



# Construction Industry Snapshot Western Australia

November 2016

Construction Contribution to Gross State Product

8.7%

Percentage of State Workforce

10.4%

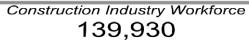
Percentage of WA Apprentices employed in Construction

48.1%

(including Electricians)

Apprentice Commencements (Construction)

(Annualised)



(Annualised)

6.8%

Apprentice Commencements (Electrical)

19.5% (Annualised)

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# Published by the Construction Training Fund

Released November 2016

This report is published every two months.

Although this report is dated November 2016, it should be noted that some data is taken from previous monthly/quarterly results if they are the most recent.

ABS Data relates to the most recent quarters/months of 2015-16. In this version of the 'Snapshot', care must be taken when interpreting any comparison of data from different quarters or months.

Unless otherwise stated, all apprenticeship and overall training data is current from the TRS Datacubes as at end of August 2016.

All interpretations and conclusions drawn from this data are those of the Construction Training Fund.



### 1. **Executive Summary**

This report provides up-to-date data on economic, employment and training issues affecting the Construction Industry in Western Australia.

The Construction Industry employs over 10.4% (annualised) of the overall State workforce.

Compared to August 2015, at the end of August 2016 (annualised), there was a 30.5% decrease in Construction apprentice commencements and also a decrease of 19.5% in Electrical apprentice commencements (combined decrease of 26.5%).

There are currently 4,021 Building Trades apprentices 'in training' as at the end of August 2016. Together with Electrical trade apprentices, there are 7,735 apprentices in training.

As at August 2016, the Industry employed 48% of all Western Australia's apprentices<sup>2</sup> (Building Trades and Electricians combined)

Western Australia's estimated resident population grew by 1.2% for the year to March 2016. This is comparable to Victoria (1.9%), Queensland (1.3%) and New South Wales (1.4%). The October 2016 seasonally adjusted unemployment rate for Western Australia increased to 6.5% up from 6.1% in September 2016. The National rate is 5.6%. The seasonally adjusted participation rate in Western Australia increased to 67.2% in October 2016.

It is estimated that over 17,000 Construction Industry employees are working on Resource Industry infrastructure construction projects. This is a significant reduction from the 29,000 estimated to be employed in that sector in 2013.

The value of Residential and Non-Residential Construction Work, excluding Heavy Engineering, in the year to September 2016 decreased by 11.0% compared to September 2015<sup>3</sup>. The Engineering Construction sector, excluding Heavy Engineering, decreased by 32.3%\*, in Western Australia between June 2015 and June 2016.

The Housing sector has declined in recent months, with annual total dwelling unit approvals to September 2016 dropping to 22,683 (16,424 houses), compared to a previous peak of 31,269 (22,568 houses) in September 2015<sup>4</sup>.

Seasonally adjusted, building approvals for total dwelling units increased by 5.5% between August and September 2016, while building approvals in the July 2016 to September 2016 quarter decreased by 1. 5% against the previous quarter.

Trend building approvals in Western Australia decreased by 0.6% between August 2016 and September 2016 and fell by 26.8% over the year (annualised average).

Seasonally adjusted, dwelling commencements decreased by 9.6% in the quarter to June 2016; and on an annualised basis, compared to June 2015 figures, commencements decreased by 19.3%.

\*Note: This figure is derived from ABS data that is currently not available for publication. Please see note 8 on page 6 for explanation.

Using comparison to 'All Industries' data TRS Datacube

ABS 8755.0 and 8762.0 Construction & Engineering Work Done

### 2. The Workforce

-6.84%

(Annualised) (12 months compared to previous 12 months)

WORKFORCE IN CONSTRUCTION

150,190 Year to August 2015 139,930 Year August 2016



Annualised<sup>5</sup>

% Change over Period

-6.84%

-10.28%

The industry currently employs 10.4% (annualised) of the State workforce as at August 2016.

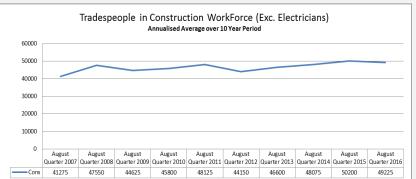
ABS 6291.0.55.003

TRADESPEOPLE IN CONSTRUCTION (Excluding Electricians)

-1.94%

(12 months compared to previous 12 months)

50,200 Year to August 2015 49,225 Year to August 2016



Annualised 3 Months
% Change over Period -1.94% -7.64%

These figures reflect the second highest number of tradespeople in the industry in over 10 years.

Note: Tradespeople in Construction now includes the trade of Concreter.

