Engineers Australia

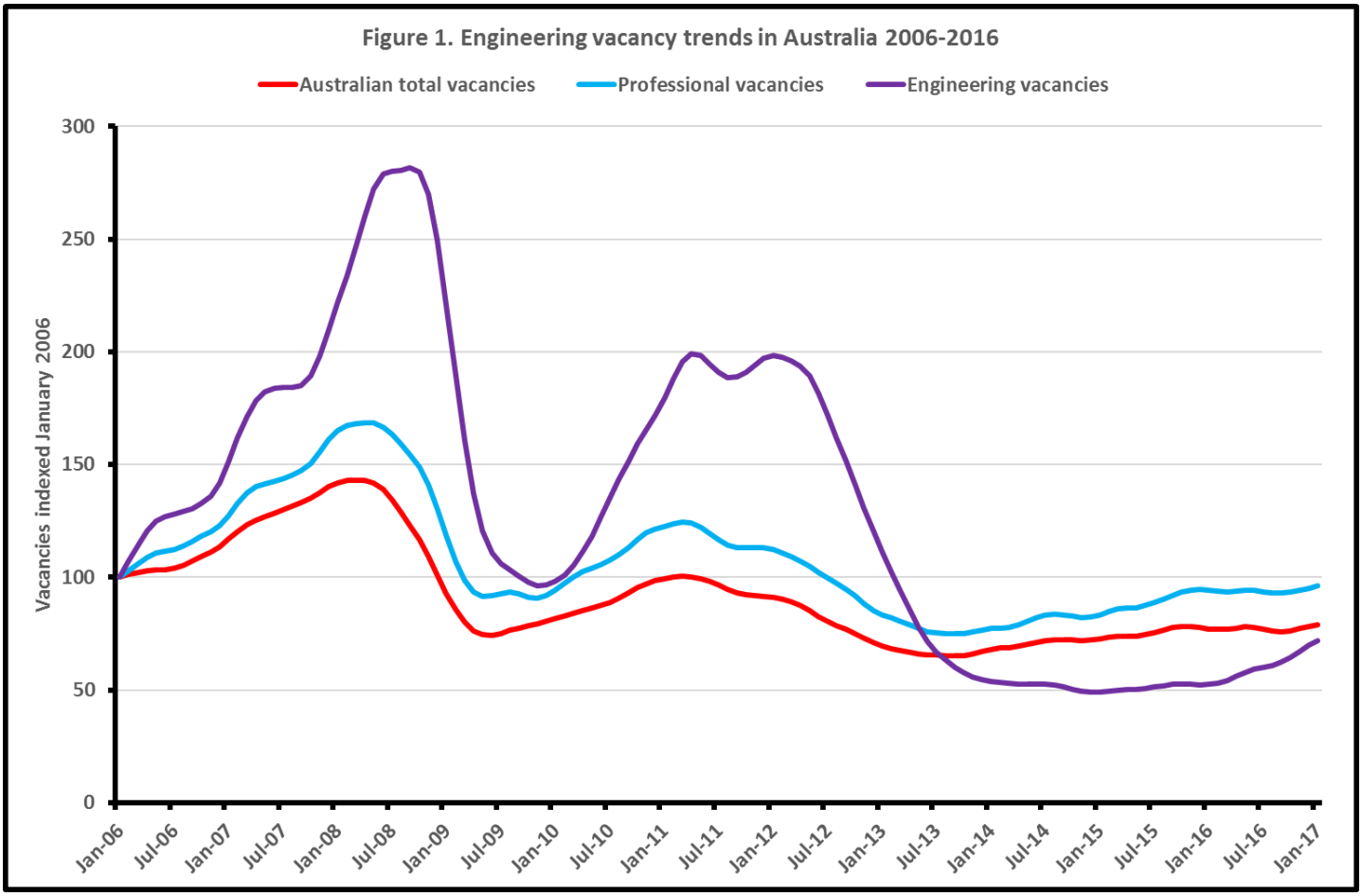
Public Affairs Note

ENGINEERS AUSTRALIA

Vacancies for Engineers January 2017 Update

This policy note looks at the current state of engineering employment in Australia by analysing the direction of change in engineering vacancy numbers. The Department of Employment has released its February 2016 Vacancies Report which covers trends in job vacancies for engineers to the end of January 2017 and revisions for previous months, allowing analysis of engineering vacancies for 2016. As usual, statistics presented are the Department's revised and preferred trend series. Movements in vacancies provide broad indications about the direction in which labour market changes are heading. All the vacancy numbers and graphs presented below are in trend terms.

