	4	19
Certificate III in Surface Extraction Operations	131	31	20	6	58
Certificate II in Conservation and Land Management	354	243	88	10	187
Certificate II in Drilling Oil/Gas (On Shore)	603	441	283	7	302
Top 10 qualifications as a proportion of total enrolments	**18.2%**	**18.2%**	**19.9%**	**18.5%**	**18.2%**

Notes: Rankings in red are outside the Top 10 for the respective remoteness category. The totals for Australia include government funded and fee for service program enrolments for all regions (including students with permanent residence addresses in offshore areas and “unknown” regions).
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Table 9 shows how the types of training that individuals engage with varies across regions. The availability of apprenticeships and/or traineeships varies by qualification; this may be reflected across regions. However, overall differences in the extent to which students across remoteness areas are in an apprenticeship or traineeship are not substantial, representing 13% of program enrolments in major cities, compared to 16% in remote areas.

Figure 15: Apprenticeship and trainee status, by remoteness (millions)



Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

3.1.1 Who is accessing VET?

Vocational education provides an important pathway to employment and further education. It is therefore useful to examine the extent to which VET is being accessed by students from a variety of backgrounds, and to identify barriers to access, choice and positive outcomes.

Female participation in VET is strongest in major cities, decreasing with remoteness. At a national level, differences in male and female participation remain small across remoteness areas. More substantive differences exist within states and territories. For example, the female share of program enrolments ranges from 41% in remote Queensland to 46% in major cities. Similar variation is observed between remote and inner regional Tasmania.

Table 10: Female program enrolments, proportion total program enrolments, 2020

	Major cities	Inner Regional	Outer Regional	Remote
New South Wales	52%	52%	52%	53%
Victoria	49%	46%	47%	
Queensland	46%	43%	43%	41%
South Australia	51%	47%	47%	49%
Western Australia	50%	50%	48%	47%
Tasmania		48%	48%	41%
Northern Territory			47%	49%
Australian Capital Territory	45%			
Australia	**49%**	**47%**	**47%**	**46%**

Note: As students can be enrolled in more than one program at once enrolment count is not equal to student count, and this ratio may not be equal between comparison groups. Inner regional in the Australian Capital Territory has been suppressed due to low enrolment counts.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Reflecting the proportion of Indigenous Australians living in regional and remote areas, Indigenous students account for a higher proportion of total enrolments in these areas (see Table 11). In 2020, Indigenous students accounted for 28% of total program enrolments in remote areas, commensurate with the population proportion of Indigenous Australians in remote areas (29%). Conversely, Indigenous students accounted for a higher proportion of total program enrolments than their population size in major cities (4% compared to 2%), inner regional (8% compared to 4%) and outer regional (13% compared to 7%).[22]

[22] Population proportions are calculated using ABS 2016 Census data, also reported in Section 2.1 of this report.

Table 11: Indigenous student program enrolments, proportion of total program enrolments, 2020

	Major cities	Inner Regional	Outer Regional	Remote
New South Wales	5%	12%	16%	31%
Victoria	2%	4%	7%	
Queensland	4%	8%	14%	22%
South Australia	5%	7%	12%	33%
Western Australia	4%	4%	8%	14%
Tasmania		6%	10%	12%
Northern Territory			16%	46%
Australian Capital Territory	4%			
Australia	**4%**	**8%**	**13%**	**28%**

Note: As students can be enrolled in more than one program at once enrolment count is not equal to student count, and this ratio may not be equal between comparison groups. Caution should also be taken when using data with large numbers of 'not known' responses, including Indigenous status. Inner regional in the Australian Capital Territory has been suppressed due to low enrolment counts.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Students with a disability accounted for 8% of all program enrolments in 2020, and at higher proportions of total enrolments in inner regional Australia, broadly reflecting population shares (discussed in Section 1.1.1). Across all remoteness areas, the proportion of enrolments for students with a disability was higher than the population proportion for this group.[23]

Table 12: Students with a disability enrolments, proportion of total program enrolments, 2020

	Major cities	Inner Regional	Outer Regional	Remote
New South Wales	9%	12%	10%	8%
Victoria	8%	10%	10%	
Queensland	7%	8%	6%	5%
South Australia	7%	9%	9%	5%
Western Australia	9%	9%	9%	5%
Tasmania		11%	11%	10%
Northern Territory			6%	6%
Australian Capital Territory	8%			
Australia	**8%**	**10%**	**8%**	**5%**

Note: As students can be enrolled in more than one program at once, enrolment count is not equal to student count, and this ratio may not be equal between comparison groups. Caution should also be taken when using data with large numbers of 'not known' responses, including disability status. Inner regional in the Australian Capital Territory has been suppressed due to low enrolment counts.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

The pattern of engagement of students from low socioeconomic backgrounds with VET is not clear as remoteness increases.[24] However, a higher share of VET students in regional and remote areas in general are from low socioeconomic backgrounds.

[23] Population proportions are calculated using ABS 2016 Census data, also reported in Section 2.1 of this report.
[24] For this report, a 'low socio-economic background' is defined as those classified as belonging to SEIFA (IRSD) Quintile 1: most disadvantaged.

Table 13: Students from low socioeconomic backgrounds, proportion of total program enrolments, 2020

	Major cities	Inner Regional	Outer Regional	Remote
New South Wales	18%	24%	43%	46%
Victoria	15%	18%	38%	
Queensland	17%	39%	29%	26%
South Australia	10%	8%	23%	16%
Western Australia	27%	30%	70%	19%
Tasmania		43%	62%	58%
Northern Territory			5%	44%
Australian Capital Territory	0%			
Australia	**16%**	**27%**	**35%**	**28%**

Note: As students can be enrolled in more than one program at once enrolment count is not equal to student count, and this ratio may not be equal between comparison groups. Caution should also be taken when using data with large numbers of 'not known' responses, including SEIFA. Inner regional in the Australian Capital Territory has been suppressed due to low enrolment counts.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

3.2 How is VET accessed in regional and remote Australia?

The availability of training may be considered in terms of the number of RTOs within a region, and their scope of delivery (considered by the number of training products that they offer). This analysis is based on enrolment activity. Availability of training is assessed by matching a student and a RTO. This means there may be RTOs offering programs not captured in this analysis due to the absence of demand and similarly, there may be latent demand where students are unable to access local training options. This analysis is based on student location, rather than RTO delivery location.

Table 14 shows the number of RTOs delivering training by student remoteness, and the number of training products being delivered. This shows that more than 2,500 RTOs deliver to students located in major cities, while this number is about 1,300 in remote areas. Similarly, students in regional and remote areas access a more constrained set of qualifications than those in major cities, with the number of unique training products accessed decreasing with remoteness.

The average number of program enrolments per RTO decreases with remoteness, reflecting differences in population density (noting that this population density is assessed at student location, rather than RTO location). Small class sizes and the difficulty in attaining economies of scale represents one of the challenges faced in delivering VET in regional, rural and remote areas.

Table 14: Number of RTOs and qualifications with enrolments by student location, 2020

