Minerals Council of Australia and CoverCard Mining Job Advertisement Analysis – Model Outputs and Key Insights for March 2020 to May 2020

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Introduction

This Quarterly Update includes an additional 8,785 job advertisements identified as being within the mining industry between March and May 2020.

This brings the total number of job advertisements included in the modelling and analysis to 193,663, spanning four years and three months from March 2016 to the end of May 2020.

This work is based on the original proposal dated March 7 2019, titled 'Minerals Council of Australia and CoverCard Mining Job Advertisement Analysis Pilot' which outlines the research scope and approach (included in the Appendix to this document).

The overall data set of 193,663 mining job advertisements is a large and comprehensive dataset with a consistent methodology applied to identify trends within the dataset.

Structure of this Quarterly Update

This Quarterly Update will discuss the key insights and observations identified for March to May 2020 and includes the following key sections:

1. Analysis and discussion of overarching mining job advertisement trends
2. Analysis and discussion of FIFO job advertisement trends
3. Analysis and discussion of key qualifications
    a. Update on top five qualifications identified from the research
    b. Key insights for remaining qualifications under investigation
4. Updated graphical outputs for each item

The Appendix contains the initial report dated April 9 2019. The initial report contains explanatory notes to understand the methodology and the detailed graphical outputs. These have not been repeated within this Quarterly Update.

1. Analysis and discussion of overarching mining job advertisement trends

This Quarterly Update includes an additional 8,785 job advertisements identified as being within the mining industry between March and May 2020.

This is lower than the 9,242 job advertisements identified in the prior quarter, likely due to the impact of COVID-19. It is also the smallest quarterly total volume of mining job advertisements included in the analysis since the June to August period in 2016. However, mining job advertisements have proven resilient through the pandemic, relative to the significantly larger falls experienced in other sectors.

Western Australia was again the dominant region, with 47% of identified mining job advertisements in the current quarter being for roles within the State. This was up from 43% in the prior quarter.

Queensland, the second largest State for identified mining job advertisements, also increased its share of total identified mining job advertisements in the current quarter, up from 26% to 31%.

This suggests a potential impact of COVID-19 has been a consolidation of job opportunities where there is existing strength and scale (i.e. Western Australia and Queensland), with other regions comparatively less likely to hire and therefore showing a reduction on a relative share basis.

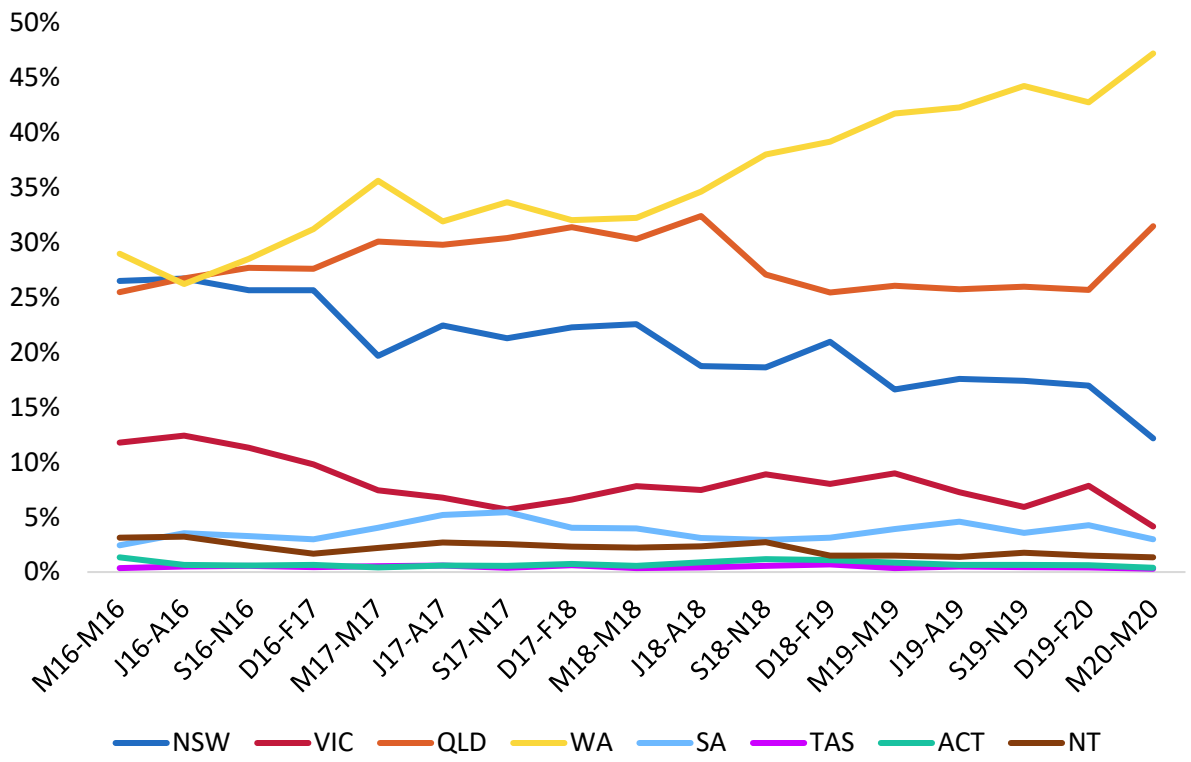
Table 1 – Change in Identified Mining Job Advertisements from the Prior Quarter By Region

Region	Share This Quarter	Share Last Quarter
Western Australia	47%	43%
Queensland	31%	26%
New South Wales	12%	17%
All Other Regions	10%	14%

In addition, Western Australia has shown a steady in its share of overall mining job advertisements over the full four year three month period, primarily at the expense of New South Wales (see graph 1 over the page).

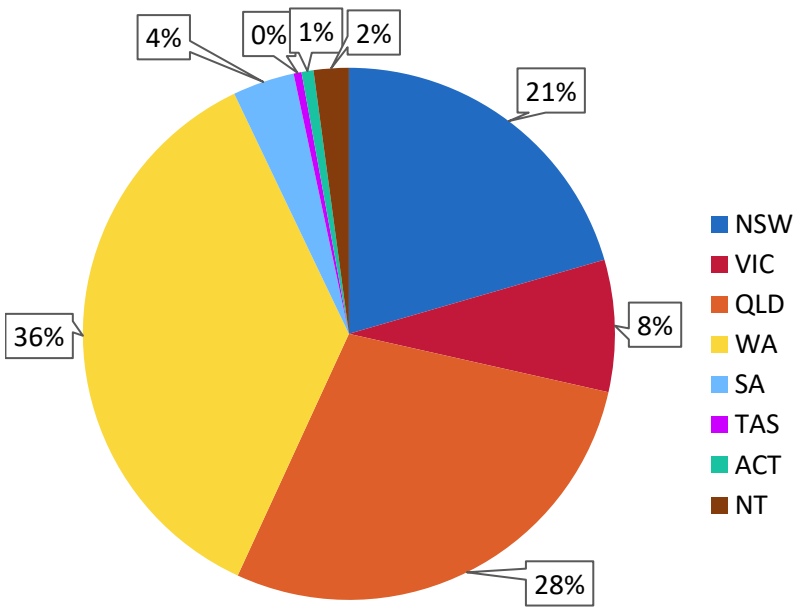
The graph also highlights the relative increase in job advertisements in Western Australia and Queensland in the latest quarter, at the expense of the other regions.

Graph 1 – Share of Mining Jobs Included in this Analysis by State or Territory, Quarter by Quarter



Across the full four year three month period, Western Australia has represented 36% of identified mining job advertisements, with Queensland next on 28%.

Graph 2 – Share of Mining Jobs Included in this Analysis by State or Territory, March 2016 to February 2020



2. Analysis and discussion of FIFO job advertisement trends

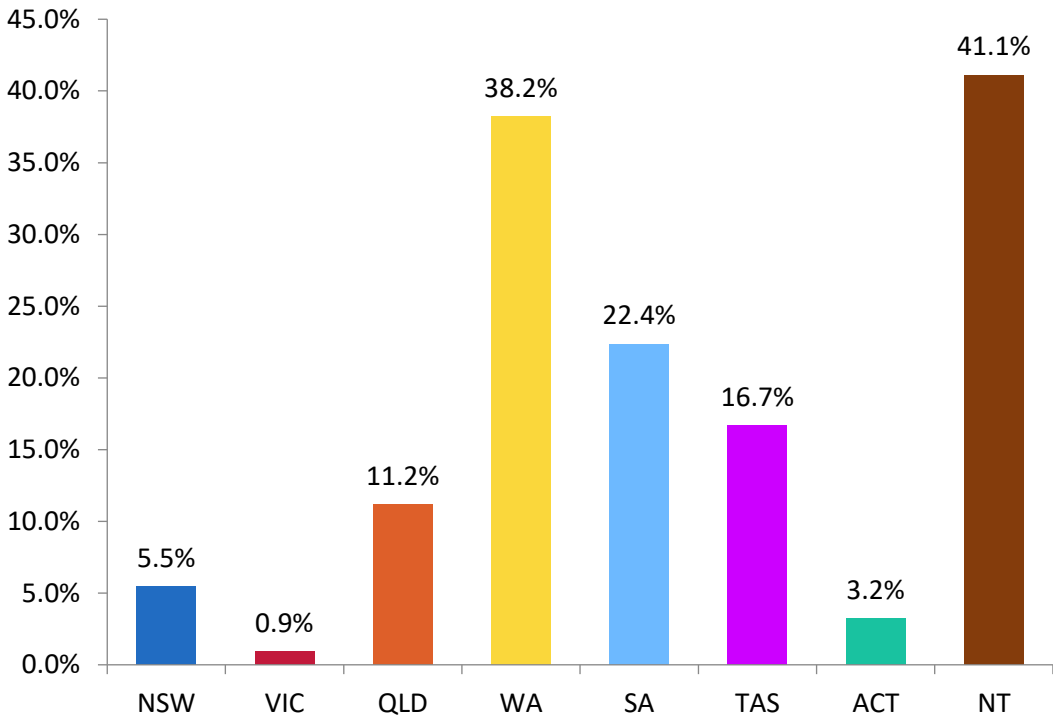
The percentage of overall job advertisements referencing FIFO in the quarter was 22.8%. This was up by 2.7% from the prior quarter, and above the 18.2% average across the full research period.

Changes to roster and travel arrangements may have necessitated an increased focus on FIFO recruitment. For example, there has been a need to recruit additional FIFO workers where existing workers were based interstate from the mining operation and therefore impacted by border closures.

It may also be that COVID-19 has meant that a higher share of recruitment activity has been for front line site-based roles, as opposed to head office or corporate roles.

The Northern Territory again had the highest percentage share of mining job advertisements referencing FIFO at 41.1% in the March to May 2020 period. This was up from 35.4% of job advertisements in the prior quarter. Western also recorded an increase, rising from 35.2% to 38.2% during March to May 2020.

Graph 3 – Percentage of Identified Mining Job Advertisements Referencing FIFO: December 2019 to February 2020



3. Analysis and discussion of Key Qualifications

a. Update on top five qualifications identified in initial report

The majority of the qualifications within the research scope, including the top five qualifications, showed an increase in percentage demand references during the most recent quarter.

This suggests that advertisements for blue collar roles, where these qualifications are most prevalent, likely increased as a share of total job advertisements during the quarter. It may be that recruitment for white collar, typically corporate roles, has been more adversely affected by COVID-19 than recruitment for blue collar positions.

There was continued consistency, with top five qualifications identified in the April 2019 initial report (of those included in the research scope) also the five most referenced in the mining job advertisements in the most recent quarter.

This consistency provides strong validity of the importance of these qualifications for both those seeking employment and those providing training for blue collar roles in the mining sector.

As noted previously, there may be other qualifications outside the scope of this research that may also be in high demand. There is significant potential to expand the research scope to include other qualifications such as car and truck licences, but also common skills such as communication, customer service, problem solving, digital capability, and other similar 'soft' skills.

Qualification	Rank: This Quarter	Rank: Last Quarter	Rank: Initial Report	Change in Demand and Commentary
High Risk Licence: LF – Forklift Truck Operation	1	1	1	This qualification remains highly desirable for blue collar roles in the mining sector. It was the most referenced qualification in the latest quarter with 820 references, equating to 9.3% of mining job advertisements. This has increased from 8.5% in the prior quarter and is consistent with the long run average across the full four year research period (9.4%). Job advertisements in Western Australia were responsible for 40% of references to this qualification in the latest quarter, albeit below its share of identified jobs advertisements in the same period (47%). Queensland showed the greatest change, increasing its share of total references to this qualification from 23% last quarter to 36% this quarter.

Qualification	Rank: This Quarter	Rank: Last Quarter	Rank: Initial Report	Change in Demand and Commentary
Construction Induction Card	2	2	3	748 job advertisements referenced this qualification in March to May 2020. This represented 8.5% of the job advertisement dataset, up from 7.7% last quarter, and above the long run average of 6.3%. This qualification became the second most referenced of those under investigation in the September to November 2019 quarter and has now retained this ranking for the last three quarters. Western Australia was again the most prominent State overall during the quarter, albeit in line with its share of job advertisements (43% of total references and 47% of total job advertisements).
Work Safely at Heights	3	3	2	There were 583 references to Work Safely at Heights in the period, meaning the qualification was referenced in 6.6% of job advertisements during the quarter. This was up slightly from the prior quarter where 6.4% of jobs referenced this qualification (and in line with its long run average of 6.5%). Western Australia was again the most important region for this qualification, representing 61% of references during the quarter (as opposed to 62% in the prior period). This was followed by Queensland with 17% of total references.
Enter and Work in a Confined Space	4	4	4	There were 423 job advertisements referencing Enter and Work in a Confined Space in March to May 2020. The qualification was referenced in 4.8% of mining job advertisements in the period, above the 4.5% recorded in the prior quarter, and in line with the long run average of 4.7%. Western Australia accounted for 61% of the references to this qualification in the quarter, appearing in 6.8% of mining job advertisements within the State (up from 6.6% last quarter). Queensland held the next largest share of total references (18%), albeit the qualification only appeared in 3.1% of mining job advertisements in the State, down from 3.4% last quarter.

Qualification	Rank: This Quarter	Rank: Last Quarter	Rank: Initial Report	Change in Demand and Commentary
High Risk Licence: WP – Boom-type Elevating Work Platform	5	5	5	326 job advertisements contained references to this qualification in March to May 2020. This meant the qualification was referenced in 3.7% of job advertisements in the quarter, up from 3.6% in the prior quarter and slightly below the long run average of 4.0%. Most regions showed a small percentage increase, in line with the overall result. Overall, Western Australia accounted for 56% of total references to the qualification in the quarter, above its' share of total job advertisements (47%).

b. Key insights for remaining qualifications under investigation

High Risk Licence Types DG – Dogging (250 references representing 2.8% of identified mining vacancies) and RB – Rigging (204 references, 2.3%) were again the next most referenced qualifications. Both of these qualifications experienced a small increase in percentage terms during the quarter, in line with similar increases in the top five qualifications.

Gas Test Atmospheres appeared in 0.5% of the job advertisement set during the quarter, as opposed to 0.6% last quarter, being one of the few qualifications to experience a relative drop in prominence. Western Australia remains the key region for this qualification, accounting for 89% of all references over the full research period.

The graphical outputs that follow in Section 4 contain outputs for all the qualifications, plus references to FIFO, that form the research scope.

4. Updated graphical outputs for each item

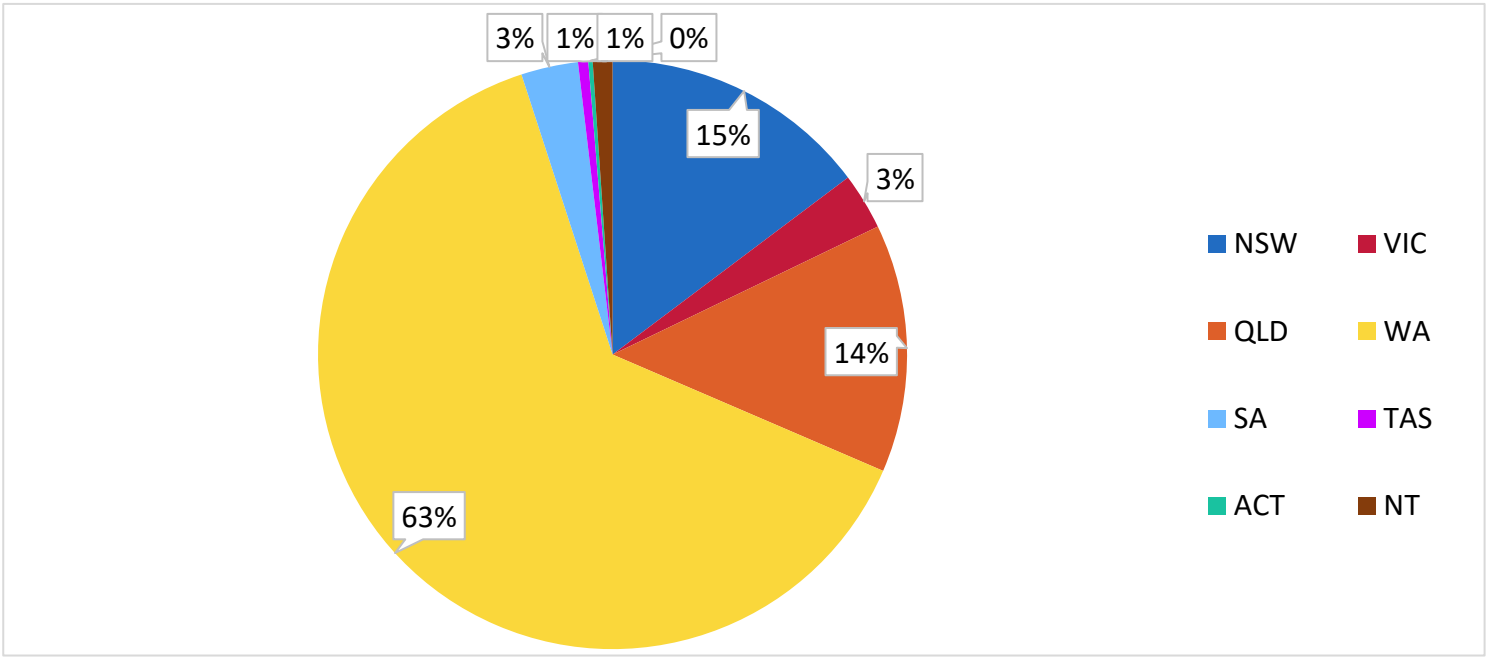
This section contains the updated model outputs that includes the additional 8,785 mining job advertisements identified between March and May 2020.

Graphs are provided for each item where references were identified within the job advertisement data set. This includes 21 of the 28 high risk licence types (with seven showing no references), all five of the other priority qualifications, as well as references to FIFO. More detailed notes to assist the reading and interpretation of these graphs were included in the April 2019 initial report and have not been reproduced here.