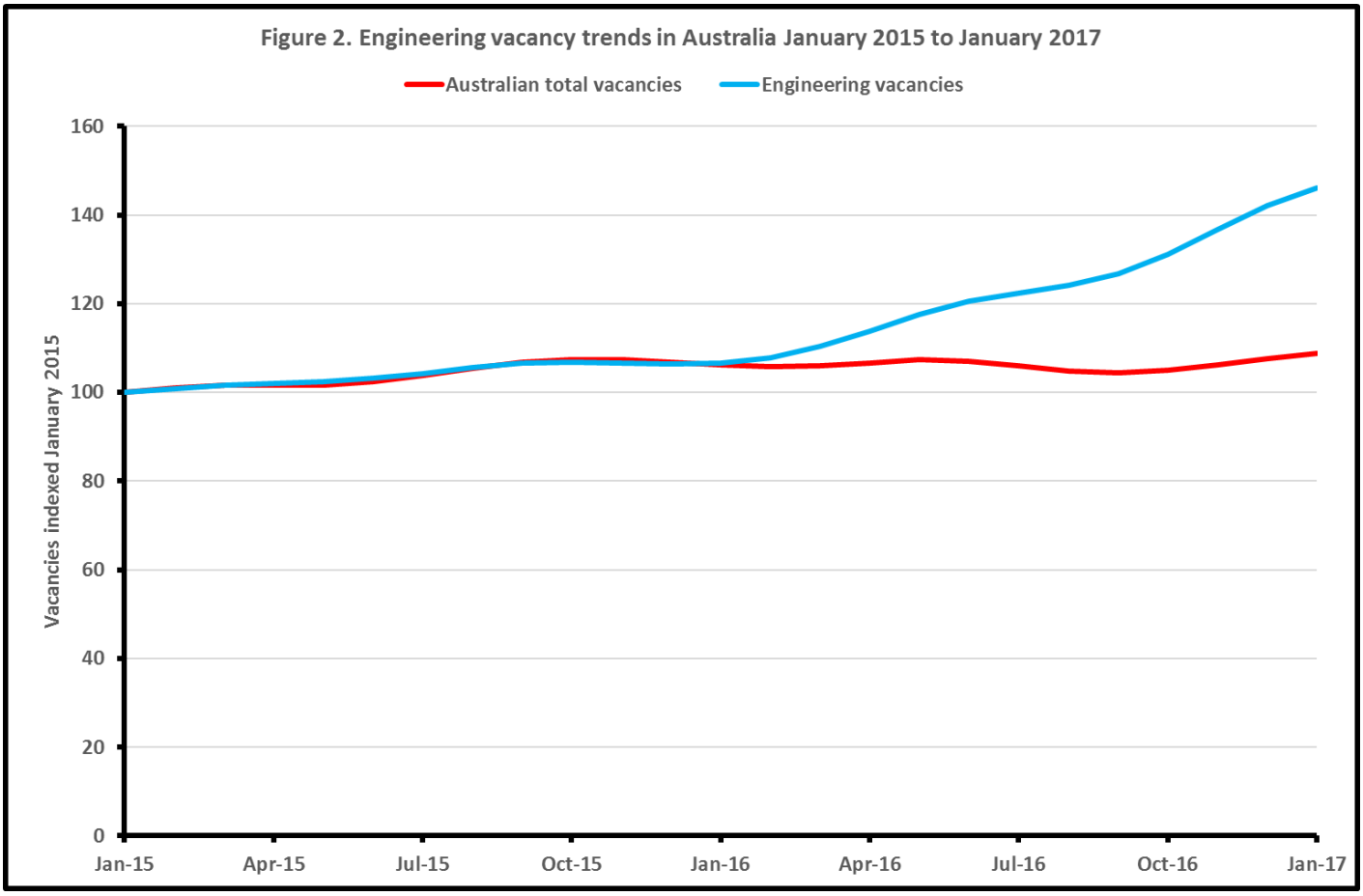
Figure 1 provides background trend information about the changes to the engineering labour force over the past decade, including influences such as the resources boom and the Global Financial Crisis. Figure 1 also shows how engineering vacancies have compared to Australian general vacancies and Australian professional vacancies over the same time period.



