



Pro forma for SOL 2013 Submission

The Australian Workforce and Productivity Agency (AWPA) (formerly Skills Australia) is currently updating the **Skilled Occupation List (SOL)** for 2013 and is seeking your input concerning the occupations/industry sectors represented by your organisation. In particular, we are seeking evidence of:

- demand and supply imbalance¹, both nationally and regionally
- medium-to-long term demand and supply trends which may impact upon the employment outlook
- formal licensing or registration requirements

(N.B. For the purposes of this exercise, 'medium-to-long term' is defined as a period of around 2 to 10 years).

Please note that the SOL is concerned *only* with medium-to-long-term skills needs rather than immediate skills shortages. As such, AWPA is only seeking to obtain information on longer term trends, rather than immediate shortages and costs.

1. The industry (or industries), and occupation(s) represented by your organisation, for the purposes of this submission, are:

Industry/industries:

Auto Skills Australia represents the **Automotive Industry**, which is comprised of numerous sectors and occupations. These include the following:

SECTORS

- Motor Vehicle and Motor Vehicle Parts Manufacturing;
- Motor Vehicle and Motor Vehicle Parts Wholesaling;
- Motor Vehicle Retailing;
- Motor Vehicle Parts and Tyre Retailing;
- Fuel Retailing;
- Vehicle Recycling and Disposal;
- Automotive Repair and Maintenance
- Motorsport
- Outdoor Power Equipment
- Bicycle Retailing
- Marine Equipment Retailing

¹ **Skill demand and supply (im)balance** occurs when the quantity of a given skill supplied by the work force and the quantity demanded by employers diverge at the existing market conditions. Labour market supplies and demands for occupational skills are continuously fluctuating. At a certain point in time, there will be labour market imbalances and accompanying skill imbalances because of the disequilibrium between the demand for and supply of skills.



OCCUPATIONS

<u>ANZSCO</u>	<i>Occupation</i>
321111	Automotive Electrician
321211	Motor Mechanic (General)
321212	Diesel Motor Mechanic
321213	Motorcycle Mechanic
321214	Small Engine Mechanic
322313	Fitter (General)
323213	Fitter-Welder
323214	Metal Machinist
324111	Panelbeater
324211	Vehicle Body Builder
324212	Vehicle Trimmer
324311	Vehicle Painter
599612	Insurance Loss Adjuster
611313	Sales Representative (Motor Vehicle Parts and Accessories)
621311	Motor Vehicle or Caravan Salesperson
621312	Motor Vehicle Parts Interpreter
811111	Car Detailer
832211	Product Assembler
839311	Product Examiner
899411	Motor Vehicle Parts and Accessories Fitter (General)
899412	Autoglazier
899413	Exhaust and Muffler Repairer
899414	Radiator Repairer
899415	Tyre Fitter
899911	Bicycle Mechanic
899916	Mechanic's Assistant

2. **Are there any occupations that you represent where there is evidence of imbalances in the demand for and supply of skills in the medium-to-long term?**
(Can you please provide a quantified estimate of the demand and supply for your nominated occupation(s) out to 2020, if possible)

Evidence from industry and survey research has identified the following occupations as being in limited supply, with supply constraints increasing over the medium to long term. Please see Attachment A for demand and supply estimates out to 2020.

- ANZSCO 321111 – Automotive Electrician**
- ANZSCO 321211 - Motor Mechanic (General)**
- ANZSCO 321212 – Diesel Motor Mechanic**
- ANZSCO 321213 – Motorcycle Mechanic**
- ANZSCO 321214 – Small Engine Mechanic**
- ANZSCO 324111 – Panelbeater**
- ANZSCO 324311 – Vehicle Painter**
- ANZSCO 899911 – Bicycle Mechanic**



3. Is there evidence of non-metropolitan imbalances in the demand for and supply of skills in the medium-to-long term?

(If so, can you indicate in what part of Australia and the number in the occupation in over- or under-supply)

Using ABS Census benchmarks, ABS labour force data occupation data, NCVER automotive apprenticeship commencements and completions data, ABS Business Counts and the results from a labour force survey of 600 automotive businesses nationally (*the 2013 Automotive Environmental Scan Survey*), the following **non-metropolitan** imbalances were observed in the demand for and supply of skills in the medium to long term:

