



# Outer Eastern LLEN Regional Overview 2018 – 2019





## ABOUT OELLEN

The Outer Eastern Local Learning and Employment Network (OELLEN) is a not for profit incorporated association and is one of 31 LLENs established across Victoria in 2001 and funded by the State Government to support 15-19 year old young people; particularly those at risk of making poor transitions; to attain year 12 or equivalent qualification, and transition successfully to further education, training or employment.

The OELLEN Region comprises the local government areas of Knox, Maroondah and Yarra Ranges, and works closely with a range of local stakeholders to broker partnerships and initiatives to support better outcomes for young people in the outer east of Melbourne.

OELLEN is also funded to deliver the State Government Structured Workplace Learning Program (SWL) in the OELLEN region to increase the number and quality of workplace learning opportunities available to school students enrolled in Vocational Education and Training (VET) and VCAL.

In addition, the OELLEN conducts research on issues affecting youth transitions, and the identification and dissemination of information regarding areas of local skill shortage.

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# Introduction

The Outer Eastern Local Learning and Employment Network (OELLEN) is a community-based incorporated association, which is focused on improving the education, training and employment outcomes for young people (15-19 years) in the municipalities of Maroondah City, Knox City and Yarra Ranges Shire.

## ABOUT OELLEN

### Vision & Mission

**Vision:** All young people in the Outer East of Melbourne have access to education, training and employment opportunities.

**Mission:** To facilitate local partnerships that enable young people in OELLEN's Region to be effectively engaged in school and transition successfully to further education, training or employment.

### Purpose

OELLEN exists to:

Drive solutions through partnerships in the community to improve outcomes for young people and connect them to opportunities via the development of real world skills/and preparing for careers of the future

Broker collaborative partnerships between local organisations that result in improved education and training outcomes for young people, in particular, those at risk of not making successful transitions.

### Strategic goals

OELLEN exists to:

Initiate local, coordinated and future focused approaches to work readiness, career learning and development for all young people based on a positive education approach

Facilitate community actions that ensure all young people not maximising education and training opportunities are monitored and appropriately supported into meaningful education, training and employment options

Develop and sustain an organisation that drives place-based, community strengthening, and responsive initiatives informed by evidence and aligned to current and emerging community needs

### Environmental Scan

This regional review provides an environmental scan of the Maroondah, Knox and Yarra Ranges LGAs from the perspective of the community and economy of each area. It examines factors affecting young people in the region and their education, training and employment outcomes.

The review generates insights from the diverse range of data and other information that is available at a local government area level from the Australian Bureau of Statistics (ABS) and other sources. The data includes the latest available in January 2018.

## ABBREVIATIONS

ABS	Australian Bureau of Statistics
DET	Department of Education and Training (Victoria)
ILO	International Labour Office (Geneva)
LGA	Local Government Area
LTU	Long term unemployment
OELLEN	Outer Eastern Local Learning and Employment Network
VCAL	Victorian Certificate of Applied Learning
VCE	Victorian Certificate of Education

## KEY MESSAGES

### Increased Educational Attainment

Vocational and academic pathways are both important. A Year 12 minimum is now required for entry into most areas of employment and further education. There is a need to continue to strengthen Year 12 attainment, while also promoting employment pathways in the region for students wishing to pursue vocational education and training opportunities. This also includes continuing to strengthen schools' links with businesses in the key industry sectors in the region.

### Health Care and Social Assistance is an Important Sector

The Health Care and Social Assistance is a major employment sector in the OELLEN Region and this sector is projected to continue to generate significant employment in the OELLEN Region and across Australia, with projected jobs growth of 250,500 (16.1 %) nationally to 2022. Factors contributing to strong projected growth in this sector include Australia's ageing population; increasing demand for childcare and home-based care services; and full implementation of the National Disability Insurance Scheme.

### Higher Skills Required

Overall employment trends and projected job growth in Australia will demand higher skill levels.

Employment growth over the past five years has largely been in occupations that generally require post-school qualifications, either through the VET or higher education sectors. This is a long-term trend which is likely to continue, with the vast majority of jobs growth over the next five years projected to be in higher skilled occupations (Managers, Professionals, Technicians and Trades Workers and Community and Personal Service Workers).

### Employment for 15-19 year olds is becoming increasingly difficult

Long-term unemployment (LTU) is being disproportionately felt by youth, with many young people continuing to encounter difficulties trying to secure work and facing longer spells of unemployment.

Five year employment projections suggest this trend will continue over the next five years, which highlights the importance of post-school qualifications.



# Regional Overview

# OUTER EASTERN LLEN REGION

The Outer Eastern LLEN Region comprises three local government areas - Knox, Maroondah and Yarra Ranges, and extends from the Outer Eastern suburbs of Melbourne to parts of the Yarra Valley.



## Population

A total regional population of 435,587 in 2017.<sup>1</sup>

## Business

A total of 34,725 businesses, with 14,898 being businesses with employees and 19,827 being single person businesses.<sup>2</sup>

## Jobs

There were 177,120 jobs in the Outer Eastern metropolitan geographic region (2017). Overall job numbers have increased by 1.52% per annum from 2007 – 2017.<sup>3</sup>

## Employed residents

A total of 241,529 residents were in employment in the Outer Eastern Region in December 2017.<sup>4</sup>

## Regional unemployment rate

August 2018 Unemployment Rate (15+) 3.9%;  
Youth Unemployment Rate (15-24) 9.8%<sup>5</sup>

## Education (2016)

A total of 117,526 residents of the region were in education and training including: 7,127 in pre-school; 33,831 in primary school; 28,015 in secondary school; 7,884 in TAFE; 16,448 in a university; 3,612 in other types of education; and 20,609 not specified.<sup>6</sup>

1. Australian Bureau of Statistics
2. ABS 2016 Census Population Data
3. Regional Development Victoria Information Portal
4. Small Area Labour Market Dec 2017
5. ABS Labour Force Survey
6. ABS Census 2016, Demographics and Education



## KNOX LGA

Knox LGA is located in Eastern Melbourne, south of the Maroondah LGA, and is approximately 20-25 kilometres south-east from Melbourne's CBD.

Knox LGA covers an area of 114 square kilometres and is mostly residential with significant areas of commercial and industrial land use and some rural areas. The major population centres are Wantirna, Bayswater, Boronia and Ferntree Gully, and the major industrial and employment precincts are the Scoresby/Rowville Employment Precinct, and the Bayswater/Bayswater North Industrial Precinct. The population of Knox was estimated to be 162,116 in 2017, which reflects 0.64% change per year since the 2011 census. Population projections are estimated to be 192,929 in 2041.<sup>7</sup>

## Education

At the 2016 Census, 28.0% of people in Knox were attending an educational institution. Of these, 27.8% were in primary school, 24.6% in secondary school and 22.9% in a tertiary or technical institution. 16.9% of people in Knox aged 15 and over reported having completed Year 12 as their highest level of educational attainment. 22.3% had Bachelor level and above (compared to 24.3% for Victoria and 22% for Australia), 10.3% had Advanced Diploma and Diploma level (compared to 9.2% for Victoria and 8.9% for Australia, and above the State and National percentage with Certificate IV (3.3%) and Certificate III (13.4%).<sup>8</sup>

There are 27 primary schools and 8 secondary schools in Knox and a Swinburne University TAFE campus in Stud Road Wantirna.

## Employment

Three industry areas employed 34.0% of the total number of employed residents in Knox in November 2016.

Health Care and Social Assistance was the highest employment area in 2016 (12.2% of the workforce), and the LGA is serviced by three hospitals: Knox Private Hospital (359 bed); Wantirna Health and Palliative Care and Rehabilitation Hospital (Eastern Health); and Melbourne Eastern Private Hospital which opened a new rehabilitation unit in 2017.

Manufacturing continues to be a major industry sector in Knox, despite some downturn, employing 9.9% of the population in November 2016,<sup>9</sup> and it is home to some of Victoria's leading companies including GlaxoSmithKline, Siemens, Universal Bio Sensor, MiniFAB, the Small Technologies Cluster (STC), Electrolux Professional, and Davey Water Products.

Retail is also a key strength of Knox, with Knox City Shopping Centre located in Wantirna South and retail precincts in Ferntree Gully and Bayswater. Retail made up 12.0% of employment in Knox in the 2016 Census.<sup>10</sup>

7. Profile.i.d.Knox

8. ABS 2016 Census Population – demographics & education

9. Profile.i.d.Knox

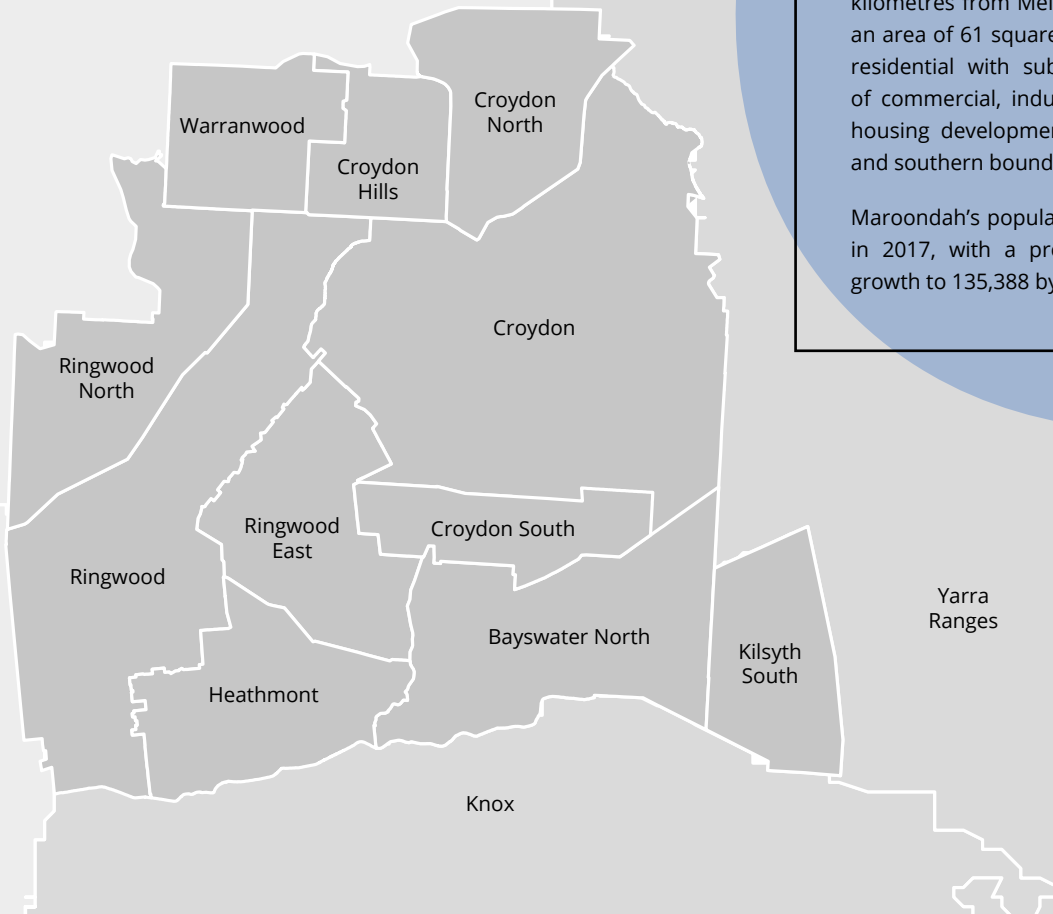
10. ibid



## MAROONDAH LGA

The Maroondah LGA is located in the east of the metropolitan Melbourne region, approximately 25 kilometres from Melbourne's CBD. Maroondah covers an area of 61 square kilometres and is predominately residential with substantial parklands and a range of commercial, industrial and semi-rural areas. New housing development has occurred in the northern and southern boundaries of the municipality.

Maroondah's population was estimated to be 116,489 in 2017, with a projected estimated 0.82% annual growth to 135,388 by 2036.<sup>10</sup>



### Education

At the 2016 Census, 28.4% of people in Maroondah were attending an educational institution. Of these, 28.7% were in primary school, 22.7% in secondary school and 21.7% in a tertiary or technical institution. At that time, 15.3% of people in Maroondah aged 15 and over reported having completed Year 12 as their highest level of educational attainment. 24.2% had Bachelor level and above (compared to 24.3% for Victoria and 22% for Australia), 10.8% had Advanced Diploma and Diploma level (compared to 9.2% for Victoria and 8.9% for Australia), above the State and National percentage with Certificate IV at 3.6% (Victoria 2.9% Australia 2.9%) and above the State and slightly below the National Certificate III at 12.7% (Victoria 11.5%, Australia 12.8%).<sup>12</sup>

There are 18 primary schools and 9 secondary schools located in Maroondah LGA, and Swinburne University has a TAFE campus in Norton Road Croydon.

11. Profile.i.d. Maroondah

12. ABS 2016 Census Population – demographics & education

13. Profile.i.d. Maroondah

14. ibid

15. ibid

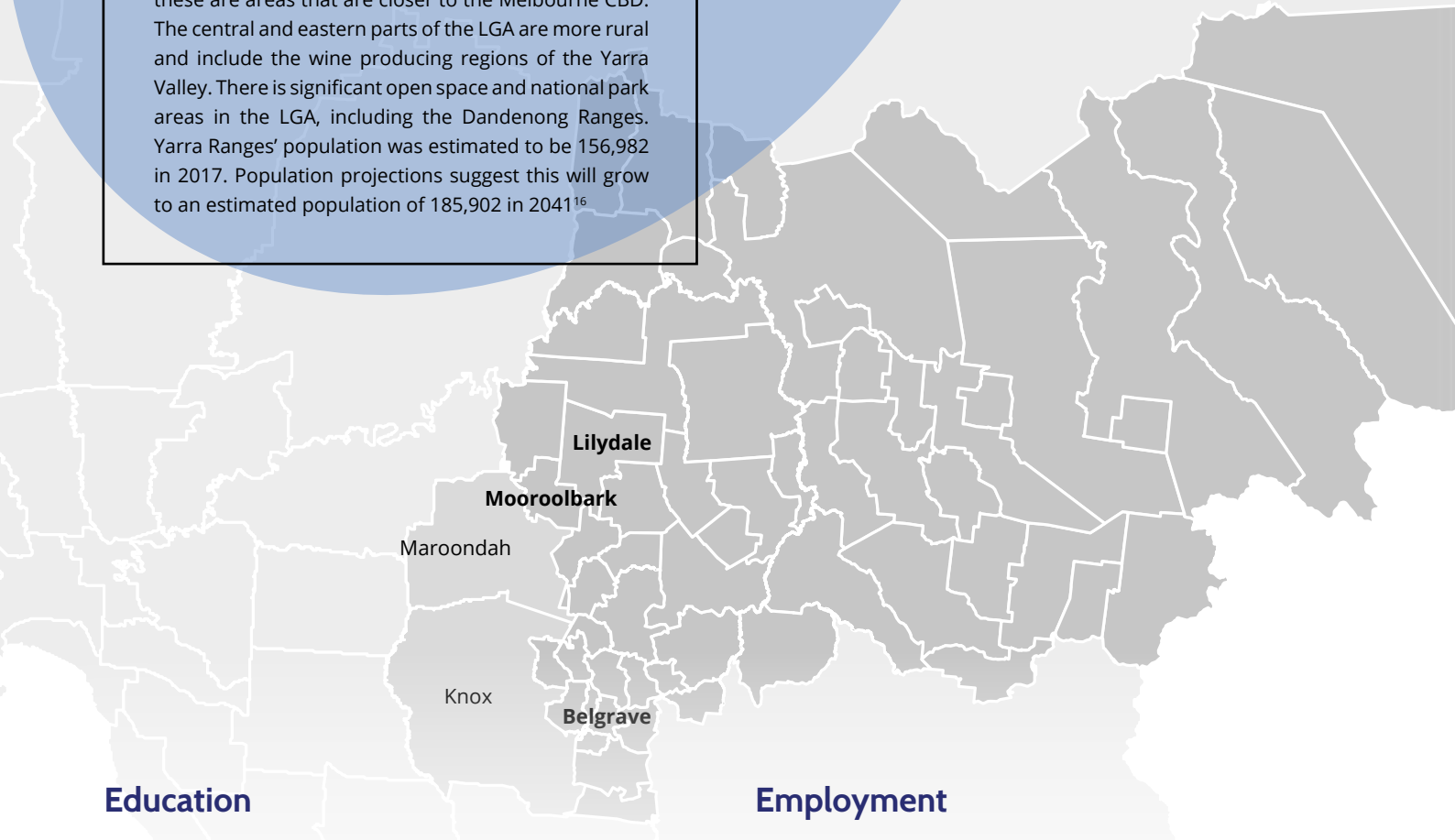
### Employment

Health Care and Social Assistance was the highest employment area (13.2%) in Maroondah in 2016.<sup>13</sup> Health services are a major activity and include Maroondah Hospital, a teaching and training hospital (up to 500-beds), which is part of the Eastern Health Group, and is affiliated with Monash, Deakin, La Trobe and Melbourne Universities.

