



**ENGINEERING & AUTOMOTIVE  
TRAINING COUNCIL INC.**

## **THE ENGINEERING AND AUTOMOTIVE TRADES IN WESTERN AUSTRALIA**

# **A skills base at risk**

**Summary, key findings and recommendations | August 2014**



## SUMMARY

This report summarises the findings from an extensive literature review, data analysis and research project examining the current and future skills requirements in the engineering and automotive trades in Western Australia.

A downloadable copy of the full report is available from the Engineering and Automotive Training Council (EATC) – contact [admin@eatc.com.au](mailto:admin@eatc.com.au).

Evidence collected during the project identifies serious concerns about the range, specialisation and quality of skills in the nominated engineering and automotive trades. The project has also defined difficulties with apprenticeship training that are impacting on the development of the state's skills base.

Although these skills and apprenticeship difficulties are causing current recruitment and retention issues and associated operational difficulties for employers, the scale of these problems is tempered by the slowing down of business activity, particularly associated with the completion of major engineering construction projects.

It is the effects of the current skills and apprenticeship dilemmas on the state's future skills base that are of greater concern. Without action, there is a risk the state is likely to experience a significant skill shortage in a range of engineering and automotive trades and a continuing decline in the overall quality of locally trained tradespersons.

If the risk is not managed, the lack of quality and shortage of skills will not just affect future major resource construction projects, but will extend to the general engineering and automotive workforce. There are already signs that employers involved in general manufacturing, maintenance, servicing and construction are finding it hard to recruit the range, type and quality of skills they require.

The project has identified a gap in local skills development in both apprenticeships and up-skilling of existing workers. There is also an over-reliance on skilled overseas labour that has the potential to adversely affect local skills development.

## KEY FINDINGS

- A. Apprenticeship commencements have dropped, in some cases to levels lower than that during the global financial crisis in 2009. This does not augur well for the future of a strong and sustainable local skills base.

The apprenticeship model relies on the continuous supply of employment-based training places. A drop in the availability of employment-based training places reduces opportunities for people to develop trade skills and creates a gap in the future skills base. Future local supply of trade skills depends on the level of apprenticeship investment now.

- B. The apprenticeship system, as it is currently designed, is not meeting current or future requirements. The apprenticeship model depends on the capacity of an employer to offer an extended training opportunity combined with full time employment. A transformation is needed to accommodate:
- a. The highs and lows of the business cycle;
  - b. The particular needs of individual trades and industry sectors – the current ‘one size fits all’ apprenticeship system may no longer be appropriate;
  - c. A rapid response to emerging skills demand;
  - d. Changing demographics and the aptitude, expectations and suitability of young people;
  - e. A greater focus on specialised skills – higher level certified welding and automotive electrical skills are examples; and

- f. The introduction of new delivery models and qualifications, including direct entry to higher level skills pathways.
- C. The current supply of quality, locally trained tradespersons is not adequate to meet current demand. Even though there are many applicants for advertised trade positions, employers report that the specific skills required are in short supply and the available skills are low calibre.
- D. Employers are reporting gaps in higher level and broader range skills in the existing skills base. Greater investment is needed in targeted, higher-level and post-trade training.
- E. Despite most employers stating a preference for employing local tradespersons the engineering and automotive sectors in Western Australia are likely to continue as importers of trade skills.

Tradespersons trained overseas have increased as a proportion of the trade population. Somewhere between one half to two thirds of employers have or are employing overseas workers. In some trades the increase in overseas born workers has been instrumental in maintaining employment levels.

- F. The skills base in some specific trades is in decline. These trades include: metal machinist (first class); welder (first class); and motor mechanics (general).
- G. While there are similarities in the issues faced in the engineering and automotive sectors, there are sufficient differences to warrant tailored solutions – for each trade group and in some cases for individual trades.
- H. There is a strong case for improved data collection, availability and reporting at the individual trade level to better inform decisions related to skills development, workforce planning and skilled migration.

## RECOMMENDATIONS

The project findings have identified a range of issues that need to be addressed. There is a requirement for further work in certain areas and the need for a continued focus on the factors that are influencing local skills development decisions.

There are risks to the sustainability of the state's engineering and automotive trade skills base that need to be managed and therefore it is recommended that the Engineering and Automotive Training Council:

1. Work with the relevant Government agencies on the most appropriate occupational classifications in the engineering and automotive trades to enable more effective data collection.
2. Define the issues associated with the existing apprenticeship model and develop alternative approaches (whilst maintaining the integrity of the apprenticeship system) to ensure the continued industry investment in the state's engineering and automotive skills base.
3. Strengthen involvement in career promotion and industry advice to the schools sector. Consider the suitability of materials available through the Australian Apprenticeships and Traineeships Information Service for prospective apprentice aptitude self-assessment.
4. Work with the Department of Training and Workforce Development and other stakeholders, to investigate the reasons for low level enrolments in key higher level skill units in the fabrication and mechanical trades, and determine how skill sets may contribute to improved participation rates.
5. Reposition welding as a full apprenticeship program, (including up to Certificate IV Advanced Welding), separate from the general heavy fabrication trade and train to the requirements of Certificate 1 to 9 under Australian Standard 1796 Certification of Welders.

6. Work towards the establishment of a direct entry Certificate IV apprenticeship program in the engineering trades.
7. Encourage continuous improvement by giving employers and individual Certificate III holders the option of accessing specific units to reach the Certificate IV outcome for trade up-skilling purposes in the engineering trades.
8. Identify and introduce mechanisms to capture automotive electrical/electronic skills within the automotive trades.
9. Review the current automotive apprenticeship pathways to capture intakes at Certificate levels II, III and IV, thereby more appropriately responding to industry requirements.