Motor Mechanics (General) – Average non-metro supply shortages to 2020:

NSW & ACT(1,223), VIC (1,120) QLD (997), SA (734), WA (820), TAS (102) NT (112)

Automotive Electrician – Average non-metro supply shortages to 2020:

NSW & ACT(250), VIC (198) QLD (189), SA (119), WA (164), TAS (20) NT (35)

Diesel Motor Mechanic – Average non-metro supply shortages to 2020:

NSW & ACT(231), VIC (200) QLD (170), SA (138), WA (165), TAS (19) NT (42)

Motorcycle Mechanics – Average non-metro supply shortages to 2020:

NSW & ACT(184), VIC (160) QLD (140), SA (120), WA (150), TAS (40) NT (56)

Small Engine Mechanic - Average non-metro supply shortages to 2020:

NSW & ACT(140), VIC (120) QLD (108), SA (100), WA (132), TAS (32) NT (56)

Panelbeater - Average non-metro supply shortages to 2020:

NSW & ACT(456), VIC (378) QLD (310), SA (250), WA (300), TAS (40) NT (48)

Vehicle Painter - Average non-metro supply shortages to 2020:

NSW & ACT(250), VIC (232) QLD (189), SA (145), WA (200), TAS (25) NT (35)

Bicycle Mechanic - Average non-metro supply shortages to 2020:

NSW & ACT(180), VIC (155) QLD (150), SA (130), WA (165), TAS (25) NT (38)

4. Are there any occupations which require formal licensing or registration arrangements in order to practice/perform in this occupation?

For example:

- *Midwives are required to register with the nurses board in their state or territory;*
- *Panelbeaters are required to be registered or certified with the state Motor Vehicle Repair Industry Authority*

In New South Wales most automotive trades are licensed.



Panelbeaters and spray painters are licensed trades in New South Wales and Western Australia only.

There is national refrigerant gas licensing for automotive air-conditioning.

There is national licensing for LPG (Liquid Petroleum Gas) installations and servicing.

There is national licensing for issuing of Vehicle Roadworthy Certificates.

5. **Is your employment sector expected to be impacted by any medium-to-long term trends (excluding costs associated with training, labour hire, and international sponsorship) which will impact upon demand and/or supply? Please provide evidence (e.g. data source, policy document) which substantiates these claims.**

For example:

- *New benchmarks for childcare centres will be introduced by the Australian Government on 1 January 2013, which will mandate increased staff-to-child ratios and higher qualification standards for childcare workers.*

Internal industry analysis conducted by Auto Skills Australia, in conjunction with extensive stakeholder consultations, has determined the following medium-to-long term trends:

Analysis of ABS trend employment estimates for the automotive industry (*ABS Labour Force Cat. No. 6291.0.55.003 datacubes E06, E07, E08 and E09*) and internal forward modelling of demand and supply using ABS Census benchmarks, NCVER trend apprentices and trainees commencements and completions statistics, *ABS Counts of Australian Business Entries and Exits, (Cat. No. 8165.0)* and the results of the *2013 Automotive Environmental Scan Survey* reveal the following demand and supply trend forecasts to 2020:

- A trend decrease of **2.5%** per annum in employment within the Motor Vehicle and Motor Vehicle Parts Manufacturing sectors (*ANZSIC 231*). This equates to a net reduction in employment of approximately **11,400 positions by 2020**. Factors contributing to this decline include cost pressures associated with a high Australian dollar, smaller production volumes, an increasing market share for imported vehicles and restructuring/ offshoring of component supplier operations.



- A trend decrease of **1.4%** per annum in employment within the Automotive Repair and Maintenance sector (*ANZSIC 941*). This equates to a net reduction in employment of approximately **23,000 positions by 2020**. Contributing factors to this decline include an increasing cohort of automotive workers aged 60 to 65 years or more. Currently, employment within this age cohort stands at over 43,000 persons (see *ABS Labour force Cat. No. 6291.055.003 datacube E08*). Assuming that 50% of these workers will retire over the next decade, a net shortage of approximately 23,000 positions is forecast by 2020, with no corresponding decrease in the demand for automotive labour. Growth in the supply of automotive labour through annual apprenticeship commencements is not sufficient to counteract this trend. Annual growth in the stock of motor vehicles on road, as well as population growth over the decade, will further exacerbate this demand and supply imbalance (see *ABS Motor Vehicle Census data 9309.0*).