Maroondah is a major commercial and industrial area in the outer east of Melbourne, with the Ringwood Metropolitan Activity Centre being a significant commercial and retail centre. Ringwood is home to the large Eastland Shopping Centre retail hub. Croydon is the other major commercial centre and Bayswater North is a key industrial precinct. Retail accounted for 10.8% of employment in Maroondah in the 2016 Census.<sup>14</sup> Construction made up the third largest employment industry at 10.1% of Maroondah residents employed in that industry.<sup>15</sup> There is also substantial manufacturing activity, and Maroondah is home to several large manufacturers such as ANCA, Sigma Pharmaceuticals and Kenworth Trucks.

## YARRA RANGES LGA

The Shire of Yarra Ranges covers a large area of 2470 square kilometres and is located adjacent to the Maroondah and Knox LGAs. The Shire extends across an area from 35 kms to 110 kms east of Melbourne's CBD. Yarra Ranges encompasses large rural areas as well as urban areas. The main population centres are located in Lilydale, Belgrave and Mooroolbark and these are areas that are closer to the Melbourne CBD. The central and eastern parts of the LGA are more rural and include the wine producing regions of the Yarra Valley. There is significant open space and national park areas in the LGA, including the Dandenong Ranges. Yarra Ranges' population was estimated to be 156,982 in 2017. Population projections suggest this will grow to an estimated population of 185,902 in 2041<sup>16</sup>



### Education

At the 2016 Census, 28.8% of people in Yarra Ranges were attending an educational institution. Of these, 29.9% were in primary school, 23.9% in secondary school and 17.8% in a tertiary or technical institution. In the 2016 Census, 14.2% of people in Yarra Ranges aged 15 and over reported having completed Year 12 as their highest level of educational attainment, 17.1% had Bachelor level and above (compared to 24.3% for Victoria and 22% for Australia), 10.6% had Advanced Diploma and Diploma level (compared to 9.2% for Victoria and 8.9% for Australia), and above the State and National percentage with Certificate IV at 4.0% (Victoria 2.9% Australia 2.9%) and Certificate III at 17% (Victoria 11.5%, Australia 12.8%).<sup>17</sup>

There are 52 primary schools and 15 secondary schools in Yarra Ranges Shire. Box Hill Institute Lilydale Lakeside campus opened in February 2016 in partnership with Deakin University and William Angliss and offers a variety of courses on site at Jarlo Drive, Lilydale.

### Employment

The top three employment areas in 2016 in Yarra Ranges were similar to Maroondah, however Construction was the highest (13.2%) in Yarra Ranges, followed by Health Care and Social Assistance (11.8%) and Retail Trade (10.1%).<sup>18</sup> Manufacturing and Tourism are other key industry areas, with Yarra Valley wineries attracting over 3 million visitors each year. There were approximately 5.3 million visitors across the Yarra Valley Region in 2017.<sup>19</sup> There is a substantial number of small to medium enterprises, and several large retail employers that service local and tourist markets in food and wine, hospitality, construction, property and business services. Yarra Ranges has approximately 13,500 businesses employing over 35,000 people.<sup>20</sup>

16. Profile i.d. Yarra Ranges

17. ABS 2016 Census Population – demographics & education

18. Profile i.d. Yarra Ranges

19. Yarra Ranges Tourism

20. Yarra Ranges Council Economic profile

*Only most populated suburbs indicated on map due to scale*



# Labour Market

## KEY ISSUES

**The burden of long-term unemployment (LTU) is being disproportionately felt by youth, particularly 15-19-Year-old young people**

**Five industry areas account for around half of total employment**

### National Overview

There are around 12.4 million people employed across 19 broad industries in Australia. More than two thirds work full-time and almost half are female. Around one in every five workers is aged 55 years or older, while young people (aged 15–24 years) comprise 14% of total employment. Two thirds of Australian workers hold post-school qualifications.<sup>21</sup>

Five industries account for around half of total employment, with each providing more than 1 million jobs. The five largest employing industries are Health Care and Social Assistance (1,663,900); Retail Trade (1,286,900); Construction (1,167,200); Professional, Scientific and Technical Services (1,033,000) and Education and Training (1,024,300).

There was a rise in full-time employment over the year – up by 3.6% or 293,200 in January 2018. Part-time employment also increased (up 2.8% or 110,100). There was a fall in unemployment from 5.7% in January 2017 to 5.5% in January 2018, and the participation rate rose by 1.0% to 65.6% over the period. Despite this, the underemployment rate remained steady at 8.3% over the year to November 2017 but below the peak of 8.9% in February 2017.<sup>22</sup>

In April 2018 the Australian unemployment rate was 5.40% with youth unemployment at 11.30%.<sup>23</sup>

### National Youth Labour Market

Globally, youth are three times more likely than adults to be unemployed and despite improvements in youth employment up by 43,800 (or 2.4%) over the year to 1,891,000 in January 2018, the burden of long-term unemployment (LTU) is being disproportionately felt by young people. Many are continuing to face difficulties when trying to secure work and are experiencing longer spells of unemployment. The youth unemployment rate fell by 0.1 percentage points over the year to 12.3% in January 2018, however it remains more than double the rate recorded for all persons.<sup>24</sup> In addition to this, globally, three out of four employed young people are in informal employment, compared to three in five for adults. In developing countries, this ratio is as high as 19 out of 20 for young women and men.<sup>25</sup>

### Victorian Overview

Victoria is the second largest employing state, adding more jobs than any other state over the past five years. Health Care and Social Assistance provided the largest number of new jobs during this period, with significant numbers also added in Professional, Scientific and Technical Services and Construction. Labour market conditions strengthened in Victoria over the year, with employment increasing by 100,200. The increase was driven by rising full-time employment, up by 66,600 over the year, while part-time employment also increased (up by 33,600).

However, job losses were recorded in 6 of the 19 industries, with the largest fall in Wholesale Trade (down 13,600). Around 68% of Victorian workers hold post-school qualifications and they are more likely to have a Bachelor degree or higher qualification than the national average. Melbourne has the most

highly educated workforce in the state (37% hold a Bachelor degree or higher) and employment is concentrated in Melbourne.

Victoria's age profile is like the national average, although some areas, such as Hume, North West, and Warrnambool and South West, have relatively large shares of workers aged 55 years or older.

The state's unemployment rate decreased by 0.2 percentage points over the year to 5.6% (marginally higher than the national rate of 5.5%), while the participation rate rose by 0.4 percentage points to 65.9% (above the national rate of 65.6%).<sup>26</sup>

In June 2018 the Victorian unemployment rate was 5.6%, with youth unemployment at 13.1%.<sup>27</sup>

### Victorian Youth Labour Market

Conditions for youth in Victoria have been mixed over the year, with youth employment rising by 1,100 (or 0.2%), while the youth unemployment rate also increased, albeit marginally, by 0.2 percentage points to 13.2% in January 2018. While youth labour market conditions have improved over recent years, young people are still facing challenges getting a job and many are remaining unemployed for longer periods. Therefore, the burden of long-term unemployment is being disproportionately felt by youth in Victoria.<sup>28</sup>

### OELLEN Overview

Health and Social Assistance is the highest employment industry sector in the OELLEN Region, accounting for 25,472 jobs. This is followed by Construction, employing 22,933 and Retail at 22,751.<sup>29</sup>

Between 2006 and 2016, despite a total decline of -9459 jobs within Region. Manufacturing is still a significant employer in Knox (7,620) and Yarra Ranges (6,968) and to a lesser extent in Maroondah (4,442) The unemployment rate in the Outer Eastern Metropolitan Region for June 2018 was 3.8% with youth unemployment at 9.5%.<sup>30</sup> The percentage of unemployed is below both the Australian and Victorian unemployment rates.

21. Australian Jobs 2018, Department of Small Jobs and Business

22. *ibid*

23. Australian Government Labour Information Portal

24. Australian Jobs 2018, Department of Small Jobs and Business

25. International Labour Office – Geneva: ILO, 2017 (web pdf)

26. Australian Jobs 2018, Department of Small Jobs and Business

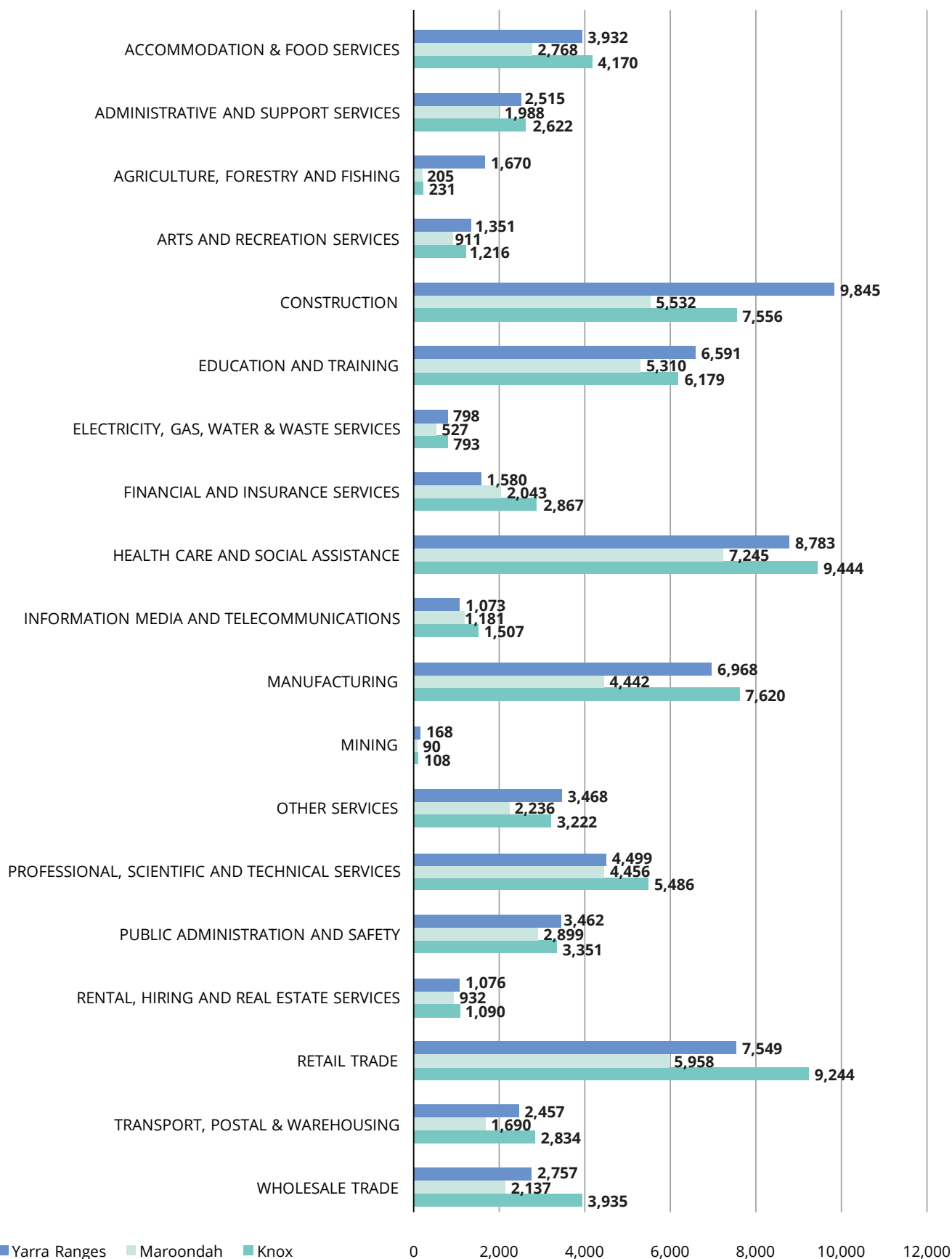
27. Australian Government Labour Information Portal

28. Australian Jobs 2018, Department of Small Jobs and Business

29. Australian Bureau of Statistics 2016 Census People – employment

30. Australian Government Labour Information Portal

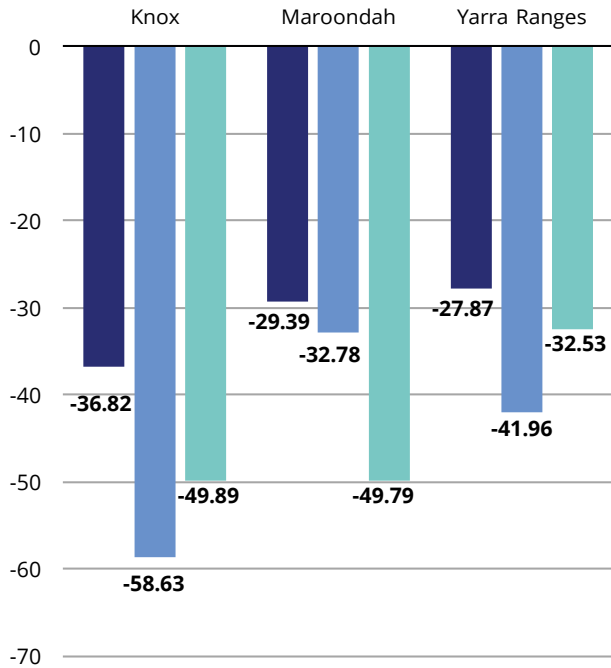
## OELLEN 2016 Jobs by Industry, Knox, Maroondah and Yarra Ranges - number of persons



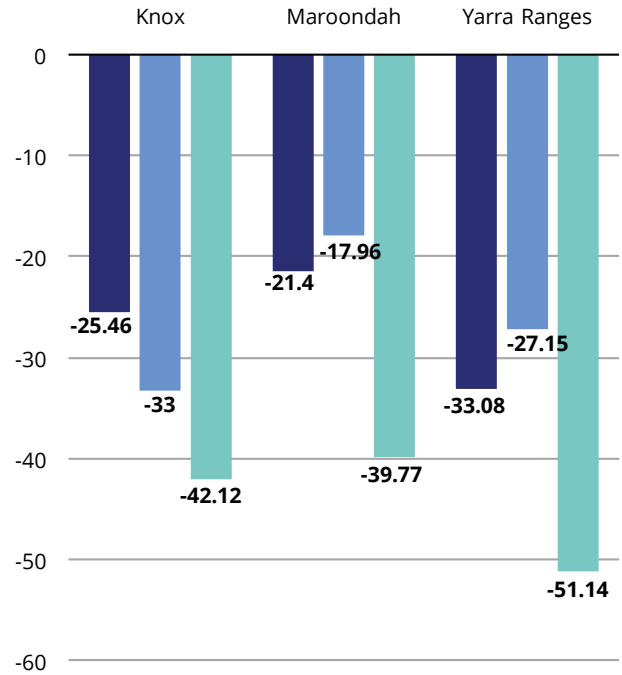
Data source: profile i.d. Knox, Maroondah, Yarra Ranges

## OELLEN changes in employment by industry 2006-2016

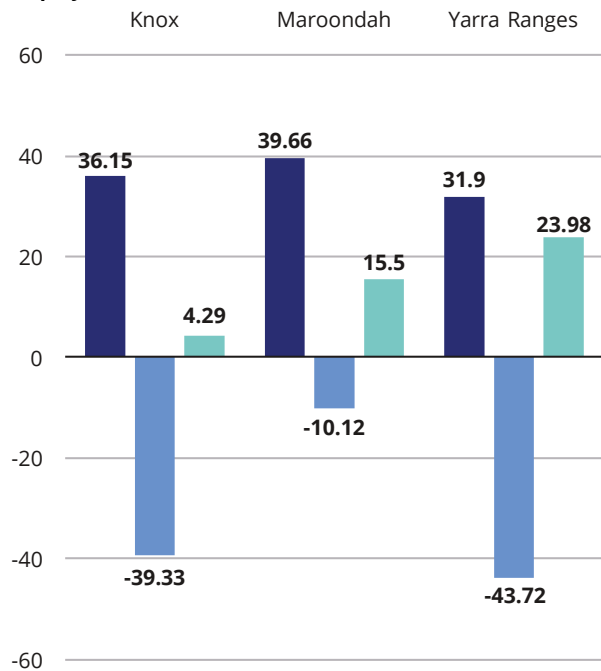
### Employed in Manufacturing 2006-2016



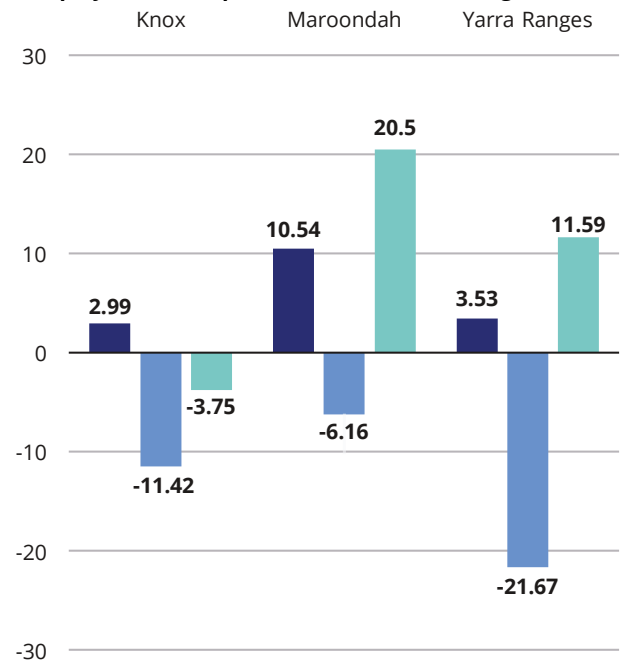
### Employed in Wholesale 2006-2016



### Employment in Health Care and Social Assistance 2006-2016



### Employed in Transport, Postal & Warehousing 2006-2016



■ All Population ■ 15-19 year olds ■ 20-24 year olds

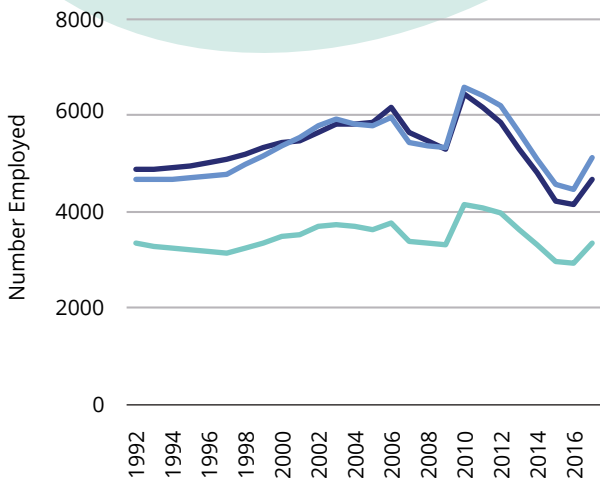
Data source: State of Victorian Youth 2018 - Victorian LLEN Network