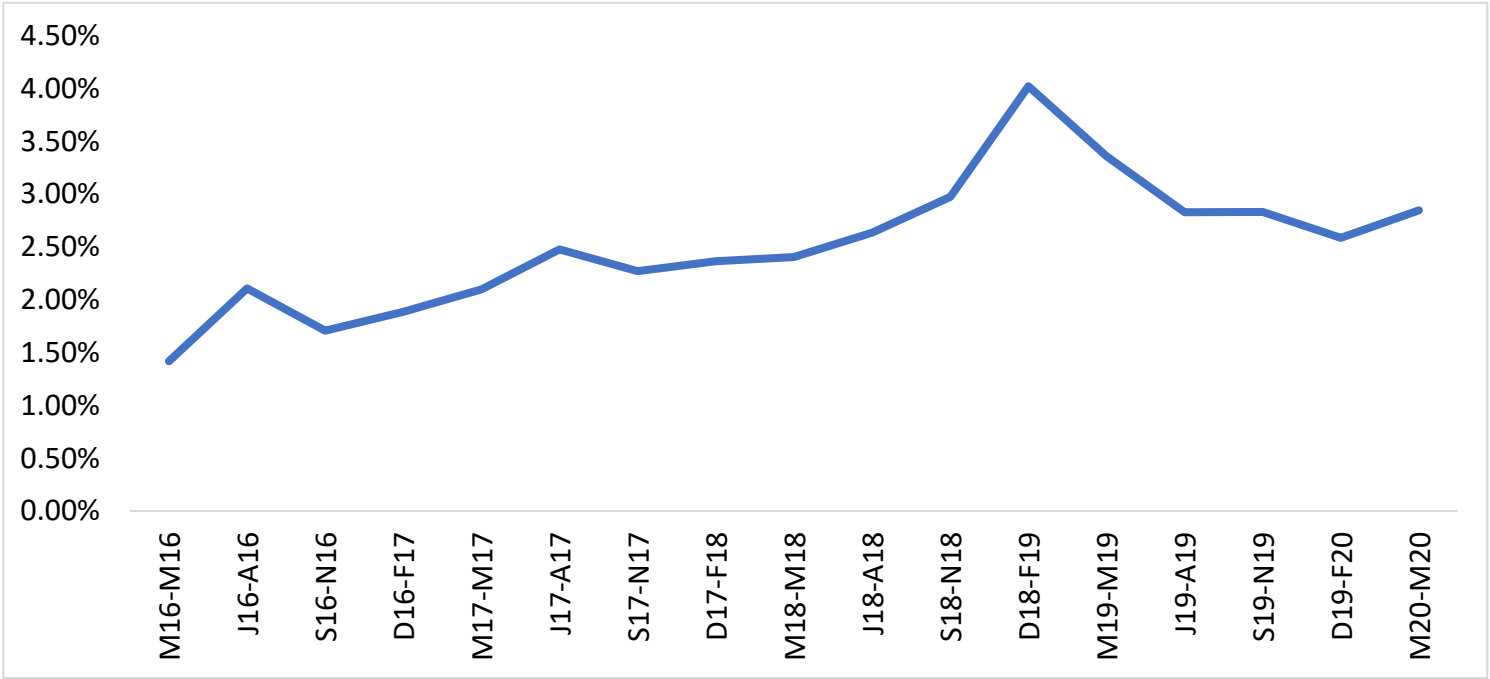
DG - Dogging

References = 4943

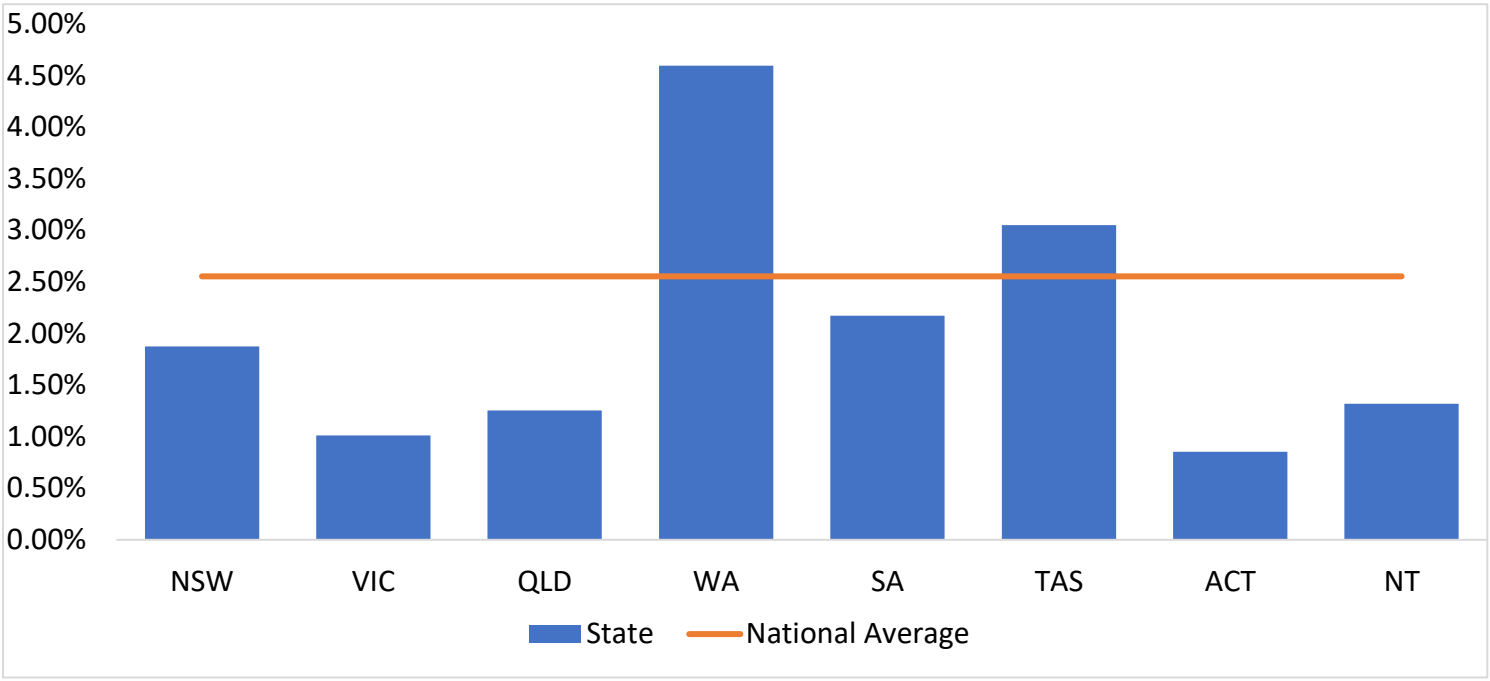
Breakdown Of All References To DG - Dogging (March 2016 - May 2020)



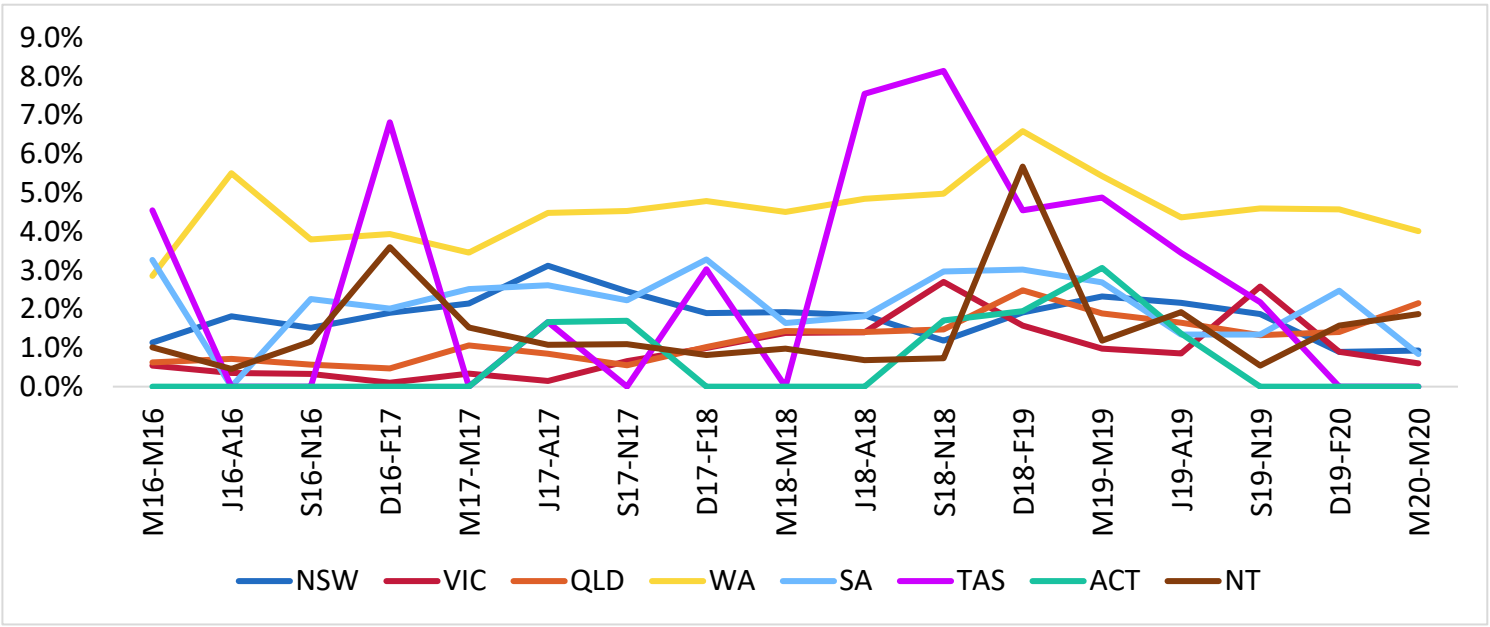
National: Percentage Of Mining Jobs Referencing DG - Dogging (March 2016 - May 2020)



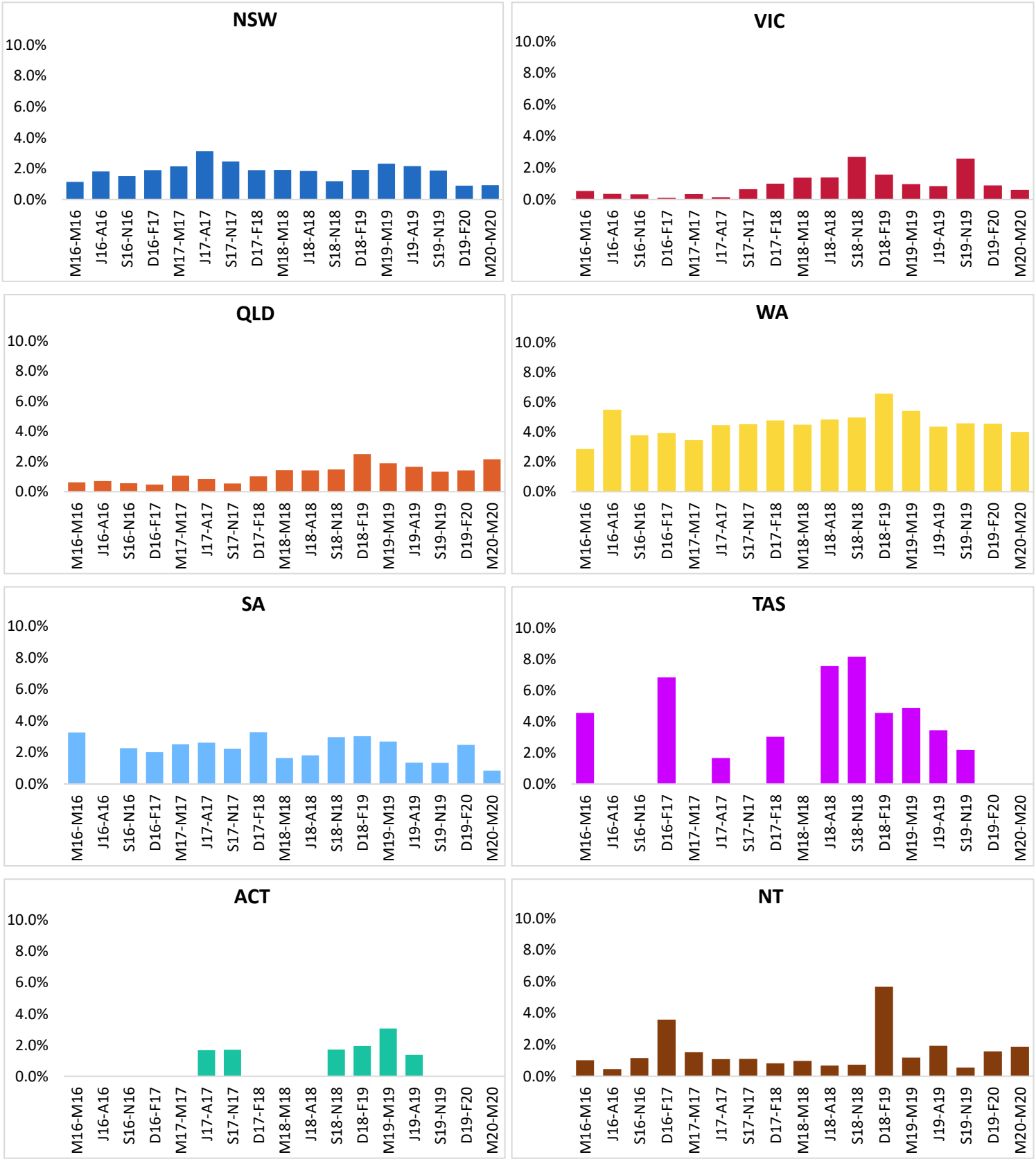
All States: Percentage Of Mining Jobs Referencing DG - Dogging (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing DG - Dogging



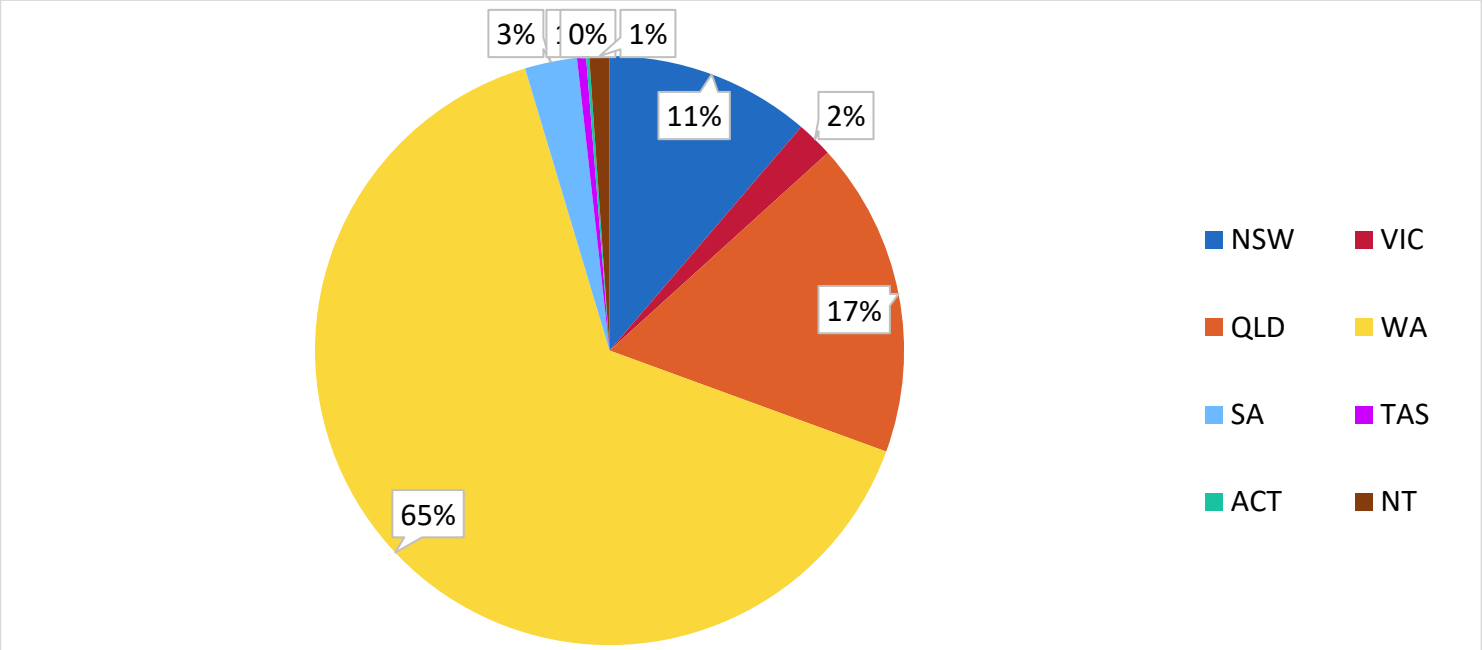
All States: Percentage Of Mining Jobs Referencing DG - Dogging



RB - Basic Rigging

References = 4923

Breakdown Of All References To RB - Basic Rigging (March 2016 - May 2020)



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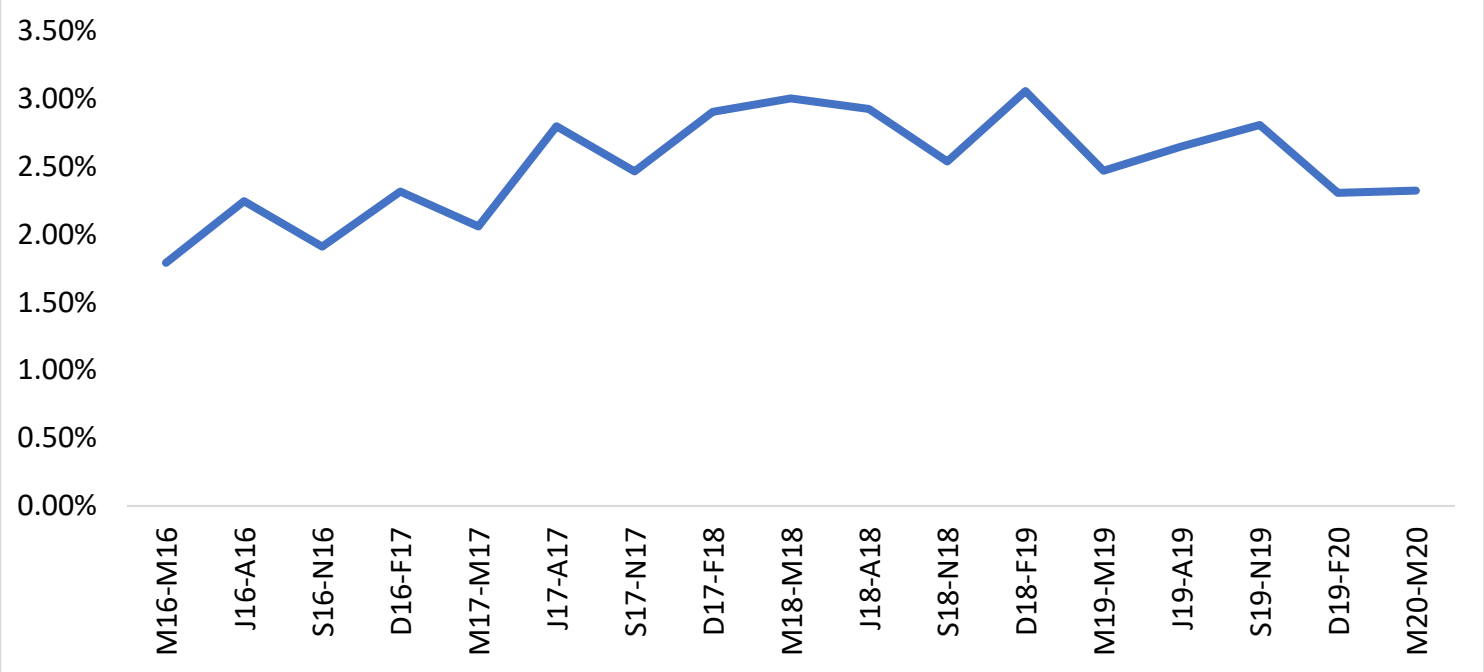

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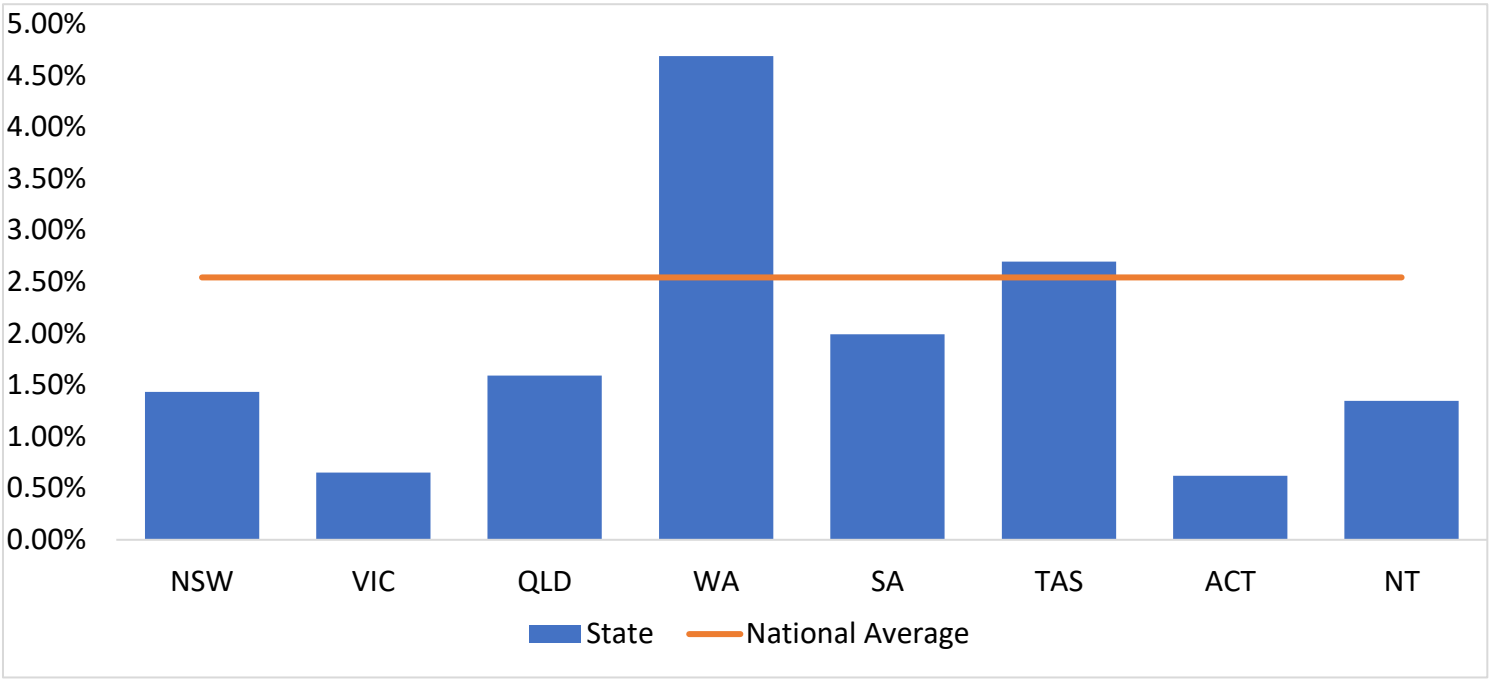