- Survey evidence compiled from 600 automotive business enterprises (*2013 Automotive Environmental Scan Survey*) and numerous meetings with business operators around the country indicates that many sole proprietor automotive businesses have intentions to retire and close their workshops in the medium to long term due, primarily due to falling profitability and ongoing labour supply shortages. This is supported through data from ABS (*Counts of Australian Businesses, Cat. No. 8165.0*) which shows that there is an increasing net loss of automotive businesses. Since 2008-09, there has been a net reduction of 1,815 small automotive businesses, or an average loss of **0.7%** in the number of businesses closures per annum, rising to over **1%** in the last 12 months. These closures in sole proprietor businesses will result in a net reduction in employment of **4,500 persons by 2020**. Rapid technological change within motor vehicles is also contributing to this rationalisation of businesses within the industry, given that the servicing of modern vehicles requires significant investment in capital equipment and training, which is not viable for many small operators.

- There is a serious lack of training providers for bicycle mechanic qualifications. There is only one registered training provider for bicycle mechanic qualifications in Australia. Employment within this trade is facing severe supply risks in the medium to long term as most bicycle mechanics that are currently employed have no qualifications or training, and the use of transient, unqualified labour is rife within the industry. Projections of **3%** growth per annum in both turnover and employment over the next decade and the lack of training providers will see demand for qualified bicycle mechanics outstrip supply in the order of **2,000 positions by 2020** (see *IBIS WORLD Bicycles in Australia, Industry Report*).



6. Please provide any other information you consider relevant evidence to support your submission

(for example, you may know of some independent studies about your occupation that supports your advice to us).

There have been very few studies conducted into the labour market and the demand and supply of skills within the Australian automotive industry. This is due to a number of factors. Firstly, on the supply side, the coverage and scope of automotive occupations reflected within ANZSCO is poor. Official statistics do not report occupation level employment data for bicycle mechanics, diesel motor mechanics, motorcycle mechanics and small engine mechanics.

In addition, the level of advertised vacancies within these occupations is not an accurate indicator of their level of shortage, as the vast majority of these and all automotive occupations are filled through word of mouth rather than direct advertising. This is a unique characteristic of the industry.

Auto Skills Australia (ASA) has undertaken significant development work into measuring the supply and demand for employment within these and other automotive occupations, by constructing indicators of the stock and flow of employment within such occupations. Data sources used in this modelling include detailed industry surveys; NCVER apprenticeship commencement and completions data, ABS business counts by sector; ABS labour force data, business interviews and intelligence gained through industry bodies and associations.

Consequently, ASA is in an informed position to provide forecasts on demand and supply imbalances within automotive occupations.

It is the firm belief of ASA, that the eight automotive occupations identified within this submission will suffer from excess demand and be in undersupply over the next decade. They truly satisfy the following criteria:

- They involve a **long lead time** to complete training –approximately 3 years or more at Certificate III level for over 68% of apprentices across the eight occupations listed in this submission;
- They are **high use** occupations – a high match of over 70% between the training and expected skills and employment outcomes across the eight occupations;
- They constitute **high risk** scenarios - the skills shortages identified within the eight occupations pose a significant risk of disruption to the community and broader economy. The possibility of people not being able to get their vehicles repaired in a timely manner is a huge risk with the exit of thousands of businesses and loss of skills, particularly in regional areas.



In terms of entry of new labour into these trades, annual commencements of apprentice motor mechanics, small engine mechanics, motorcycle mechanics and diesel mechanics has only increased by 1.1% over 2008 levels (see *NCVER AUR30405 Certificate III Apprentice Commencements*). Commencements of apprentice automotive electricians has increased by 2.4% over the same period (*NCVER AUR30308 Certificate III*), whereas commencements of apprentice panel beaters and vehicle painters has **fallen by 17.9%** (see *NCVER AUR30805 Certificate III Commencements*); and commencements of apprentice bicycle mechanics has **fallen by 44.4%** over 2008 levels (*NCVER AUR30205 Certificate III*). Continuing these trends forward, and allowing for an average attrition rate of 50% within the first three years for all apprentices within these occupations, as well as factoring in looming retirements, the net effect that is that exits of labour within these occupations are forecast to exceed entries of new labour by **over 16% by 2020**. This constitutes **a supply shortage of approximately 36,660 persons by 2020** across the all the eight occupations listed, which is a critical situation.