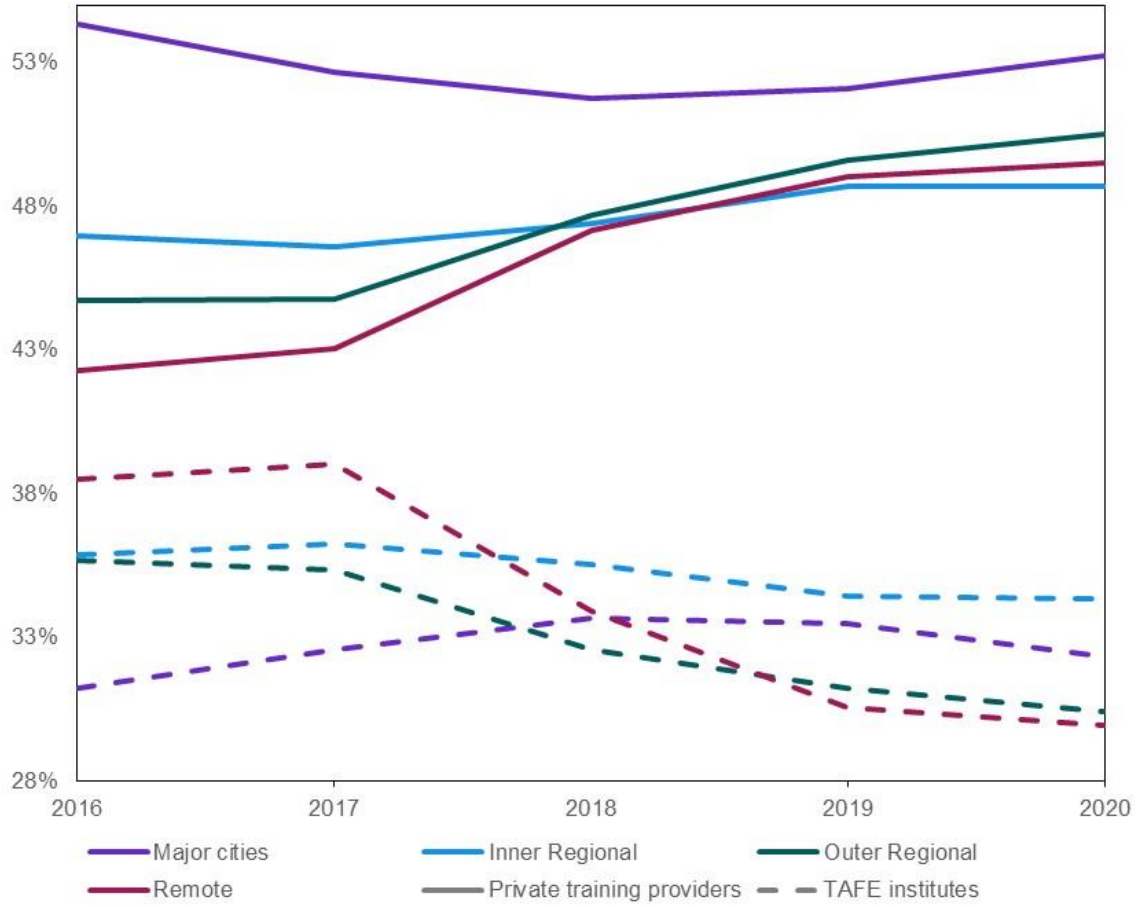
Remoteness area	Number of RTOs	Number of training products	Average RTO enrolments	Average program enrolments*
Major Cities	2,565	2,121	585	70
Inner Regional	2,338	1,906	205	30
Outer Regional	1,923	1,666	120	15
Remote	1,316	1,177	45	10

Note: As RTOs may deliver in more than one region, an RTO may be counted more than once. The total is not equal to the total number of RTOs. The number of RTOs and training products is based on program enrolment figures (capturing both government-funded and full fee paying students). The table includes RTOs delivering online or remote training to students in regional and/or remote areas. Average program enrolments refer to average enrolments per program per RTO.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

3.2.1 How do regional and remote students engage with training providers?

In recent years, students from regional and remote areas, particularly in remote locations, have become increasingly more likely to access VET through a private RTO rather than a public provider (TAFE; Figure 16). In 2016 private RTOs accounted for 42% of program enrolments in remote areas, increasing to 50% in 2020. This is approaching similar levels to that in major cities, where enrolments with private RTOs explain 53% of enrolments. These figures reflect the level of activity in relation to enrolments. That is, they may not depict the levels of actual activity undertaken due to the types of qualifications studied by provider type (e.g. a very large number of first aid short courses are undertaken through primarily private providers).

Figure 16: Proportion of VET program enrolments by remoteness area, private RTOs and TAFEs, 2016 to 2020

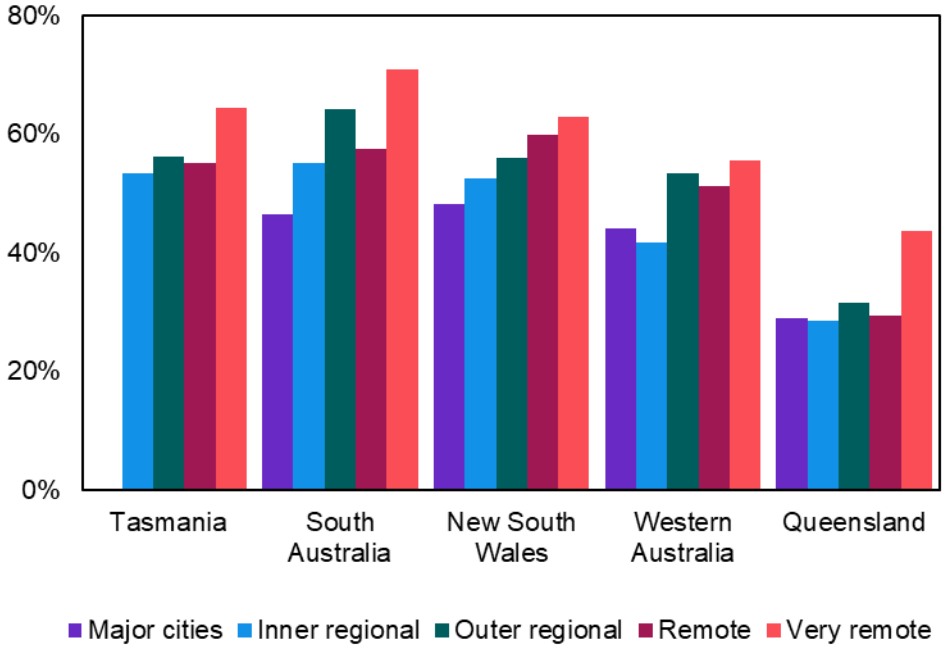


Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

While higher engagement with private RTOs is consistently observed overall across the sector (at relatively equal levels), the concentration of enrolments in larger RTOs provides one indication of the extent of student choice. That is, a more competitive market with higher relative student choice may be reflected through more dispersed enrolments across a higher number of RTOs; while high concentration in a small number of RTOs may be indicative of lower levels of RTO choice.

Program enrolments in regional and remote areas are, on average, more concentrated among the top five RTOs than in metropolitan areas (Figure 17). This is particularly the case in very remote areas. This may point towards both the lower quantum of total enrolments and the lower number of RTOs delivering training in these areas.

Figure 17: Enrolments in top five RTOs by remoteness, 2020



Note: Selected states and territories.

Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

While the analysis of RTO concentration may provide one measure of choice, care should be taken in drawing conclusions from this analysis. This analysis is subject to the following caveats:

- RTOs are only captured if they have active enrolments. That is, there may be RTOs offering training but with no activity in the reference period that are not included in this analysis.
- Access and choice should also be considered in relation to the number of training products offered within an RTO. As this analysis focuses on RTOs and enrolments, it does not provide a complete picture of what students may choose from when attending VET in their region.
- This analysis is also subject to both RTO – and in particular TAFE – structures and data reporting. For example, the New South Wales public provider – TAFE NSW – represents one large provider with a number of campuses but is consistently reported as the same RTO. Conversely, the Victorian public provider landscape exhibits a number of smaller TAFE institutes spread across a range of delivery locations (and consequently, reported here as individual RTOs). These differences extend across the country and to private RTOs.

Access to training by regional area

An accurate picture of choice considers the training options available to an individual student (i.e. rather than on an aggregate scale). Undertaking analysis at the SA3 level using student residence location finds that while, in general, students living in regional and remote areas access a narrower range of training providers, there are some exceptions, particularly relating to agriculture, environmental and related studies.

To understand how much choice of provider students have, it may be more instructive to undertake analysis at the qualification level. That is, for a given qualification, what choice do students have in terms of training provider given where they live? While this varies, regardless of the remoteness of the SA3, there are relatively similar (and small) numbers of RTOs delivering training in all the qualifications selected for this analysis, with one exception – the Certificate III in Individual Support. This diverse engagement with high-volume qualifications across states further demonstrates the range of training undertaken across Australia, and the influence of local industries in training choice.

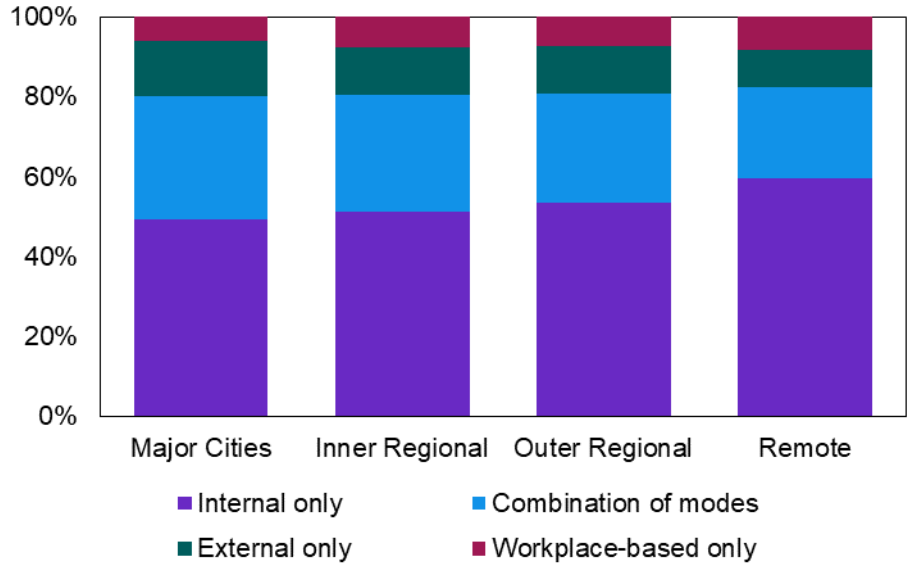
3.3 How do regional and remote students engage with different modes of study?