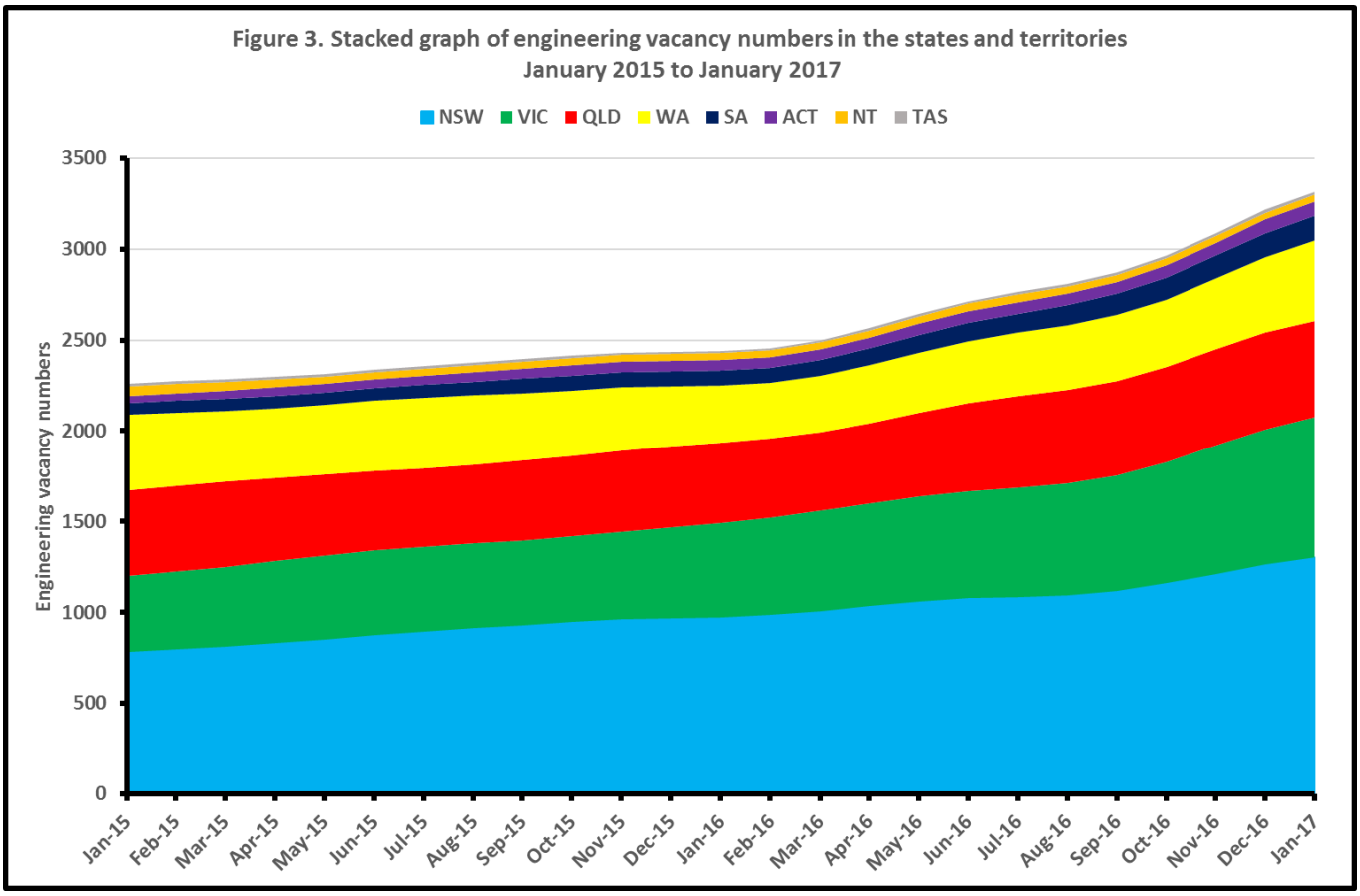
In 2006 Australia's engineering labour force grew significantly to meet the demand for engineers during the construction phase of the resources boom, peaking in 2008. The engineering labour force weathered the Global Financial Crisis which followed, and was able to recover with growth in 2010 and 2011, but this recovery was short lived. The engineering labour market began to deteriorate rapidly from December 2012 as engineering vacancies began a 30-month slide. This deterioration continued through to 2014, and engineering vacancies have remained at low levels throughout 2015 before the first signs of growth appeared in 2016.