7. Please provide the name, position and contact details of a person within your organisation who is willing to be contacted if any further information or follow-up is required.

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All information (**including name and address details**) contained in submissions will be made available to the public on the AWPA website unless you indicate that you would like all or part of your submission to remain in confidence. Automatically generated confidentiality statements in emails do not suffice for this purpose. Respondents who would like part of their submission to remain in confidence should provide this information **marked** as such in a separate attachment. Legal requirements, such as those imposed by the *Freedom of Information Act 1982*, may affect the confidentiality of your submission.



ATTACHMENT A

DEMAND AND SUPPLY ESTIMATES

ANZSCO 321211 MOTOR MECHANIC (GENERAL)			
Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	56,417	75,611	19,194
2013-14	56,721	76,018	19,297
2014-15	57,025	76,425	19,400
2015-16	57,331	76,836	19,505
2016-17	57,640	78,249	20,609
2017-18	57,949	79,163	21,214
2018-19	58,260	80,588	22,328
2019-20	58,572	81,498	22,926

Source: ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey. Modelled Time Series Estimates.

ANZSCO 321212 DIESEL MOTOR MECHANIC			
Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	11,115	14,200	3,085
2013-14	11,272	14,450	3,178
2014-15	11,350	14,578	3,228
2015-16	11,428	14,620	3,192
2016-17	11,507	14,715	3,208
2017-18	11,585	14,850	3,265
2018-19	11,663	14,950	3,287
2019-20	11,742	15,132	3,390

Source: ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey. Modelled Time Series Estimates.

ANZSCO 324111 PANELBEATER			
Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	16,726	20,138	3,412
2013-14	16,829	20,274	3,445
2014-15	16,931	20,409	3,478
2015-16	17,032	20,542	3,510
2016-17	17,131	20,673	3,542
2017-18	17,229	20,803	3,574
2018-19	17,326	20,932	3,605
2019-20	17,422	21,058	3,636

Sources: ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey. Modelled Time Series Estimates.



ANZSCO 324311 VEHICLE PAINTER			
Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	9,542	12,138	2,596
2013-14	9,649	12,274	2,625
2014-15	9,755	12,409	2,654
2015-16	9,859	12,542	2,683
2016-17	9,963	12,673	2,711
2017-18	10,065	12,803	2,738
2018-19	10,166	12,932	2,766
2019-20	10,265	13,058	2,793

Sources: ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey. Modelled Time Series Estimates.

ANZSCO 321111 AUTOMOTIVE ELECTRICIAN			
Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	8,501	11,143	2,642
2013-14	8,609	11,283	2,675
2014-15	8,715	11,423	2,708
2015-16	8,820	11,560	2,741
2016-17	8,923	11,696	2,773
2017-18	9,026	11,830	2,805
2018-19	9,127	11,963	2,836
2019-20	9,227	12,094	2,867

Sources: ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey. Modelled Time Series Estimates.

ANZSCO 321213 MOTORCYCLE MECHANIC			
Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	1,437	2,918	1,481
2013-14	1,466	2,956	1,491
2014-15	1,494	2,994	1,500
2015-16	1,521	3,031	1,509
2016-17	1,549	3,067	1,519
2017-18	1,576	3,504	1,928
2018-19	1,603	3,750	2,144
2019-20	1,629	4,125	2,496

Sources: ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey. Modelled Time Series Estimates.