VET provides the flexibility for training to be delivered across a range of modes, including internal delivery (e.g. classroom-based), external delivery (e.g. online or by correspondence), workplace-based delivery or a combination of these.[25] In the data collections, mode of delivery is set at the subject level. Analysis in this section is conducted on subjects rather than programs and therefore includes non-nationally recognised programs (i.e. enrolments in individual units of competency or locally developed skill sets).

Students from remote areas are more likely to undertake classroom-based training than students from major cities (see Figure 18). In 2020, 60% of subject enrolments for students from remote areas were internally delivered, compared to 49% for students from major cities. Considered in conjunction with Table 3 and Table 15, this reflects higher (relative) participation in engineering and related technologies and agriculture, environmental and related studies in outer regional and remote areas, where there is higher than average internal delivery.

[25] The Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS) is the data standard for the VET activity data used in this report. Its *delivery mode identifier* has four categories – internal, external, workplace-based delivery or a combination of these. Internal delivery is where the client and trainer interact in real-time and physically attend training delivery locations organised or managed by the RTO. External delivery is where the client does not attend a physical delivery location and all training and training materials are accessed online or by correspondence. Workplace-based delivery includes that conducted in the workplace, conducted by the RTO or the employer.

Figure 18: Subject enrolments by mode of delivery and remoteness, 2020



Note: Excludes the delivery mode type of "Not applicable (RPL or credit transfer)".
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Table 15 shows the higher share of training undertaken via internal only delivery in the engineering and related technologies field of education, at 60% (compared to the average of 51%). This contrasts with education, management and commerce, and society and culture where less than 50% of subject enrolments are delivered in internal only contexts.

Table 15: Proportion of subject enrolments by field of education and delivery mode, 2020

	Internal only	External only	Workplace-based only	Combination of modes
Natural and physical sciences	43%	6%	13%	38%
Information technology	63%	15%	3%	19%
Engineering and related technologies	60%	3%	12%	24%
Architecture and building	62%	10%	6%	22%
Agriculture, environmental and related studies	54%	10%	9%	27%
Health	44%	11%	3%	42%
Education	21%	20%	9%	50%
Management and commerce	39%	31%	10%	20%
Society and culture	42%	14%	4%	41%
Creative arts	78%	9%	2%	12%
Food, hospitality and personal services	60%	2%	13%	25%
Mixed field programmes	83%	7%	0%	10%
Average	**51%**	**13%**	**7%**	**29%**

Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

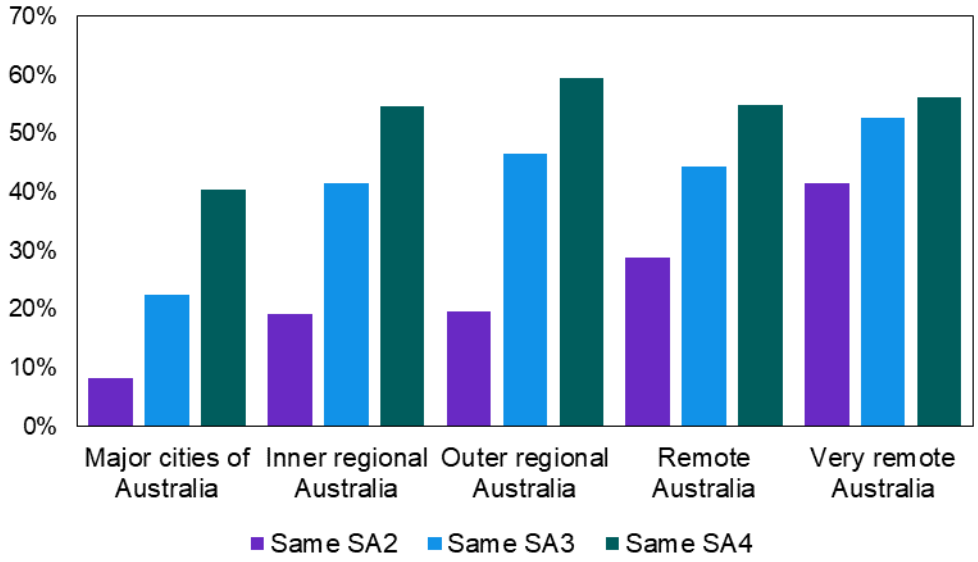
3.4 How do students engage with local training providers across Australia?

The analysis presented so far has identified some differences in what training is accessed in regions across Australia. These may be due both to students travelling (near or far) to access training options, or because training is delivered online. A subsequent question is what training VET students can access from local providers without having to travel.

To examine that question, the ABS Statistical Area classification is used, ranging from SA2 to SA4. While these geographical areas vary in size, as do travel times within them, they are in general alignment with population size, so provide a reasonable indication of activities taking place in a local area.

A higher proportion of students living in regional and remote areas access training locally compared to students living in metropolitan areas (Figure 19). This finding is clearest at the SA2 level; where 49% of students in very remote areas undertook training within the same area, compared to 9% of students in major cities. This difference is due both to the geographical size of SA2s (as noted above, alignment to population size results in geographically smaller SA2s in capital cities) and to transport infrastructure available for moving around these areas.

Figure 19: Share of program enrolments that are local delivery, 2020



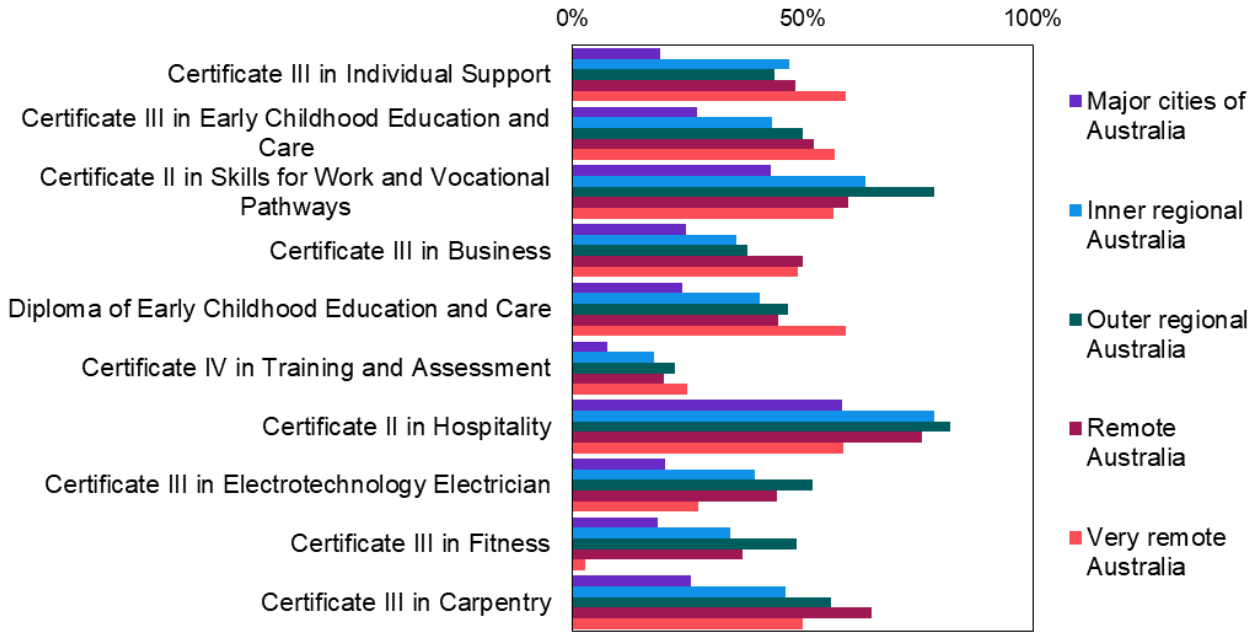
Note: Students may attend more than one delivery location. These figures identify only the closest delivery location to a student's usual residence address and do not capture all potential delivery locations they attend, defined at the SA2 level.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

The proportion of students undertaking local training varies by qualification (see Figure 20). Key differences include:

- Higher local delivery for the Certificate II in Hospitality and Certificate II in Skills for Vocational Pathways is observed across all remoteness areas.
- Relatively low local delivery is observed for the Certificate IV in Training and Assessment, though it is broadly consistent across remoteness areas (with the exception of major cities).

- Higher local delivery of care-related qualifications outside major cities likely reflects travel distances and the greater likelihood of crossing SA3 boundaries for work (and in this case, work placements) in cities compared to regions.