Engineering vacancies grew in 2016 from 2,423 recorded in January to 3,230 recorded in December. The number recorded for December 2016 was higher than the number of 2,415 recorded in December 2015, and also higher than the 2,268 recorded in December 2016. However, engineering vacancy numbers are still much lower than peaks of 13,005 in September 2008 and 9,156 in January 2012.

Over the past two years engineering vacancies recorded growth of 42.2 per cent, which is better than the overall Australian vacancy growth of 7.7 per cent over the same period. Figure 2 shows the changes to engineering vacancies over the last two years in comparison to Australian total vacancies.



Growth in engineering vacancies in the last 12 months has increased at a greater rate than all Australian vacancies as seen in the figure above which could indicate the first signs of a slight recovery in the engineering labour market. Investigating this further reveals that many of the states and territories have recorded growth in engineering vacancies in the last two years, especially South Australia, Victoria, New South Wales and the ACT. Figure 3 shows engineering vacancy numbers over the last two years for all the states and territories.

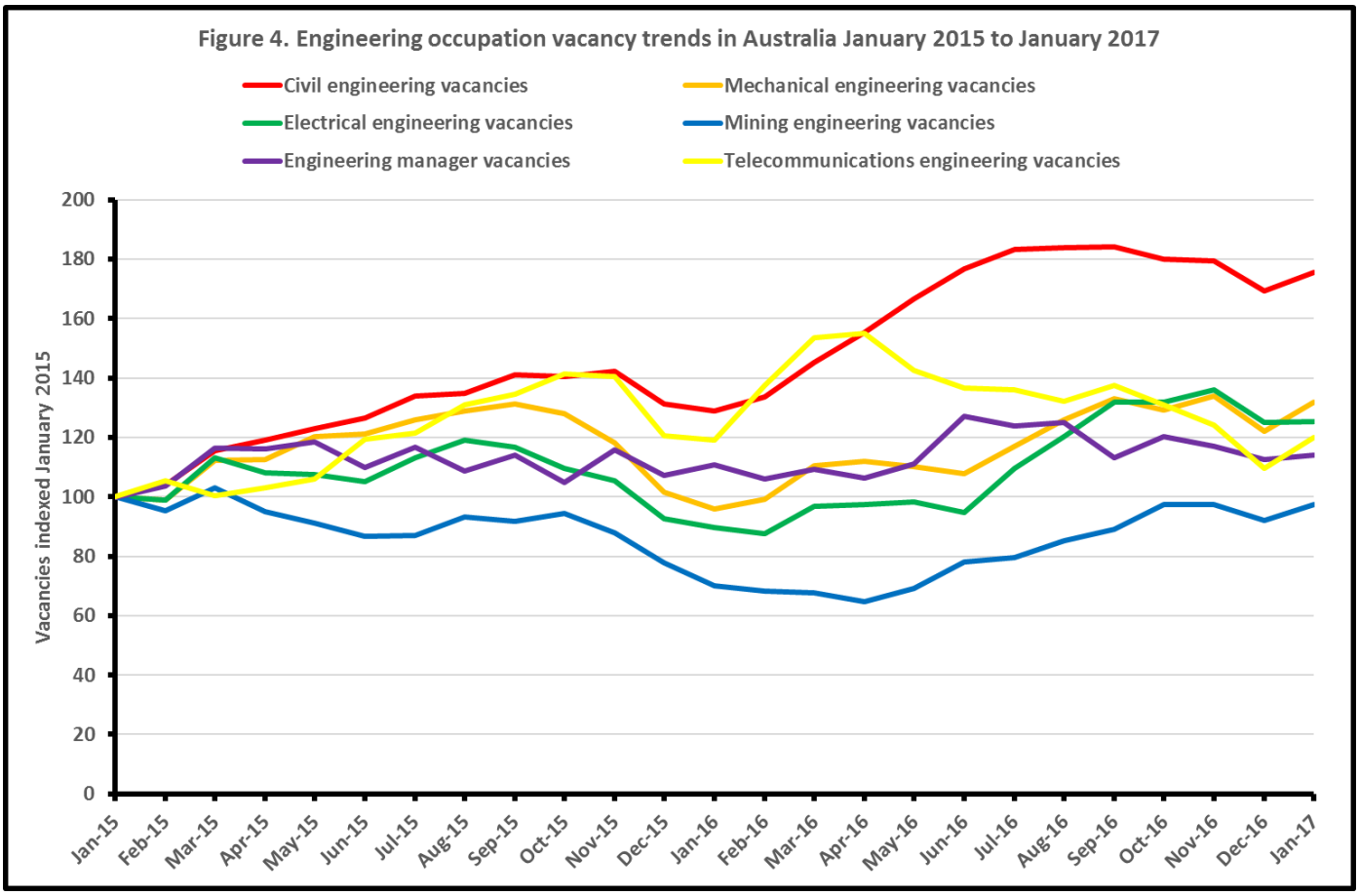


Engineering vacancy numbers in the states and territories are recorded below. From January 2015 to January 2017:

- New South Wales engineering vacancies have increased from 782 vacancies recorded to 1,303 vacancies. New South Wales currently makes up 39.3 per cent of total engineering vacancies.
- Victorian engineering vacancies have increased from 417 vacancies recorded to 770 vacancies recorded. Victoria currently makes up 23.2 per cent of total engineering vacancies.
- Queensland engineering vacancies have increased from 472 vacancies recorded to 531 vacancies recorded. Queensland currently makes up 16 per cent of total engineering vacancies.