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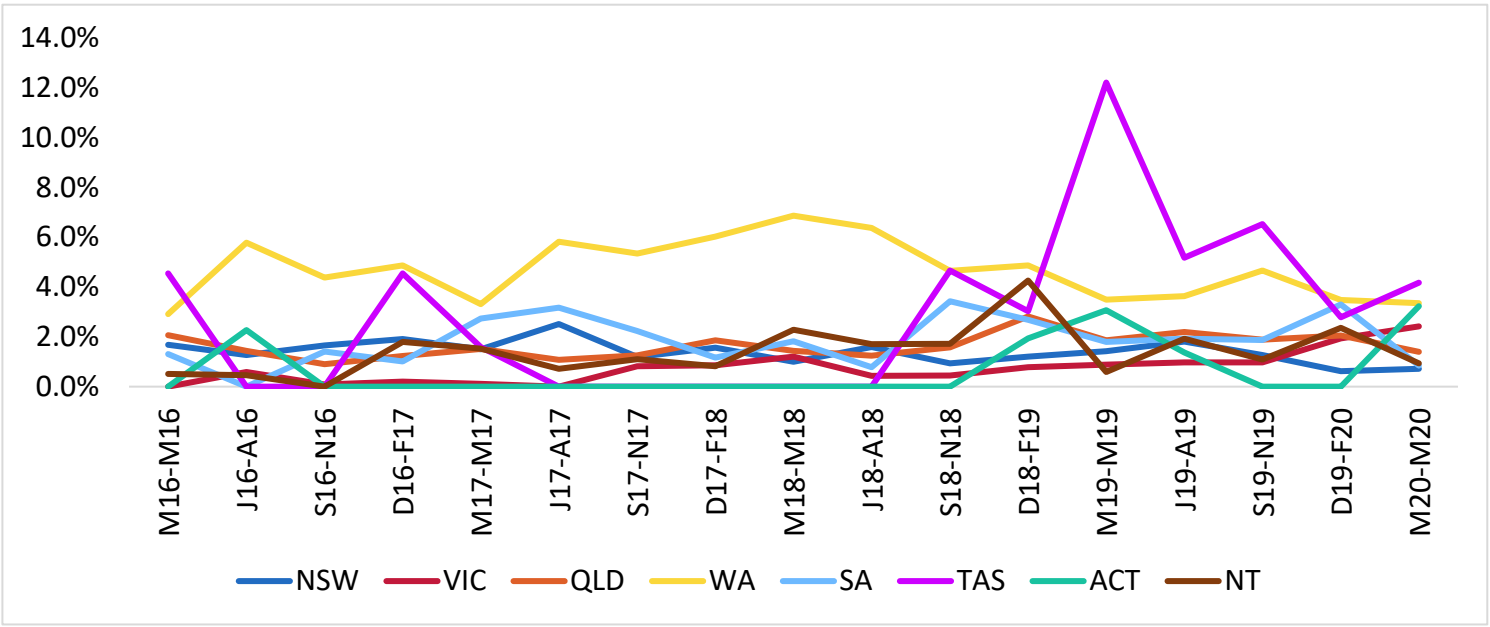
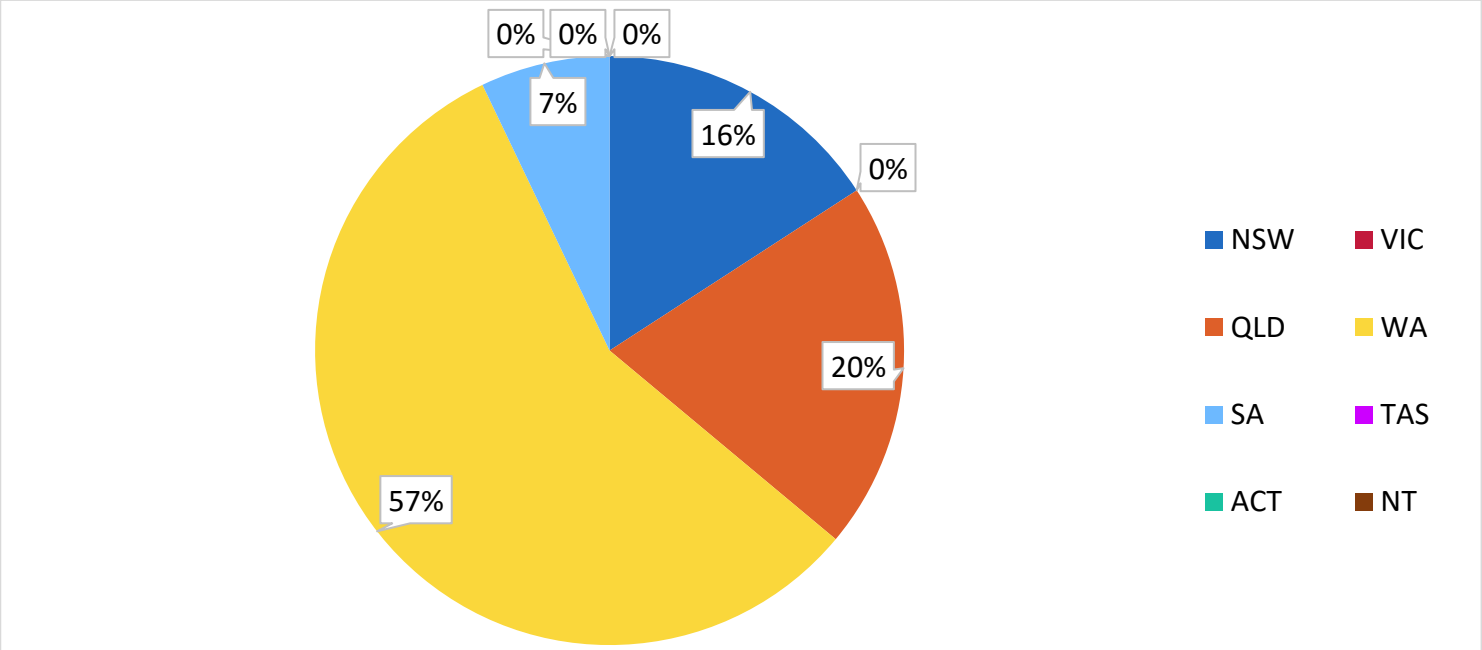


All States: Percentage Of Mining Jobs Referencing RB - Basic Rigging

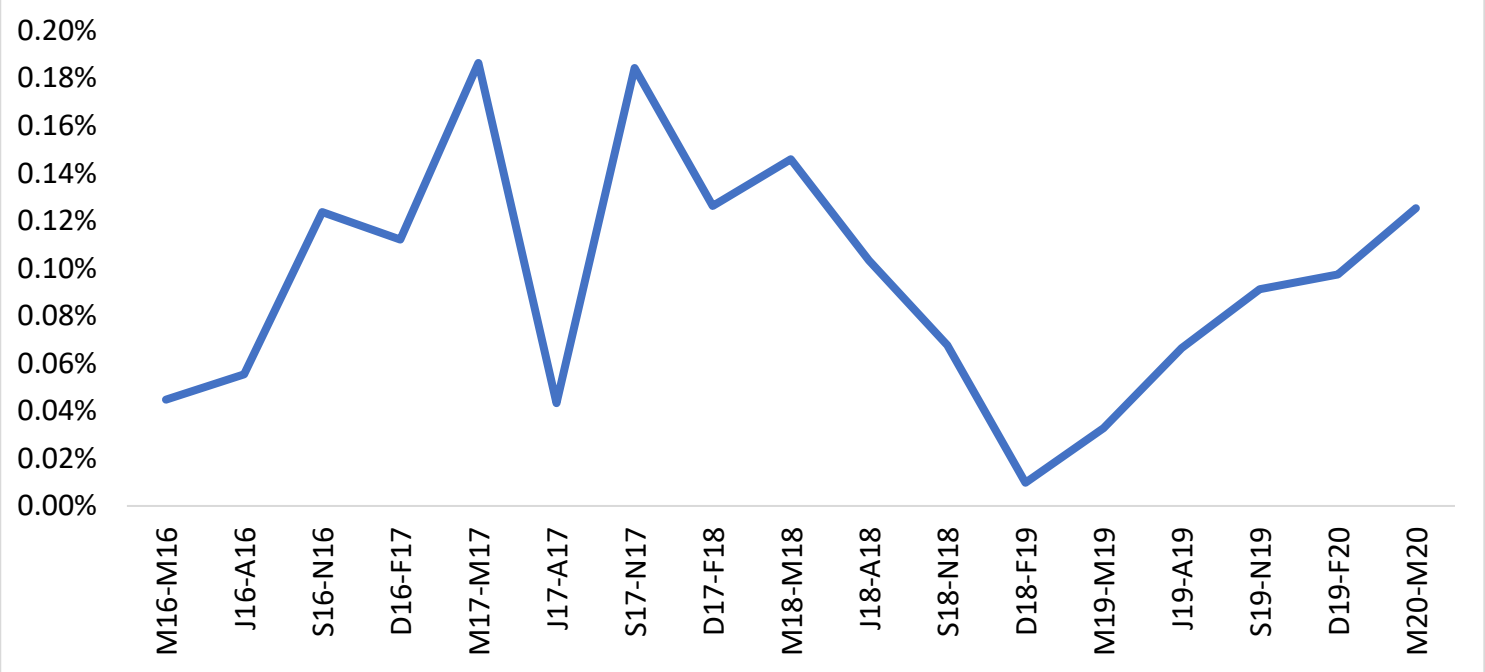
RI - Intermediate Rigging

References = 191

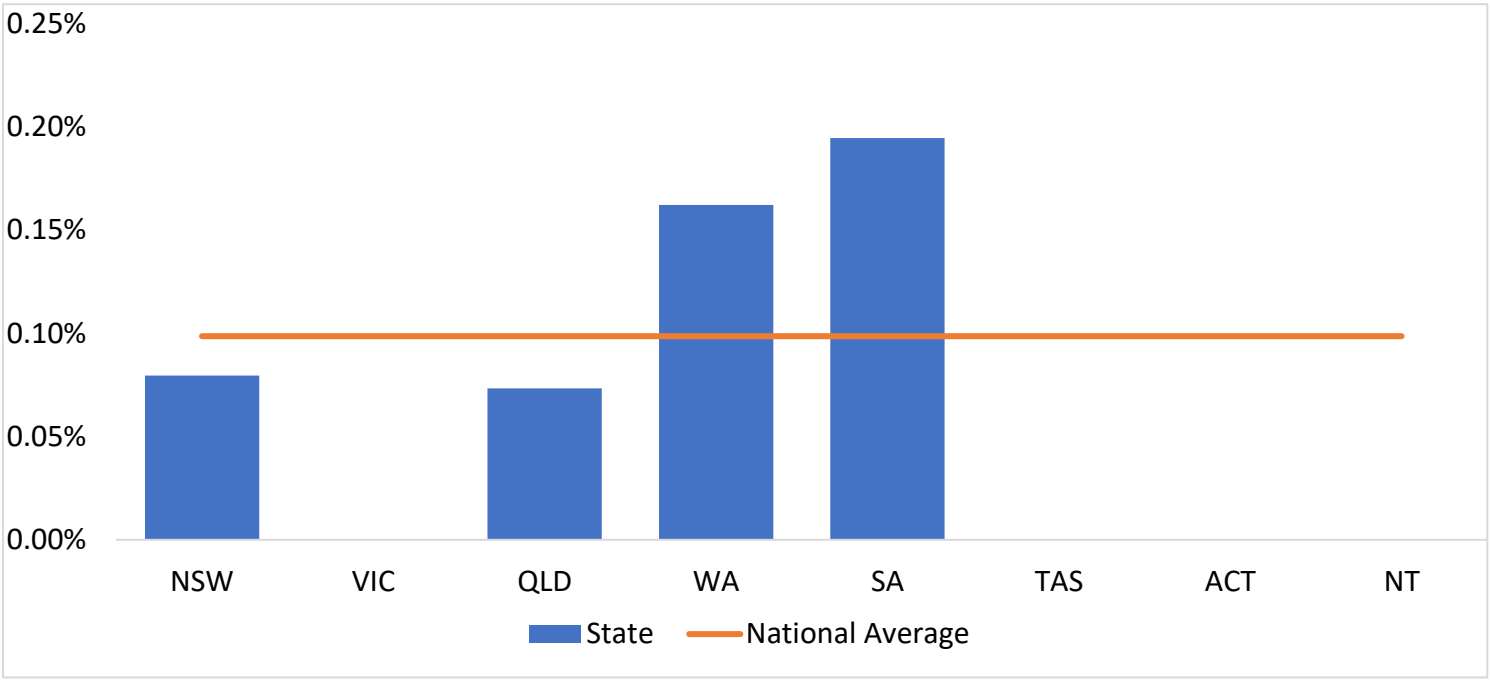
Breakdown Of All References To RI - Intermediate Rigging (March 2016 - May 2020)



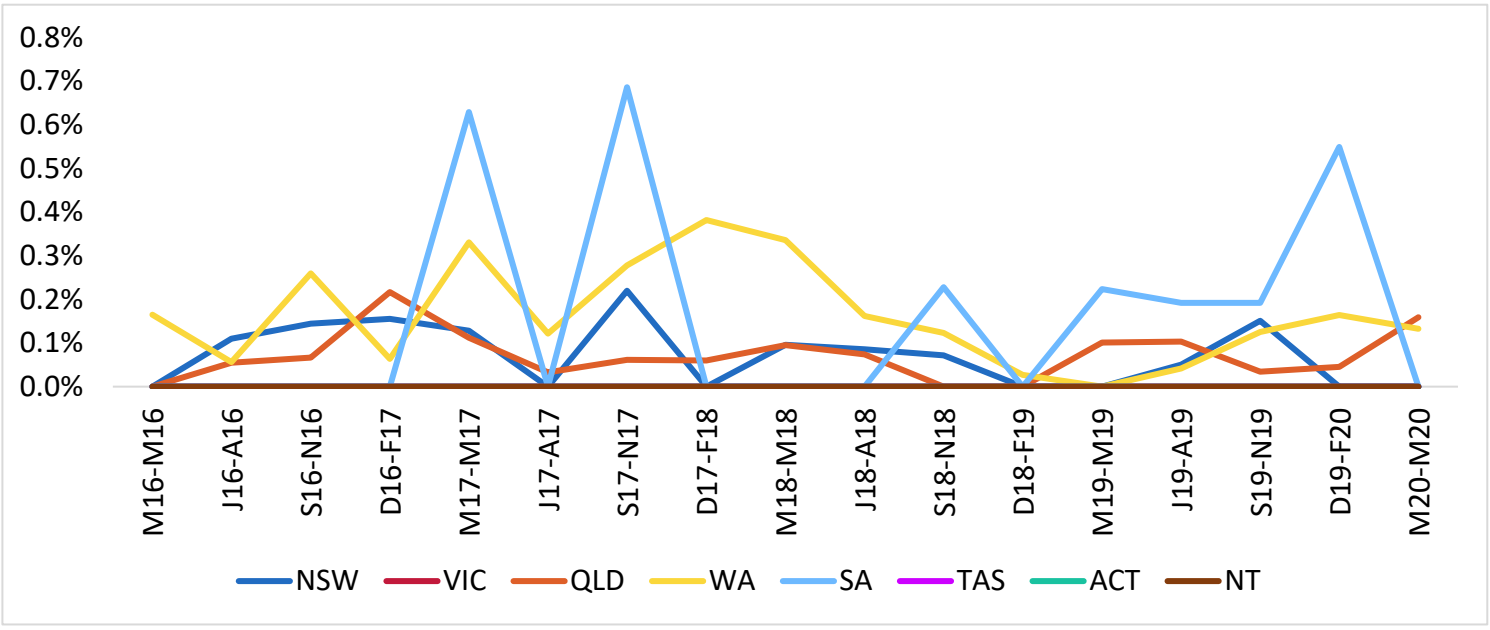
National: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging

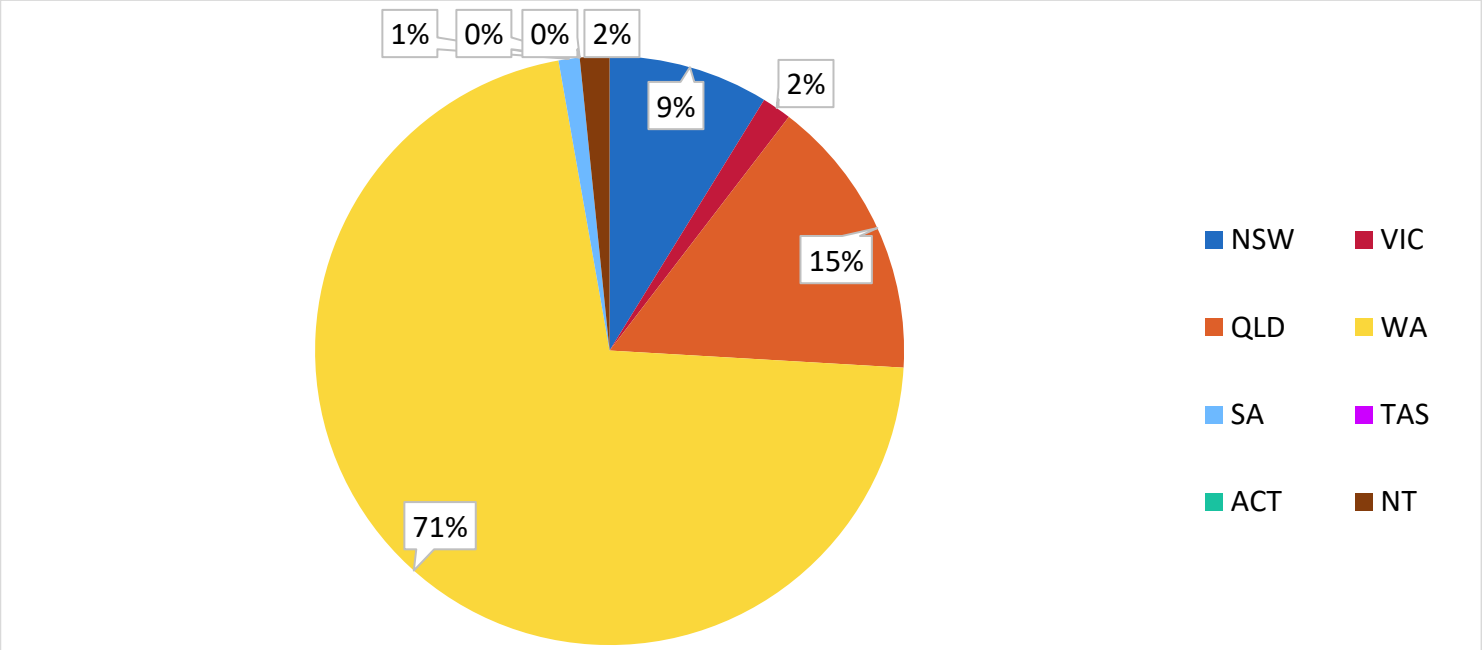


All States: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging

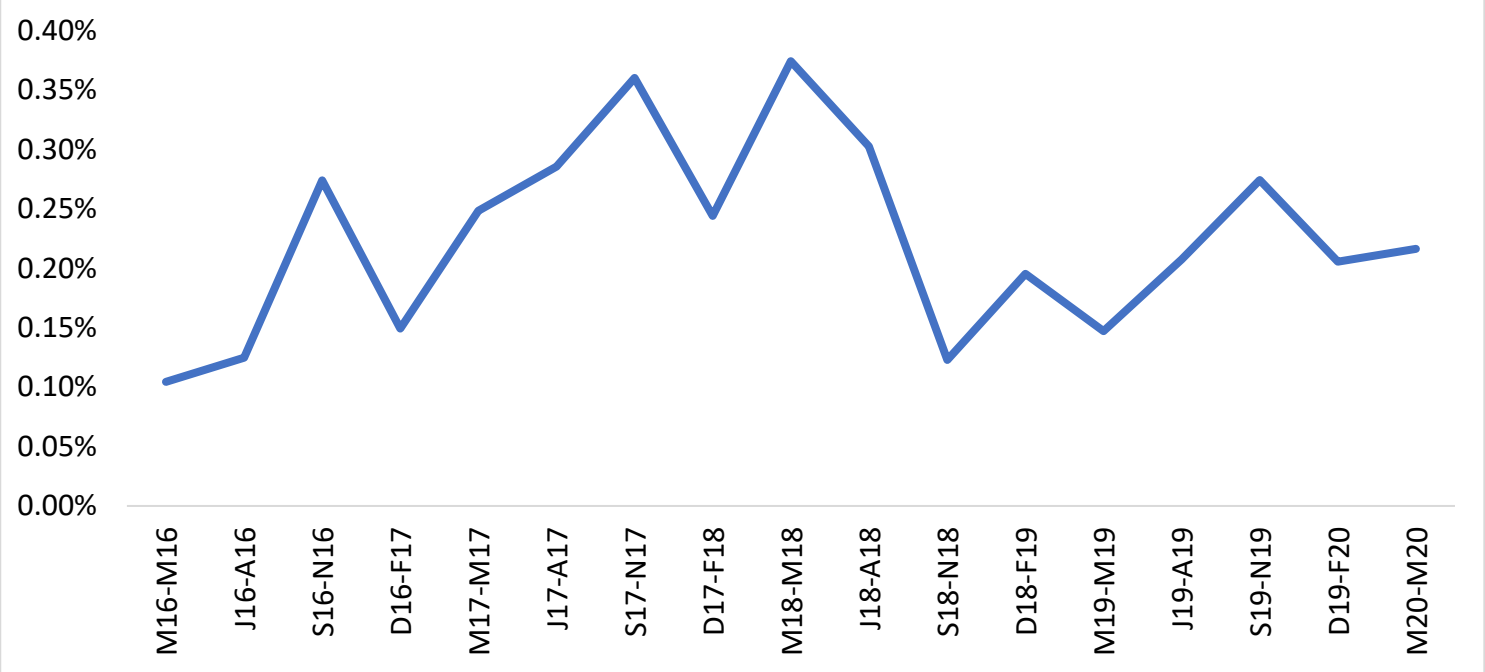
RA - Advanced Rigging

References = 452

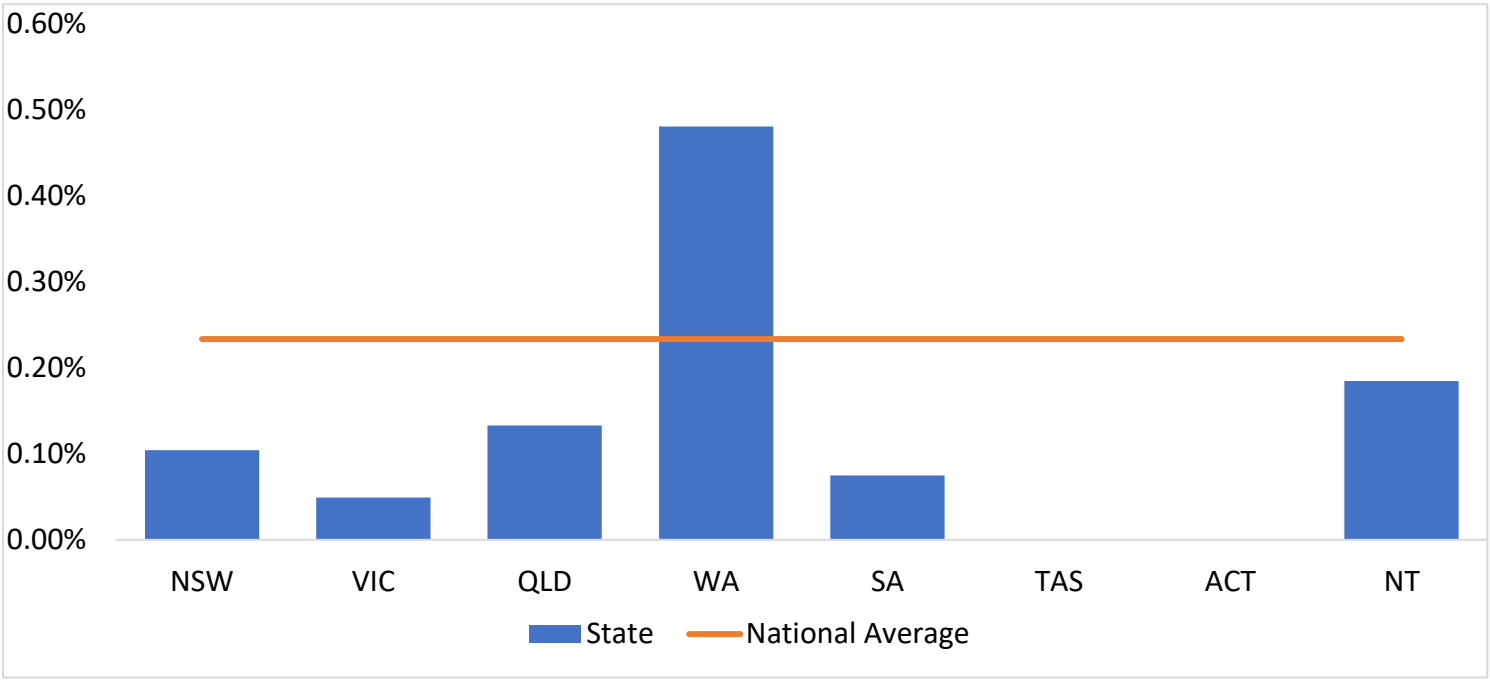
Breakdown Of All References To RA - Advanced Rigging (March 2016 - May 2020)