Figure 20: Share of top 10 qualifications that are delivered within an SA3 region, 2020



Note: Students may attend more than one delivery location. These figures identify only the closest delivery location to a student's usual residence address and do not capture all potential delivery locations they attend.
Source: NCVER 2021, Total VET students and courses 2020, NCVER, Adelaide.

Analysis of access to local training options by SA3

The SA3 analysis of delivery shows that some students are accessing courses outside their place of residence to gain access to a greater range of courses and RTOs. The analysis also shows that often local delivery of high-priority qualifications may not match local demand. This means that students are travelling outside their local region to study their preferred qualification.

The analysis indicates that in a number of regions – regardless of remoteness – students may have to travel beyond SA3 boundaries to access their preferred qualification. The potential implications of travelling outside SA3 boundaries differs by remoteness. SA3 regions are smaller in major cities and travel across SA3 boundaries is not unusual to access education and/or employment. This differs in regional and remote areas, with physically larger SA3 regions (and hence travel times) and often less access to public transport.

4 What is the student experience in regional and remote Australia?

Key findings

- Student satisfaction with training is generally high and has remained consistently so between 2017 and 2021 (at approximately 90%).
- Minimal variation is currently observed in student satisfaction levels based on remoteness, on average.
- However, there is more nuance within these figures once AQF level and field of education are considered. For instance, overall satisfaction relating to Certificate I qualifications has decreased over time, while an increase has been observed for diploma and above qualifications in major cities and inner regional areas.
- Lower overall satisfaction is observed for information technology courses, with the most substantial difference observed in remote areas.
- Students in regional and remote areas have lower completion rates on average, with these differing across jurisdictions.

The NCVER conducts the annual Student Outcomes Survey (SOS) of students who have completed their VET training in the previous calendar year in Australia. The survey collects information on several aspects of training, including reasons for training, employment and further study outcomes, and satisfaction with various components of delivery. The SOS is collected the year after completion. For instance, the 2021 survey has coverage of 2020 completers.

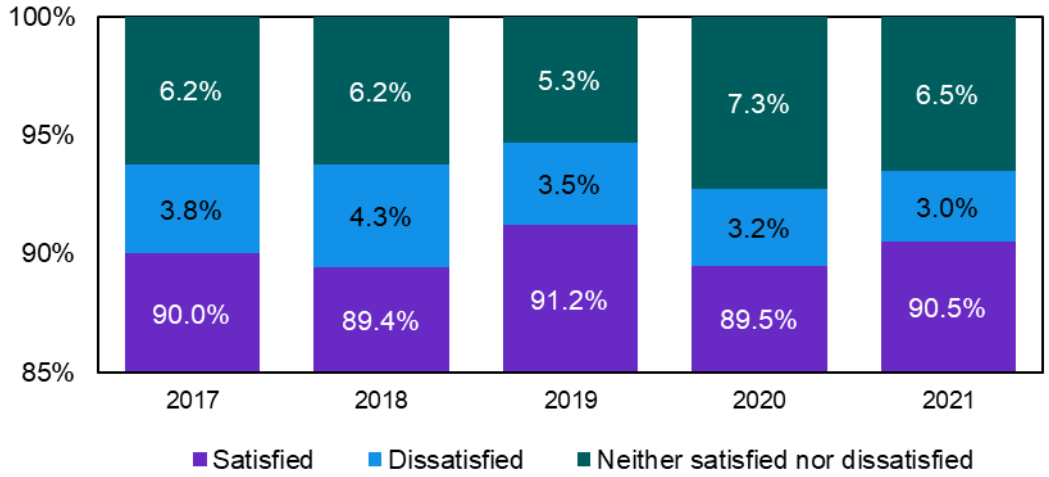
Satisfaction is a subjective concept and only one indication of VET performance. Examining the SOS data supplements the quantitative analysis of enrolment activity and completion rates, and therefore helps build a stronger understanding of how students from regional and remote areas engage with VET. However, these SOS results should be interpreted with the understanding that survey data, given their self-reporting nature, are subject to response bias (including acquiescence bias).

In this section, students' overall satisfaction with training is analysed through several characteristics such as AQF level, field of education, funding source and student completion status. To develop a more detailed understanding of potential contributors to satisfaction, analysis is included of the satisfaction level of support services, facilities, learning resources and the location of the training provider. All characteristics are reviewed with a remoteness lens.

4.1 How satisfied are students with training?

Students' reported level of satisfaction with overall training remained broadly constant at about 90% between 2017 and 2021 (Figure 21).

Figure 21: Satisfaction with overall training, 2017 to 2021



Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

Students in all regions reported generally consistent satisfaction levels in 2021; approximately 90% of students were satisfied with overall training (see Figure 22). This had improved slightly since 2017 in major cities and inner regional areas (0.6 and 1.3 percentage points respectively), while overall satisfaction *decreased* by almost 3 percentage points in remote areas (see Figure 23).

Figure 22: Satisfaction level by remoteness, 2021

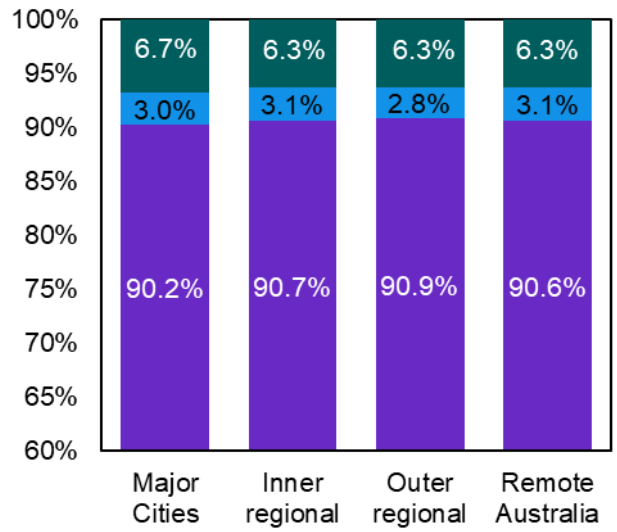
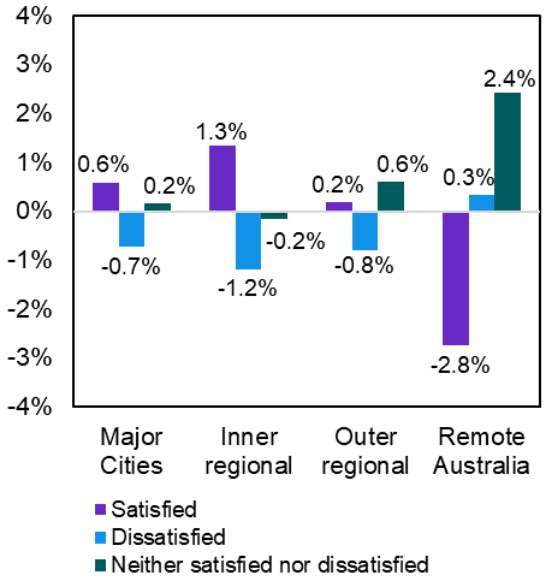


Figure 23: Satisfaction level by remoteness, % change, 2017 to 2021



Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

Nationally, satisfaction with overall training generally declines with increases in the qualification level, though this varies by remoteness area (Figures 24 and 25). Patterns between levels and remoteness areas remain relatively consistent, with some exceptions:

- decreased satisfaction levels reported for certificate I in remote and outer regional Australia; and
- increased satisfaction for diploma or higher qualifications in inner regional areas.