- South Australian engineering vacancies have increased from 66 vacancies recorded to 136 vacancies recorded. South Australia currently makes up 4.1 per cent of total engineering vacancies.
- Western Australia engineering vacancies have increased from 416 vacancies recorded to 444 vacancies recorded. Western Australia currently makes up 13.4 per cent of total engineering vacancies.
- Tasmanian engineering vacancies have increased from 15 vacancies recorded to 18 vacancies recorded. Tasmania currently makes up 0.6 per cent of total engineering vacancies.
- Northern Territory engineering vacancies have fallen from 55 vacancies recorded to 38 vacancies recorded. The Northern territory currently makes up 1.1 per cent of total engineering vacancies.
- The Australian Capital Territory engineering vacancies have increased from 38 vacancies recorded to 76 vacancies recorded. The Australian Capital Territory currently makes up 2.3 per cent of total engineering vacancies.

The February Vacancies Report also allows us to further analyse the engineering occupation data to see which engineering occupations have contributed to this engineering vacancy growth over the last two years. Figure 4 shows the trends in growth of the six most popular engineering occupation vacancies over the last two years.

There have been high numbers of vacancies recorded for ICT support and test engineers nationally with high numbers in some of the states and territories including NSW, Victoria, and the ACT. These numbers are well above the numbers recorded for electronics and telecommunications engineers. However, it is difficult to determine how many of the vacancies in these occupations are engineering specific, so they have been left out of this analysis.