National: Percentage Of Mining Jobs Referencing RA - Advanced Rigging (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing RA - Advanced Rigging (March 2016 - May 2020)



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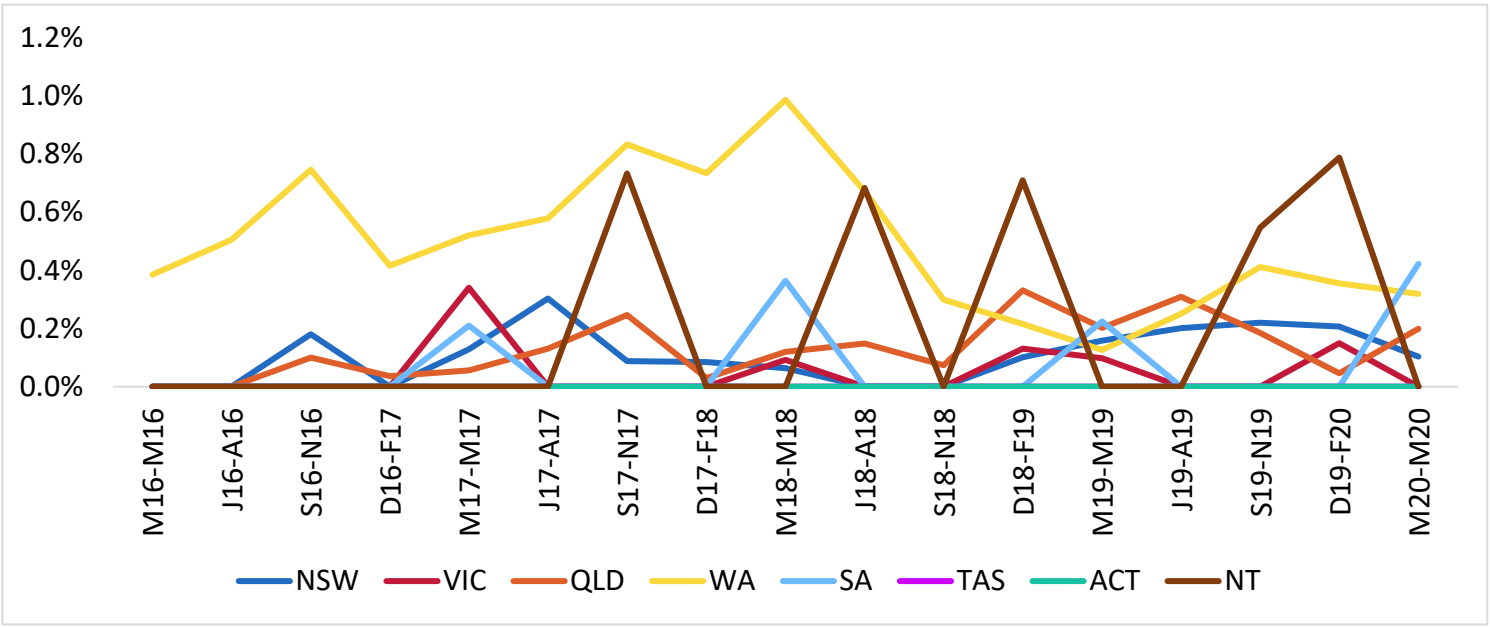

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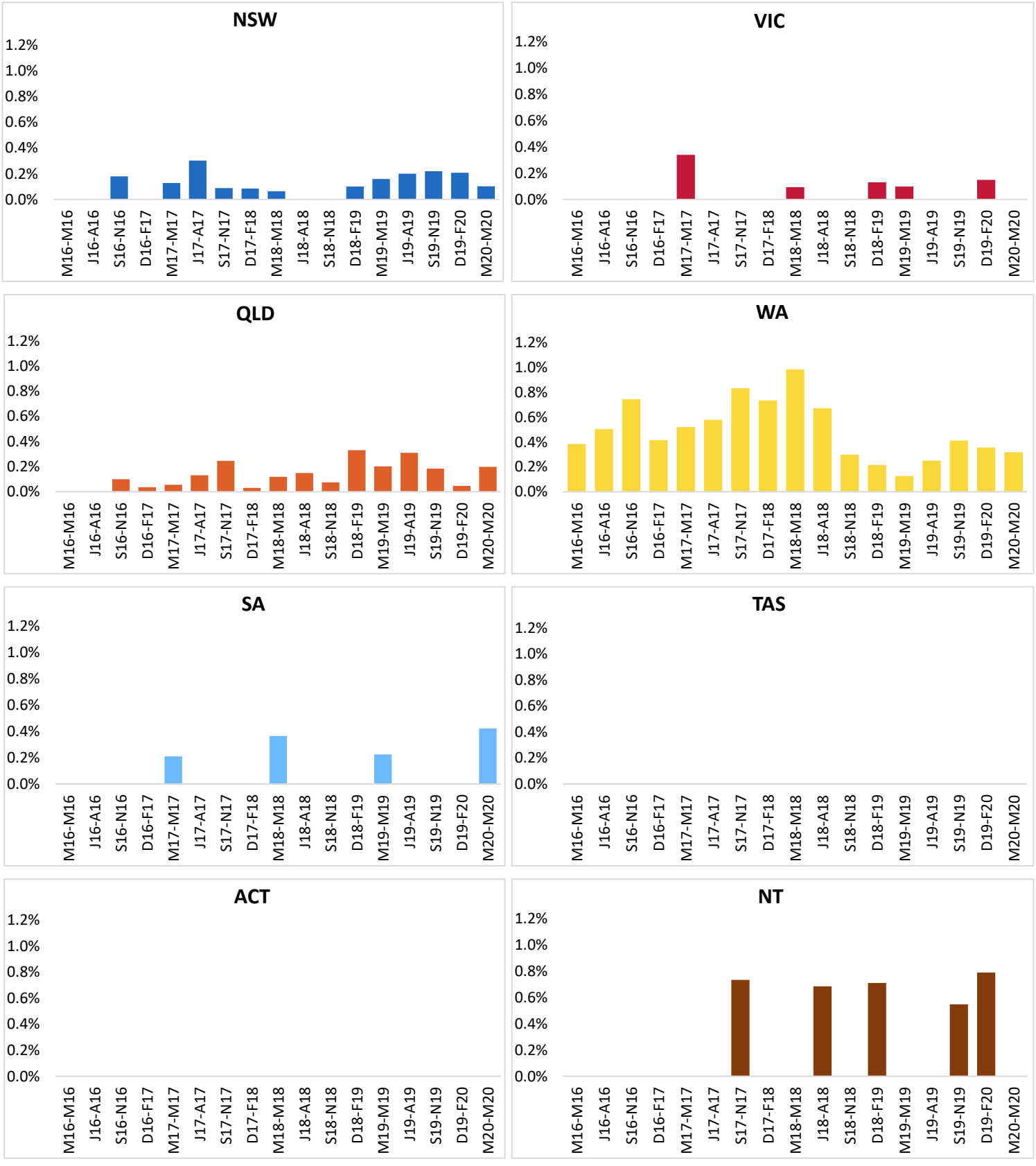
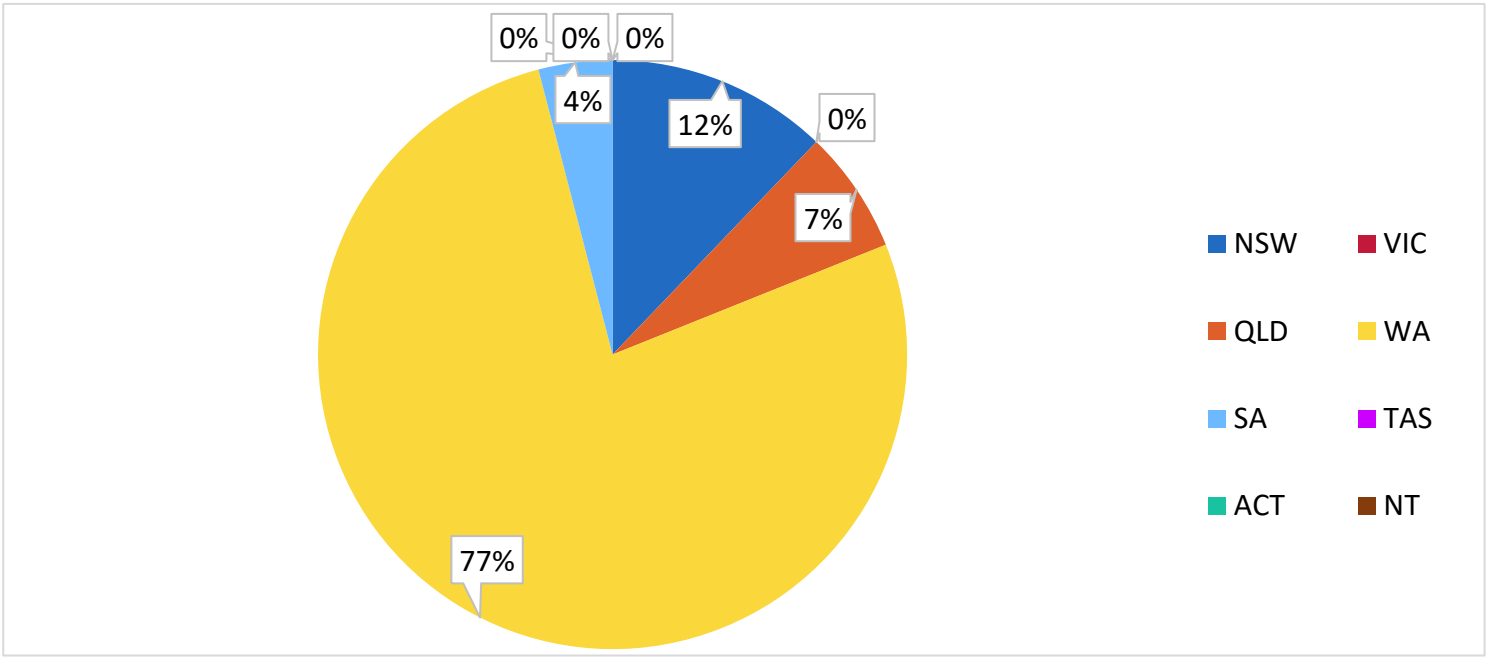


SB - Basic Scaffolding

References = 84

Breakdown Of All References To SB - Basic Scaffolding (March 2016 - May 2020)



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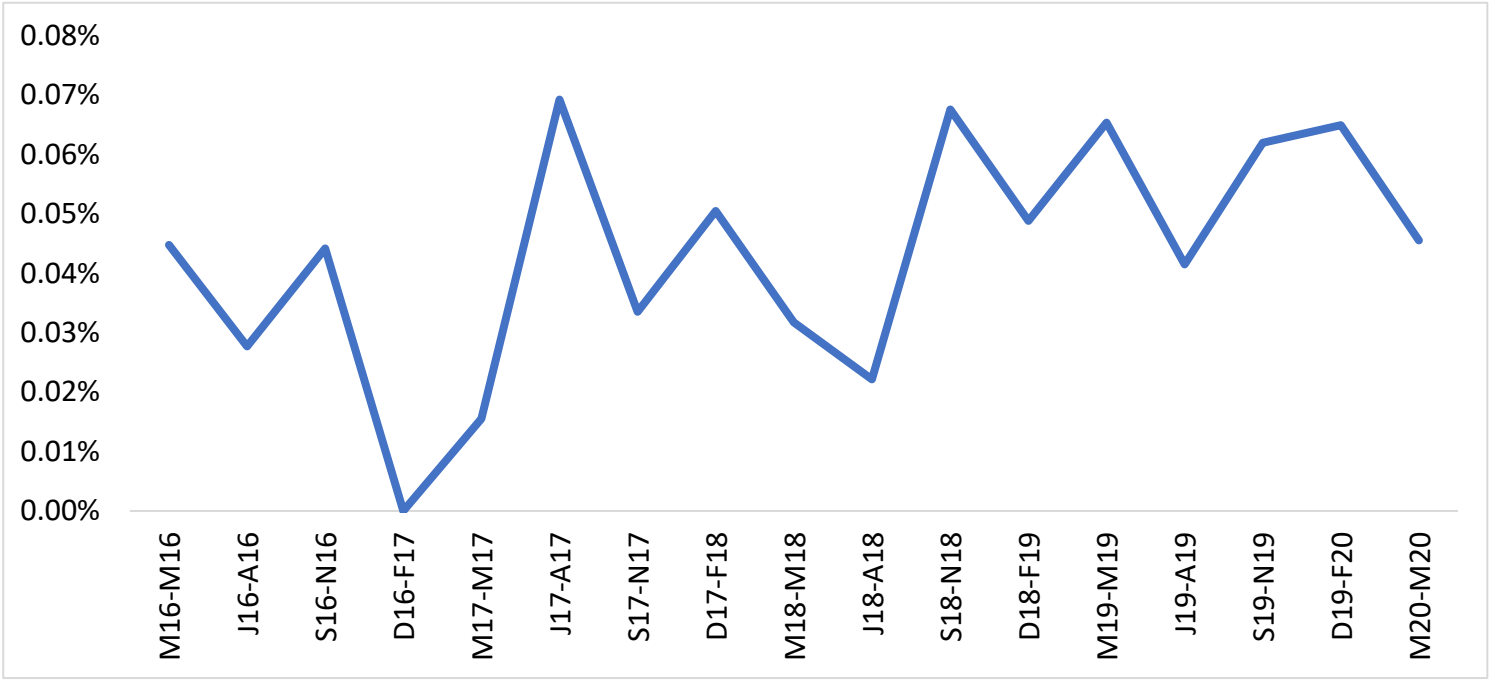

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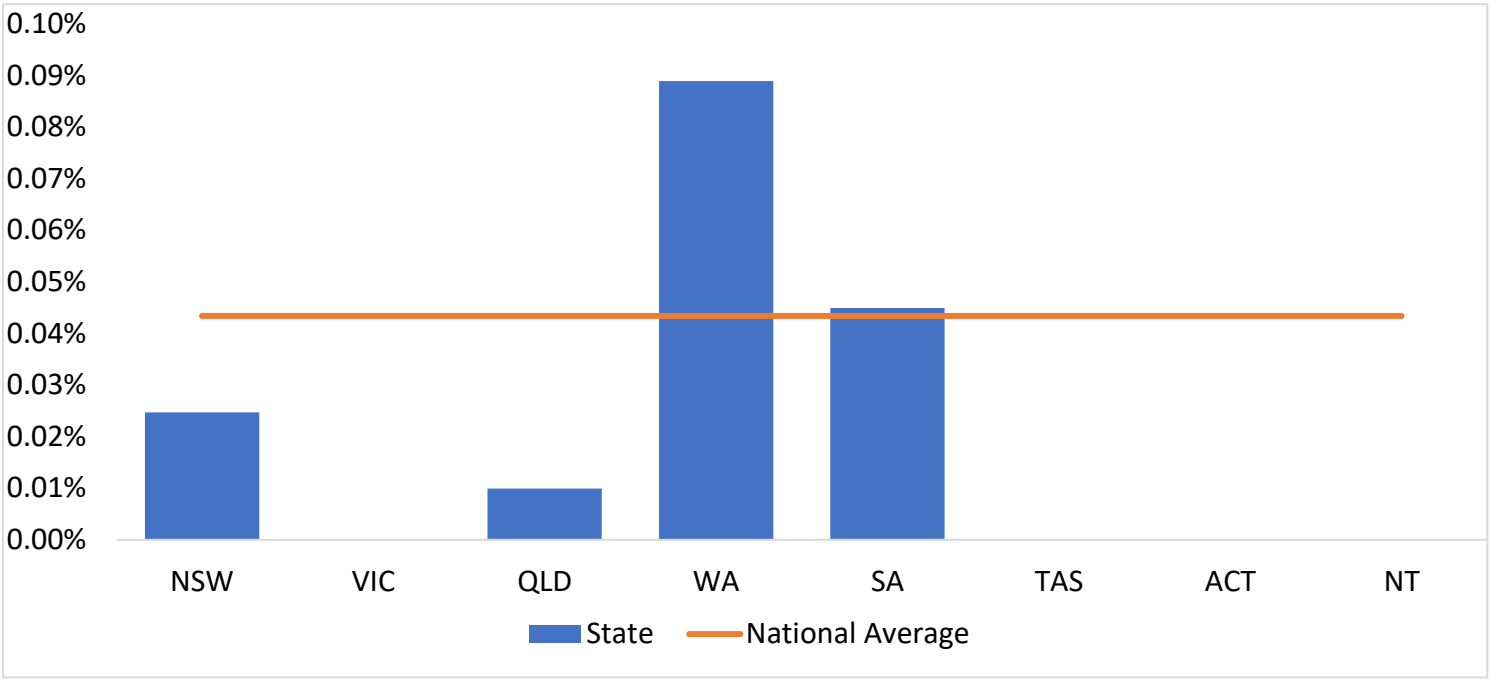

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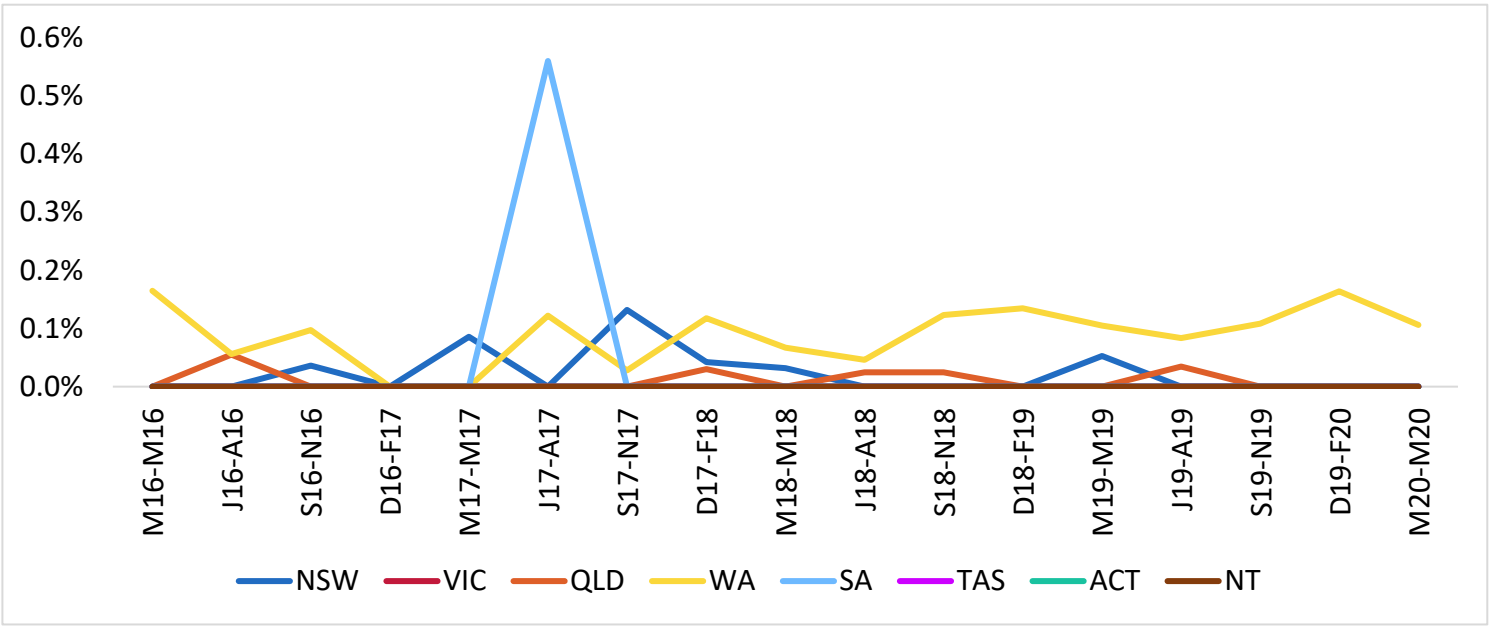
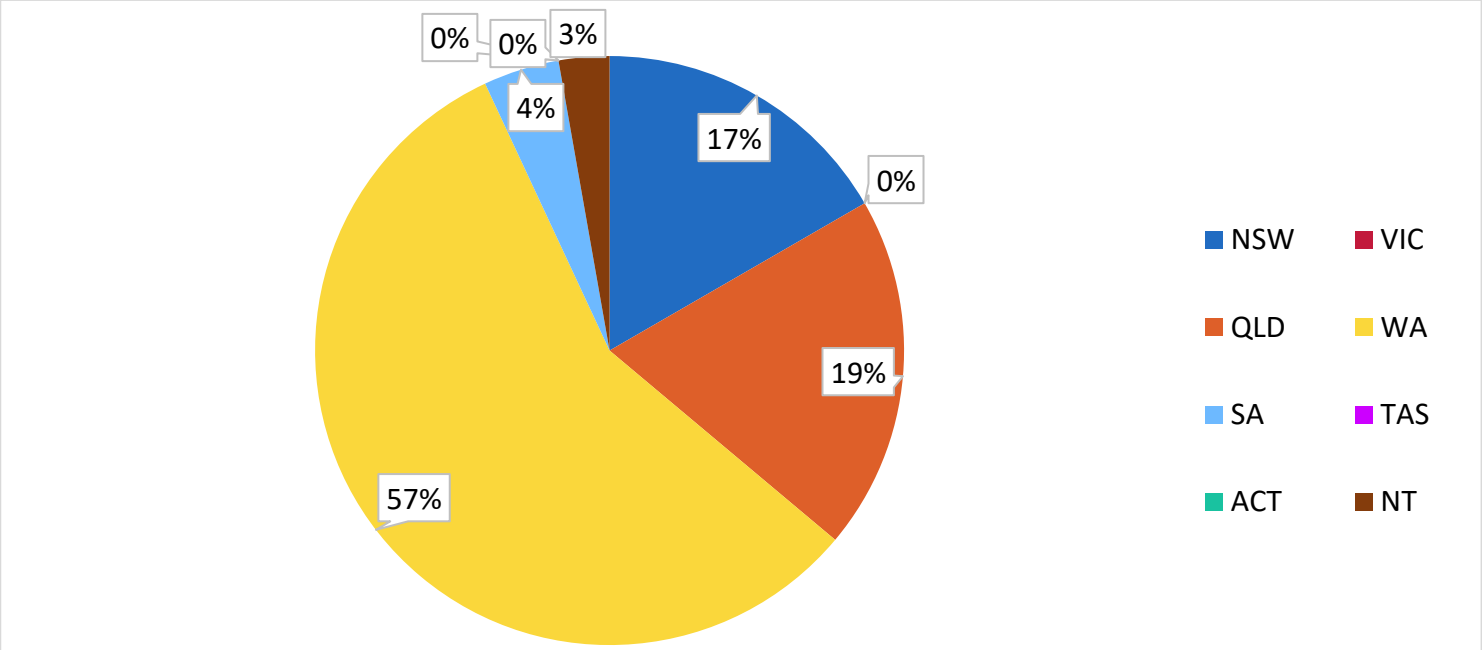