Figure 24: Satisfaction with overall training by AQF level and remoteness, 2017

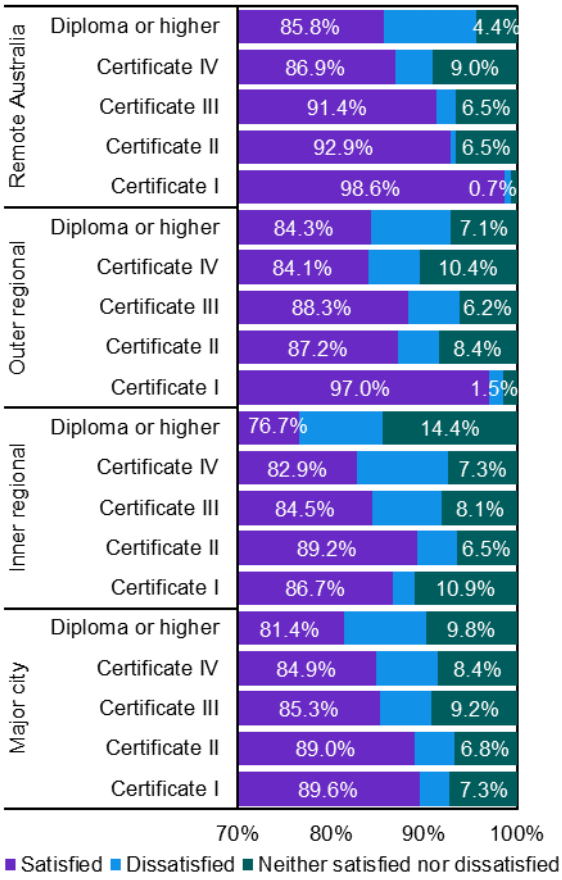
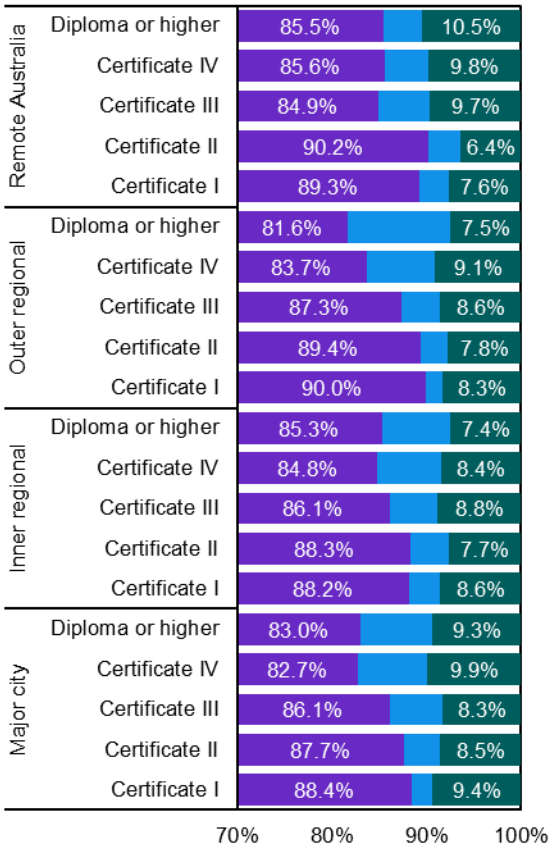


Figure 25: Satisfaction with overall training by AQF level and remoteness, 2021

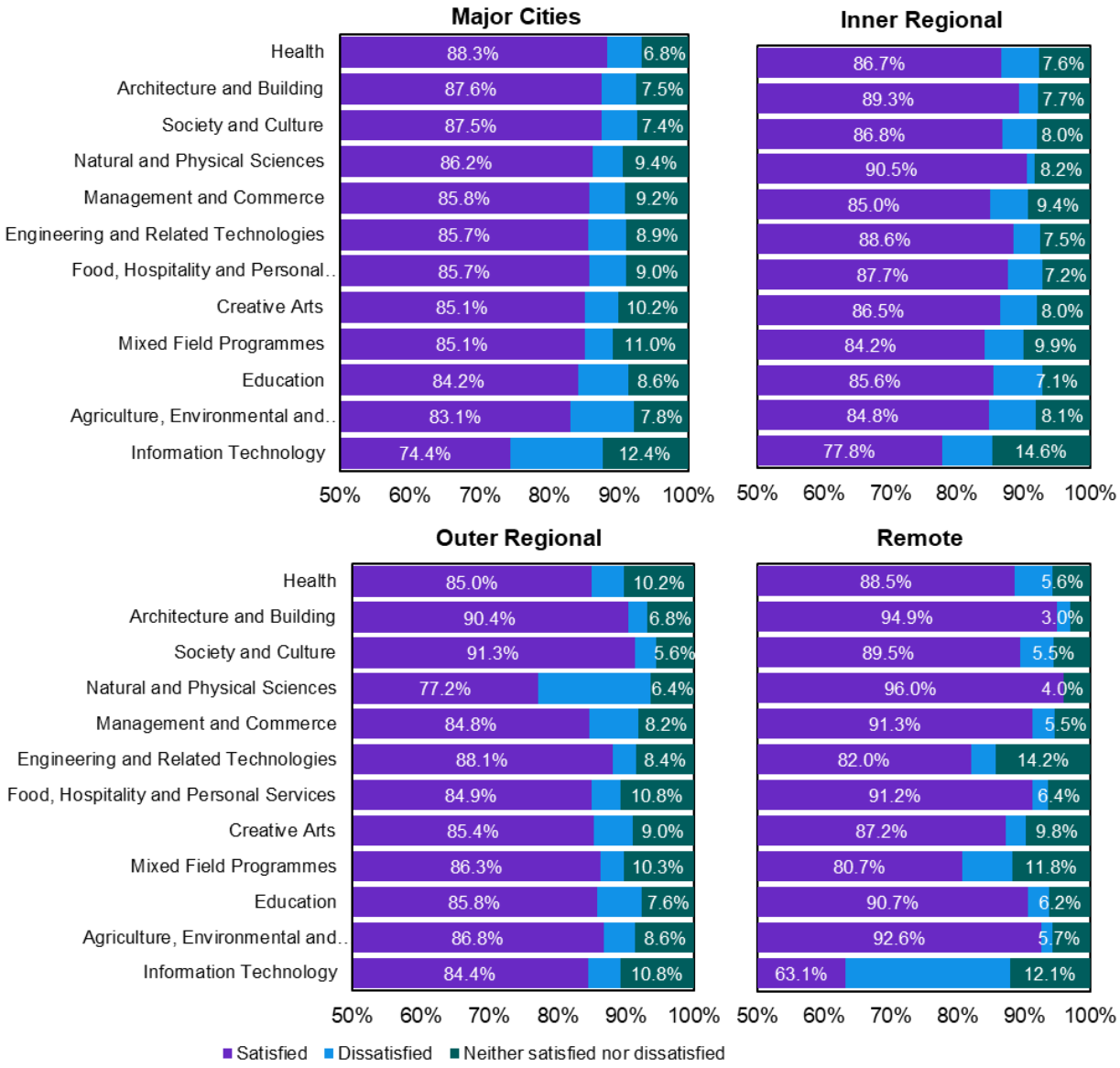


Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

Satisfaction levels appear to vary across fields of education (Figure 26). Significantly and well above the other fields, information technology programs are associated with a high level of *dissatisfied* students in combination with the *neither satisfied nor dissatisfied* respondents. This varies by remoteness area, with the lowest number of satisfied students residing in remote Australia.

Student satisfaction with overall training in agriculture, environmental and related studies programs range from 74% in major cities to 93% in remote Australia. This may reflect the prevalence and job opportunities in relation to this field depending on where it is studied.

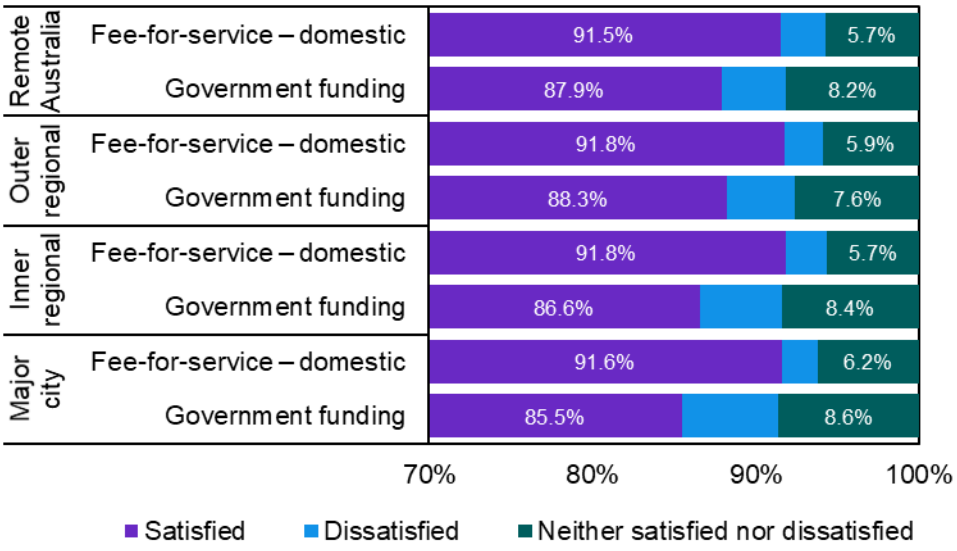
Figure 26: Satisfaction with overall training by field of education and remoteness area, 2021



Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

Satisfaction levels remain above 85% across remoteness areas, with generally consistent patterns in satisfaction differentials between funding types. However, the satisfaction gap is the widest in major cities, where students who have completed government-funded training tend to have lower satisfaction levels (Figure 27). These differences are broadly reflective of employment after training in 2021, where students who have completed fee-for-service training are more likely to be employed after training than government-funded students. The most substantial differences for both employment and satisfaction are observed in major cities.