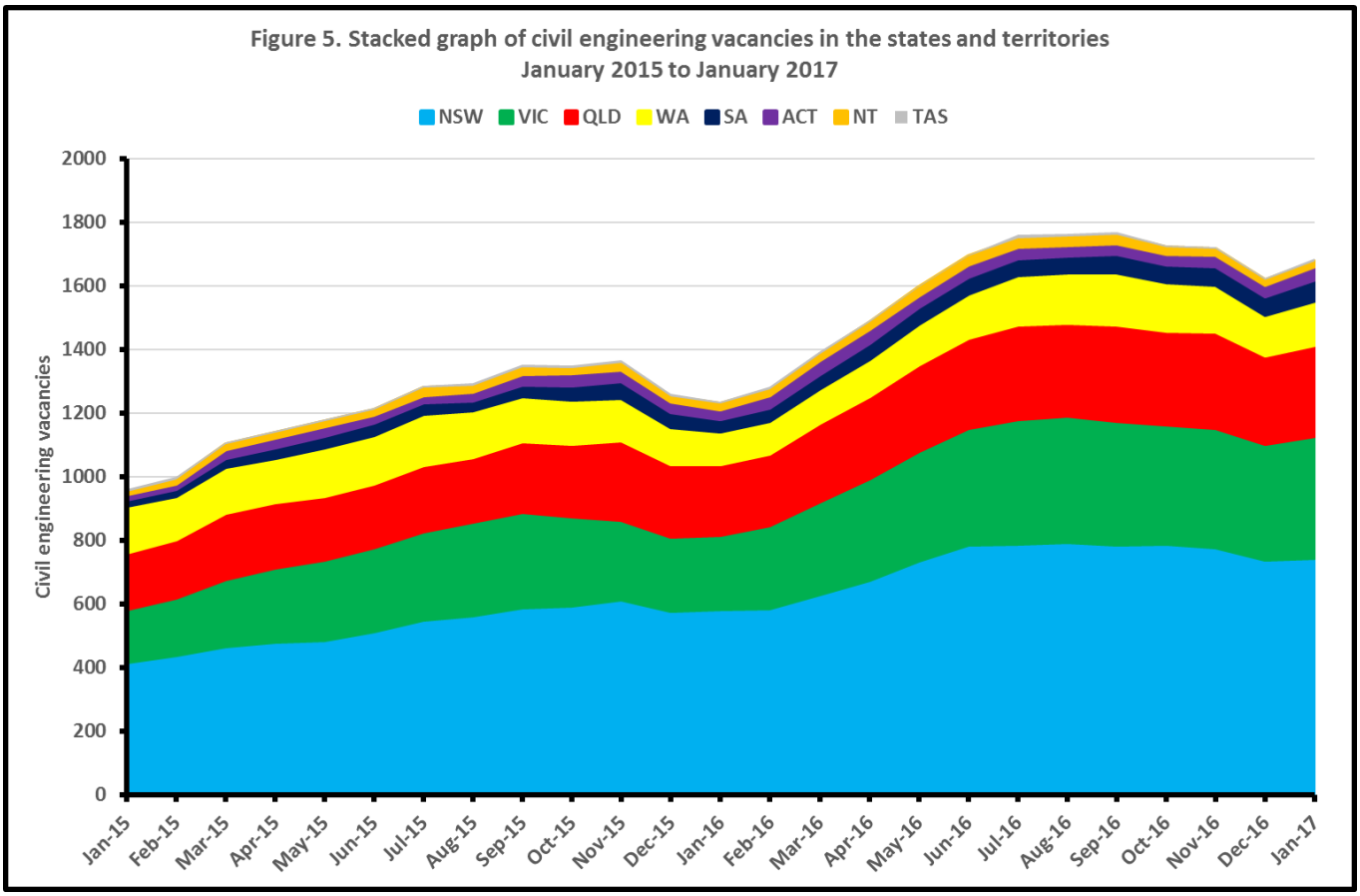


Key points for engineering occupation vacancies as seen in Figures 4 are:

- It is clear that civil engineering occupation vacancies have been the driving force behind much of the engineering vacancy growth and they have consistently recorded the highest number of vacancies of all engineering occupations over the last decade. In January 2015 there were 960 vacancies for Civil engineers rising to 1,685 in January 2017.
- Mechanical engineering occupation vacancies have grown steadily for the last two years, up from 358 vacancies recorded in January 2015 to 472 vacancies recorded in January 2017.
- Electrical engineering occupation vacancies have grown over the two-year period, with the majority of grown in the last six months. In June 2016 there were 160 vacancies recorded, growing to 212 in January 2017.
- Although mining vacancies fell slightly from January 2015 to April 2016, they have shown some signs of recovery over the last nine months. They have grown from 197 vacancies in April 2016 to 298 vacancies in January 2017.

- Engineering manager occupation vacancies have remained fairly consistent over the last two years only growing slightly in that time period from 100 vacancies in January 2015 to 114 vacancies in January 2017.
- Telecommunications engineering vacancies grew from 67 vacancies in January 2015 to 103 vacancies in April 2016, before falling back to 80 vacancies in January 2017.

As Figure 4 demonstrated that strong growth in civil engineering occupation vacancies is pushing overall engineering vacancy numbers, we can also analyse civil engineering vacancy trends in the five biggest states in Australia. Figure 5 below shows civil engineering vacancy numbers over the last two years.



As shown in Figure 5, growth in civil engineering occupations has been strong for all the major states in 2016 except for Western Australia. New South Wales and Victorian civil engineering vacancies have been the main drivers of this growth in the last two years. In New South Wales civil engineering vacancies grew from 417 vacancies recorded to 743 vacancies, while Victorian civil engineering vacancies grew from 165 vacancies to 386 vacancies. Although the biggest growth trend was in South Australian civil engineering vacancies, this is coming of a relatively small base number, growing from 22 vacancies to 66 vacancies over that time period.

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