All States: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding

SI - Intermediate Scaffolding

References = 72

Breakdown Of All References To SI - Intermediate Scaffolding (March 2016 - May 2020)



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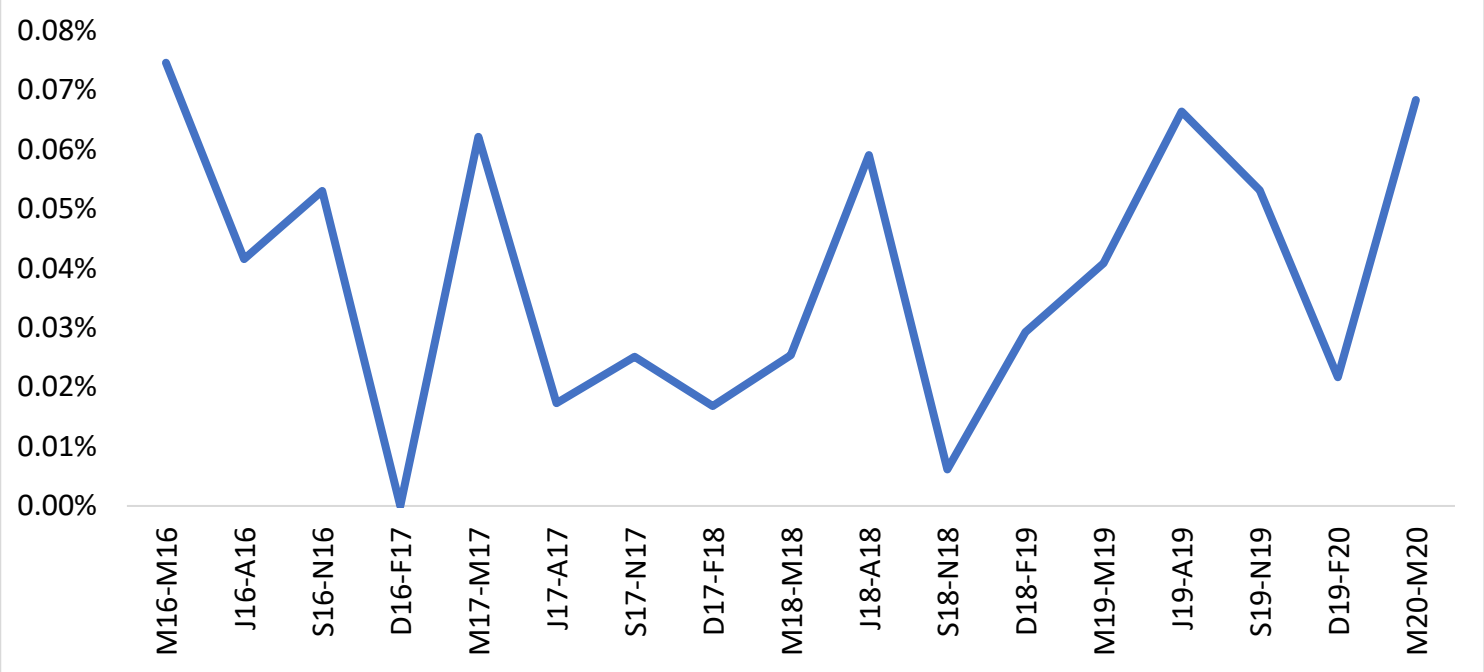

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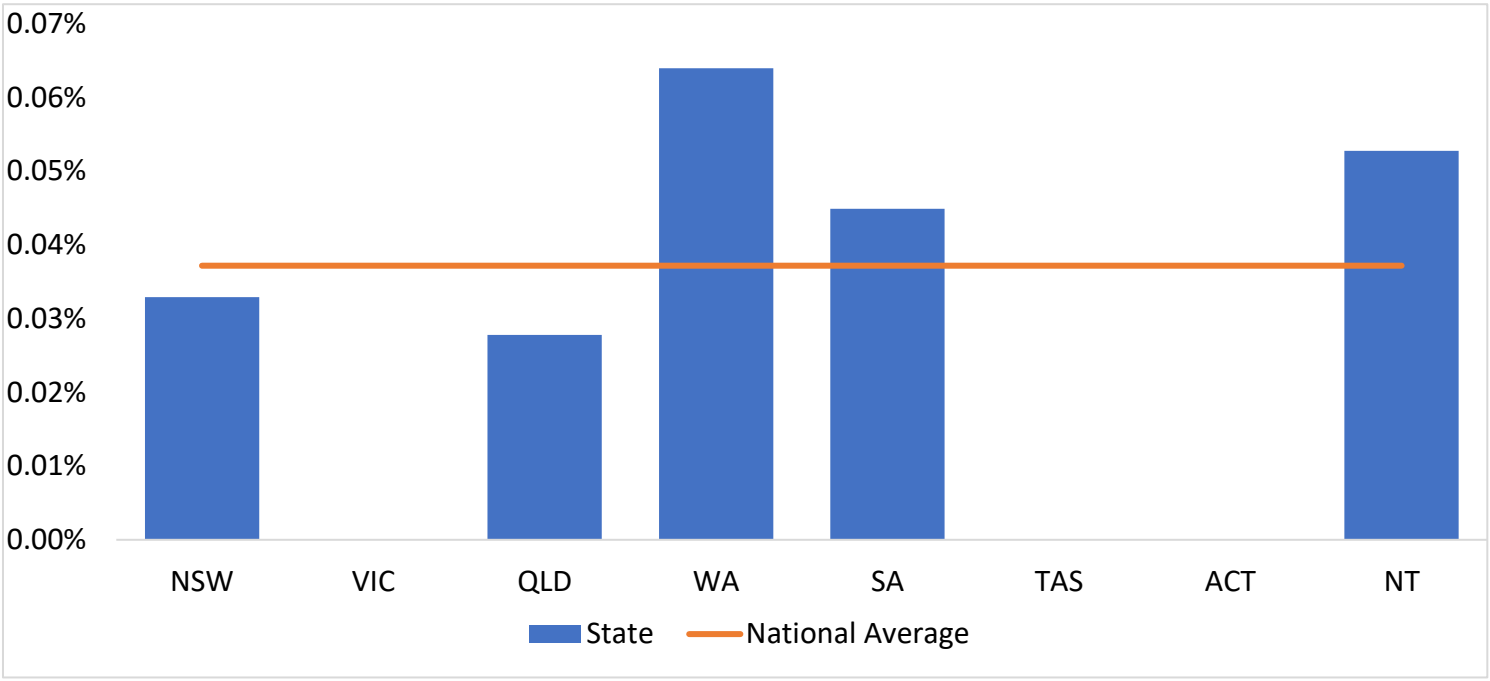

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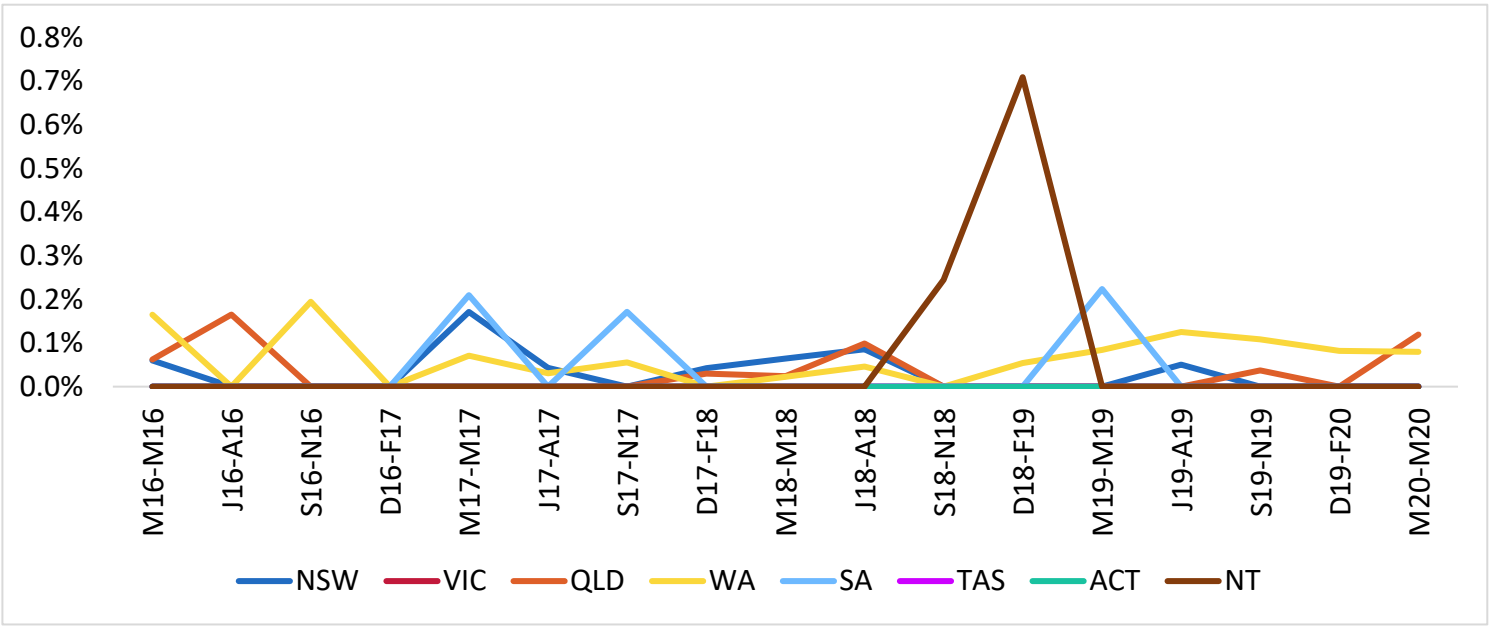

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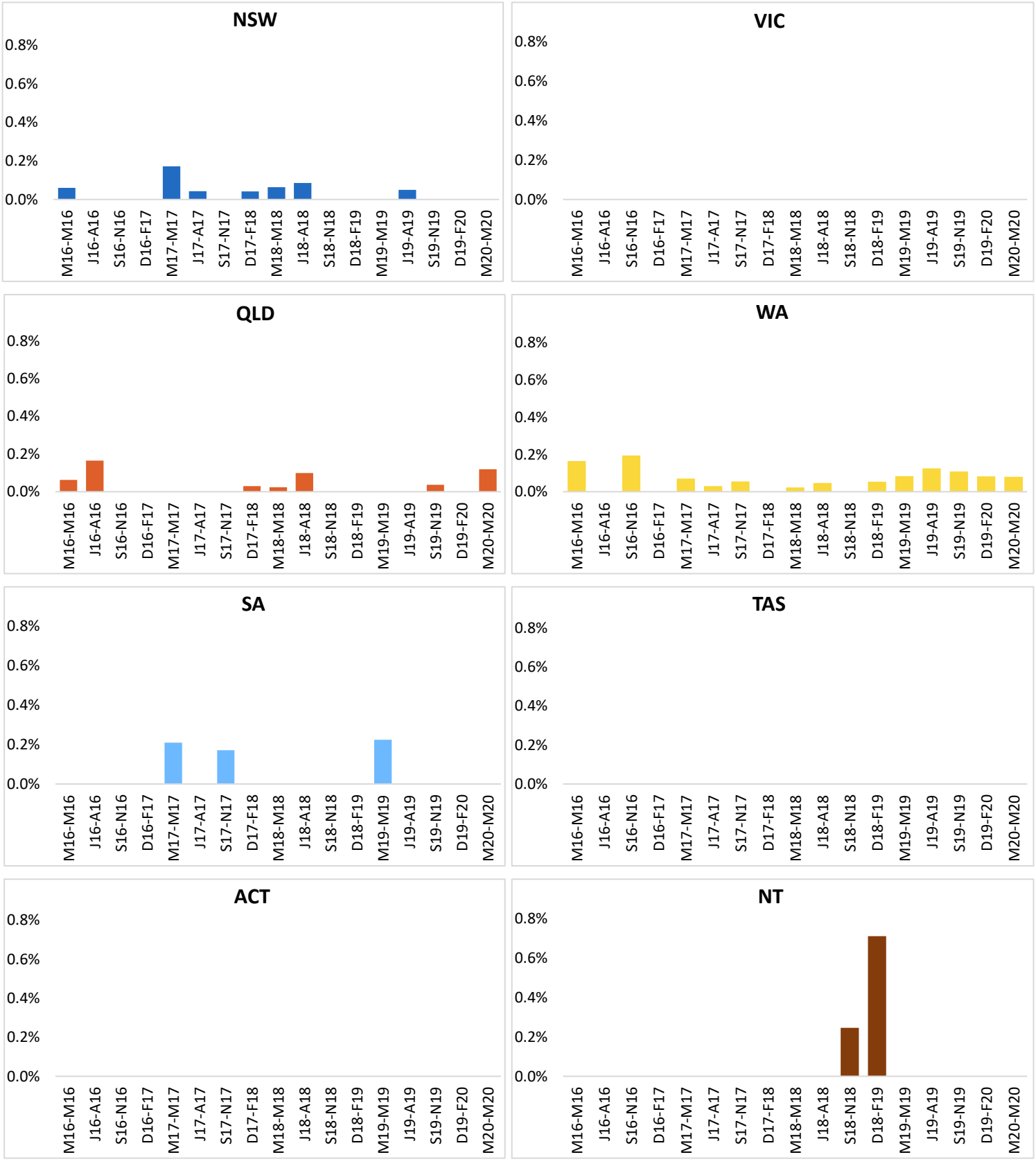
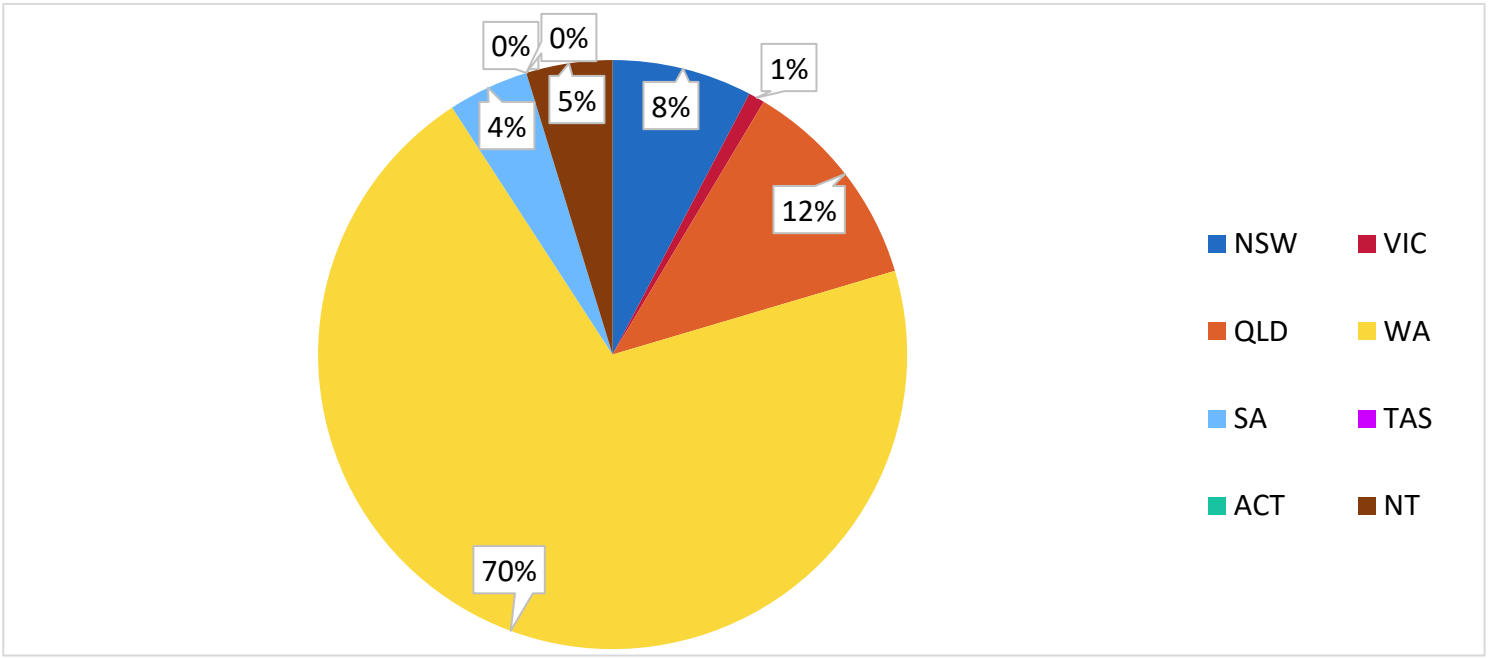