# OELLEN Youth Labour Market Trends

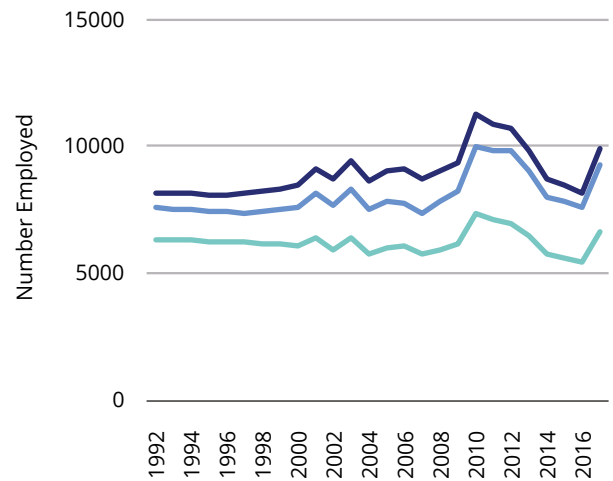
Youth employment has fluctuated over the last decade and although Health and Social Assistance is the highest overall employer, there was a marked decline in the numbers of 15-19 year olds employed in that sector from 2006-2016, particularly in Knox and Yarra Ranges.

The employment trends were similar across the three LGAs. There was a sharp decline in employment levels for 15-19 year-olds between 2006 and 2007, and numbers continued to fall until there was a steep rise in 2010 followed by a consistent yearly drop between 2010 and 2015. There was a levelling off in 2015 to 2016 followed by a rise in 2017. The pattern of employment between 2007 and 2017 was similar for the 20-24 year-old cohort with a period of instability before an increase peaking in 2010. This was followed by a steady drop in employment levels to 2016 and then an increase in 2017. Over the decade 2006-2016, full-time work declined rapidly, part-time work peaked in 2006 and has declined since.

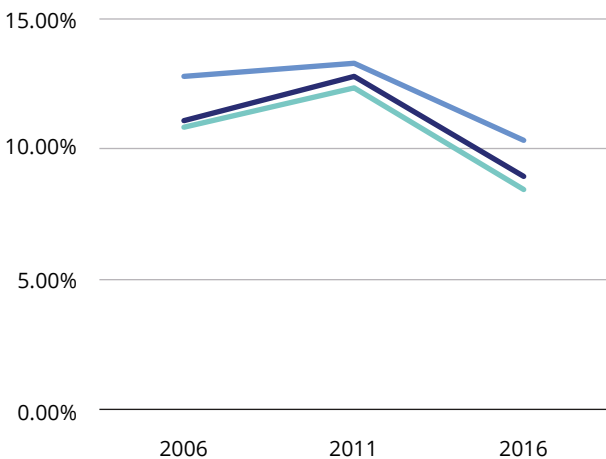
**OELLEN Youth Employment 15-19 year olds 1992 - 2017**



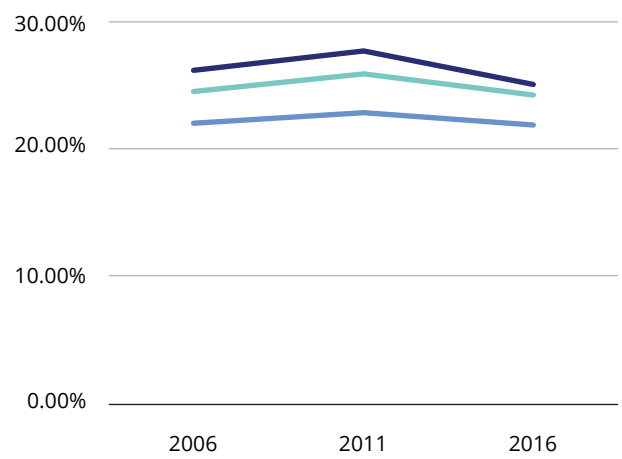
**OELLEN Youth Employment 20-24 year olds 1992-2017**



**Change in Full-Time Youth Employment 15-24-year olds 2006-2016**



**Change in Part-Time Youth Employment 15-24 year olds 2006-2016**



— Knox — Maroondah — Yarra Ranges

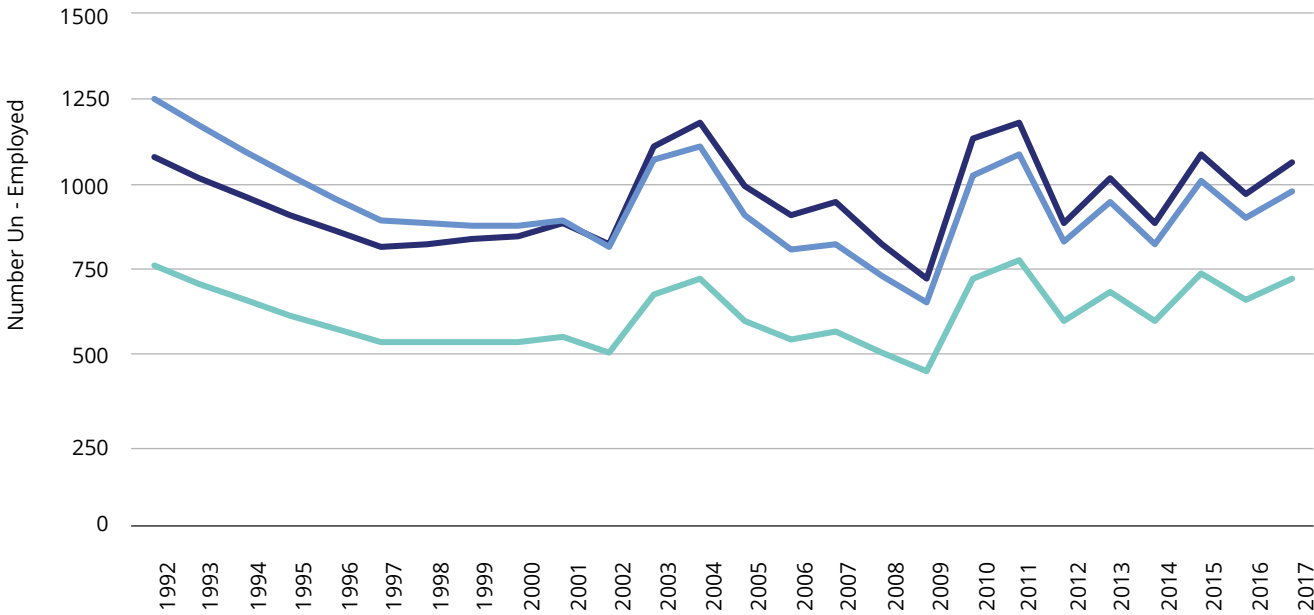
Data source: State of Victorian Youth 2018 - Victorian LLEN Network

# OELLEN Youth Unemployment

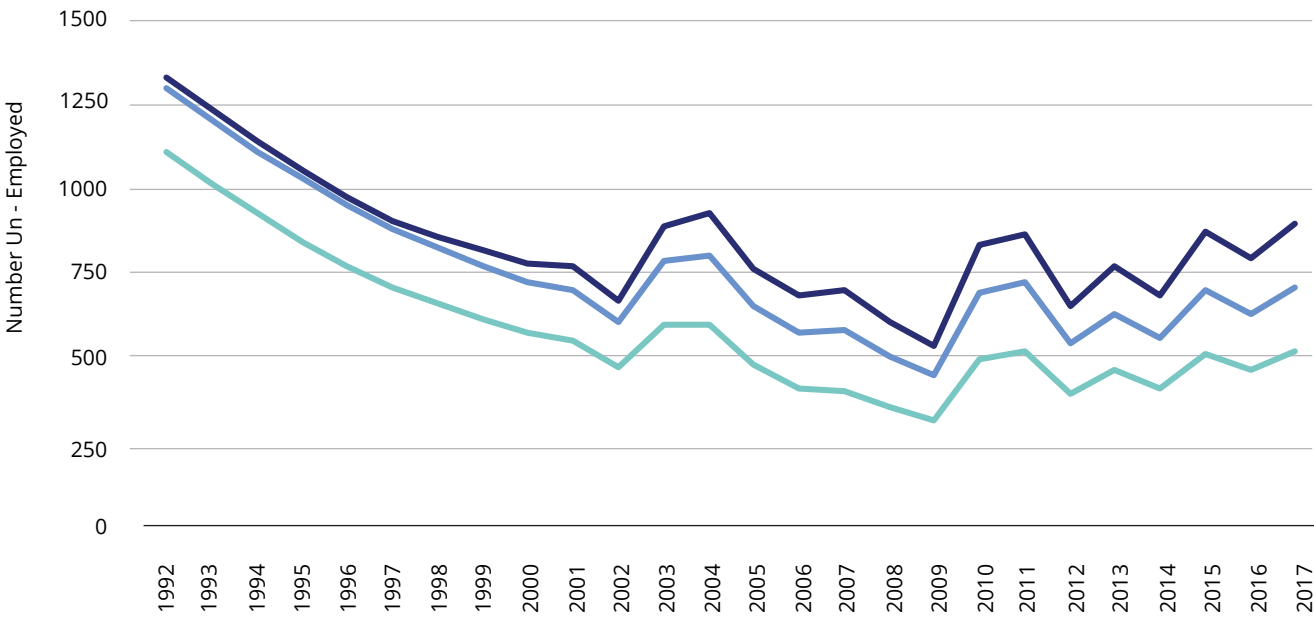
Unemployment has impacted significantly on the 15–19 year-old cohort and to a lesser degree on 20–24 year-olds. Although Health and Social Assistance is the highest employer, the decade from 2006–2016 showed a decline in the numbers of 15–19 year olds employed in that sector, particularly in Knox and Yarra Ranges.

There was also a significant reduction from 2006–2016 in employment of 15–19 year olds in Transport, Postal and Warehousing, and all age groups in Wholesale.

OELLEN Youth Unemployment 15–19 year olds 1992–2017



OELLEN Youth UN-Employment 20–24 year olds 1992–2017



Legend: Knox (dark blue), Maroondah (light blue), Yarra Ranges (medium blue)

Data source: State of Victorian Youth 2018 – Victorian LLEN Network

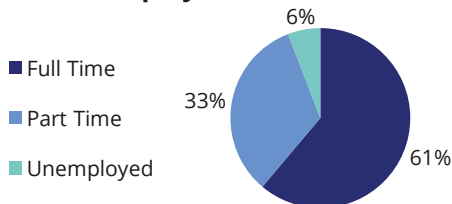


## Knox Labour Force Data

Health Care and Social Assistance was the highest employment area (12.2%) in Knox in 2016. Two industry areas (Manufacturing and Wholesale) showed significant decline in employment numbers between 2006 and 2016, particularly for 15–24-year-olds. Across the OELLEN Region, the City of Knox had the largest overall reduction of residents employed in Manufacturing between 2006 and 2016 (a decline of 4685 individuals or -36.82%). The greatest impact was the reduction in young people employed in Manufacturing who live in Knox. The 15–19 year old cohort saw a reduction of -58.63%, or 246 individuals, and the reduction for those aged 20–24 was -49.89% or 442 fewer individuals employed in Manufacturing since 2006.

There was also an overall reduction of 3444 individuals (-25.46%) in Knox residents employed in Wholesale between 2006 and 2016. As with Manufacturing, there was significant impact on young people aged 15–24. The decline in 15–19 year olds was 37 individuals (-33.18%), and 188 (-42.12%) of those aged 20–24.<sup>31</sup>

### Knox Employment Distribution



In Knox, 81,926 people reported being in the labour force in the week before Census night 2016.

### Knox Youth Place of Usual Residence Labour Force Data

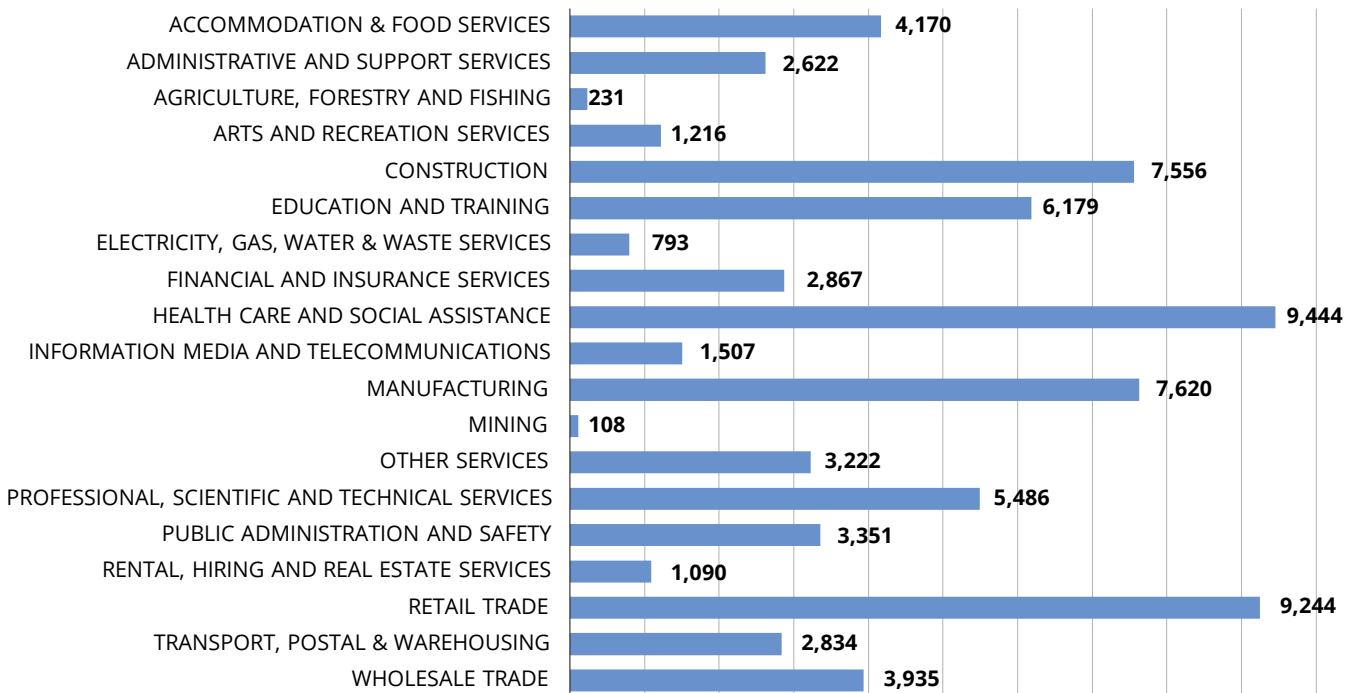
#### 15–19 Year Olds

- there were 3960 15-19 Year Olds employed in 2016
- 63.09% of this employment occurs in only three industry areas: Food & Beverages services, other store-based retailing and Food retailing
- Food & Beverages services accounts for almost one-third of all employment for 15–19 year olds in Knox [31.71%]

#### 20–24 Year Olds

- there were 7412 20-24 year olds employed in 2016
- 20-24 year olds experience a wider diversity of employment/occupations.
- 32.81% of this employment occurs in the industry areas: Food & Beverages services, other store-based retailing and Food retailing.
- Construction services is the other notable employer at 9.29% or 689 individuals.

### Knox Jobs by Industry Number of persons



31. Australian Bureau of Statistics 2016 Census People – employment  
Data source: Australian Bureau of Statistics 2016 Census People – employment

## Maroondah Labour Force Data

Health Care and Social Assistance was also a major employer in Maroondah in 2016. Among the resident population, the three most popular industry sectors were:

- Health Care and Social Assistance (13.2%)
- Retail Trade (10.8%)
- Construction (10.1%)

Combined, these three industries employed a total of 18,735 people or 34.1% of the total employed resident population. From 2006 to 2016 there was an overall 39.66% increase of individuals in Maroondah employed in Health Care and Social Assistance. However, over the decade, there was a decrease of 10 young people 15–19 years of age employed in the sector.<sup>32</sup>

In Maroondah, 57,955 people reported being in the labour force in the week before Census night 2016.