Figure 27: Satisfaction with overall training by funding source and remoteness, 2021

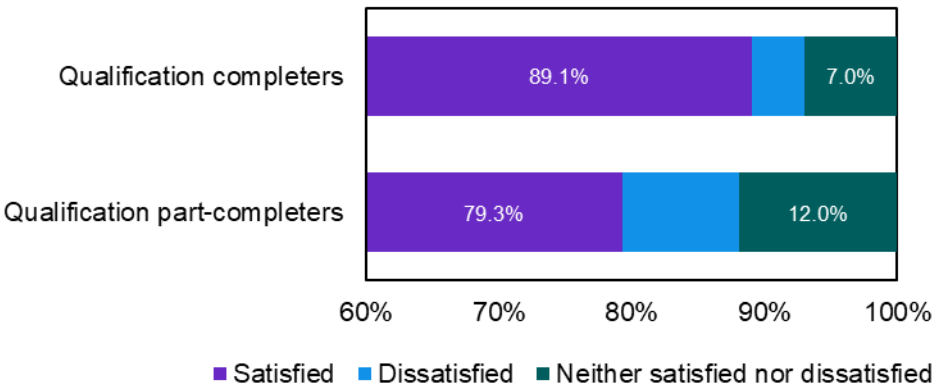


Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

As defined by the NCVER, qualification completers are students who completed a training package qualification or an accredited qualification. Part-completers are students who have only completed part of their training or qualification, either a training package or accredited qualification, or a short course (training package skill set or accredited course). An additional response bias may be present for part-completers because it is less possible to observe job-related (or other) outcomes related to training.

Figure 28 indicates the satisfaction with overall training by the qualification completers and part-completers. Those who complete a qualification are observed to have higher satisfaction rates than part-completers. Differences may reflect genuine dissatisfaction during training (and hence non-completion), different reasons for training and/or employment outcomes following training. Research into the benefits of VET typically focus on VET completers, limiting the extent to which these differences can be analysed on a large scale (i.e. beyond the SOS). The factors contributing to completion are discussed further in Section 4.3.

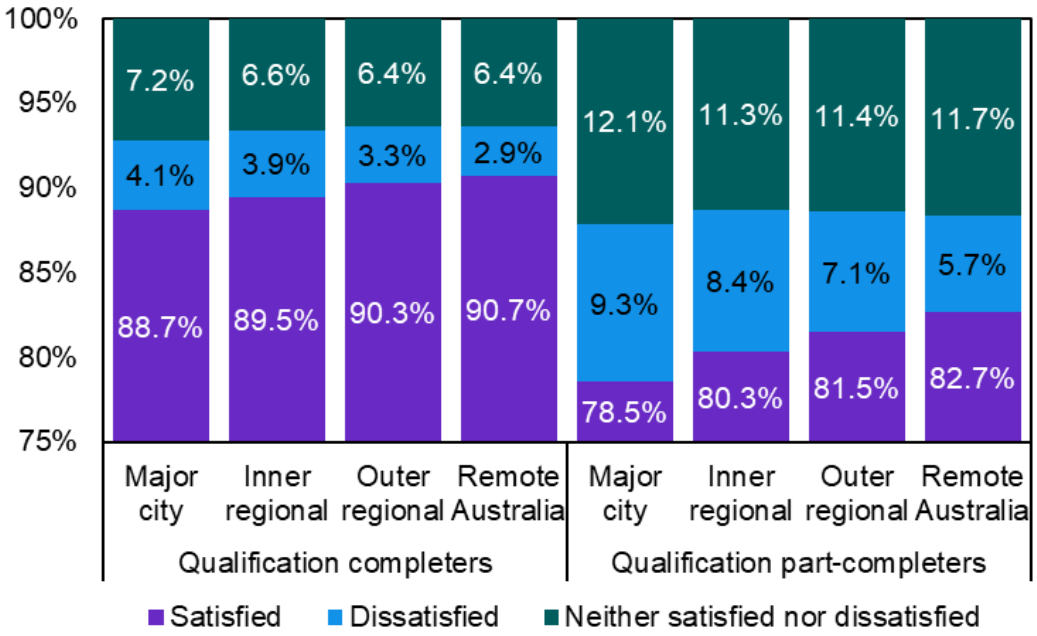
Figure 28: Satisfaction with overall training by qualification part-completers and completers, 2021



Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

Adding the remoteness perspective reveals some regional differences. While qualification part-completers remain at the lowest level of satisfaction, the percentage of satisfied students improves with remoteness (Figure 29). This is also observable with qualification completers. Another interesting observation is the high level of satisfaction of students in remote Australia (91% for completers and 83% for part-completers).

Figure 29: Satisfaction with overall training by qualification completers, part-completers by remoteness, 2021



Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

4.2 How does overall satisfaction depend on other factors?

The NCVER SOS also includes questions on satisfaction with specific aspects related to training. Figures 30 to 33 illustrate the students' responses in 2021 on the following: satisfaction with support services, facilities, learning resources and location of training provider.

Figure 30: Satisfaction with support services

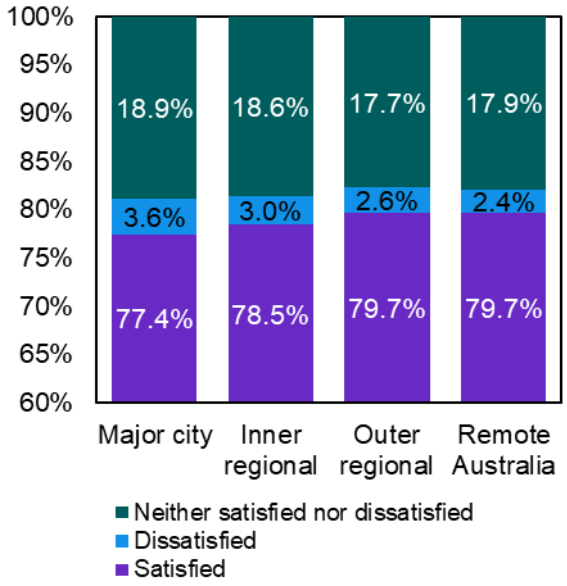


Figure 31: Satisfaction with facilities

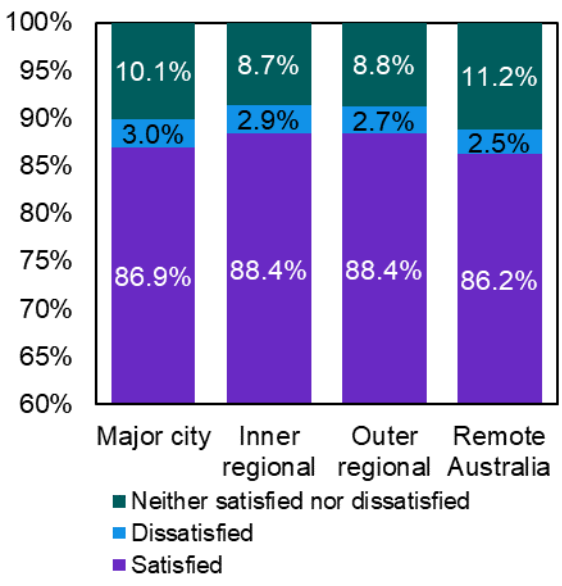


Figure 32: Satisfaction with learning resources

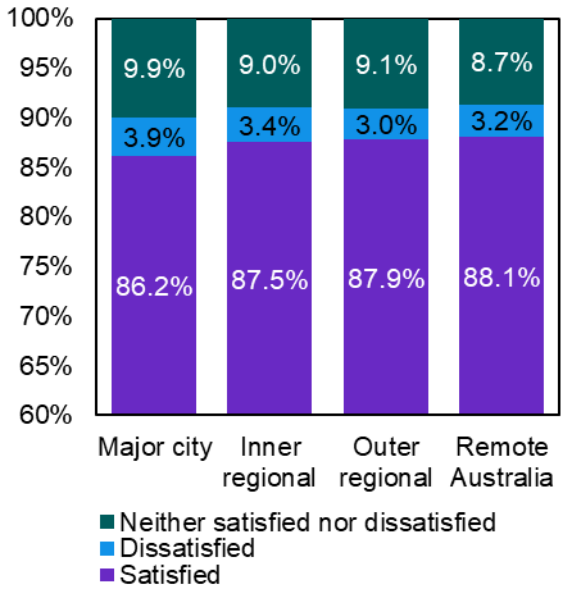
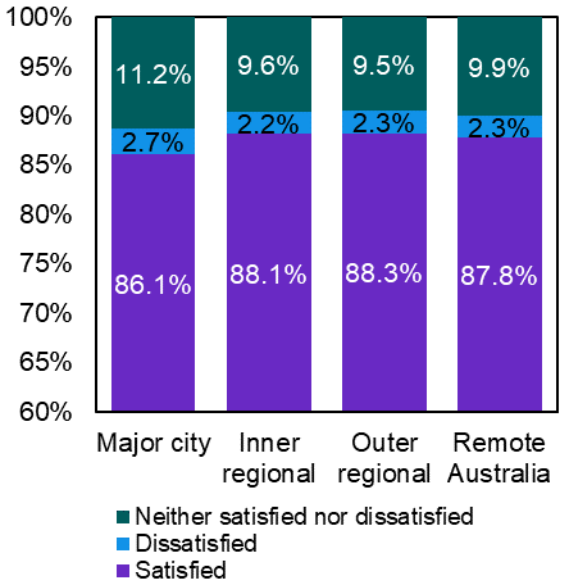


Figure 33: Satisfaction with location of training provider



Source: NCVER 2021, VET student outcomes 2021, NCVER, Adelaide.