ABS 6291.0.55.003 - E08

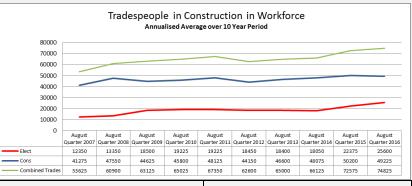
TRADESPEOPLE IN CONSTRUCTION (Including Electricians)

+3.10%

(Annualised)

(12 months compared to previous 12 months)

**72,575** Year August 2015 74,825 Year to August 2016



	Combined Trades 53625	60900	63125	65025	67350	62600	65000	66125	72575	74825
	Annı	ıalised	l				3 M	onths	;	
% Change over Period	+3,	10%					-8	.02%		

Electricians account for over 34.2% of all tradespeople in Construction with a proportion of these working in the Mining / Resource sector.

Note: Tradespeople in Construction now includes the trade of Concreter

ABS 6291.0.55.003 - E08

<sup>&</sup>lt;sup>5</sup> Full year compared to previous full year

<sup>&</sup>lt;sup>6</sup> This quarter compares to previous quarter

### Building Approvals & Commencements in WA7 3.

**BUILDING APPROVALS Total Dwelling Units** (Seasonally Adjusted)

-27.46%

(Annualised)

(12 months compared to previous 12 months)

% Change over Period

31,269 Year to Sept 2015

22,683 Year to Sept 2016



Annualised	3 Months	1 Month
-27.46%	+1.46%	+5.55%

The 'same month comparison' Sept 2014 to Sept 2015 shows decrease 19.62%; however when comparing Sept 2015 to Sept 2016 there is a decrease of 23.61%.

### **BUILDING APPROVALS Total Houses** (Seasonally Adjusted)

-27.22%

(12 months compared to previous 12 months)

22,568 Year to Sept 2015

16,424 Year to Sept 2016



	Annualised	3 Months	1 Month
% Change over Period	-27.22%	+1.76%	-4.23%

The 'same month comparison' Sept 2014 to Sept 2015 shows a decrease of 19.15%. When comparing Sept 2015 to Sept 2016 there is a decrease of 25.02%. ABS 8731.0

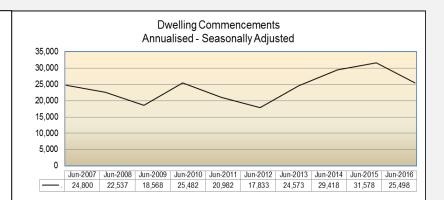
### **DWELLING COMMENCEMENTS** (Seasonally Adjusted)

19.25%

(Annualised)

(12 months compared to previous 12 months)

<u>31,5</u>78 Year to June 2015 **25,498** Year to June 2016



	Annualised	3 Months	1 Month
% Change over Period	-19.25%	+9.59%	n/a

The one full year-to-year change (Annualised) shows, for Western Australia, a decrease of 19.25%. This follows an increase of 7.34% at the same time last year. ABS 8752.0

### 4. Construction Work Done<sup>8</sup>

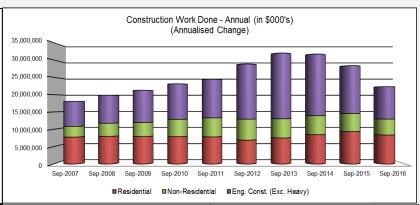
RESIDENTIAL, NON-RESIDENTIAL & ENGINEERING CONSTRUCTION (Excluding Heavy) (in \$000's)

-21.35%

(Annualised)

(12 months compared to previous 12 months) (in \$000's)

\$28,334,673 Year to Sept 2015 \$22,285,806 Year to Sept 2016



		Annualised	ł		3 M	onths	s <sup>9</sup>	
% Change over Period		-21.35%			-1	.78%		
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'Construction Work Done' is a combination of residential and non-residential building plus Engineering Construction exc. 'Heavy Engineering'. Engineering Construction, exc. Heavy, accounts for 42% of all activity. ABS 8755.0 and ABS 8762.0

RESIDENTIAL CONSTRUCTION (Original) (in \$000's)

-10.43%

(Annualised)

(12 months compared to previous 12 months)
(in \$000's)

\$9,328,294 Year to Sept 2015 \$8,355,173 Year to Sept 2016



	Annualised	3 Months
% Change over Period	-10.43%	-10.20

The value of Residential Construction has decreased noticeably from a record high 12 months ago. ABS 8755.0 and ABS8762.0.