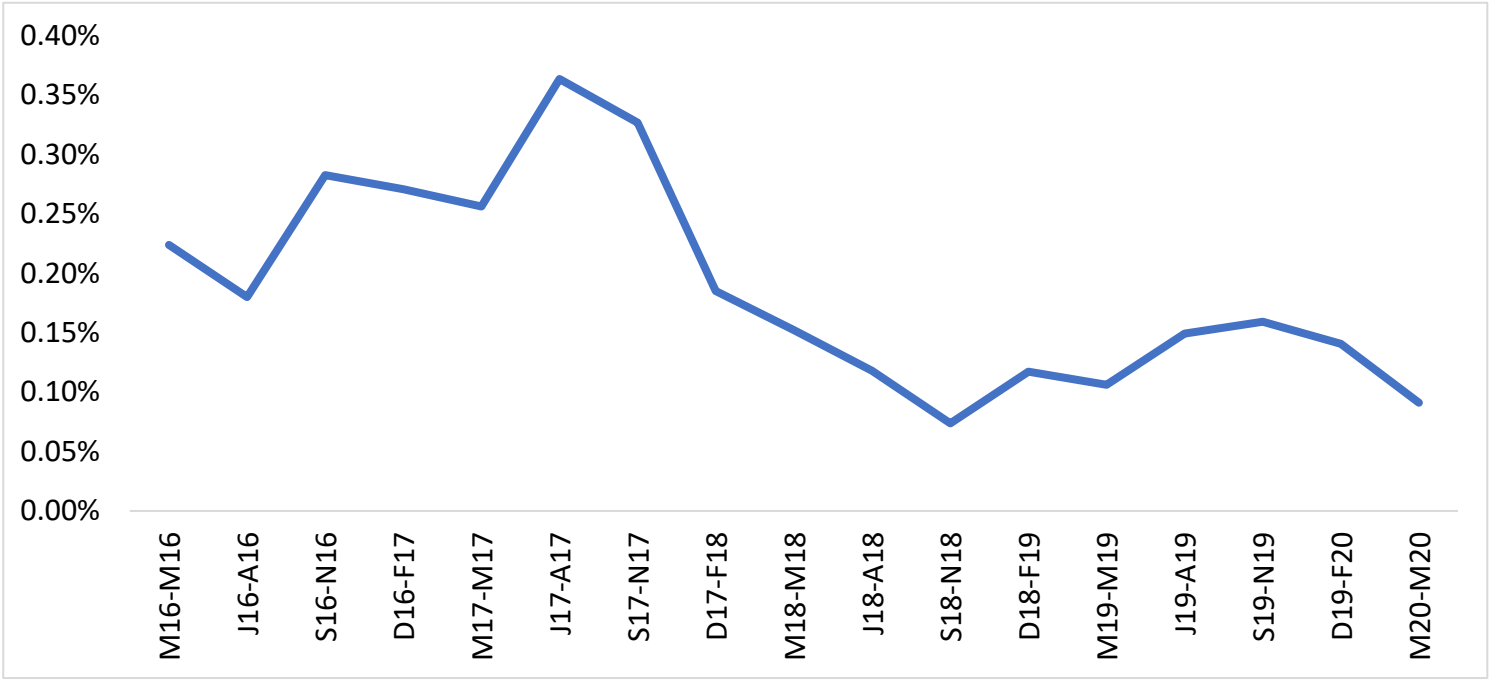
SA - Advanced Scaffolding

References = 359

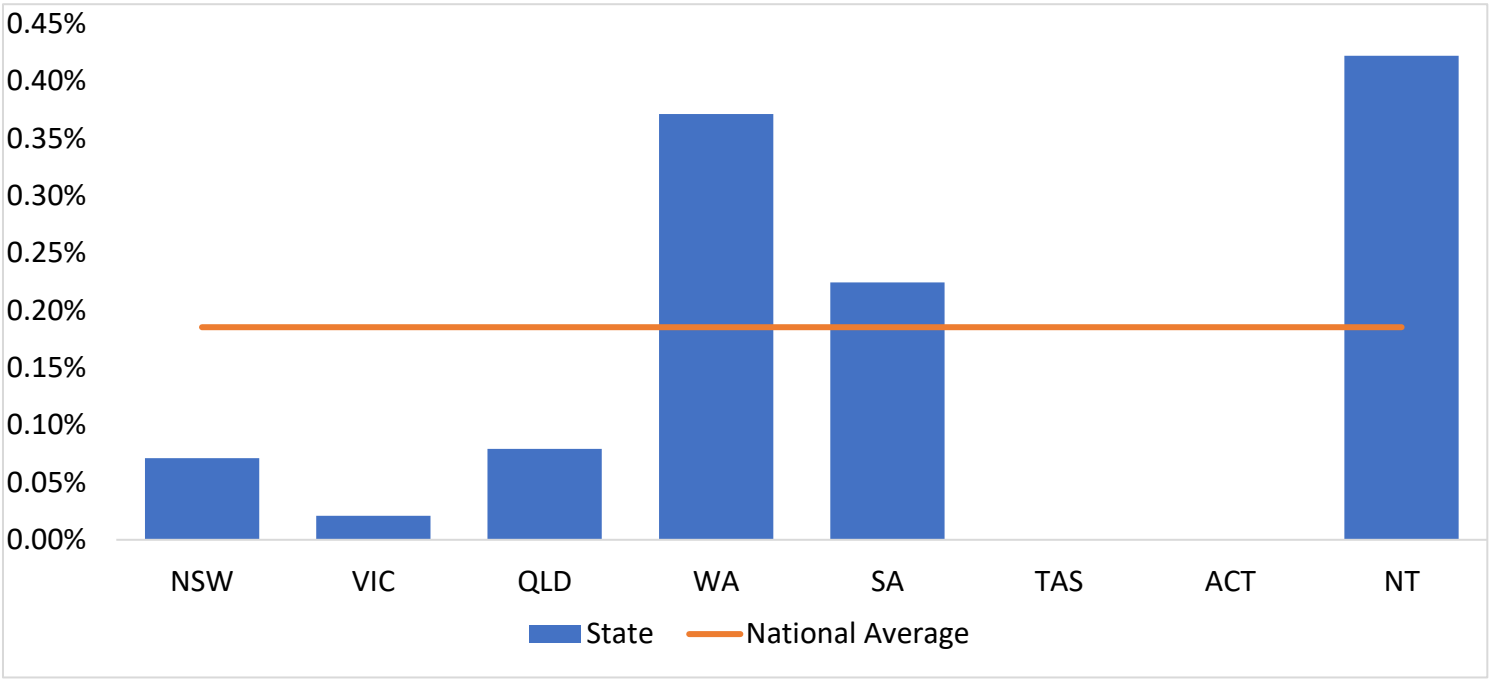
Breakdown Of All References To SA - Advanced Scaffolding (March 2016 - May 2020)



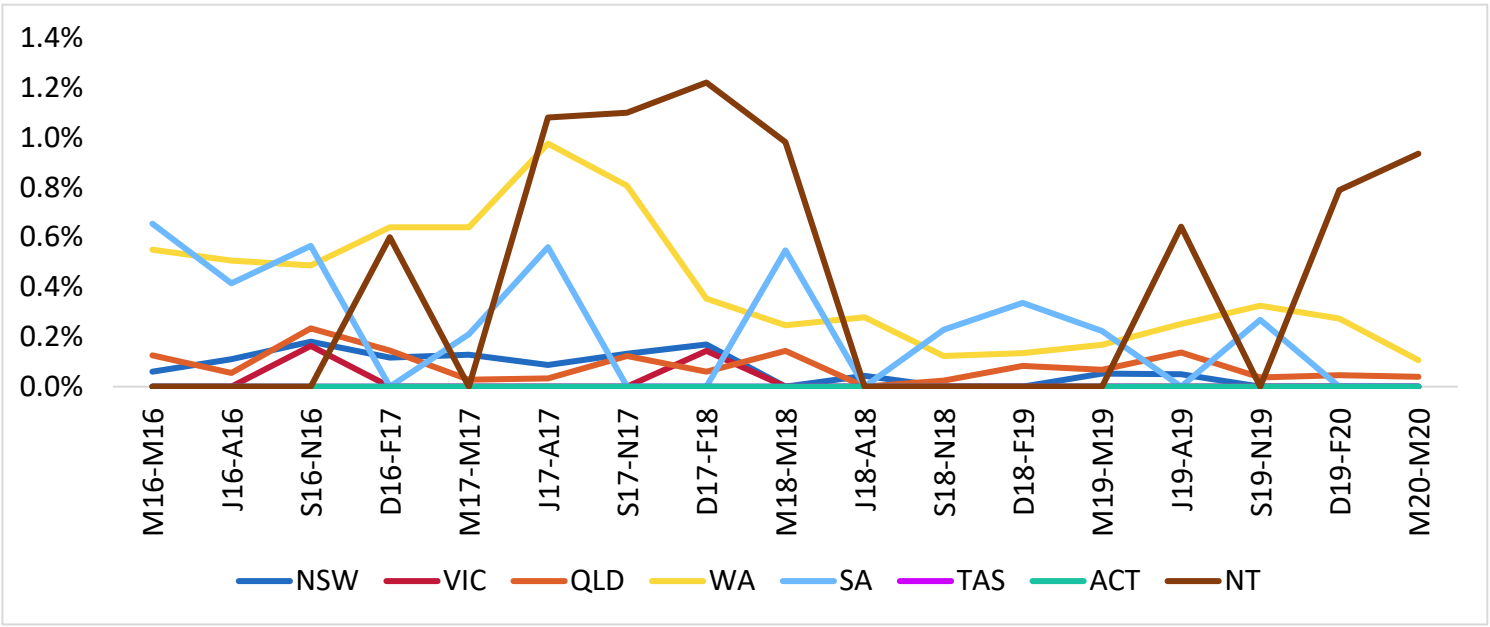
National: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding (March 2016 - May 2020)



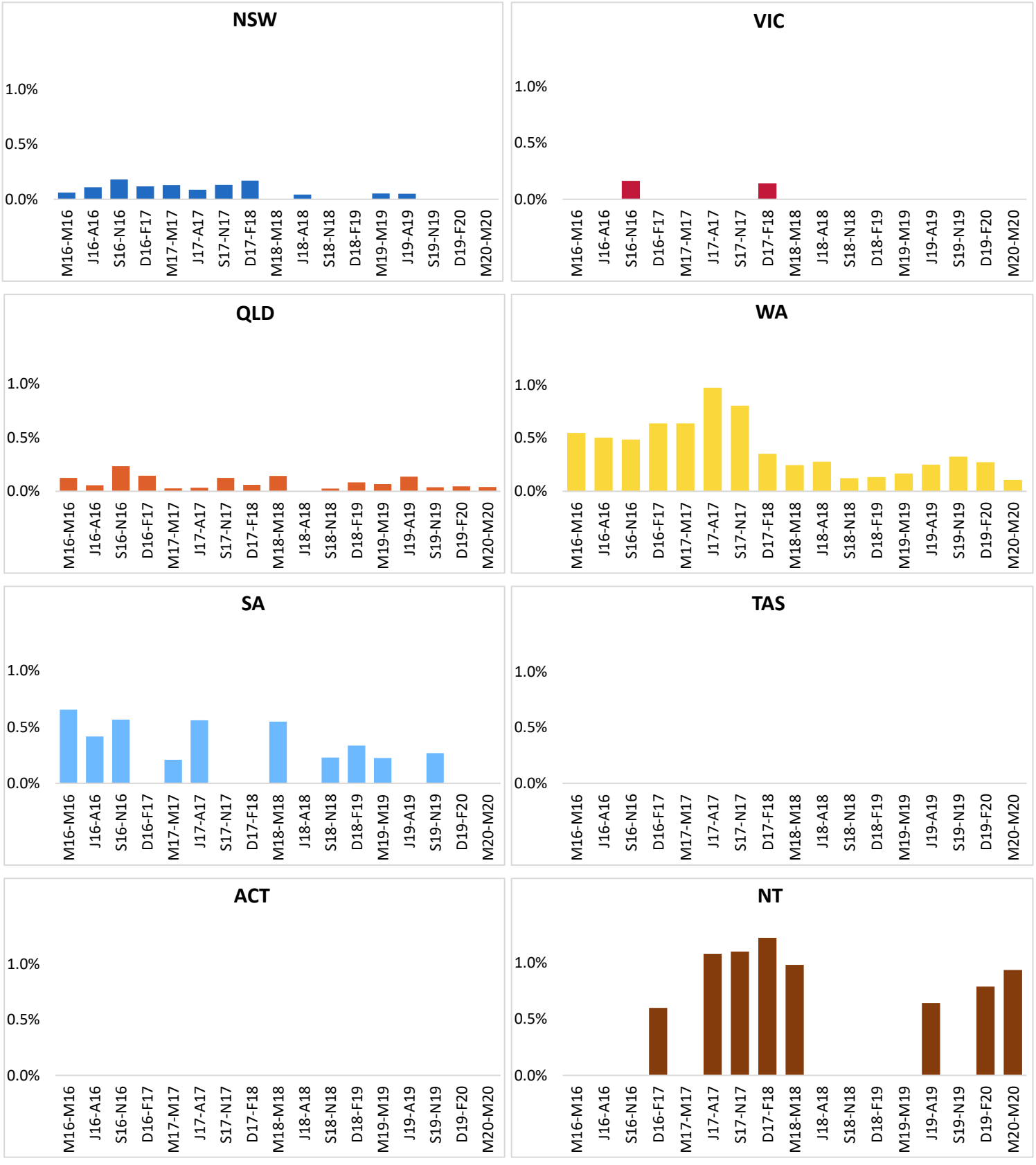
All States: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding



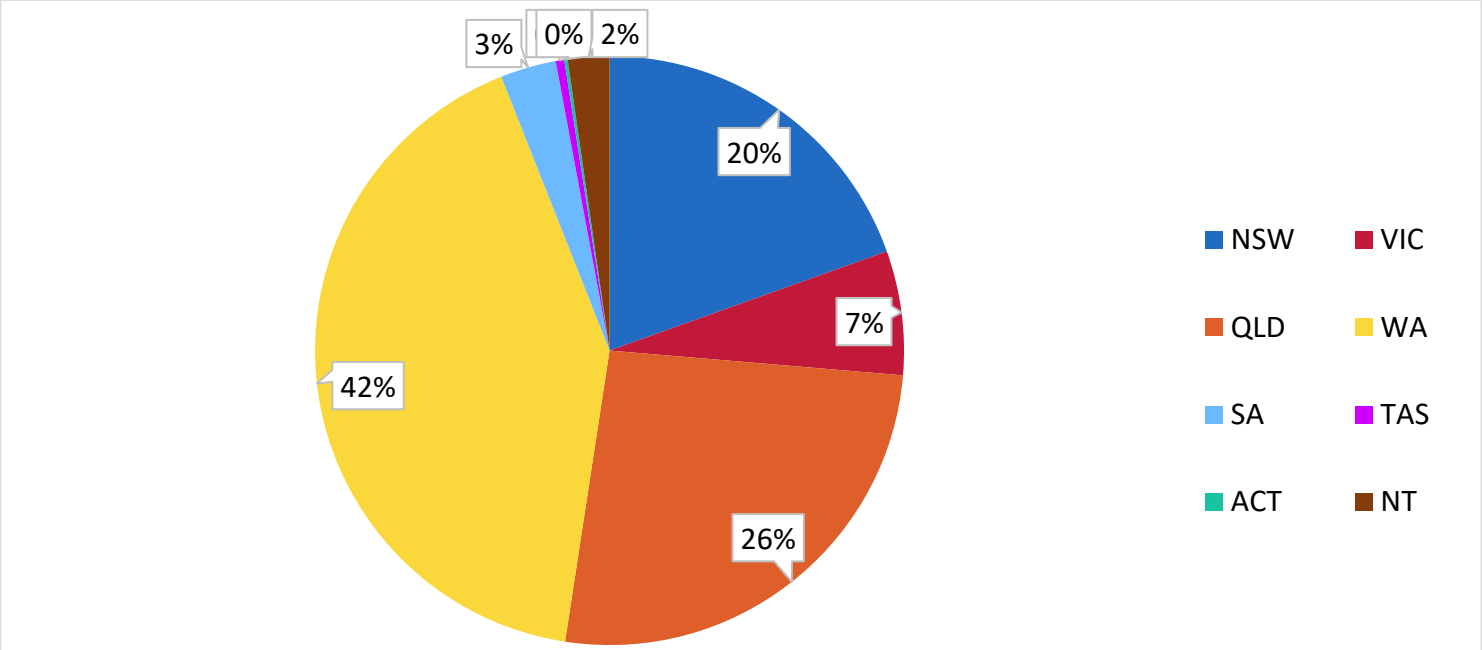
All States: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding



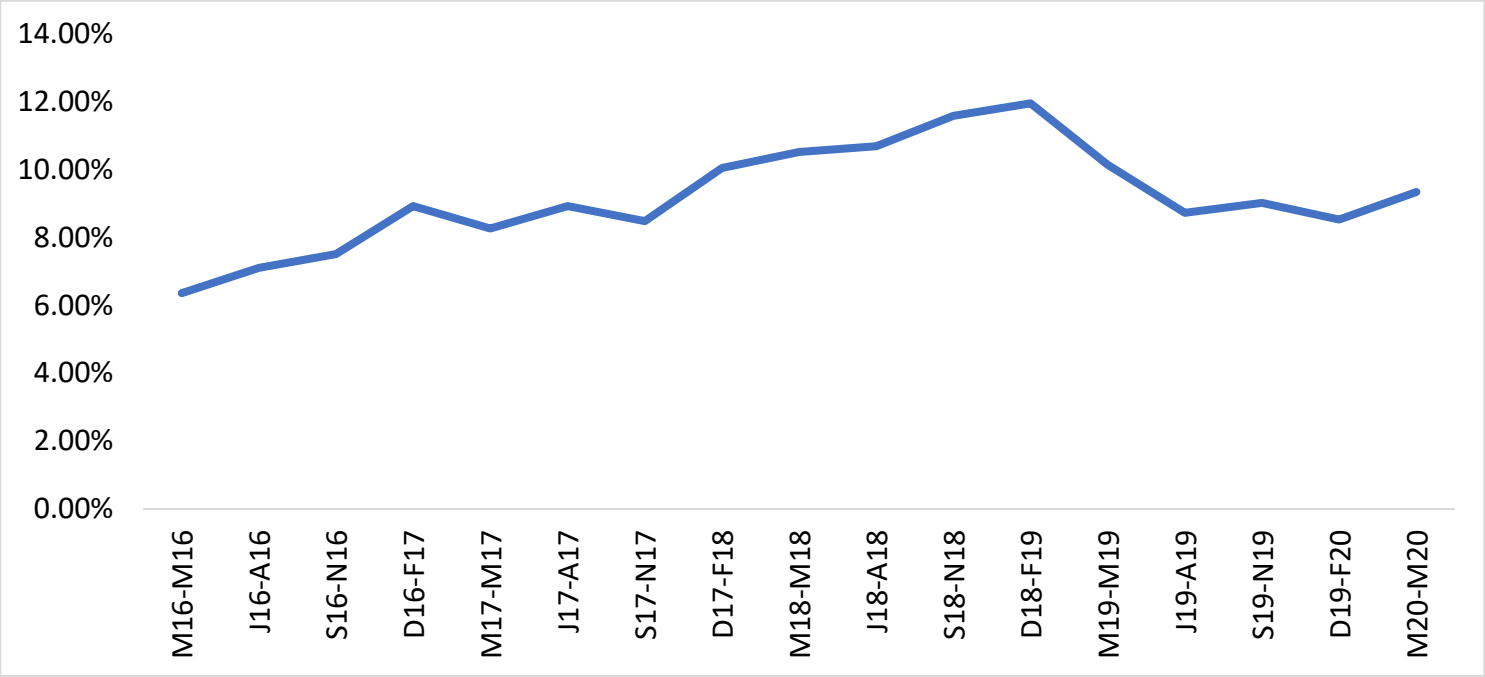
LF - Forklift Truck Operation

References = 18177

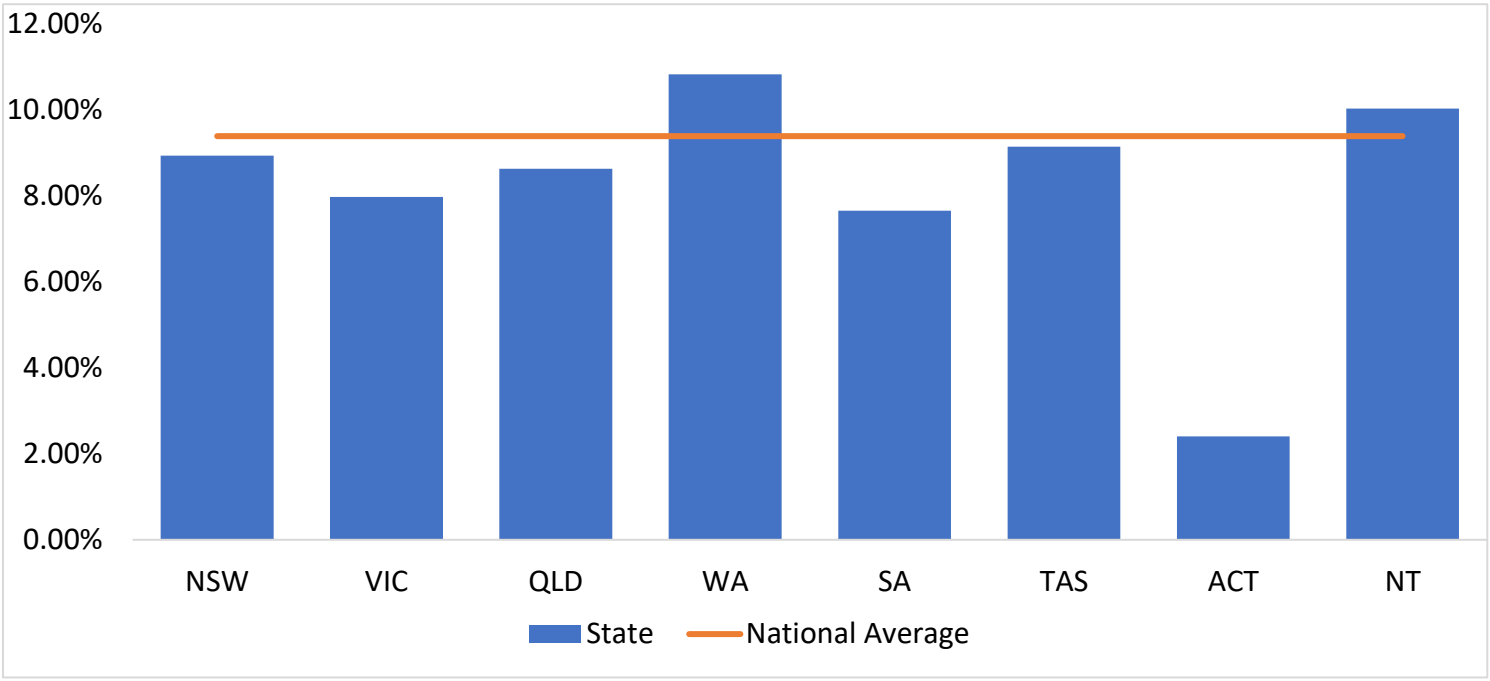
Breakdown Of All References To LF - Forklift Truck Operation (March 2016 - May 2020)



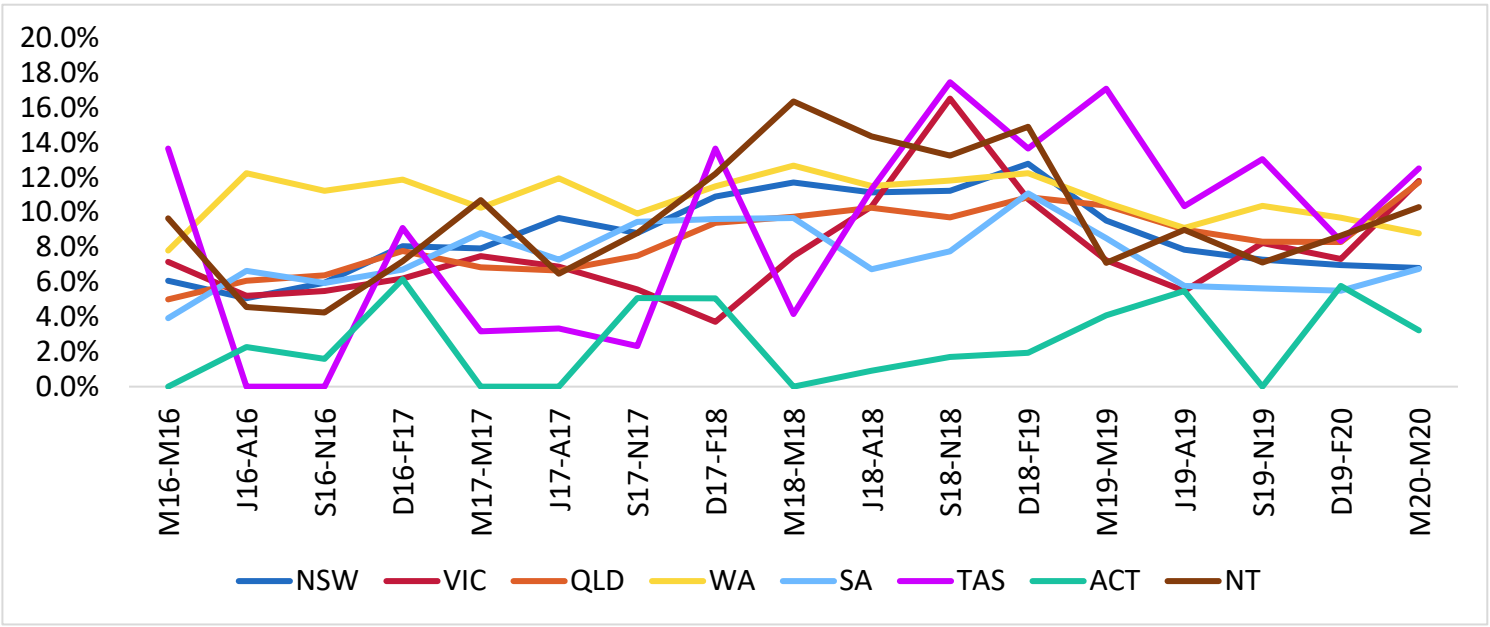
National: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation (March 2016 - May 2020)