## Maroondah Youth Place of Usual Residence Labour Force Data

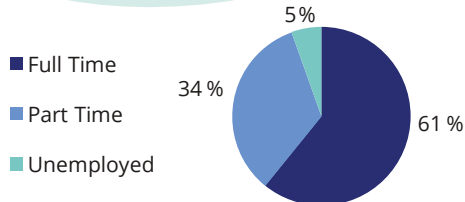
### 15–19 Year Olds

- there were 2792 15–19 year olds employed in 2016
- 62.76% of this employment occurs in only three industry areas: Food & Beverages services, other store-based retailing and Food retailing
- Food & Beverages services accounts for almost one-third of all employment for 15–19 year-olds in Maroondah [32.68%]

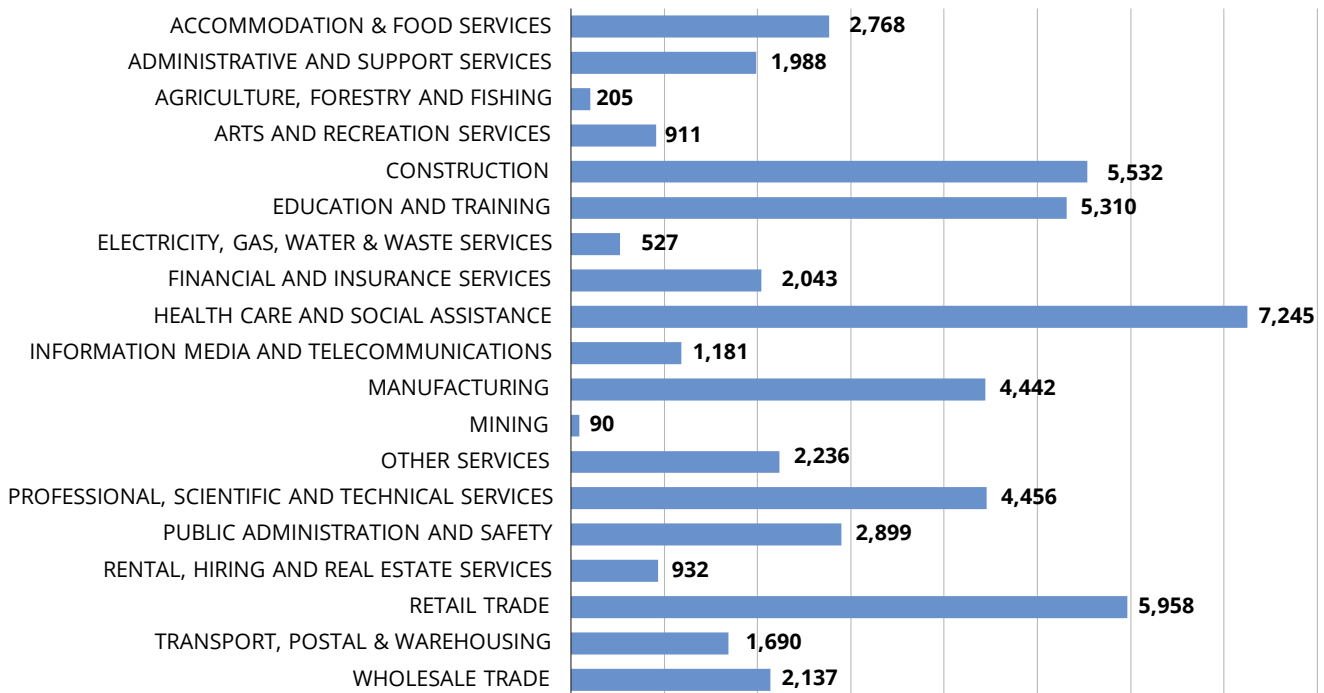
### 20–24 Year Olds

- There were 4985 20–24 year olds employed in 2016
- 20–24 year olds experience a wider diversity of employment/occupations
- 30.7% of this employment occurs in the industry areas: Food & Beverages services, other store-based retailing and Food retailing
- Construction services is the other notable employer at 9.90% or 494 individuals

### Maroondah Employment Distribution



### Maroondah Jobs by Industry Number of Persons



32. Profile i.d. Maroondah

Data source: Australian Bureau of Statistics 2016 Census People – employment

## Yarra Ranges Labour Force Data

Within the OELLEN Region, Yarra Ranges had the largest number of individuals employed in the Health Care and Social Assistance industry as of 2016 (9230). This represents a 31.90% increase from 2006, or 2232 individuals. There was a decline (-43.72% or 80 individuals) in 15–19 year olds, and an increase (24% or 126 individuals) in 20–24 year olds employed in the Healthcare and Social Assistance industry from 2006 to 2016.

Between 2006 and 2016, although, of the three LGAs, Yarra Ranges had the smallest percentage decline of its residents employed in Manufacturing (-27.87%), it had the highest reduction in number with a decline of -2833 individuals. A similar pattern of deeper reductions on the young was observed as in the previous two LGAs, with a reduction of 179 (41.96%) aged 15-19 years and 257 (-32.53%) aged 20-24.

In Yarra Ranges, 77,985 people reported being in the labour force in the week before Census night 2016.

## Yarra Ranges Youth Place of Usual Residence Labour Force Data

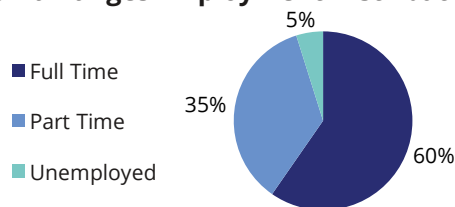
### 15–19 Year Olds

- there were 4180 15–19 Year Olds employed in 2016
- 56.46% of this employment occurs in only three industry areas: Food & Beverages services, other store-based retailing and Food retailing
- Food & Beverages services accounts for almost one-third of all employment for 15–19 year-olds in Yarra Ranges [31.79 %]
- there appear to be slightly more diverse opportunities within Yarra Ranges LGA, with Construction services [9.0%], Sports & Recreation activities [ 3.92%] and Agriculture [ 1.15%]

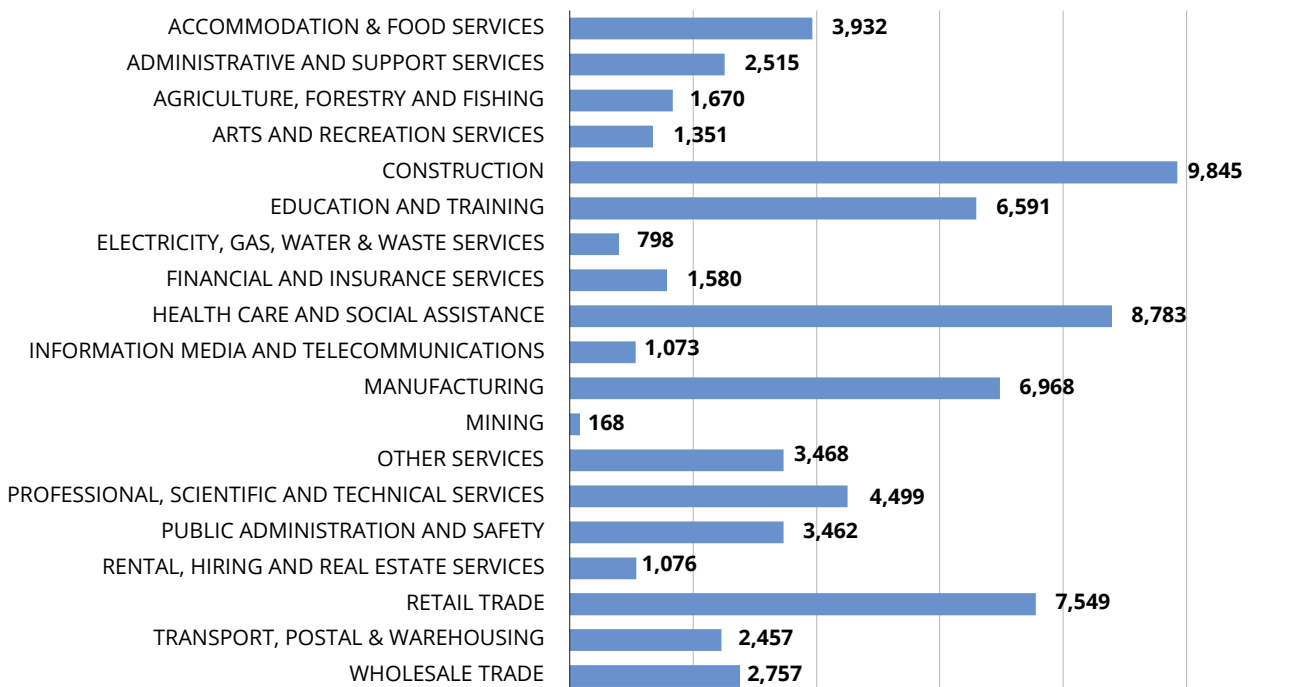
### 20–24 Year Olds

- there were 6723 20–24 year olds employed in 2016
- 20–24 year olds experience a wider diversity of employment/occupations
- 26.62 % of this employment occurs in the industry areas: Food & Beverages services, other store-based retailing and Food retailing
- Construction Services is a notable employer at 13.06 % or 878 individuals, as is Hospitals, Medical and Other Health Care Services, Residential Care Services and Social Assistance Services which combined equal 9.68% or 651 individuals

## Yarra Ranges Employment Distribution



## Yarra Ranges Jobs by Industry



Data source: Australian Bureau of Statistics 2016 Census People – employment

## Skill Shortages

The following Table shows occupations identified as having STATEWIDE and NATIONAL skill shortages in December 2017

VICTORIAN SHORTAGES	NATIONAL SHORTAGES
<b>Professionals</b>	
<b>23 - Design, Engineering, Science and Transport Professionals</b>	<b>23 - Design, Engineering, Science and Transport Professionals</b>
Architect	Veterinarian
Surveyor	
<b>25 - Health Professional</b>	<b>25 - Health Professional</b>
Sonographer	Audiologist
Registered Nurse	
<b>Technicians and Trades Workers</b>	
<b>32 - Automotive &amp; Engineering Trades Workers</b>	<b>31 - Engineering, ICT and Science Technicians</b>
Automotive Electrician	Construction Estimator
Sheetmetal Trades Worker	
Metal Machinist (First Class)	<b>32 - Automotive &amp; Engineering Trades Workers</b>
Panel beater	Locksmith
Vehicle Painter	
<b>33 - Construction Trades Workers</b>	<b>33 - Construction Trades Workers</b>
Carpenters and Joiners	Stonemason
Painting Trades Worker	Glazier
Fibrous Plasterer	Solid Plasterer
39 - Cabinetmaker	Roof Tiler
	Wall and Floor Tiler
<b>34 - Electrotechnology and Telecommunications Trades Workers</b>	<b>34 - Electrotechnology and Telecommunications Trades Workers</b>
Air conditioning and Refrigeration Mechanic	Telecommunications Trades Workers
<b>35 - Food Trades Workers</b>	<b>35 - Food Trades Workers</b>
Butchers and Smallgoods Makers	Baker
	Pastry Cook
	Arborist
	Hairdresser

Data source: Department of Jobs and Small Business – Skills Shortage List

This list reflects research undertaken to 31 December 2017 (Published March 2018)



# Projected Employment Growth

## National Outlook

Technology is changing not only how we perform our jobs, but also the recruitment process and the way we seek employment. This is not a new issue, and technological changes in the past have resulted in some jobs disappearing, new jobs being created and some jobs changing.

The Department of Jobs and Small Business projects total employment to increase by 886,100 (or 7.1 %) over the five years to May 2023. Within this period, employment is projected to increase in 17 of the 19 broad industries, Wholesale Trade is expected to fall by 2.7% and Agriculture, Forestry and Fishing by 0.4%.<sup>33</sup>

In recent years Health Care and Social Assistance has experienced strong growth, and this is expected to continue and add significantly more jobs than any other industry (up by 250,300). This will be largely due to full implementation of the National Disability Insurance Scheme (scheduled for 2019-20), Australia's ageing population and increasing demand for childcare and home-based care services.

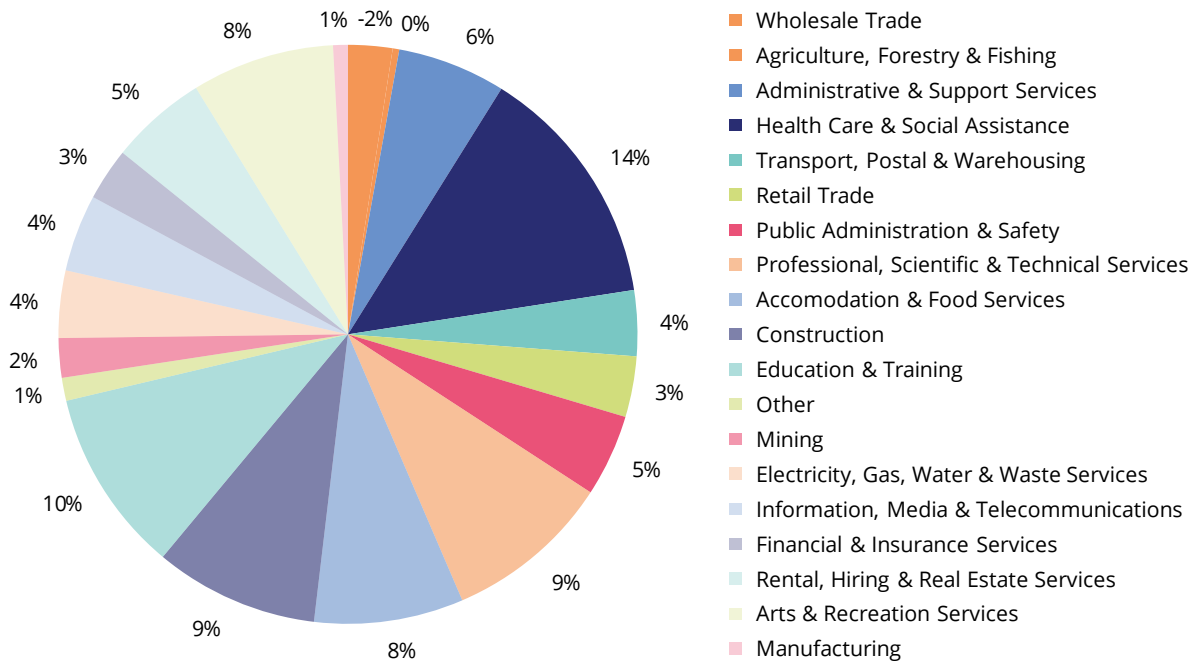
This growth is followed by Construction (118,800), Education and Training (113,000) and Professional, Scientific and Technical Services (106,600). Together, these four industries are projected to provide almost two-thirds (or 66.4 %) of total employment growth over the five years to May 2023.

Growth in Construction Employment is expected in the engineering construction sector, supported by continued infrastructure investment, while growth in Residential Construction is expected to be more in line with population growth.

Employment in Education and Training is projected to increase by 11.2 % to May 2023 due increases in the school aged population, the international education sector and growing demand for adult and community education with continuing growth in part-time workers and non-teaching staff in the industry.