It appears students are least satisfied with support services, with satisfaction levels all under 80% (Figure 30). At this level of detail, this suggests that the nature or success of support services does not differ by remoteness.

Students in remote areas report a slightly lower level of satisfaction with facilities; however, variation remains within approximately 2% across regions (Figure 31). Conversely, satisfaction relating to available learning resources (Figure 32) increases with remoteness, though differences remain small between regions. Finally, students in major cities report a marginally lower level of satisfaction relating to the location of their training provider compared to other remoteness areas (Figure 33). Here, it is important to reiterate that

satisfaction is a subjective measure. The responses on delivery location may represent different tolerances and contexts.

4.3 What are VET completion rates in regional and remote areas?

The flexibility of VET, and its vocational orientation, means that sometimes non-completion of training can indicate success: the learner has acquired the desired skills or finds a job before receiving certification. Nevertheless, especially in the apprenticeship system, poor completion rates are a concern because those who complete their training have, on average, better employment outcomes than those who do not.

Completion rates are influenced by a range of factors, including:

- Student attributes – age, disability status, gender, highest prior education level, Indigenous status and labour force status.
- Provider attributes – enrolment size and provider type.
- Course attributes – whether the course was being delivered as an apprenticeship or traineeship, the field of education and the level of education.
- Student choice – the delivery mode and whether the course was commenced full-time.
- Location of training delivery.

NCVER research identified that some factors have a stronger influence on completion rates, with course and student attributes accounting for over 70% of the variation in completion rates.[26] Prior research has also identified that students' initial intentions to complete increase with actual completion probabilities, and that the benefits to completion and satisfaction with training play only minor roles in shaping students' completion patterns. Further, the determinants of completion are typically high annual hours of enrolment and enrolment in higher level qualifications.[27]

Measurement of completion rates

The NCVER publishes completion rates on an annual basis. To calculate completion rates, NCVER tracks the completion status for students from the year they commence their VET qualification through to completion. For NCVER to obtain reliable estimates, enough time must have passed for the majority of students to have completed their qualification. The NCVER's methodology allows four years after a qualification commences before observed actual completion rates are reported. For example, as the most recent Total VET students and courses data at the time of this analysis was 2020, the actual completion rates can be reported for commencement years 2015 and 2016.

NCVER projects completion rates where it does not hold four years of history since commencement. That is, for enrolment years 2017 onwards, completion rates are a projection rather than an observed actual. Projected completion rates are an estimate of the proportion of VET qualifications commenced in a given year that will be completed. Projected completion rates are likely to be overstated due to the high proportion of students continuing their studies in the forecast calculations. Projected completion rates are revised over time, such that as time passes

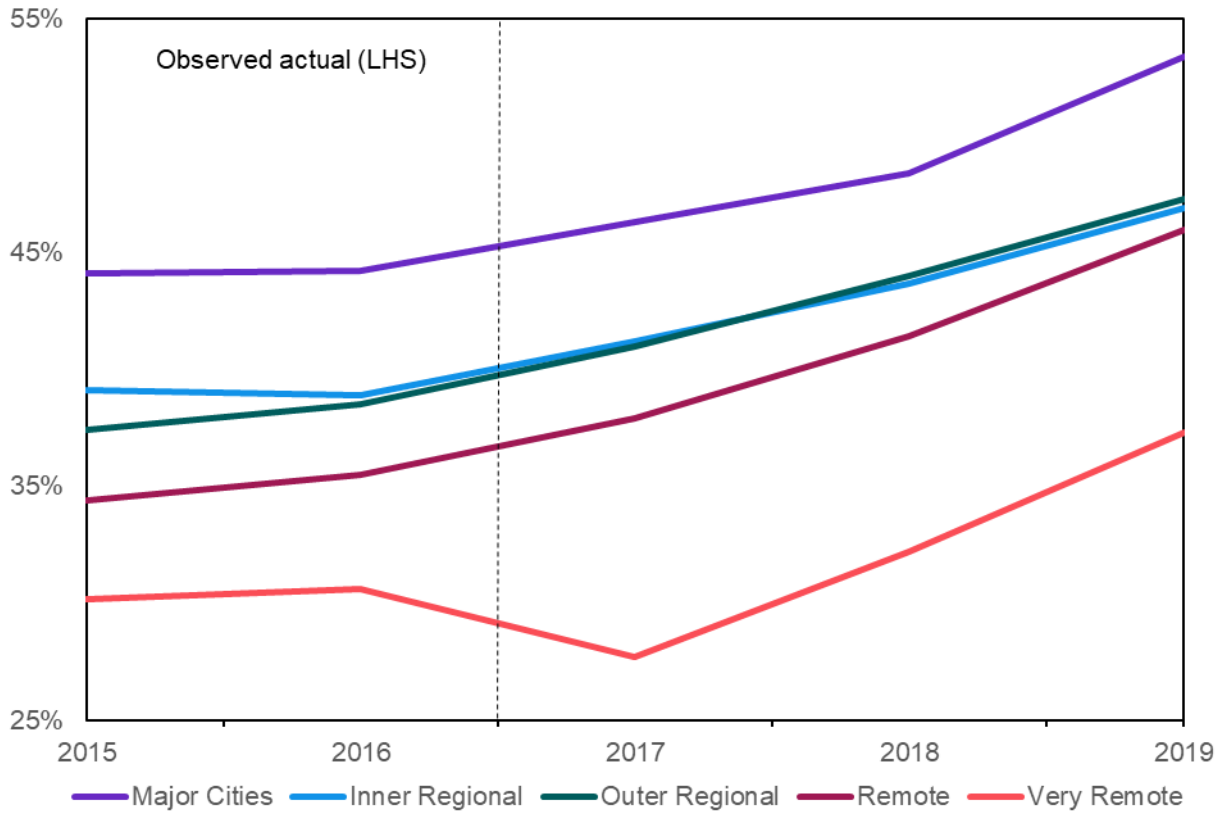
[26] A. Ong and M. Circelli (2018) 'What factors explain the likelihood of completing a VET qualification?', NCVER, Adelaide.
[27] P. Fieger (2015) 'Determinants of course completions in vocational education and training: evidence from Australia', *Empirical Research in Vocational Education and Training*, 7, Article number:14.

and more students reach a status of “completed” or “discontinued”, projections converge to observed actuals.

Students in regional and remote areas have lower completion rates on average. While completion rates for inner and outer regional are similar, lower completion rates are observed for remote and very remote areas. Consistent with the NCVER methodology, the projected completion rates in the most recent years are generally higher than previous actuals.

Figure 34 shows the observed actual completion rate in 2016 varied from 30% for certificate I qualifications to 48% for certificate IV qualifications. However, qualifications at the diploma and above level recorded a lower actual completion rate for 2015 and 2016 (though this rate may be increasing based on latest completion status information).

Figure 34: VET qualification completion rates by remoteness, 2015 to 2019



Source: NCVER 2021, VET qualification completion rates 2019, NCVER, Adelaide.

There is some variation with these trends between the remoteness areas. For students who commenced in 2016, certificate III in remote areas had a lower completion rate than certificate II. NCVER expects this trend to continue for students who commenced in 2017 and later. Additionally, while completion rates typically decline as remoteness increases, the 2016 completion rate for certificate I and certificate II in inner regional areas is lower than the equivalent completion rates for outer regional areas. Further, certificate I completion rates in major cities are also lower than those reported for inner and outer regional areas.

Table 16: VET qualification completion rates by qualification level and remoteness, latest observed actual 2016 completion rates

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Average
Certificate I	29%	31%	33%	29%	22%	**30%**
Certificate II	43%	35%	39%	37%	30%	**41%**
Certificate III	46%	42%	39%	35%	32%	**45%**
Certificate IV	49%	45%	45%	41%	41%	**48%**
Diploma or higher	43%	37%	34%	33%	33%	**45%**
Total	**44%**	**39%**	**39%**	**36%**	**31%**	**43%**

Source: NCVER 2021, VET qualification completion rates 2019, NCVER, Adelaide.