NON-RESIDENTIAL CONSTRUCTION (Original) (in \$000's)

-11.99%

(Annualised)

(12 months compared to previous 12 months) (in \$000's)

\$5,227,986 Year to Sept 2015 \$4,600,989 Year to Sept 2016





In June 2007, Non-Residential Construction was approximately 29.2% of the value of the Total Build component of Construction Work done. As at September 2016, it increased to approximately 35.5%.<sup>10</sup>

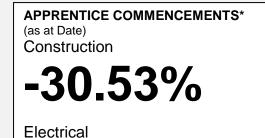
ABS 8755.0 and ABS 8762.0

<sup>&</sup>lt;sup>8</sup> Due to ABS release dates and more recent data not being available for publication, Engineering Construction data is included using the previous quarter data and has a relative standard error of 10% to less than 25% and should be used with caution.

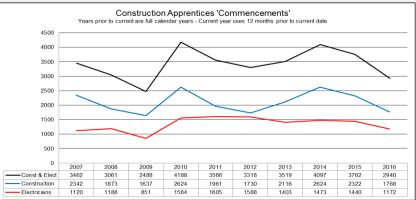
Compared to previous quarter.

Total build is the sum of Residential and Non-residential only- excluding Engineering Construction.

# 5. Apprentice Commencements 11



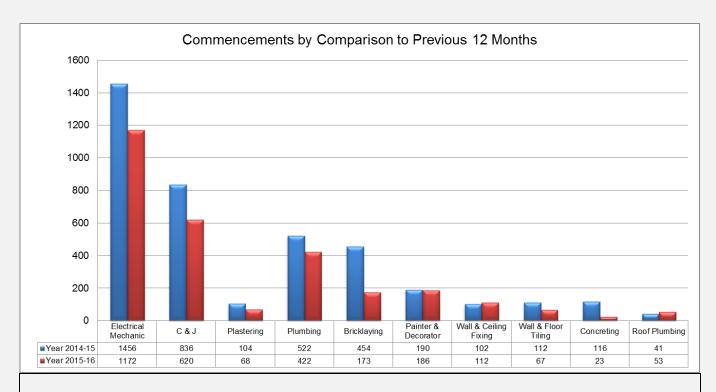
-19.51%



Annualised
-30.53%
-19.51%
-26.52%

This chart shows there has been a significant drop in total construction and electrical apprentice commencements after peaks in 2010 and 2014.

\*The years prior to 2016 are full calendar years. The figures for the 2016 year are for a rolling year as at the end of August 2016.



Some trades have seen an increase in apprentice commencements including Wall and Ceiling Fixing by 9.8% and Roof Plumbing by 29.3%. All other trades decreased noticeably.

<sup>11</sup> Commencements are training contracts that have occurred in comparative 12 month periods.

### 6. Apprentices in Training 12

### **APPRENTICES IN TRAINING**

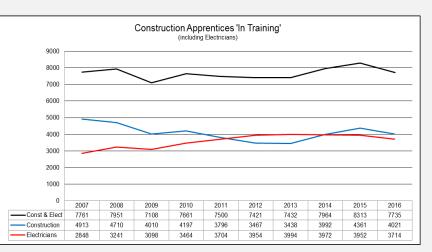
(Year on Year Increase – Point in Time)

Construction

-7.80%

Electrical

-6.02%



% Change over Period	2014-2015	Year on Year (2015-16)
Construction	+9.24%	-7.80%
Electrical	-0.50%	-6.02%
Combined	+4.38%	-6.95%

There are currently 4,021 Building and Construction apprentices and 3,714 electricians in training. The 'In-Training' numbers have dropped as a result of the negative impact from reduced commencements.

The following table shows the change in the number of 'In Training' Apprentices between 2012 and 2016.

Change in Apprentice Numbers In Training by Trade							
Trade	%change	2016	2012				
Electricians	-6.1%	3714	3,954				
Carpentry and Carpentry & Joinery	11.4%	1376	1,235				
Plastering	69.0%	120	71				
Plumbing & Gas	2.8%	1,157	1,125				
Bricklaying	76.4%	464	263				
Painting & Decorating	17.6%	334	284				
Roof Plumbing	9.6%	103	94				
Wall & Floor Tiling (Tilelaying)	18.4%	148	125				
Wall & Ceiling Fixing	13.5%	177	156				
Concreting	-40.7%	16	27				
Building & Construction (exc Electricians)	16.0%	4,021	3,467				
Building & Construction (inc. Electricians)	4.2%	7735	7421				

Almost all trades show a sound improvement since 2012, while the 'wet trades' have had a significant gain. The overall combined performances of 16.0% and 4.2% respectively still indicate a healthy rise since 2012.