Projected growth of employment in Professional, Scientific and Technical (10.2%) over the five years to May 2023, is due to strong demand for the services of qualified and highly educated workers throughout the economy. Growth is expected to come from the Computer System Design (projected to grow by 37,700); Legal and Accounting Services (projected to grow by 24,300); and Management and Related Consulting Services (projected to grow by 16,300). Trade-exposed firms are expected to be favoured by the Australian dollar remaining at levels similar to those prevailing over 2017.<sup>34</sup>

**Projected employment growth to May 2023 (% share of new jobs)**



33. Industry Employment Projections 2018 released August 2018, Department of Jobs and Small Business

34. *ibid*

Data source: Industry Employment Projections 2018 released August 2018, Department of Jobs and Small Business

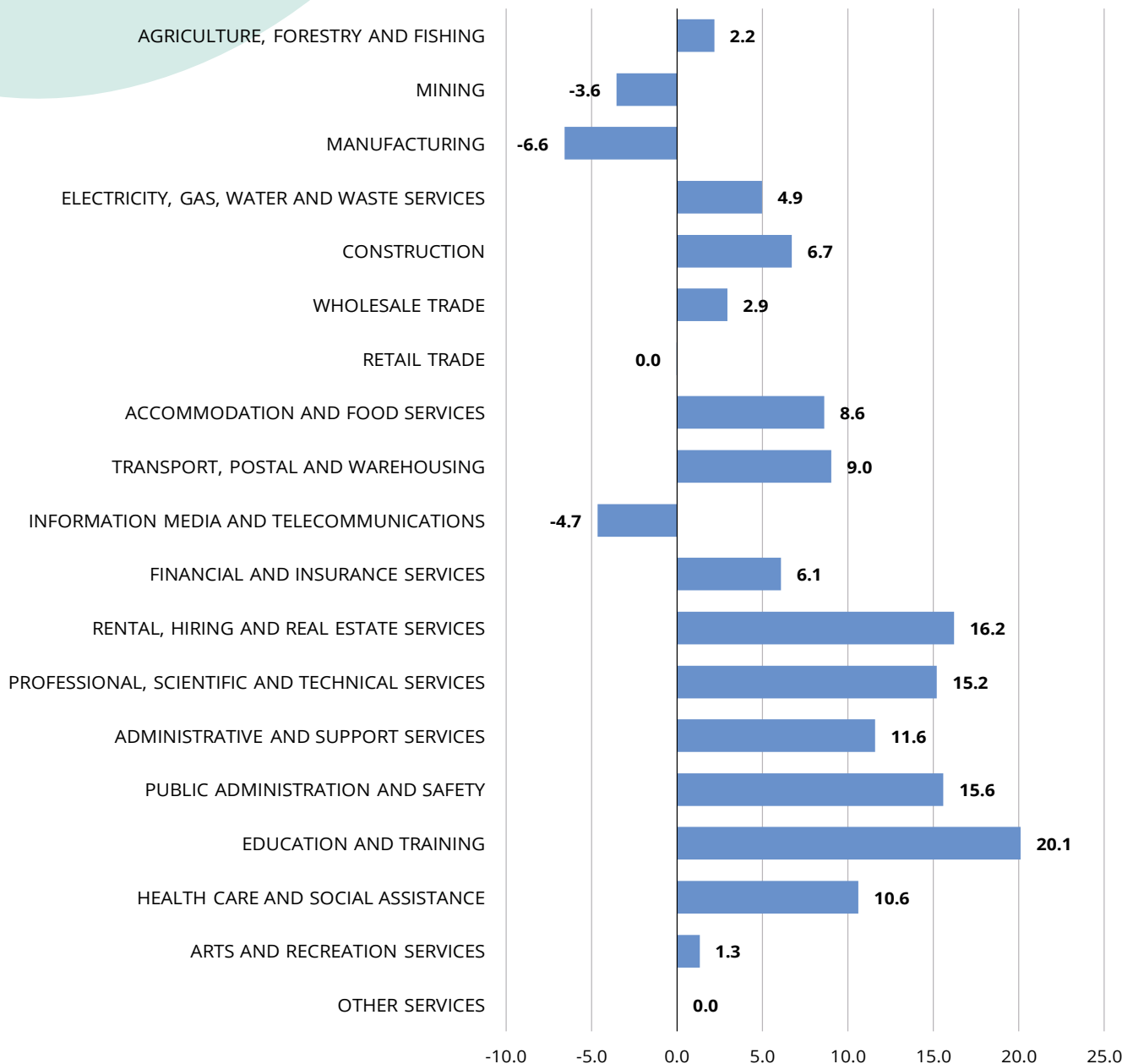
## Victorian Outlook

Over the five years to May 2022, employment is projected to rise in Victoria by 8.8%. As in the national outlook, employment growth is expected to be stronger in the metropolitan area and Healthcare and Social Assistance; Professional, Scientific and Technical Services; Construction; and Education and Training industries are projected to be the major contributors to employment growth in Victoria.<sup>35</sup>

## OELLEN Outlook

The employment outlook in the OELLEN Region over the next five years is expected to mirror the State and National trends, with Healthcare and Social Assistance; Professional, Scientific and Technical Services; Construction; and Education and Training industries contributing significantly to employment growth.

### Outer Eastern Regional Employment Projections to May 2022



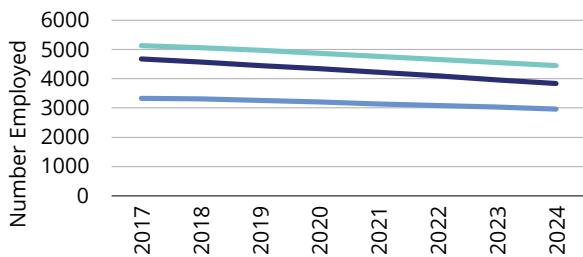
35. Department of Jobs and Small Business Employment Outlook to May 2022

Data source: Industry Employment Projections 2018 released August 2018, Department of Jobs and Small Business, Regional Outlook

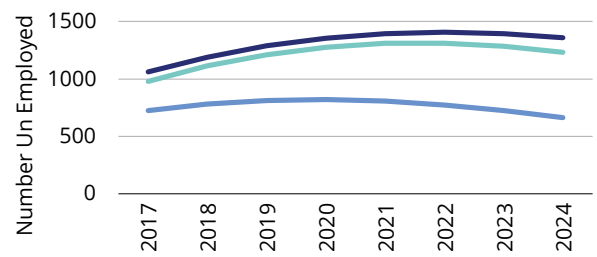
# OELLEN Youth Outlook

Youth employment has fluctuated over the last decade. The trends were similar across the three LGAs. There was a sharp decline in employment levels for 15–19 year olds between 2006 and 2007, and numbers continued to fall until there was a steep rise in 2010 followed by a consistent yearly drop between 2010 and 2015. There was a levelling off in 2015 to 2016 followed by a rise in 2017. The pattern of employment between 2007 and 2017 was similar for the 20–24 year old cohort with a period of instability before an increase peaking in 2010. This was followed by a steady drop in employment levels to 2016 and then an increase in 2017.

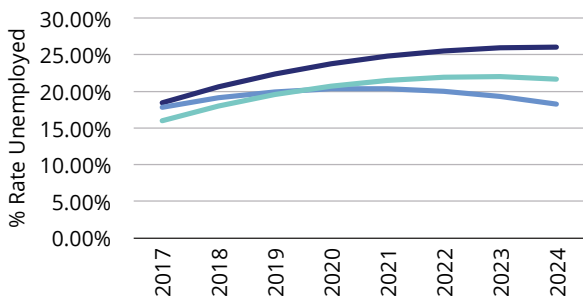
**Projected 15-19 Year-Old Youth Employment numbers in the OELLEN Region 2017-2024**



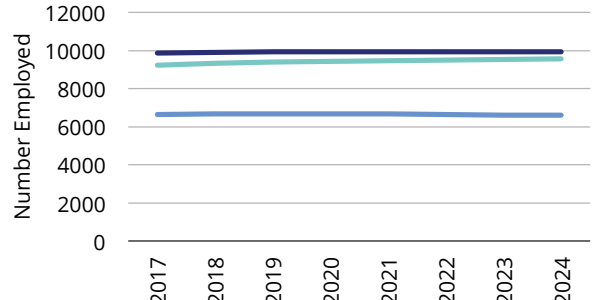
**Projected 15-19 Year-Olds Youth UN-Employment numbers in the OELLEN Region 2017-2024**



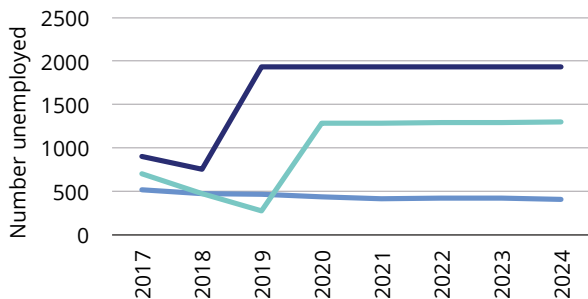
**Projected % 15-19 Year-Olds Youth UN-Employment in the OELLEN Region 2017-2024**



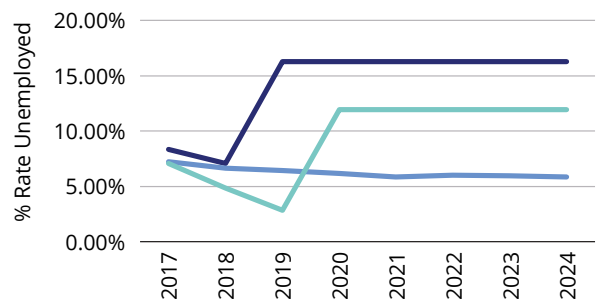
**Projected 20-24 Year Olds Youth Employment in the OELLEN Region 2017-2024**



**Projected 20-24 Year-Olds Youth UN-Employment numbers in the OELLEN Region 2017 - 2024**



**Projected % 20-24 Year Old Youth UN-Employment in the OELLEN Region 2017-2024**



— Knox (C) — Maroondah (C) — Yarra Ranges (S)

Data source: State of Victorian Youth 2018 – Victorian LLEN Network



A young man and woman are looking at a laptop screen together. The man is leaning over the woman, who is sitting at a desk. The image is overlaid with a large blue circle containing the word 'Education' and a teal circle at the bottom right. The background is a blurred office or classroom setting.

# Education

## KEY ISSUES

*The majority of jobs growth over the next five years is projected to be in higher skilled occupations*

*Education and training are essential for entry into the employment market. Early school leavers face difficulty competing for jobs and securing employment*

The Australian Bureau of Statistics (ABS) classifies occupations according to five skill levels that correspond with the following qualification(s) or where relevant work experience with training may be a substitute for formal qualifications:

- Skill level 1: Bachelor degree or higher qualification
- Skill level 2: Advanced Diploma or Diploma
- Skill level 3: Certificate IV or Certificate III with at least two years on-the-job training
- Skill level 4: Certificate II or III
- Skill level 5: Certificate I or secondary education

Half of the projected employment growth over the next five years is expected to be in occupations that are classified in the top two skill levels. Further projected areas of job growth will also require at least skill level 4. Skill level 5 occupations are projected to have the smallest growth in employment. This highlights the importance of education and training, not only for those seeking career advancement but also for those seeking entrance into the employment market.

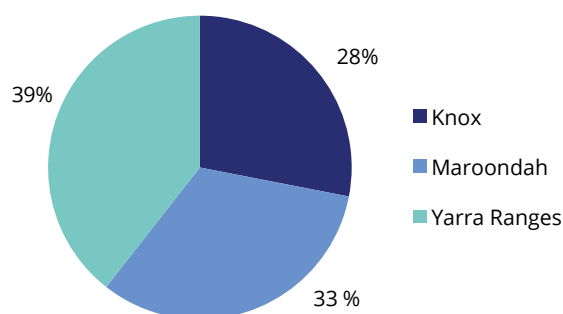
## OELLEN Schooling and Qualifications

In the 2016 Census, the percentage of people in the Outer Eastern Region who listed Year 12 as the highest education attainment (16.9% in Knox, 15.3% in Maroondah and 14.2% in Yarra Ranges) is relatively consistent with the Victorian (15.9%) and Australian (15.7%) figures. The percentage holding a Bachelor degree or higher was also consistent with Victorian (24.3%) and Australian (22.0%) figures in (Knox (22.4%) and Maroondah (24.2%) but significantly lower in the Yarra Ranges (17.1%). The figures were above both the state and national levels for Advanced Diploma/ Diploma level (Knox 10.3%; Maroondah 10.8%; Yarra Ranges 10.6%; Victoria 9.2% and Australia 8.9%).<sup>36</sup>

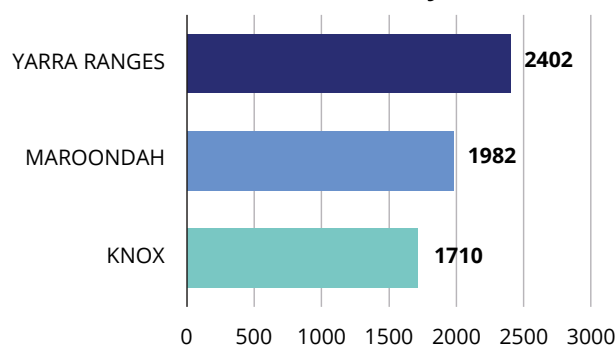
## Victorian Certificate of Education (VCE)

The VCE is the certificate a majority of students in Victoria receive on satisfactory completion of their secondary education. The VCE provides diverse pathways to further study or training at University or TAFE and to employment. There were 6094 students enrolled in VCE in the OELLEN Region in 2017. This is slightly higher than the 2016 figure of 6063.

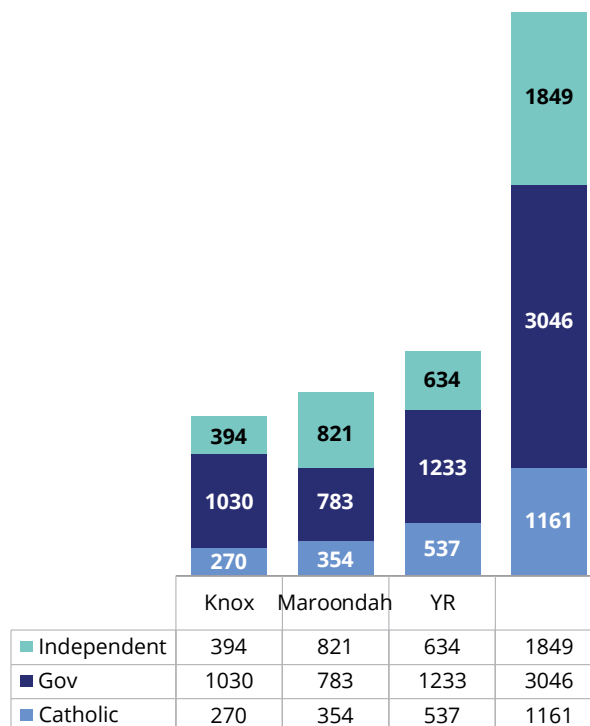
2017 VCE Distribution of Enrolments across schools in the OELLEN Region



2017 VCE Enrolments by LGA



2017 VCE Enrolments by LGA & Sector

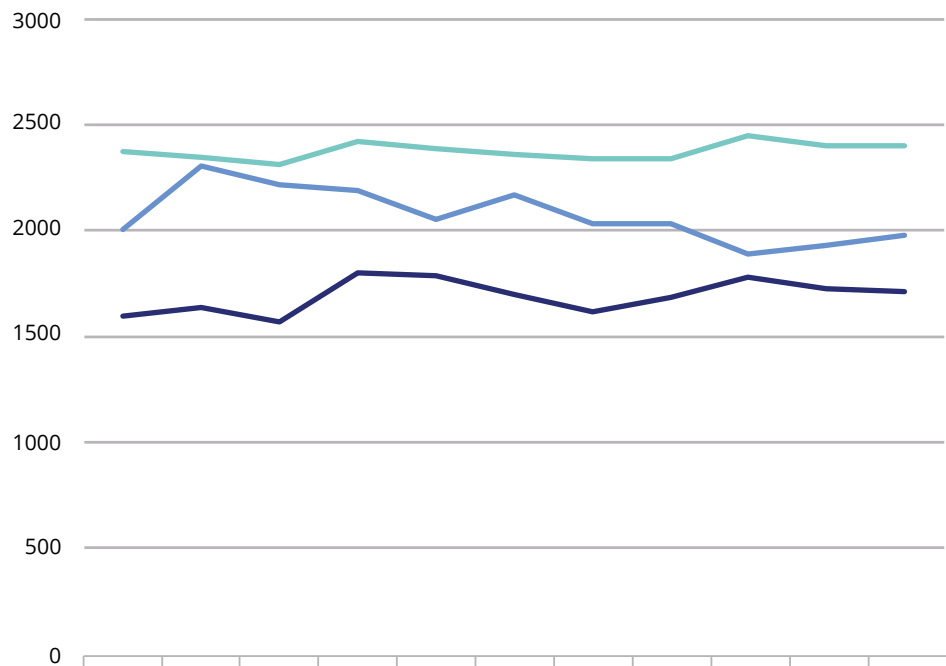


36. Australian Bureau of Statistics 2016 Census People – employment

Data source: VCAA



### 2007-2017 VCE Enrolments by LGA across the OELLEN Region



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
— Knox	159	163	157	180	179	169	161	168	178	172	171
— Maroondah	200	230	221	219	205	217	203	203	189	193	198
— Yarra Ranges	237	234	231	242	238	235	234	234	245	240	240