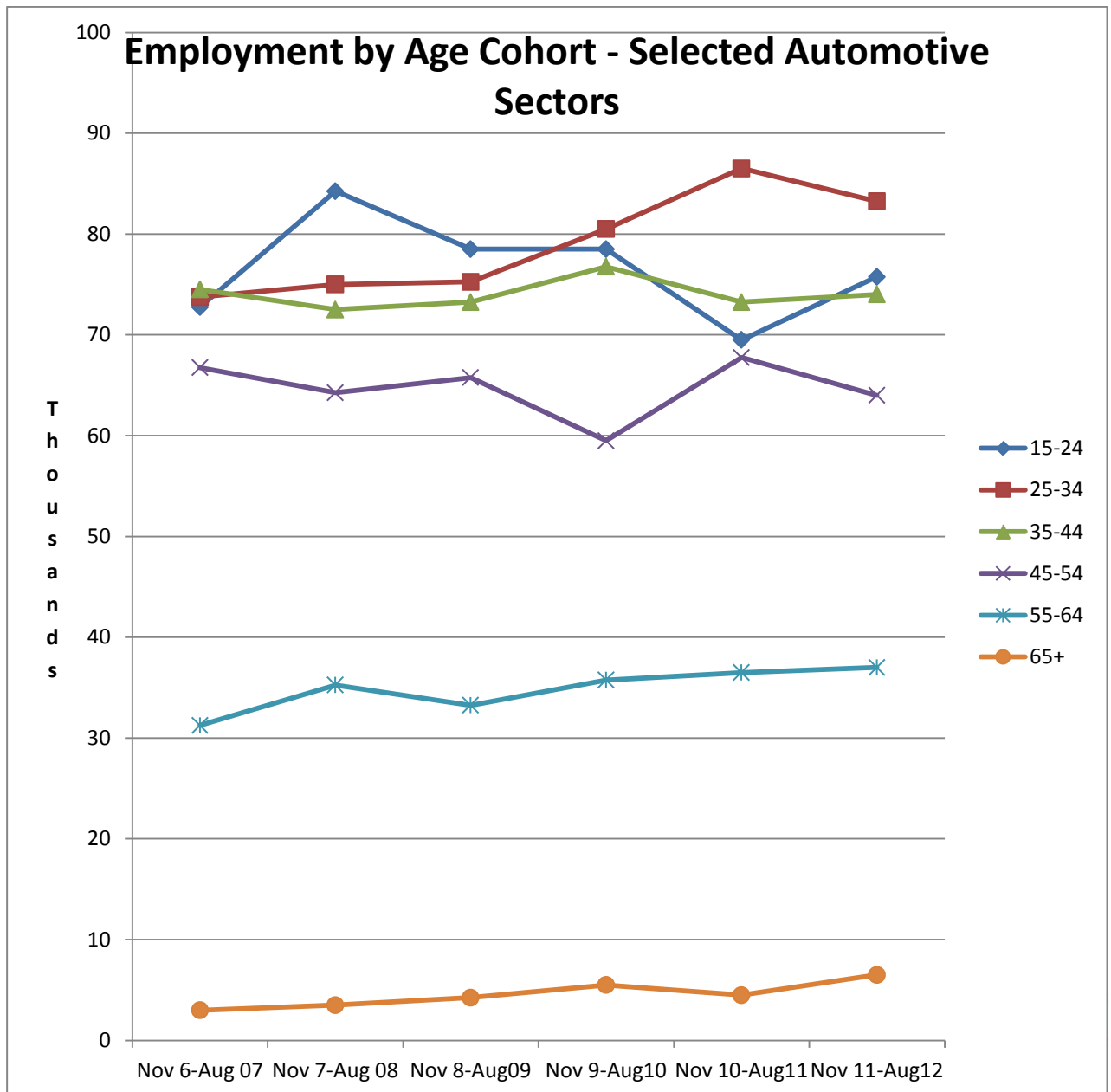
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ANZSCO 321214 SMALL ENGINE MECHANIC

Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	1,150	2,478	1,328
2013-14	1,205	2,549	1,343
2014-15	1,263	2,623	1,360
2015-16	1,324	2,701	1,377
2016-17	1,387	2,782	1,395
2017-18	1,454	2,868	1,414
2018-19	1,524	3,958	2,434
2019-20	1,597	4,200	2,603

Sources: ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey. Modelled Time Series Estimates.



Source: ABS Labour Force



ANZSCO 899911 BICYCLE MECHANIC			
Financial Year	Forecast Supply of Labour (Number)	Forecast Demand for Labour (Number)	Labour Shortage
2012-13	2,850	3,800	850
2013-14	2,832	3,850	1,018
2014-15	2,790	3,920	1,130
2015-16	2,710	4,150	1,440
2016-17	2,650	4,279	1,629
2017-18	2,555	4,421	1,866
2018-19	2,600	4,500	1,900
2019-20	2,714	4,714	2,000

Sources: *ABS Labour Force Data; ABS Business Entries and Exits; 2013 Automotive Environmental Scan Survey.*
Modelled Time Series Estimates.