# 7. Apprentice Training Rates 13

Over the last four years there has been a decline in the training rates for a number of Construction trades but an increase in others. The significant increase in the size of the workforce has a direct impact on the training rate as the number of apprentices has to grow at the same rate as the number of tradespeople in the workforce to maintain the training rate. The following table shows the change in 'Training Rates' between 2012 and 2016.

Change in Training Rates							
Trade	%change	2016	2012				
Electricians	-33.7%	15.4%	23.3%				
Carpentry and Carpentry & Joinery	-3.1%	15.0%	15.4%				
Plastering	106.1%	2.9%	1.4%				
Plumbing & Gas	-28.0%	11.6%	16.1%				
Bricklaying	171.4%	8.9%	3.3%				
Painting & Decorating	24.7%	7.1%	5.7%				
Roof Plumbing	46.1%	6.9%	4.7%				
Wall & Floor Tiling (Tilelaying)	4.5%	4.4%	4.2%				
Concreting	-60.5%	0.4%	0.9%				

Increases in Bricklaying correspond to a significant increase in commencements in prior years. The decline in Electricians can be directly attributed to a 38.8% increase in tradespeople since 2012
ABS data (Annualised average)

ABS 6291.0.55

<sup>12 &#</sup>x27;In Training' is the total number of apprentices currently in a contract of employment as an apprentice

Training Rate' is the number of apprentices 'in training' compared to the number of tradespeople in the same industry as stated by ABS 6291.0.55.003, ST\_E08

# 8. Employment of Females

There are currently 76 females undertaking an **apprenticeship** in the industry. Over the last 10 years, the overall proportion of female apprentices in Construction has risen from 1.3% to 1.9%.

There are currently 82 females undertaking a **traineeship** which is an increase from 3.5% to 11.5% of total trainees over the last 10 years, with an increase of 215.0% in the actual numbers over the last two years. It is believed that one factor is the increased promotion of 'women in trades' subsidies and scholarships. Another factor is the concerted efforts by the Civil Construction sector to employ young women.

# Employment of Aboriginal and Torres Strait Islanders

There are currently 159 Aboriginal and Torres Strait Islanders undertaking an **apprenticeship** in the industry. Over the last 10 years the overall proportion of ATSI apprentices has risen from 2.7% to 4.0% which remains indicative of the number of ATSI people in the general population.

Currently there are 52 Aboriginal and Torres Strait Islanders undertaking a **traineeship**, which represents approximately 7.3% of all Building and Construction trainees. This figure represents a concerted effort to recruit Aboriginal and Torres Strait Islanders by the Civil Construction sector.

# 10. Traineeships in the Industry

The following chart shows the number of trainees 'in training' as at the end August 2016.

Note: this chart now includes the Civil Construction Supervisor (Level 4) RII40713 trainees.

BITUMINOUS SURFACING (LEVEL 3)	1
BUILDING AND CONSTRUCTION PARA PROFESSIONAL (LEVEL 2)	0
BUILDING AND CONSTRUCTION TRADE TRAINEE (LEVEL 2)	54
BUILDING MAINTENANCE (LEVEL 2)	11
CIVIL CONSTRUCTION (LEVEL 2)	3
CIVIL CONSTRUCTION (LEVEL 3)	135
CIVIL CONSTRUCTION DESIGNER (LEVEL 5)	3
CIVIL CONSTRUCTION MANAGER (LEVEL 5)	1
CIVIL CONSTRUCTION SUPERVISOR (LEVEL 4)	152
DOGGING (LEVEL 3)	0
DRAINAGE (LEVEL 2)	6
ESTIMATING (HOUSING) (LEVEL 4)	168
GENERAL CONSTRUCTION (LEVEL 2)	12
PIPELAYING (LEVEL 3)	37
PLANT OPERATIONS (LEVEL 3)	67
RESIDENTIAL DRAFTING (LEVEL 4)	2
RIGGING (LEVEL 3)	4
ROAD CONSTRUCTION AND MAINTENANCE (LEVEL 3)	33
ROAD MARKING (LEVEL 3)	3
SCAFFOLDING (LEVEL 3)	2
SITE MANAGEMENT (LEVEL 4)	111
STEEL FIXING (LEVEL 3)	3
TRENCHLESS TECHNOLOGY (LEVEL 3)	58
Building & Construction (TOTAL)	866
• •	

There are currently 866 trainees in training, primarily in the Civil Construction sector. It is pleasing to see the growth in the numbers of traineeships in recent years. Including the Civil Construction Supervisor Level 4 qualification, there has been an overall 84% increase since the 2009 figure of 470 trainees 'in training'.