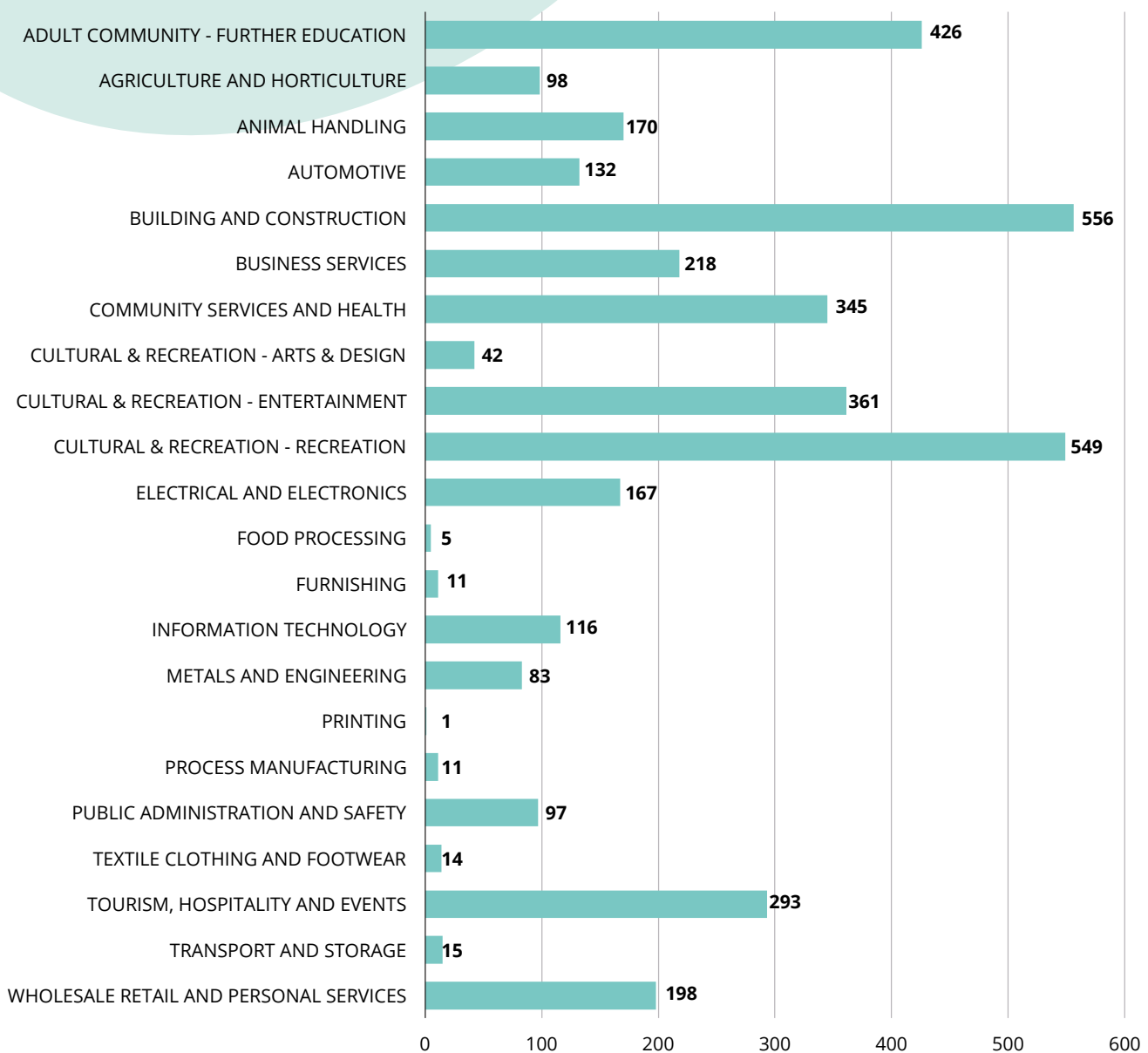
Data source: VCAA

## Vocational Education and Training (VET) in Schools

VET in school programs are undertaken as part of school studies and focus on students developing industry specific and workplace skills. These programs have the potential to increase educational attainment and provide vocational pathways for some students. Students who complete all or part of a nationally recognised qualification may receive credit towards satisfactory completion of their VCE and/or VCAL

Analysis of OELLEN Schools' enrolment data from the Victorian Curriculum and Assessment Authority (VCAA) indicates total enrolments have been fluctuating over the past 5 years with enrolments of 4070 in 2012, dropping to 3729 in 2014 and then returning, increasing somewhat to 4081 in 2016 and 3908 in 2017.

**2017 OELLEN Region School VET Enrolments**

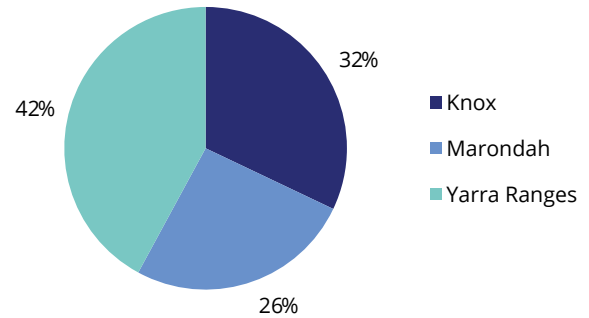


Data source: VCAA

## Distribution of VET school enrolments across OELLEN

Across the three Local Government areas, school VET enrolments were highest in Yarra Ranges with 42% of the total for the Region. Knox was second highest with 32% and Maroondah accounted for 26%.

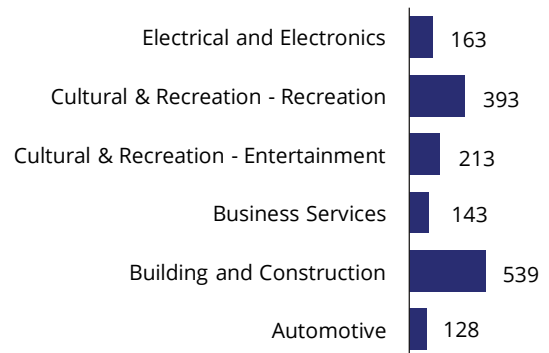
This is consistent with Year 12 completers post-school destination data which shows a higher proportion of young people in Knox and Maroondah transitioning to university compared to Yarra Ranges, which has a higher proportion of young people in Apprenticeships and Traineeships 11.6% compared to Knox (9.8%, Maroondah (7.7%) and Victoria (8.1%).



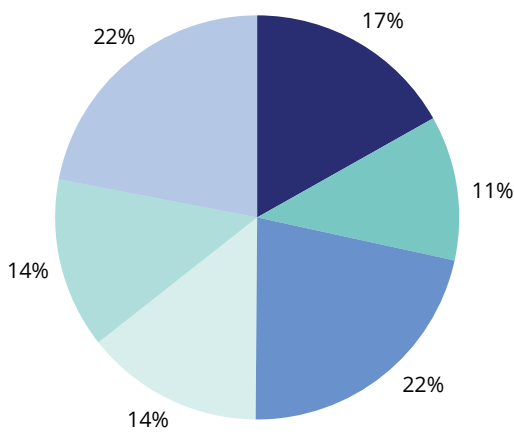
### OELLEN 2017 Female Top 6 Vocational Choices



### OELLEN 2017 Male Top 6 Vocational Choices

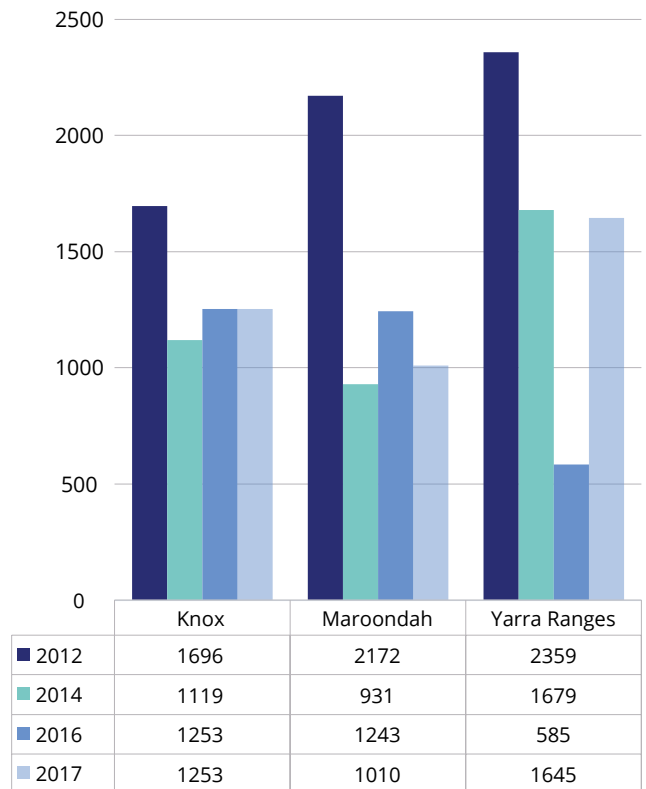


### OELLEN VET Enrolment Trends



- Adult Community - Further Education
- Tourism, Hospitality and Events
- Cultural & Recreation - Recreation
- Cultural & Recreation - Entertainment
- Community Services and Health
- Building and Construction

### OELLEN VET Enrolment Trends

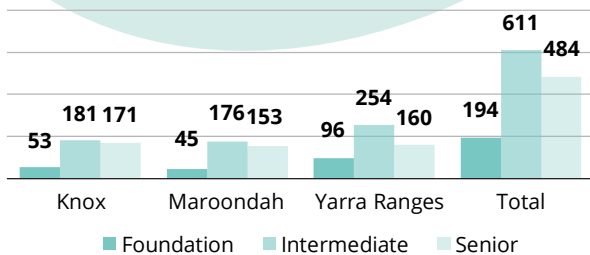


Distribution of VET school enrolments across OELLEN data source: VCAA and DET  
Other graphs data source: VCAA

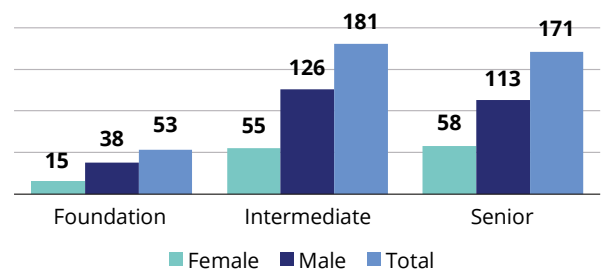
## OELLEN Victorian Certificate of Applied Learning (VCAL)

The VCAL certificate, like the Victorian Certificate of Education (VCE), is an accredited secondary certificate. VCAL is a hands-on option for Year 11 and 12 students and provides practical work-related experience and opportunities to build literacy, numeracy, and personal skills that are important for life and work.

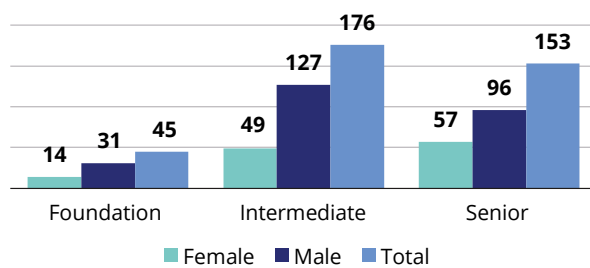
### OELLEN Victorian Certificate of Applied Learning (VCAL) Enrolments 2017



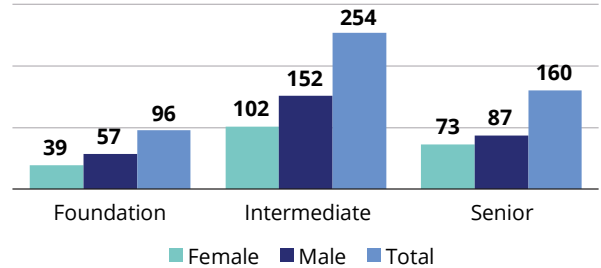
### 2017 VCAL Enrolment in Knox Schools



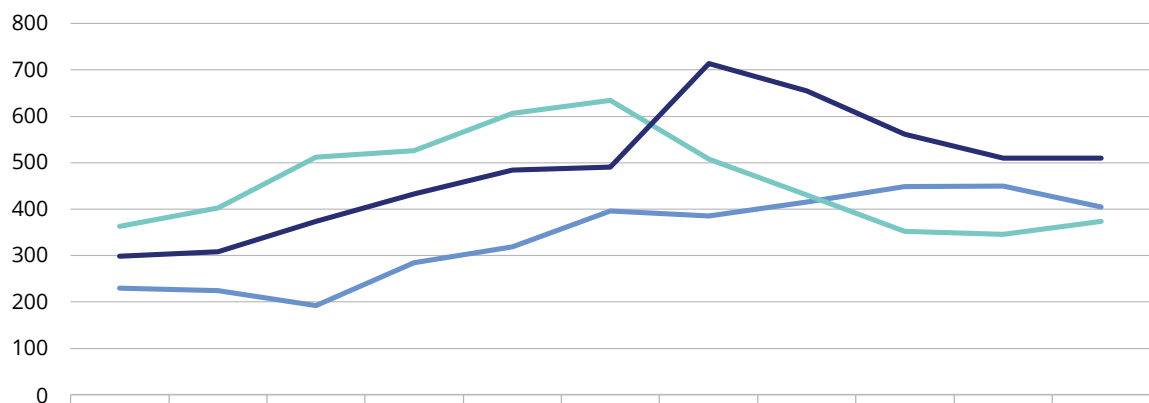
### 2017 VCAL Enrolment in Maroondah Schools



### 2017 VCAL Enrolment in Yarra Ranges Schools

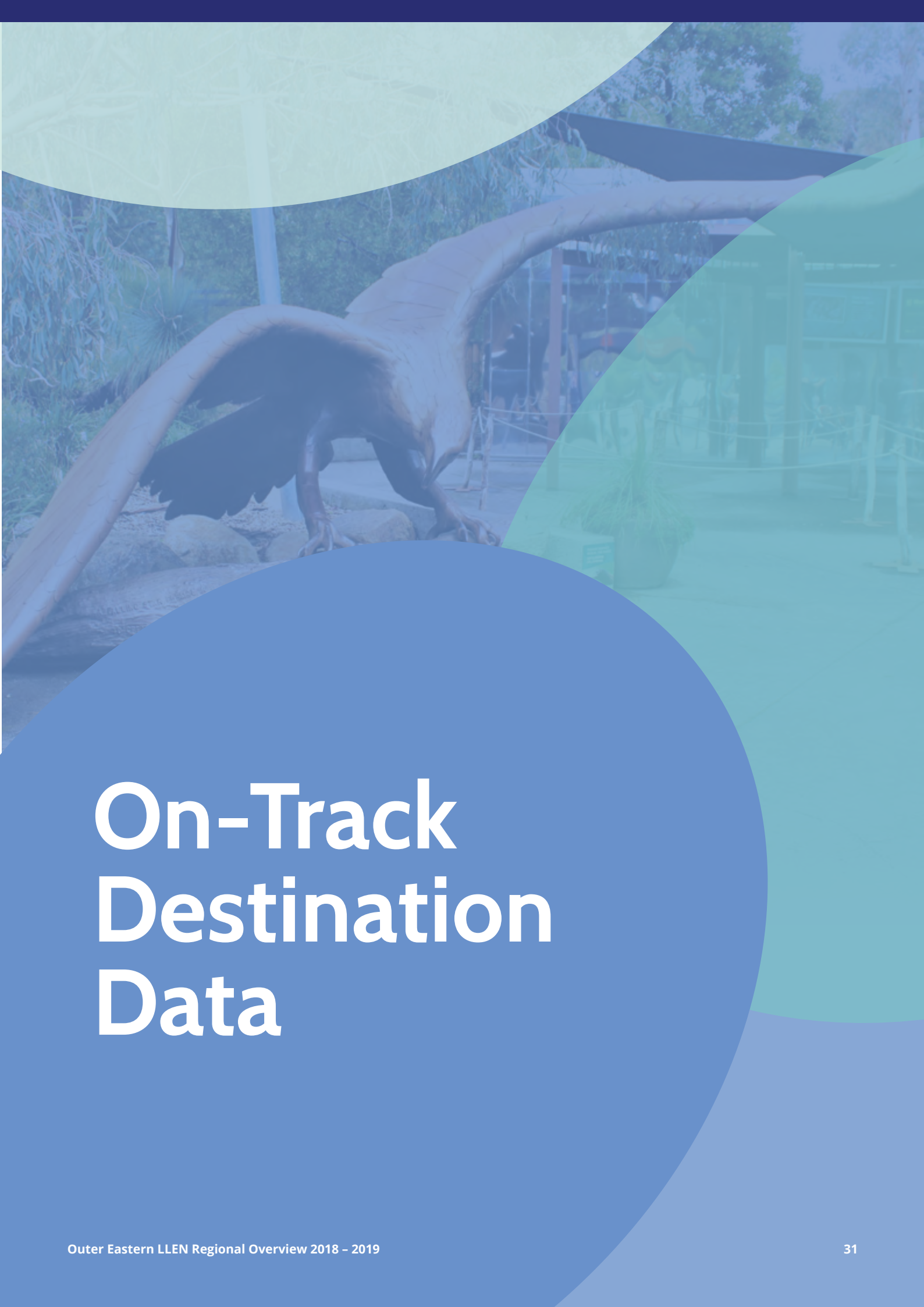


### 2007-2017 VCAL Enrolments by LGA across the OELLEN Region



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Knox	230	225	192	285	319	396	386	416	449	450	405
Maroondah	363	403	512	526	607	634	508	431	352	346	374
Yarra Ranges	299	308	374	433	484	491	714	655	562	510	510

Data source: VCAA



# On-Track Destination Data

On-Track is a Victorian Government initiative which surveys school-leavers who have left school in the last six months from years 10, 11 and 12. The survey collects data about their destinations, reasons for not continuing in education and training and details on the occupations and hours worked of employed school leavers.

On-Track ensures school leavers are contacted within six months of leaving school to see if they are on a path to further education, training or employment. It also enables young people to seek further advice and assistance via On-Track Connect, a referral service if required to get back on track.

## Year 12 or equivalent completers in 2016

The On-Track Report 2017 provides aggregate data for secondary school students who completed Year 12 in the Outer Eastern LLEN Region in 2016.