While completion rates provide a signal for continual engagement with VET, they should not be used as a single indicator for outcomes in relation to VET. Rather they should be considered in the context of other important satisfaction and outcomes indicators such as student satisfaction surveys (as above), employment and further study outcomes.

5 Concluding statements

Emerging from the analysis within this report is a picture of varying engagement with VET across regional, rural and remote Australia. Local labour market and industry factors, as well as the practical constraints on regional and remote delivery, appear to be key drivers of the types of training that are delivered and accessed within Australia's regions.

The constraints identified within this report include lower average enrolments in any given qualification outside major cities, potentially large travel distances (and the requirement to access local delivery), fewer training providers in the market and a consequently larger reliance on a smaller number of RTOs. These factors point toward a need to support delivery in regional and remote areas, with the breadth of qualifications on offer in regional and remote areas in general suggesting that the supports provided by jurisdictions are effective. These may include a combination of funding for thin market delivery, for delivery in higher cost contexts (via student and location loadings) and additional student support services.

This also means that a linear trend in availability of training between remoteness areas is not always observed. The breakdown of training type matters and affects the conclusions of how training is accessed and delivered across Australia.

This analysis is, however, limited by the data available:

- Analysis of RTO scope (i.e. the qualifications an RTO is approved to deliver) is conducted on RTO head office location. While this is not reflective of all training delivery locations, training.gov.au data is currently limited for RTO training delivery locations. While this data will improve over time, current analysis is most reliably conducted on RTO head office location.
- NCVER activity data by delivery location and student residence location are a suitable supplement to the above training.gov.au scope data. However, it is limited by the reliance on an enrolment, which is unable to capture latent demand and/or supply.
- The SA3 analysis provides a snapshot of local training availability, access and delivery. However, it is illustrative only and is not able to provide a complete and accurate picture of these dynamics within or across jurisdictions.

Further detailed analysis may explore local study options across Australia

A more complete picture of access and choice in relation to VET would be developed by considering all aspects of demand and supply at a more granular level. For example:

- More in-depth analysis would consider both what is approved to be delivered and the delivery locations that RTOs offer these options by (requiring detailed market research).
- Enrolment data provides an indication of the match between supply and demand, where a student has taken up a course at a given RTO. More detailed research (e.g. detailed case studies) may explore the prevalence of latent supply and demand at a local level.
- More explicit analysis of industry training and activity in regional and remote Australia would help to develop an understanding of the extent to which employers drive training, compared to students seeking out training options prior to employment.
- The linkages between study modes and to occupations/industries could help to explain the reliance on classroom-based delivery in remote areas.

Glossary

This glossary is adapted from NCVER's *Glossary of VET*.[28]

Term	Definition
External delivery	The client does not primarily attend a physical delivery location but instead undertakes training in their own time and location using training materials that are provided online or by correspondence. The client does not usually have to undertake training at a particular time. This type of training is often referred to as self-paced learning. Contact with the trainer is usually limited to feedback on submitted work
Fee-for-service training	Training for which most or all of the cost is borne by the student or a person or organisation on behalf of the student.
Internal delivery	The student and trainer attend any permanent or semi-permanent training delivery location (e.g. workshop, laboratory, simulator and classroom-based training) even when the training is delivered using video or internet links in real time.
Nationally recognised training	Training that leads to vocational qualifications and credentials that are recognised across Australia. Only registered training organisations (RTOs) that meet government quality standards can provide nationally recognised training. Nationally recognised training is listed on the National Training Register (training.gov.au) and includes accredited courses, endorsed training package qualifications, training package skill sets and associated subjects.
Registered training organisation (RTO)	Training providers registered by the Australian Skills Quality Authority (ASQA), or a state registering and accrediting body, to deliver training and/or conduct assessments and issue nationally recognised qualifications in accordance with the Australian Quality Training Framework (AQTF) or the VET Quality Framework (VQF). RTOs include TAFE colleges and institutes, adult and community education providers, private providers, community organisations, schools, higher education institutions, commercial and enterprise training providers, industry bodies and other organisations meeting the registration requirements.
Scope of registration	The particular services and products that a registered training organisation (RTO) is registered to provide. The RTO's scope defines the specific Australian Qualifications Framework (AQF) qualifications, units of competency and accredited courses it is registered to provide and whether it is registered to provide: (a) both training delivery and assessment services, and to issue the relevant AQF qualifications and statements of attainment, or (b) only assessment services, and to issue AQF qualifications and statements of attainment.
Training products	Key features of the vocational education and training (VET) system. They include training packages, skill sets, accredited courses, industry certification and Australian Qualifications Framework (AQF) qualifications.
Workplace-based delivery	Includes training activity conducted in the workplace, irrespective of whether it is conducted by the training organisation or the employer; for example, industrial/work experience, field placement, or fully on-job training or structured workplace training delivered at a place of employment.

[28] The online version of the NCVER glossary is updated on an ongoing basis and is available at: https://www.voced.edu.au/vet-knowledge-bank-glossary-vet

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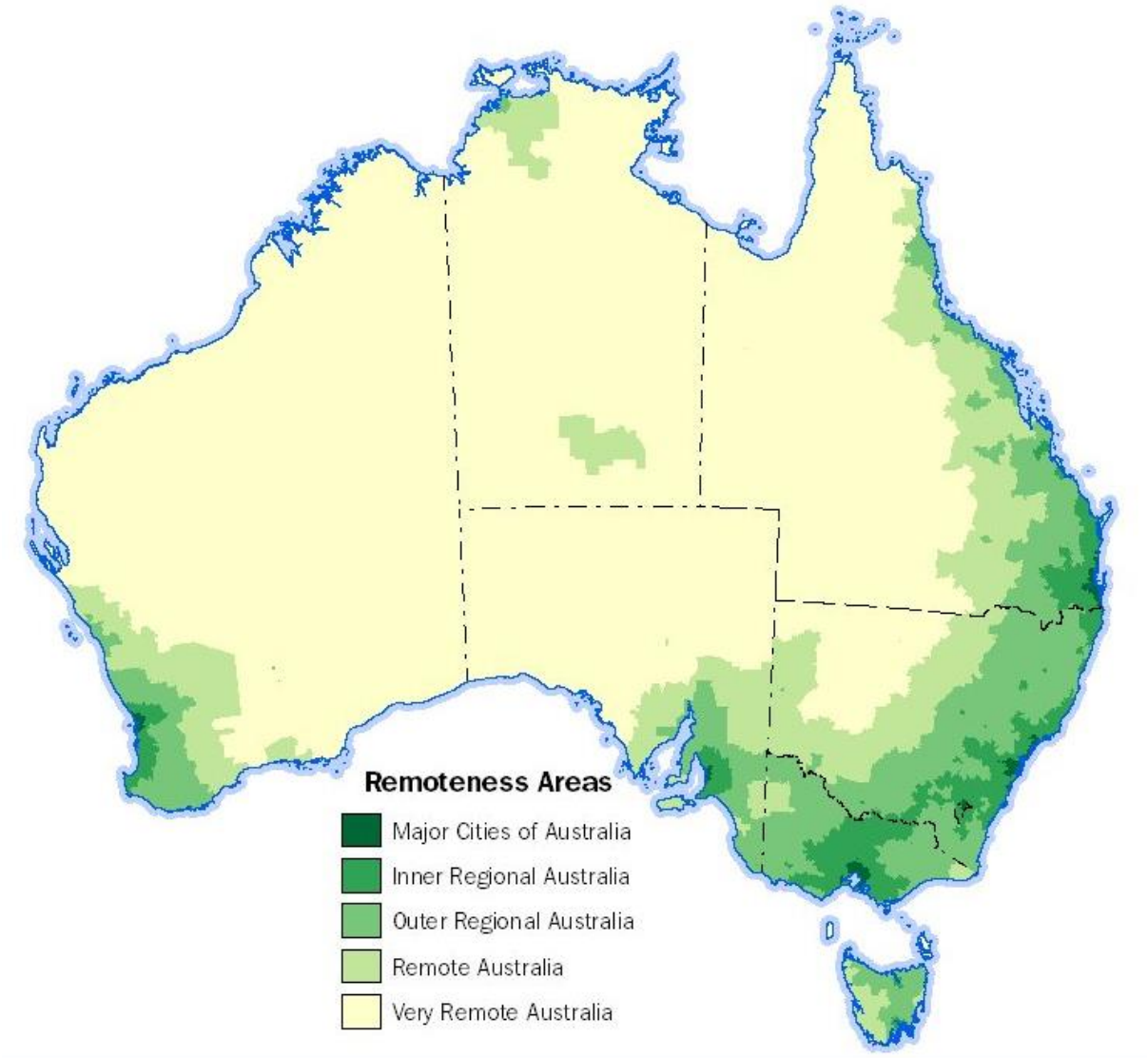
Appendix A: Map of remoteness areas



Source: Australian Bureau of Statistics