Year 12 or equivalent completers are defined as those who completed a Victorian Certificate of Education (VCE), International Baccalaureate (IB) or Victorian Certificate of Applied Learning (VCAL, Senior or Intermediate). The sample includes those who completed such qualifications in schools, or in TAFE institutions, or Adult and Community Education providers in 2016.

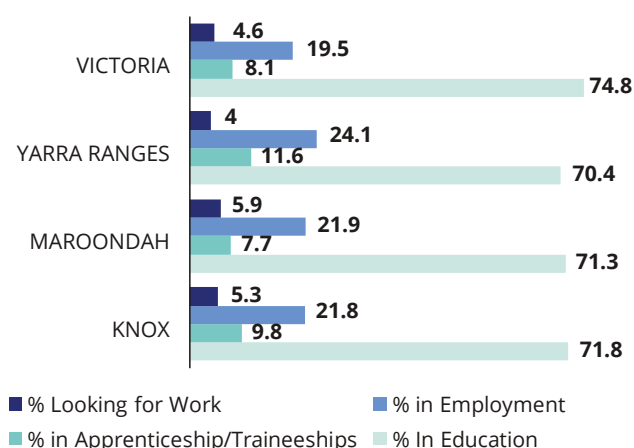
The number of Year 12 completers who participated in the survey was reasonably high in each LGA area (49.1% in Knox, 59% in Maroondah and 57.4% in Yarra Ranges), and therefore the data provides some indication of the whole.

The percentage of Year 12 completers in the OELLEN Region transitioning to a Bachelor degree was below the state in all three LGA areas (Knox 43.1%, Maroondah 49.8%, Yarra Ranges 41.4% Victoria 53.8%), however, the percentage of young people undertaking Cert IV or higher, was above the state (Knox 17.3%, Maroondah 12.0%, Yarra Ranges 15.8%, Victoria 10.9%). Apprenticeships/Traineeships were higher than the state (8.1%) in Knox (9.8%) and Yarra Ranges (11.6%) and below in Maroondah (7.7%).

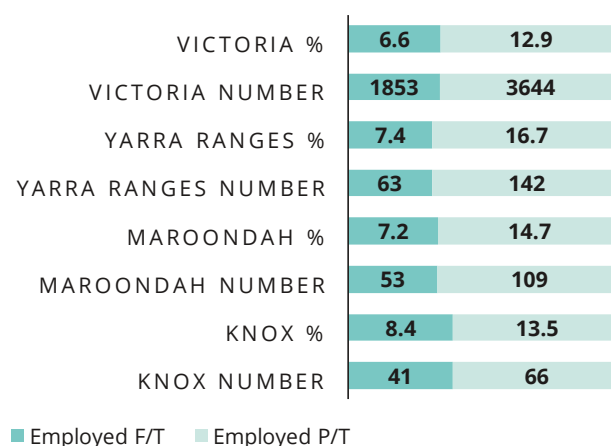
In the 2017 On Track Survey, Maroondah had the highest number of Bachelor Degree enrolments with 369 students. Yarra Ranges was second with 362 students and Knox had 211. All LGAs showed slightly reduced enrolment numbers from the 2016 report.

Deakin University was the most popular destination with 260 enrolments. Monash University was second most popular with enrolments of 191. Swinburne University received slightly higher enrolment than RMIT University, with 125 and 118 respectively.

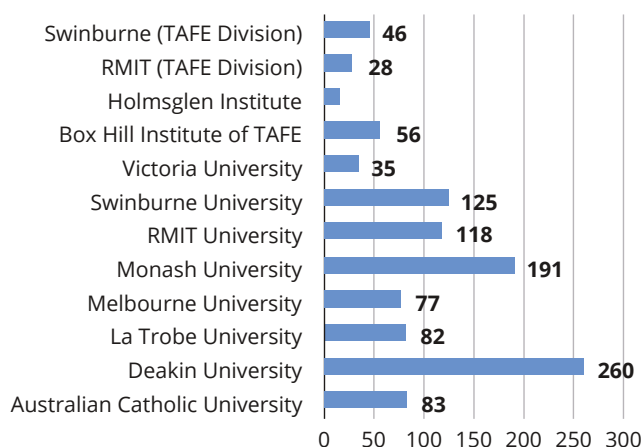
## Post School Destination Data of young people who completed Year 12 or equivalent in 2016



## Post School Employment Data of young people who completed Year 12 or equivalent in 2016



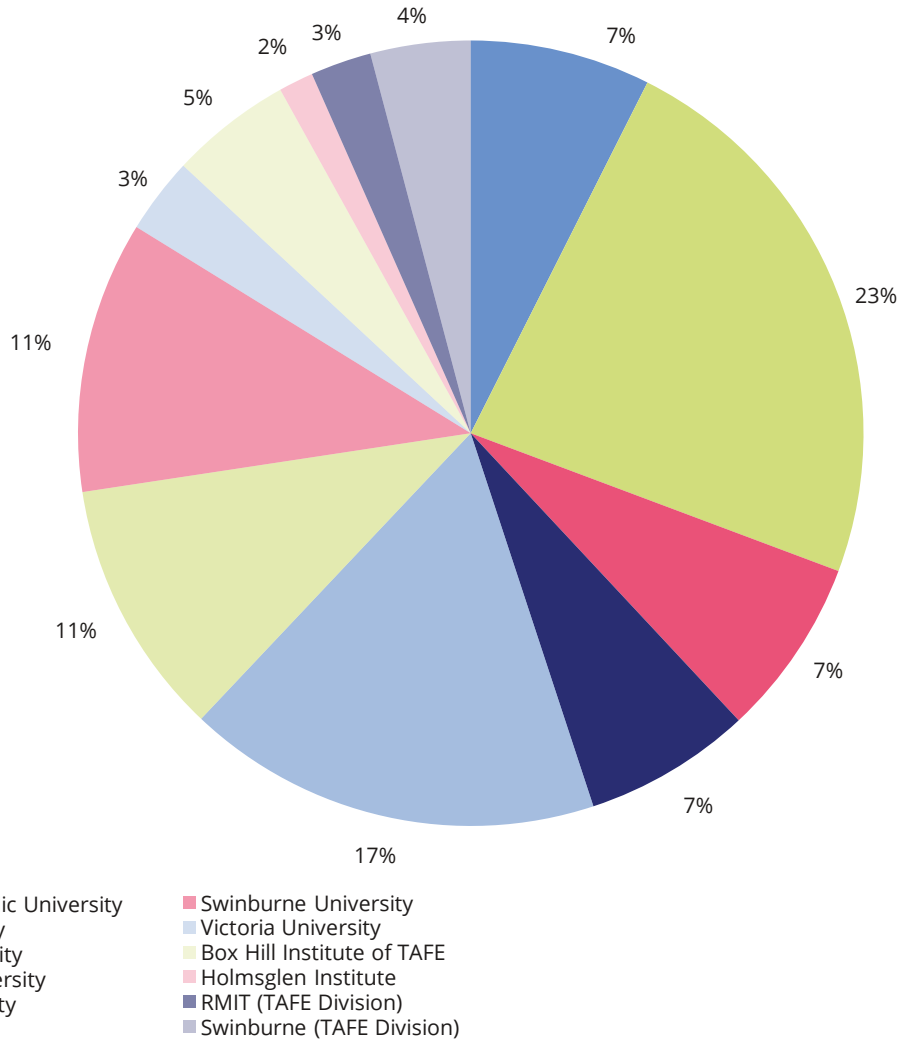
## Year 12 Completers University Destinations



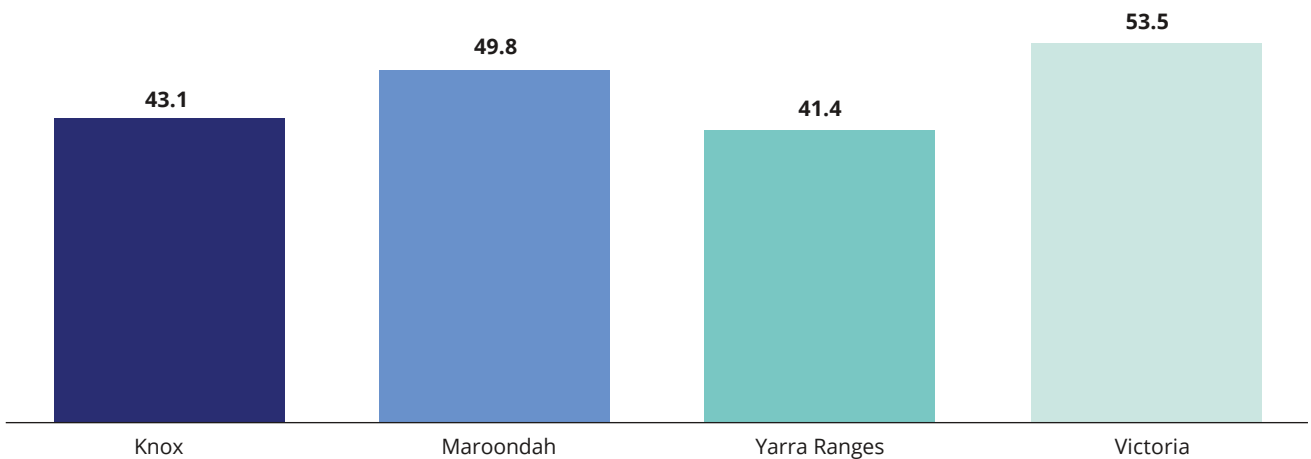
Data source: State of Victoria (Department of Education and Training) 2017



### Year 12 Completers % Distribution of University Destinations

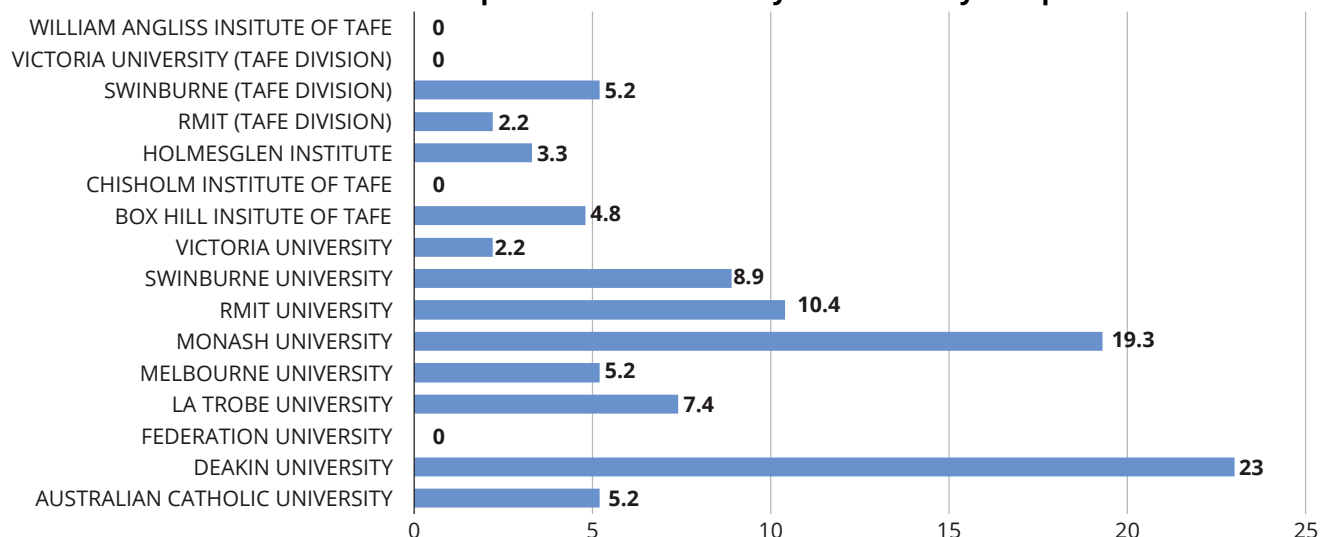


### Year 12 Completers 2017 Bachelor Degree Enrolments Percentage by LGA

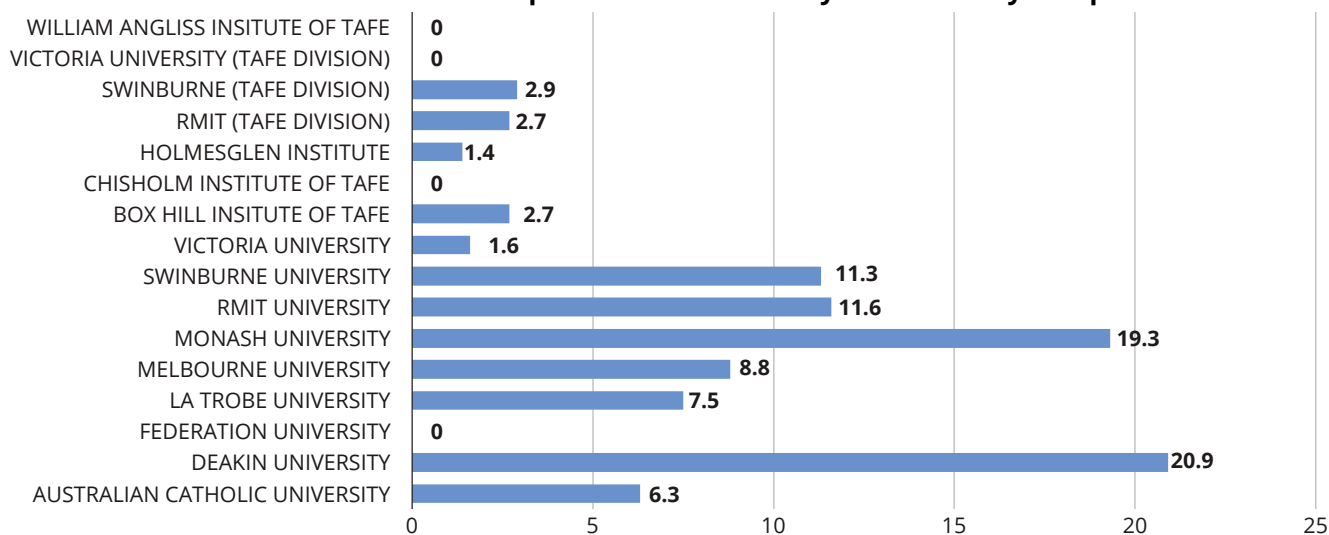


Data source: State of Victoria (Department of Education and Training) 2017

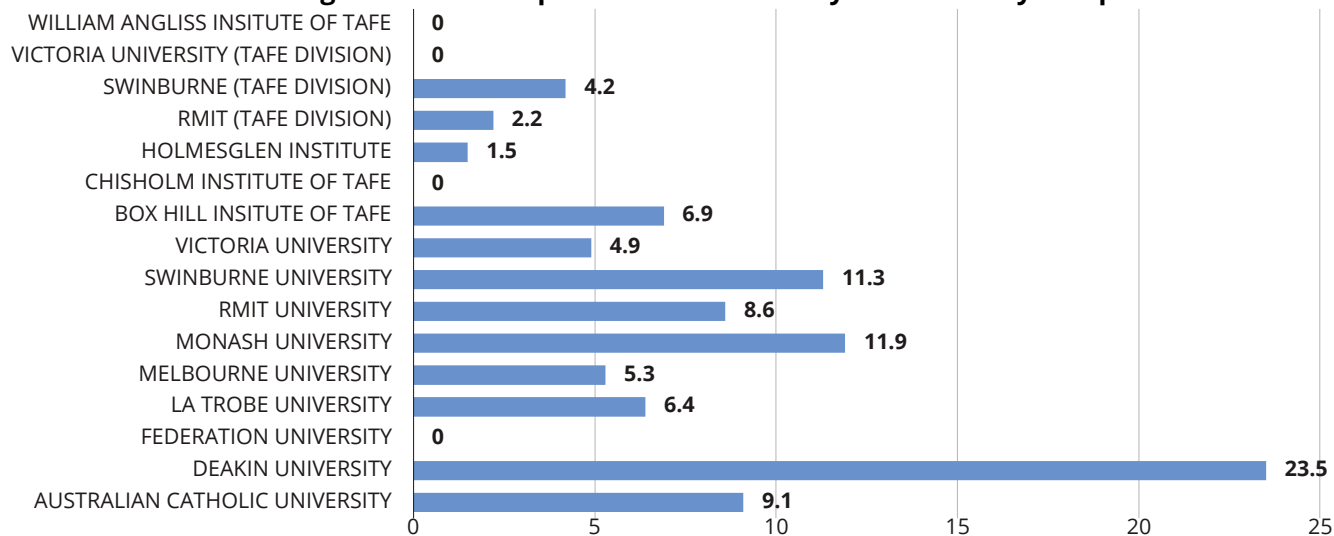
### Knox Year 12 Completers 2017 University Enrolment by Campus



### Maroondah Year 12 Completers 2017 University Enrolment by Campus

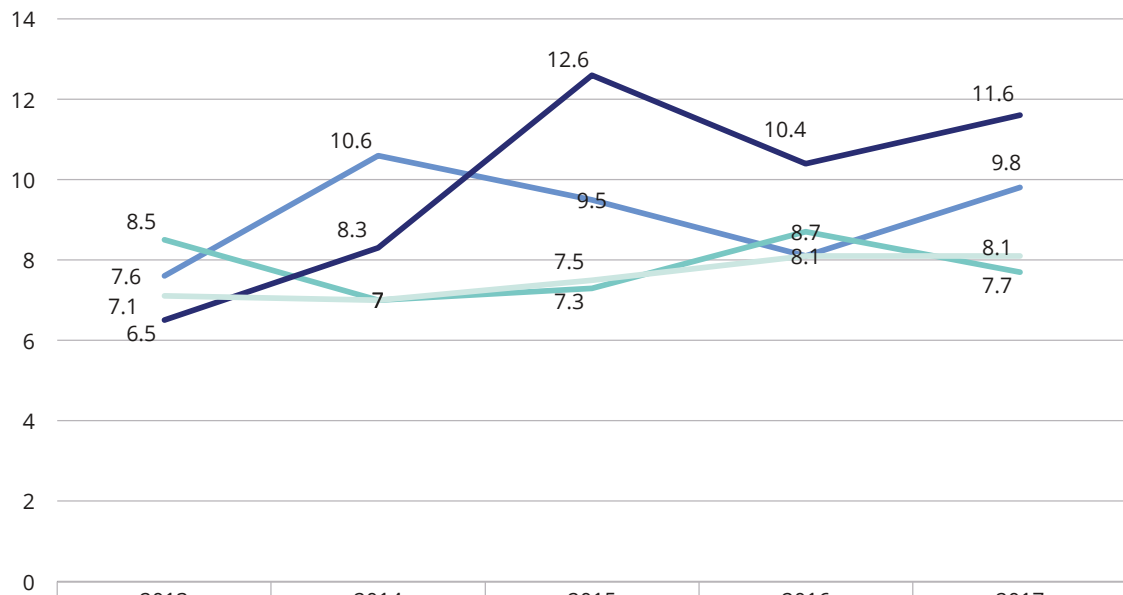


### Yarra Ranges Year 12 Completers 2017 University Enrolment by Campus



Data source: State of Victoria (Department of Education and Training) 2017

## Year 12 Completers Apprenticeship/Traineeship Trends



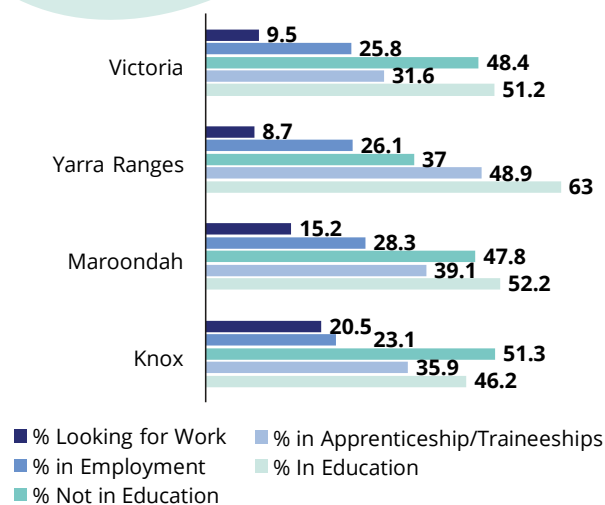
	2013	2014	2015	2016	2017
Knox	7.6	10.6	9.5	8.1	9.8
Maroondah	8.5	7	7.3	8.7	7.7
Yarra Ranges	6.5	8.3	12.6	10.4	11.6
Victoria	7.1	7	7.5	8.1	8.1

## Early School Leavers

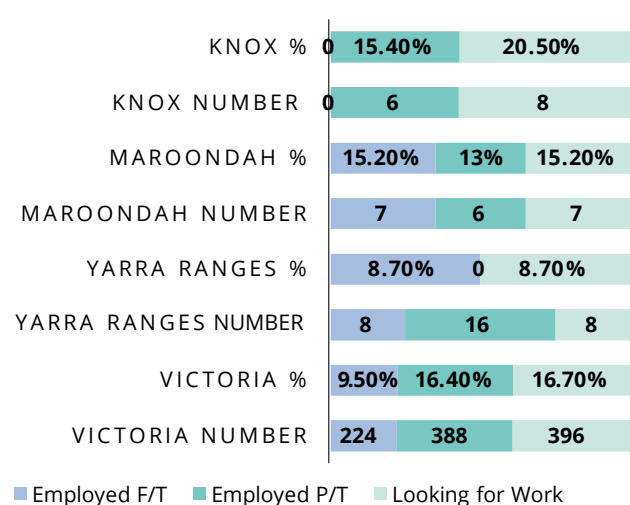
The number of Early School Leavers who responded to the survey was very low and therefore the data needs to be viewed with caution.

The percentage of OELLEN Early School Leavers who were engaged in Education and Training was above the state (51.2%) in Maroondah (52.2%) and Yarra Ranges (63%) but below the state in Knox (46.2). The percentage of Early School Leavers in Apprenticeships/Traineeships was above the state in all three LGAs. In Knox, the percentage of Early School Leavers in employment (23.1%) was below the state (25.8%).

### Destination Data for Young people who left school prior to completion to Year 12 in 2016



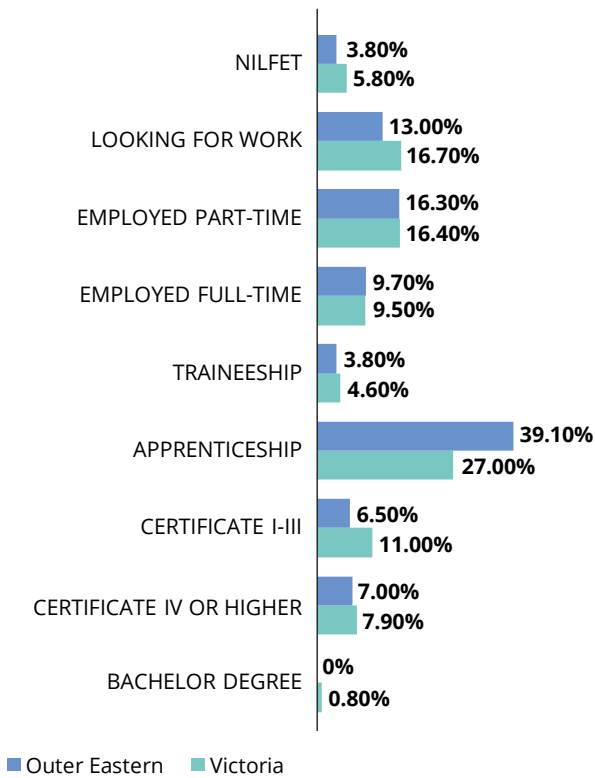
### Post School Employment Data of Early School Leavers



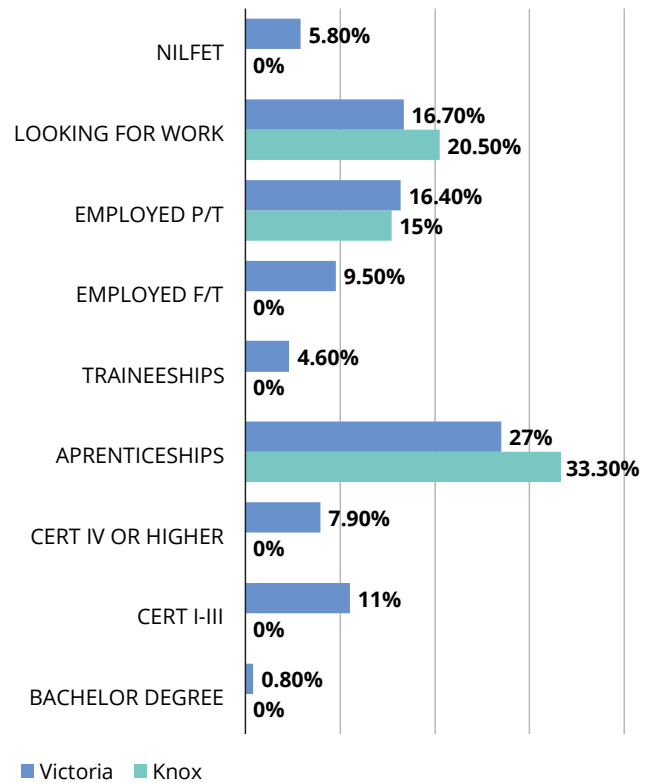
Data source: State of Victoria (Department of Education and Training) 2017

\*\* Numbers not published for Knox employed F/T due to the small number of respondents

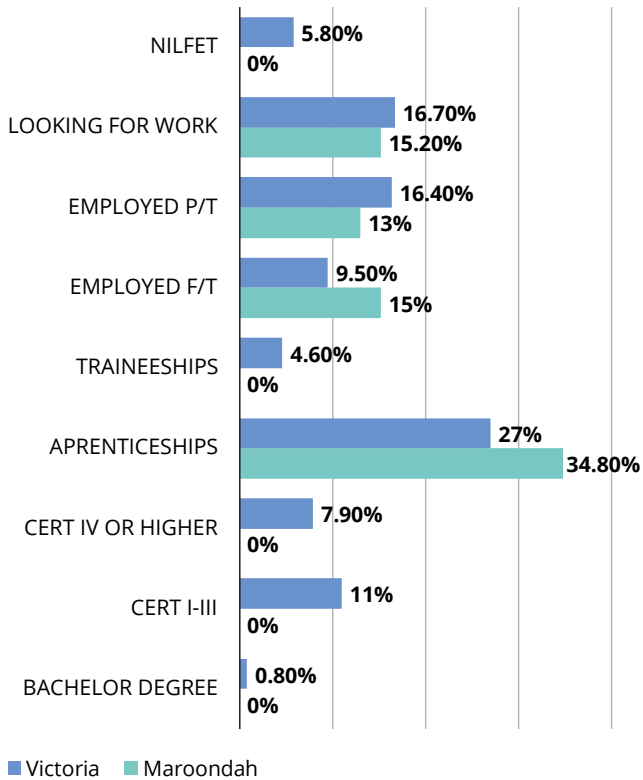
### OELLEN – Victoria Early School Leaver Destinations 2017



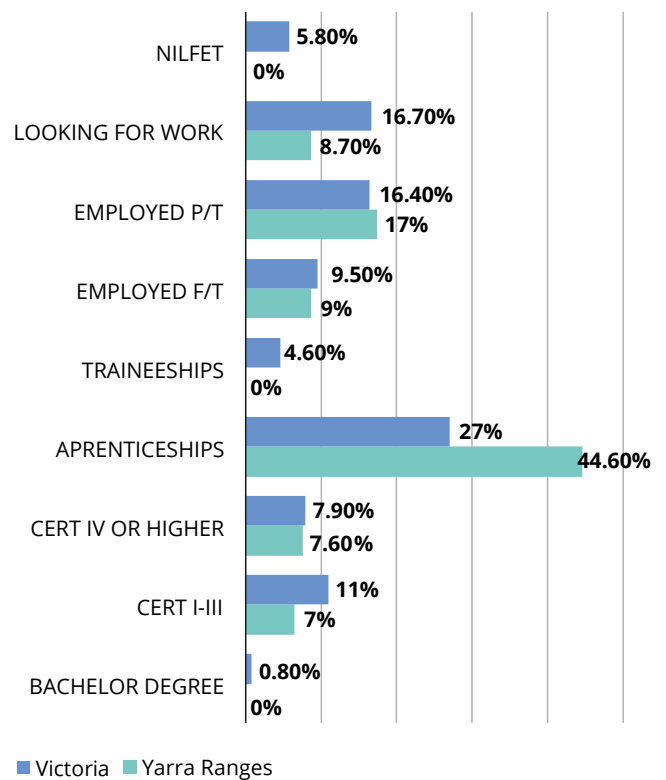
### Knox Early Leavers Destination Data 2017



### Maroondah Early School Leavers Destination Data 2017

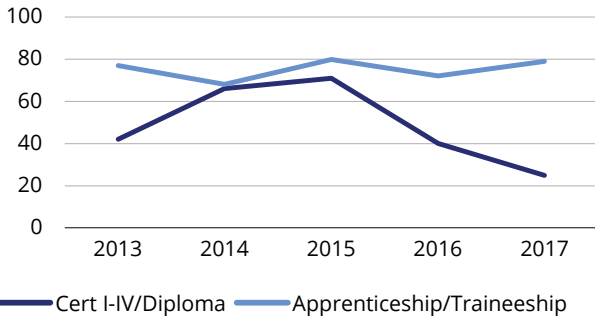


### Yarra Ranges Early School Leavers Destination Data 2017

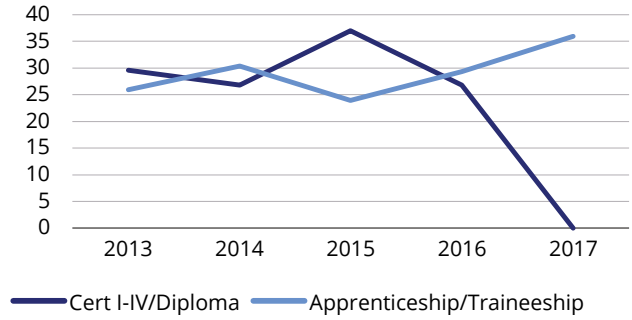


Data source: State of Victoria (Department of Education and Training) 2017

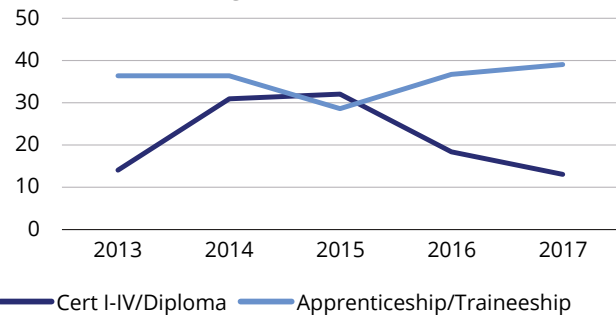
### Outer Eastern Early Leavers Education & Training Destination Trends



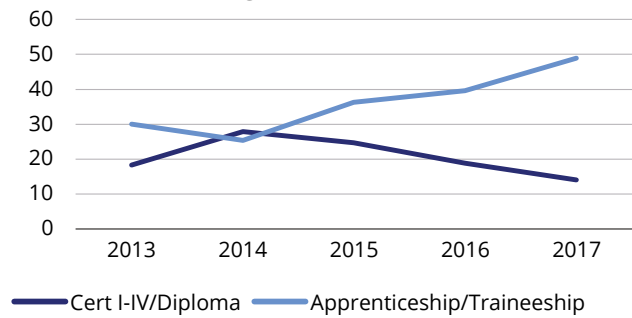
### Knox Early Leavers Education & Training Destination Trends



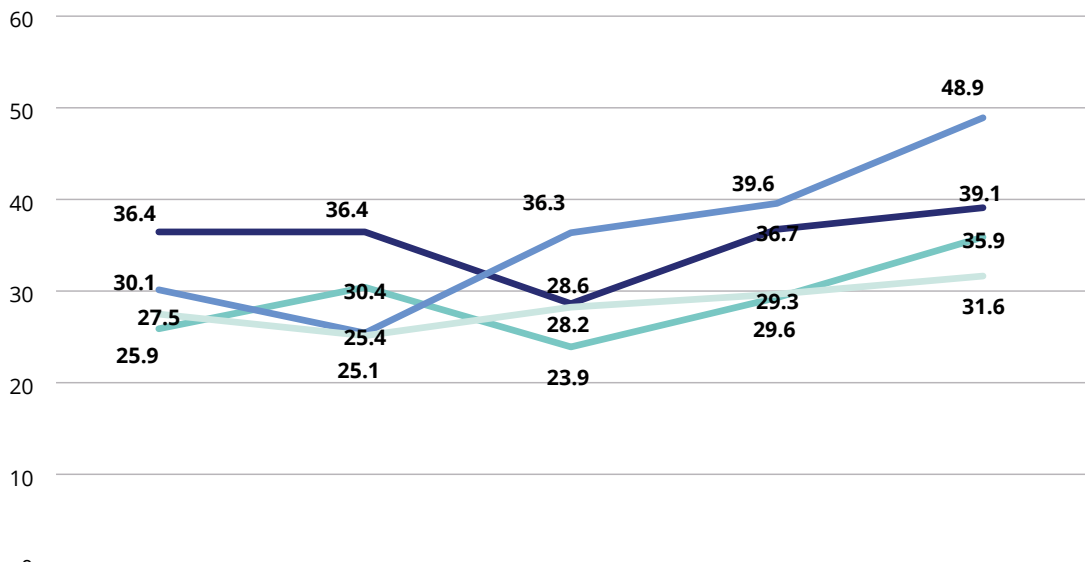
### Maroondah Early Leavers Education & Training Destination Trends



### Yarra Ranges Early Leavers Education & Training Destination Trends



### Early School Leaver Apprenticeship/Traineeship Trends



	2013	2014	2015	2016	2017
Knox	25.9	30.4	23.9	29.3	35.9
Maroondah	36.4	36.4	28.6	36.7	39.1
Yarra Ranges	30.1	25.4	36.3	39.6	48.9
Victoria	27.5	25.1	28.2	29.6	31.6

Data source: State of Victoria (Department of Education and Training) 2017

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