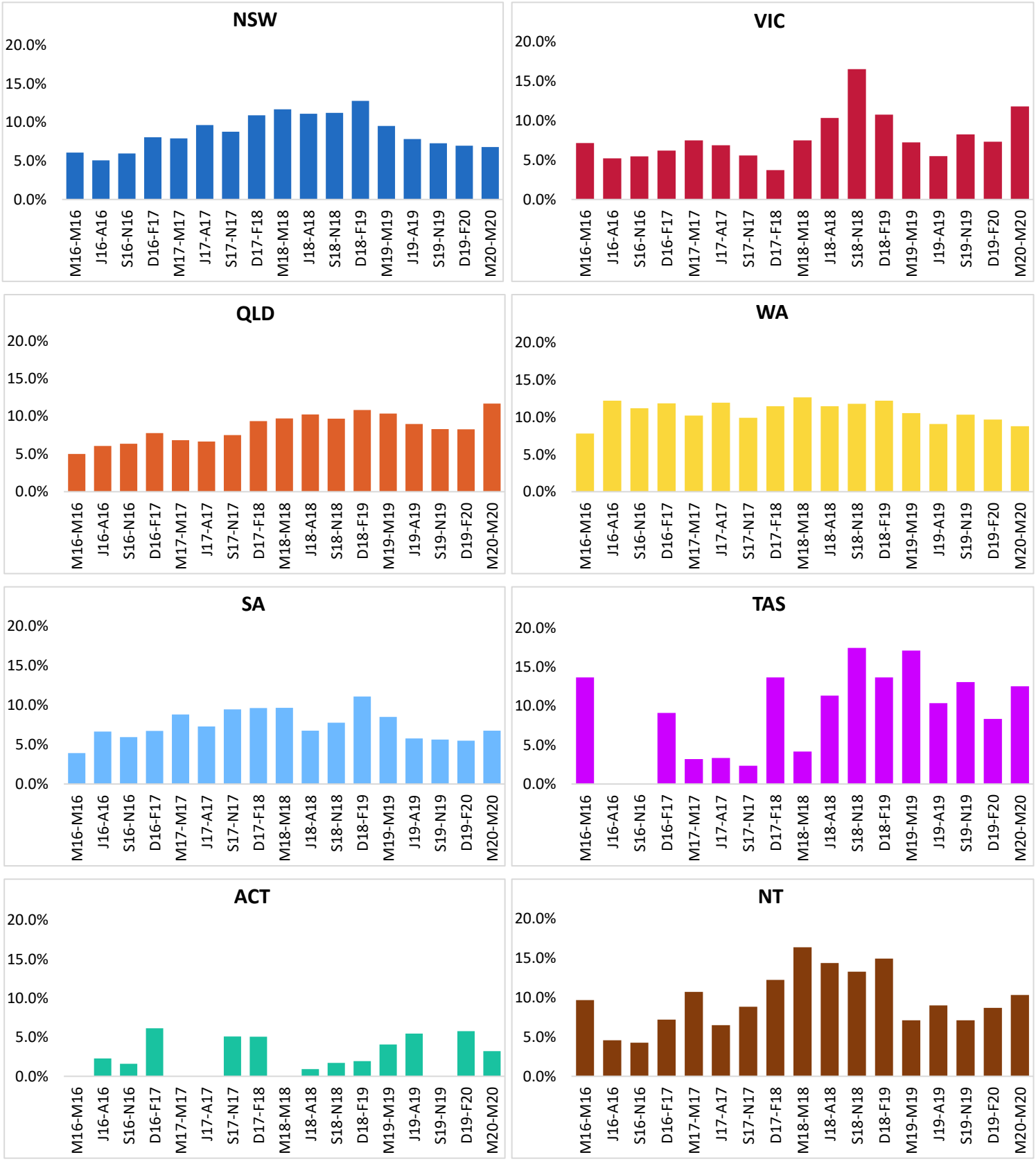
All States: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation



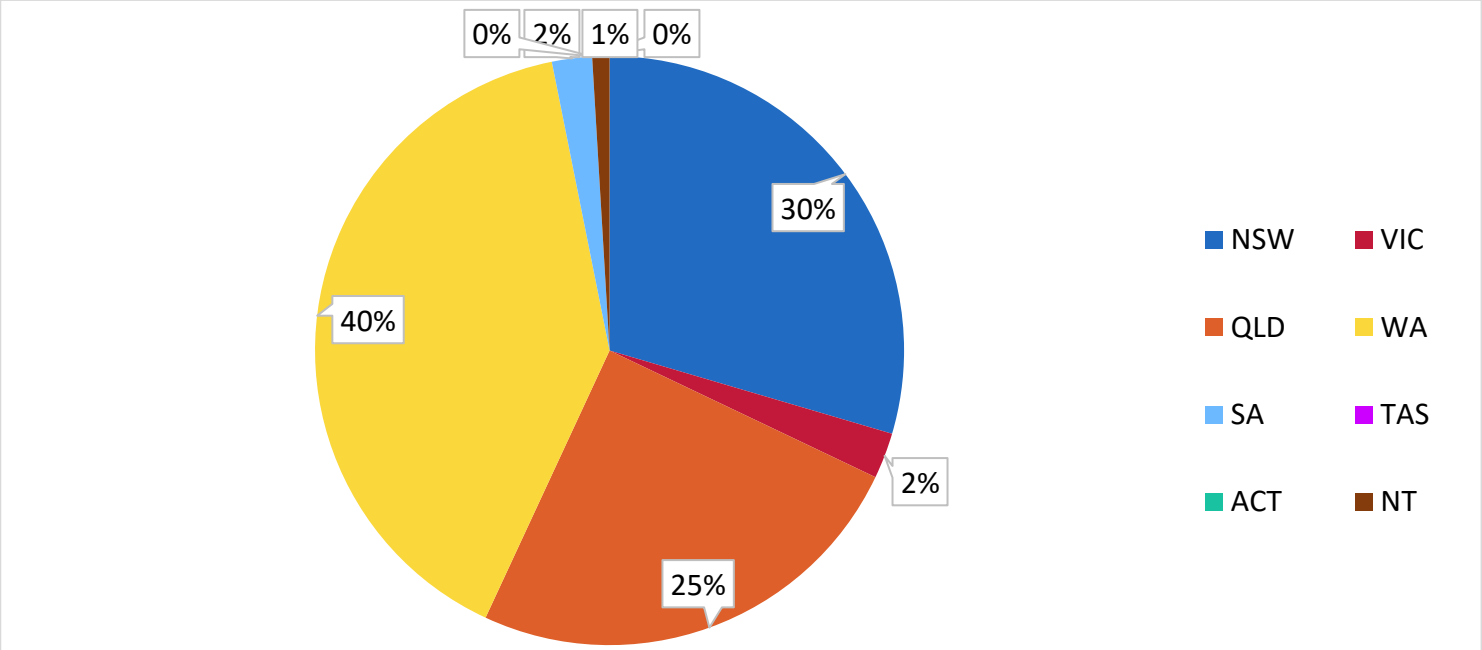
All States: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation



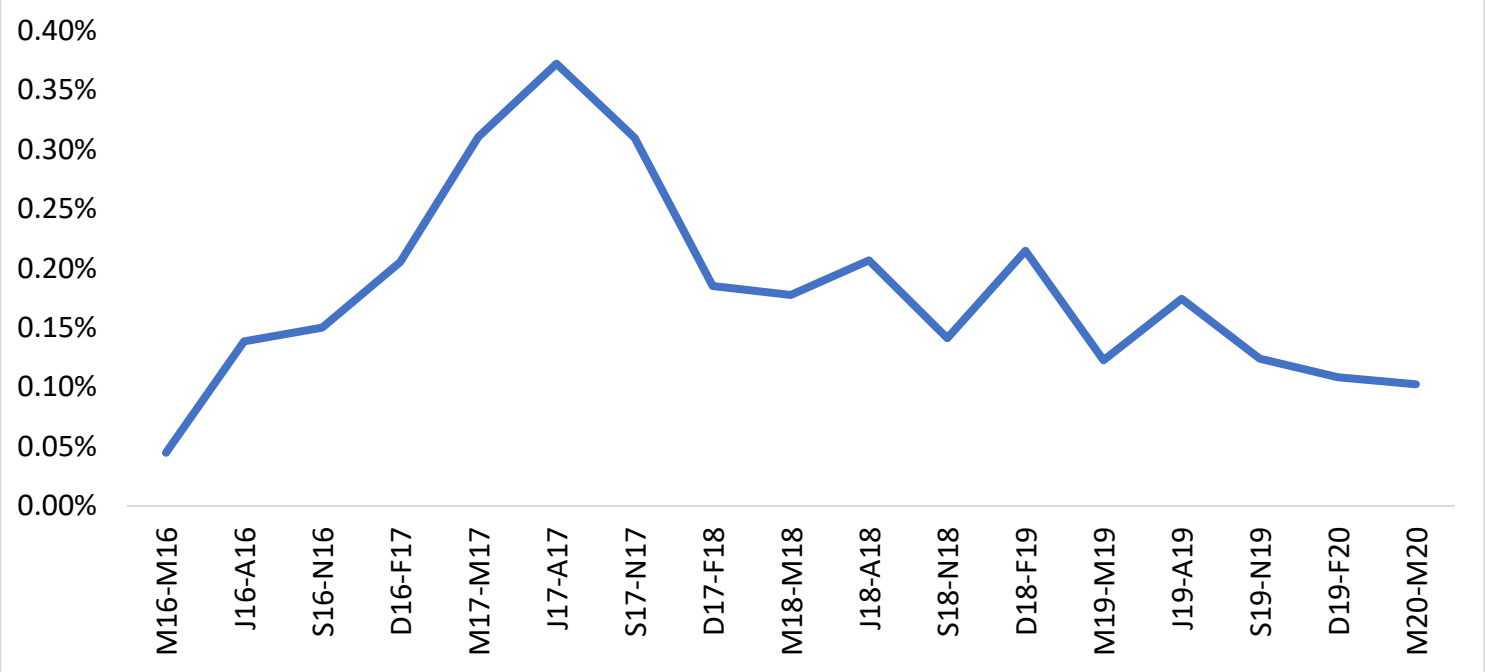
LO - Order-picking Forklift Truck

References = 364

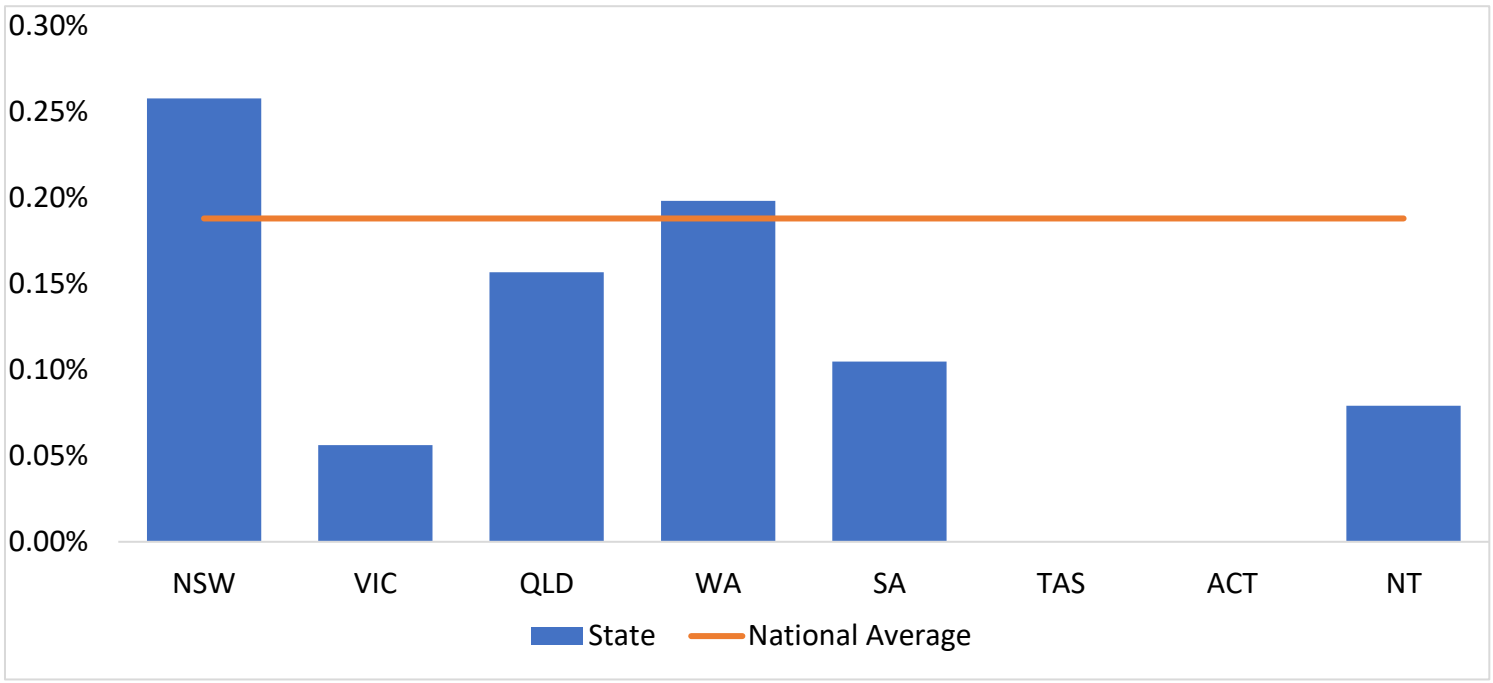
Breakdown Of All References To LO - Order-picking Forklift Truck (March 2016 - May 2020)



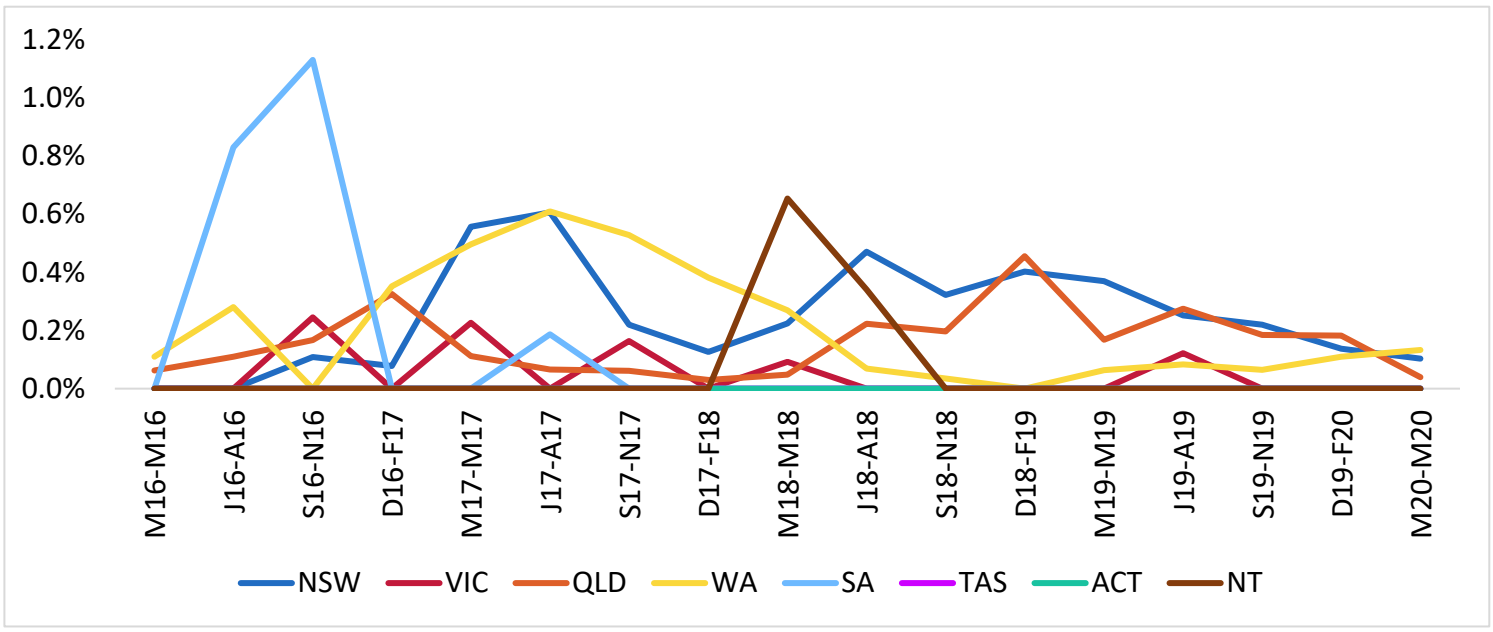
National: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck (March 2016 - May 2020)



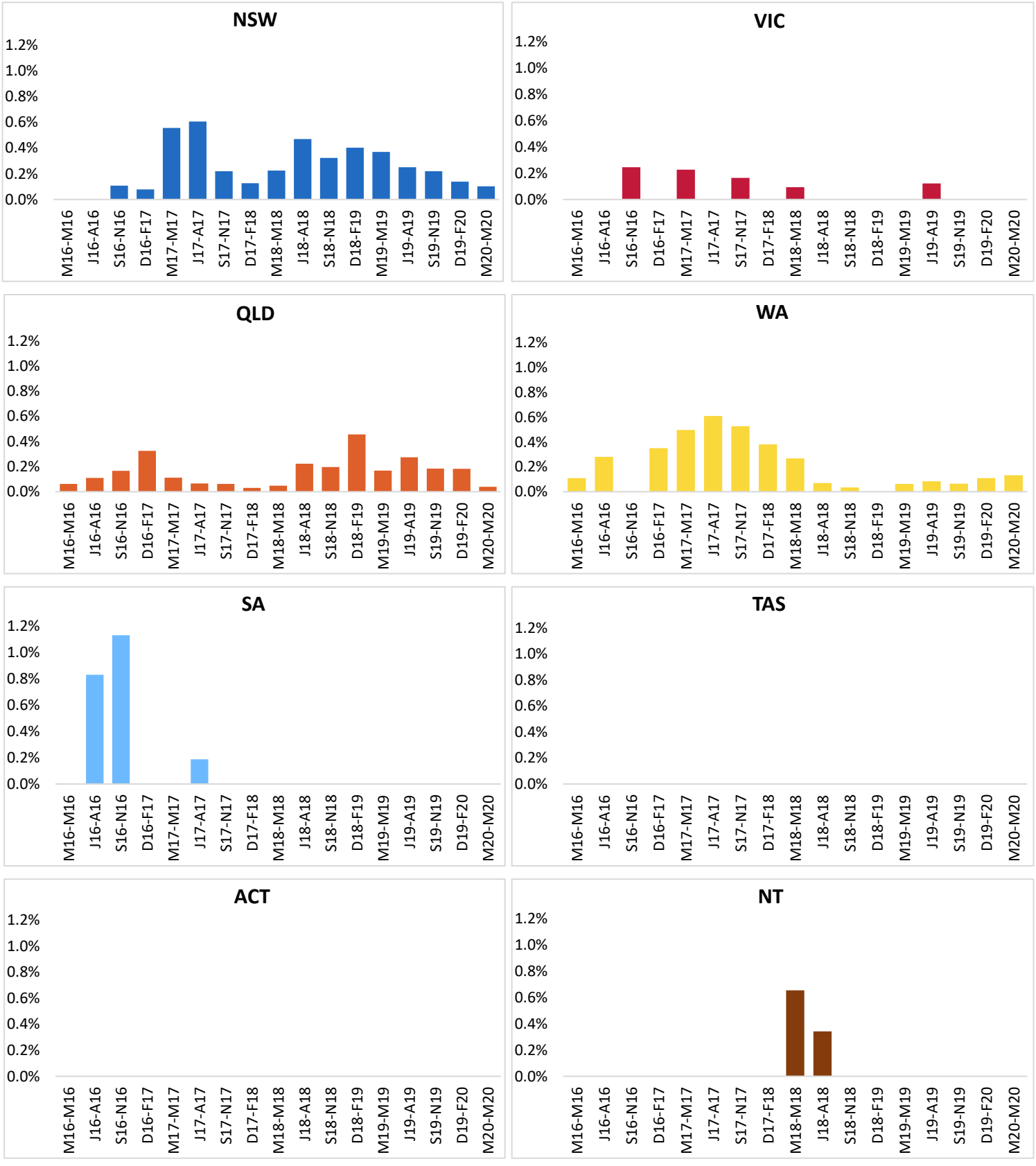
All States: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck



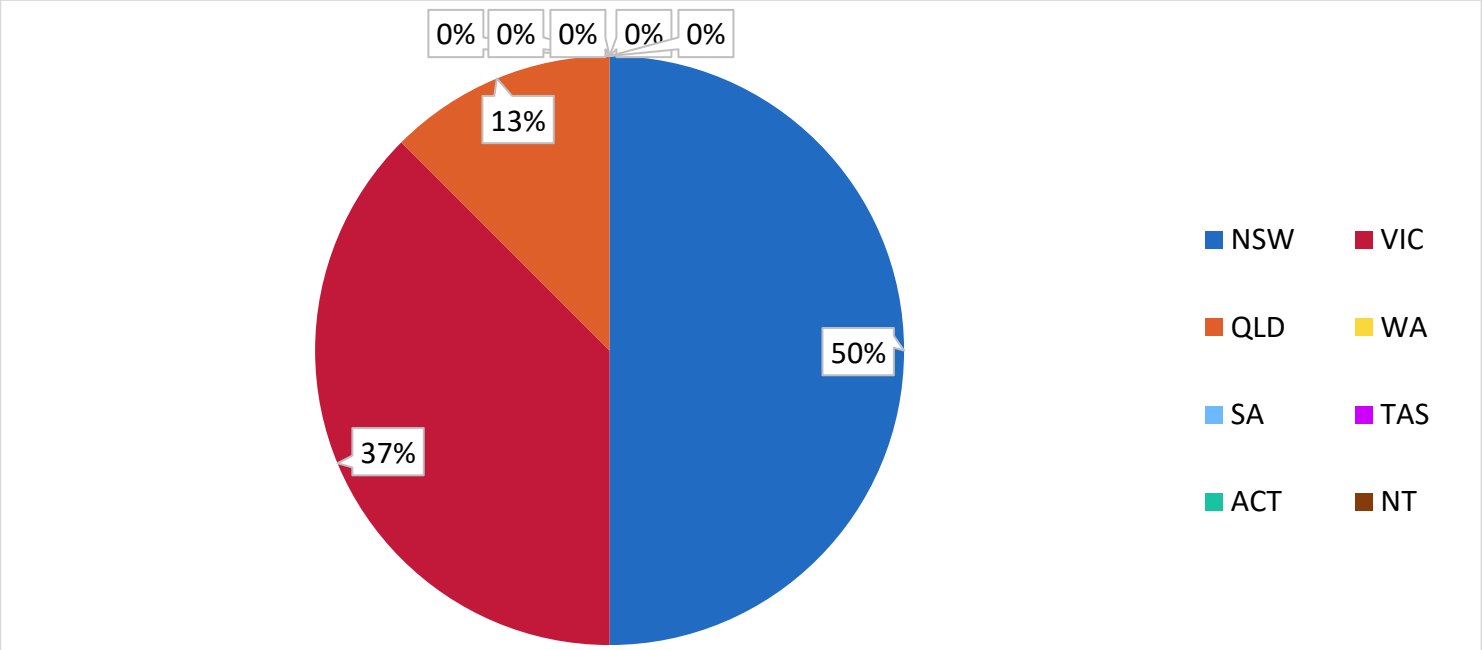
All States: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck



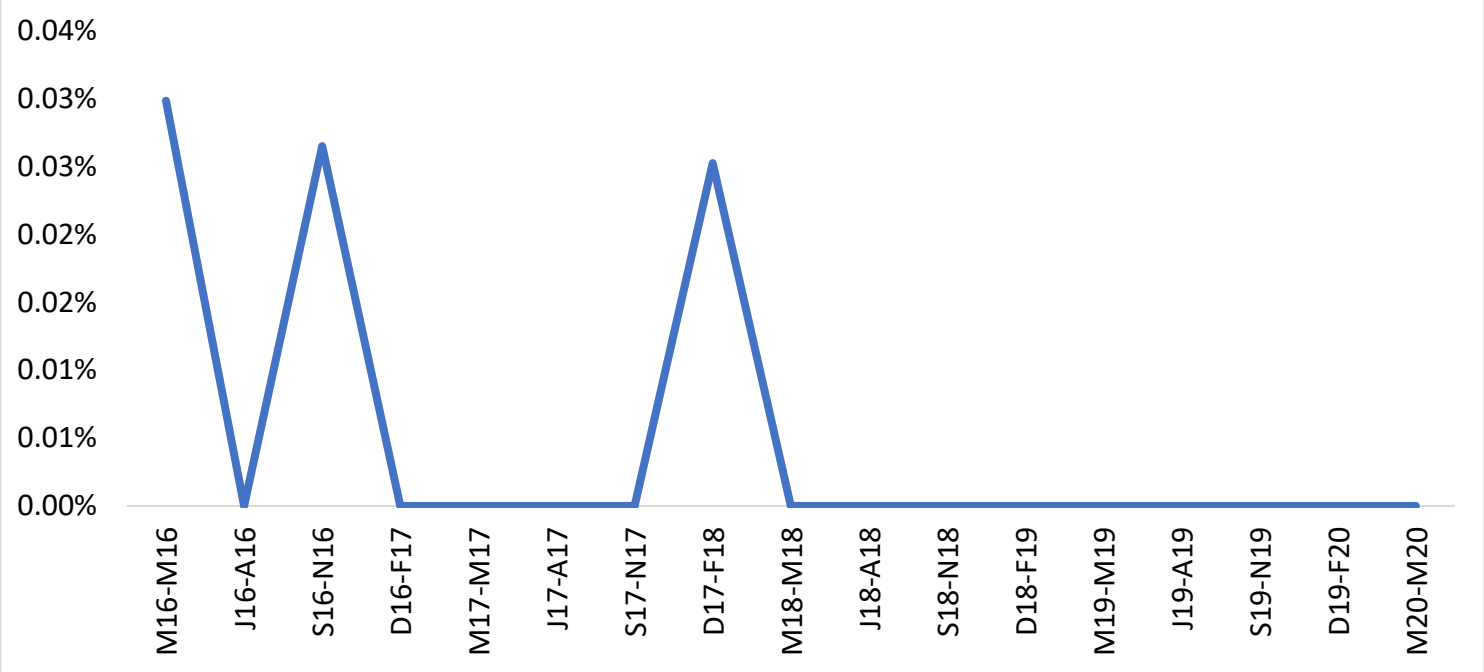
PB - Concrete Placing Boom Operation

References = 8

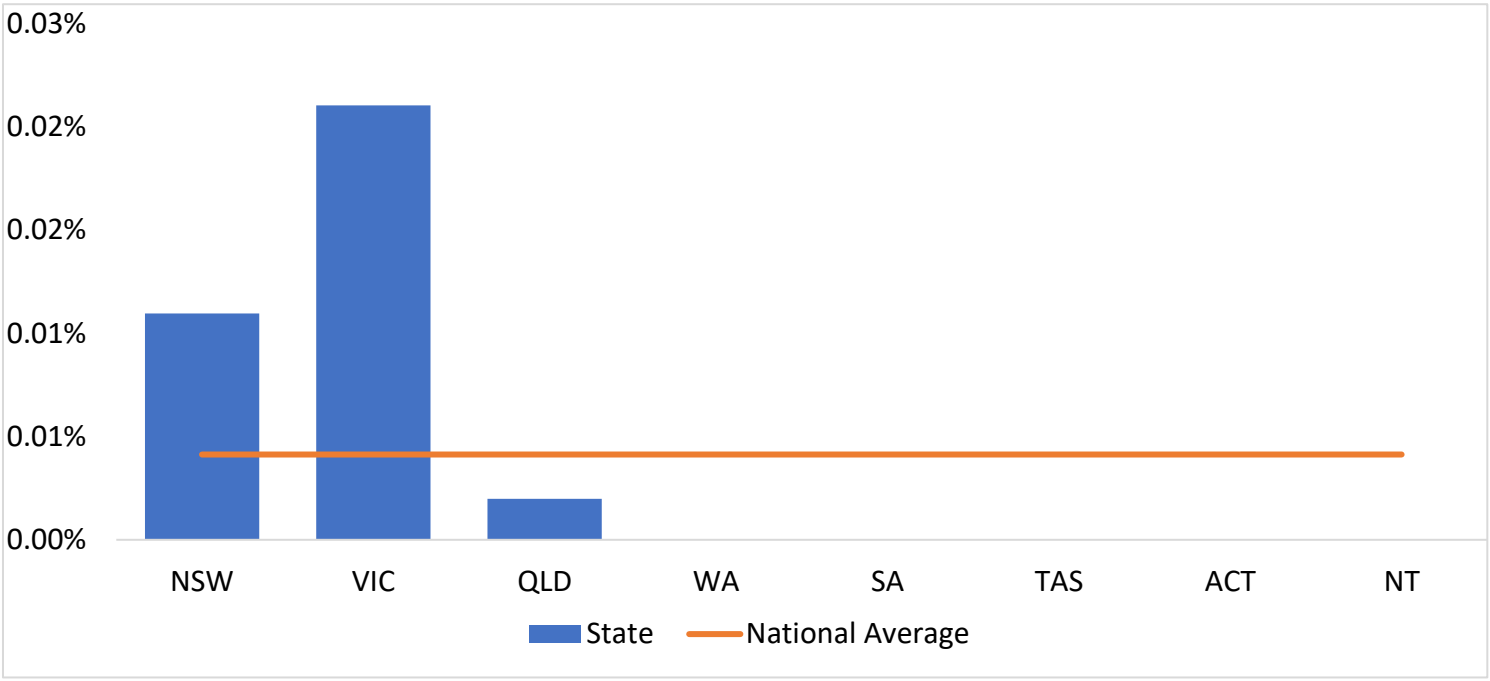
Breakdown Of All References To PB - Concrete Placing Boom Operation (March 2016 - May 2020)



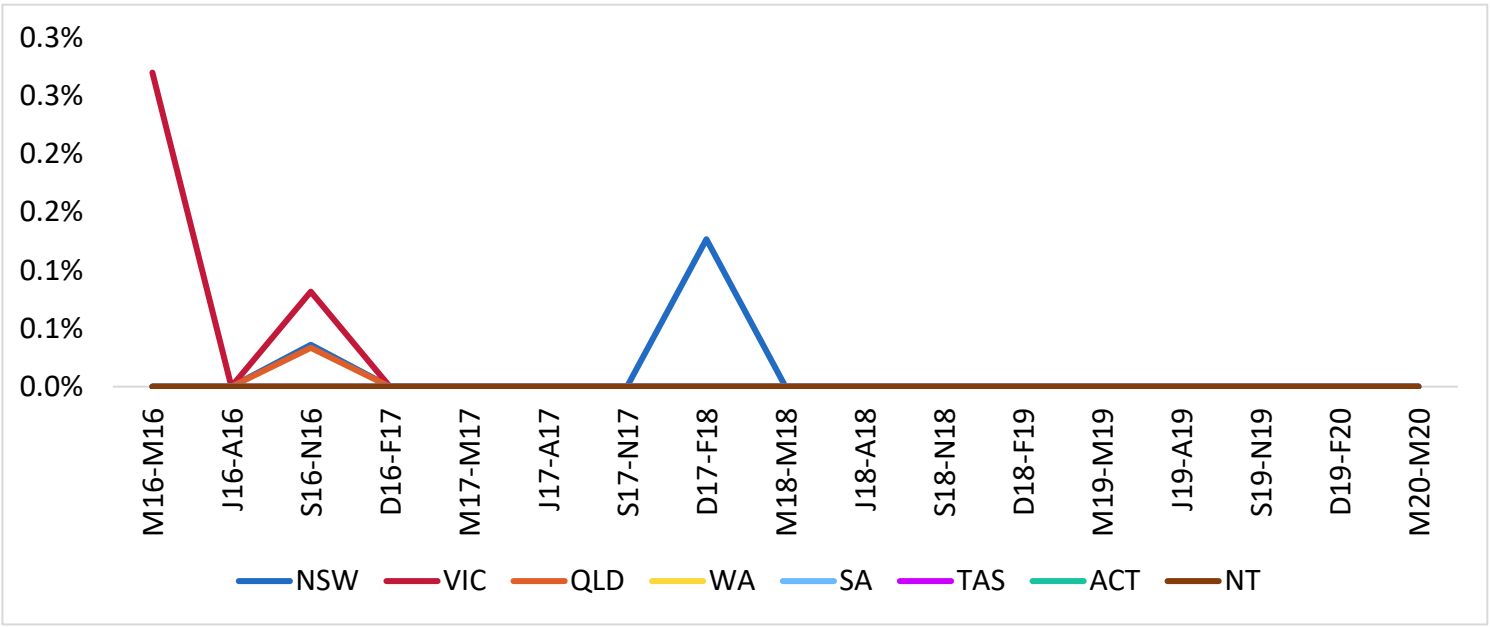
National: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation (March 2016 - May 2020)



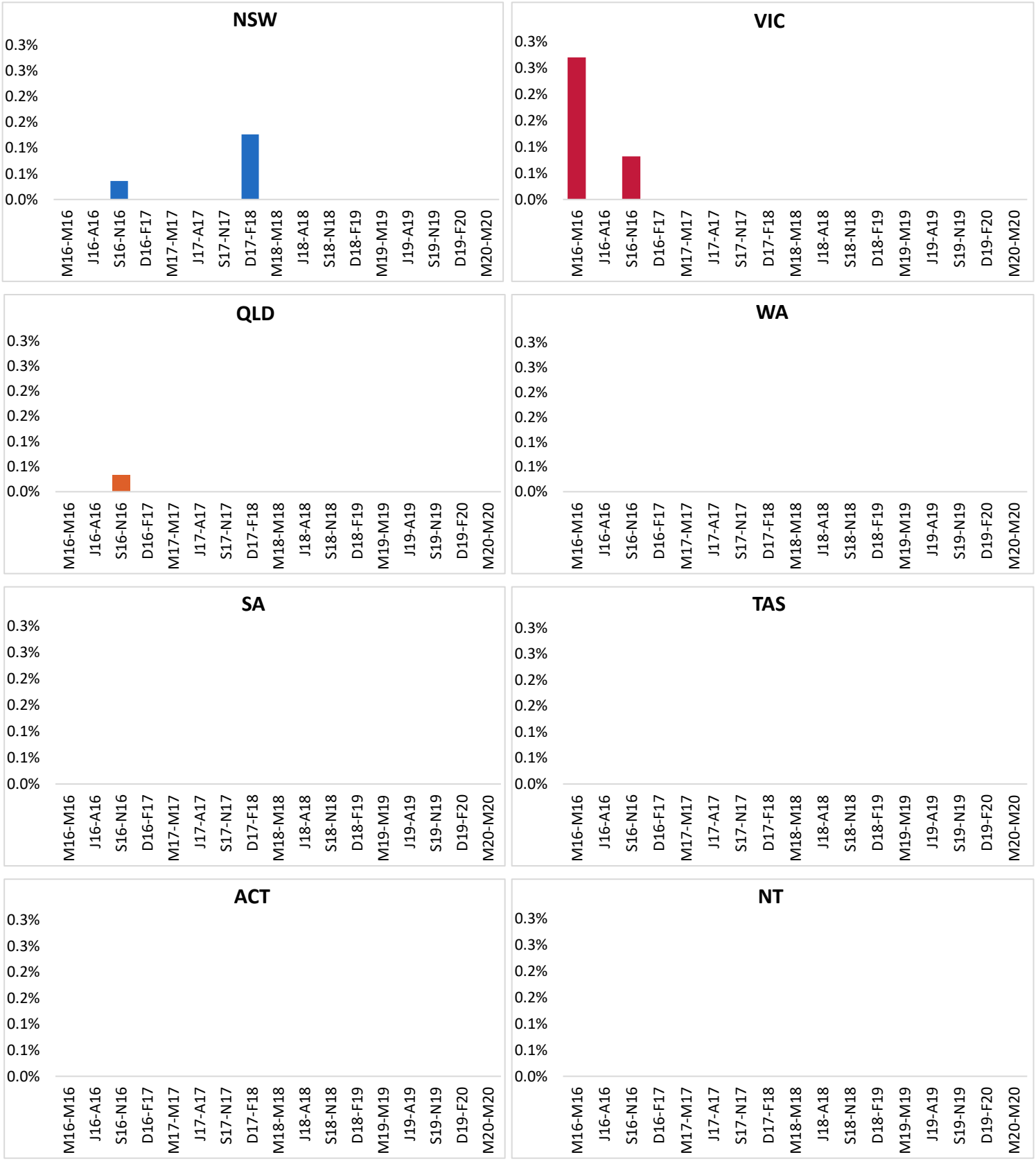
All States: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation



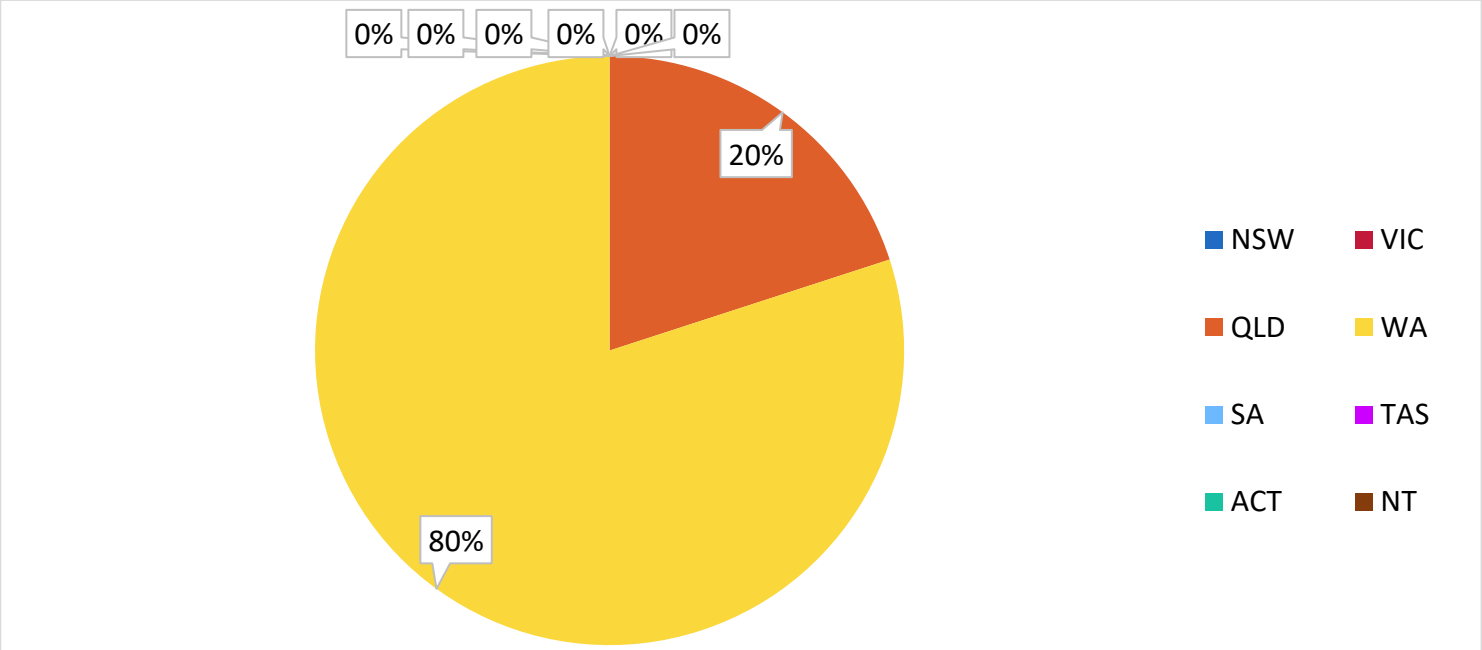
All States: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation



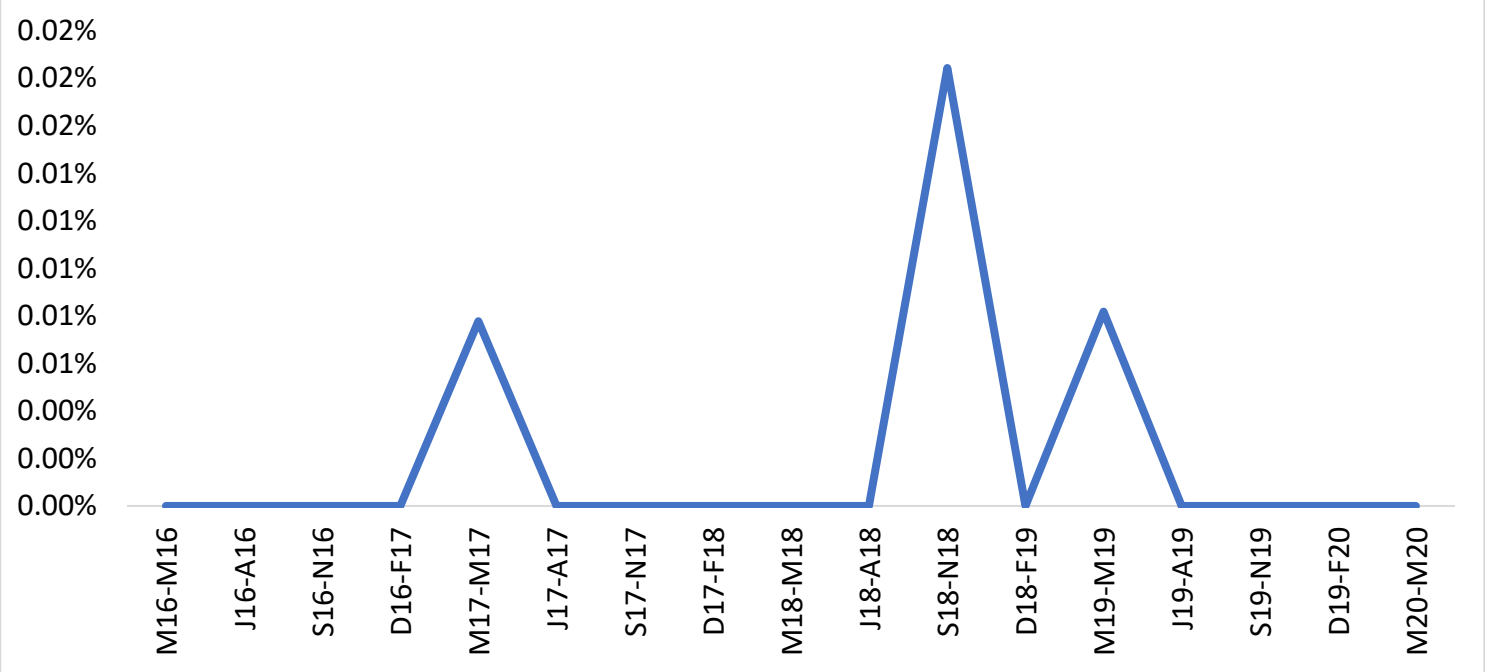
HM - Material Hoist Operation (Cantilever Operation)

References = 5

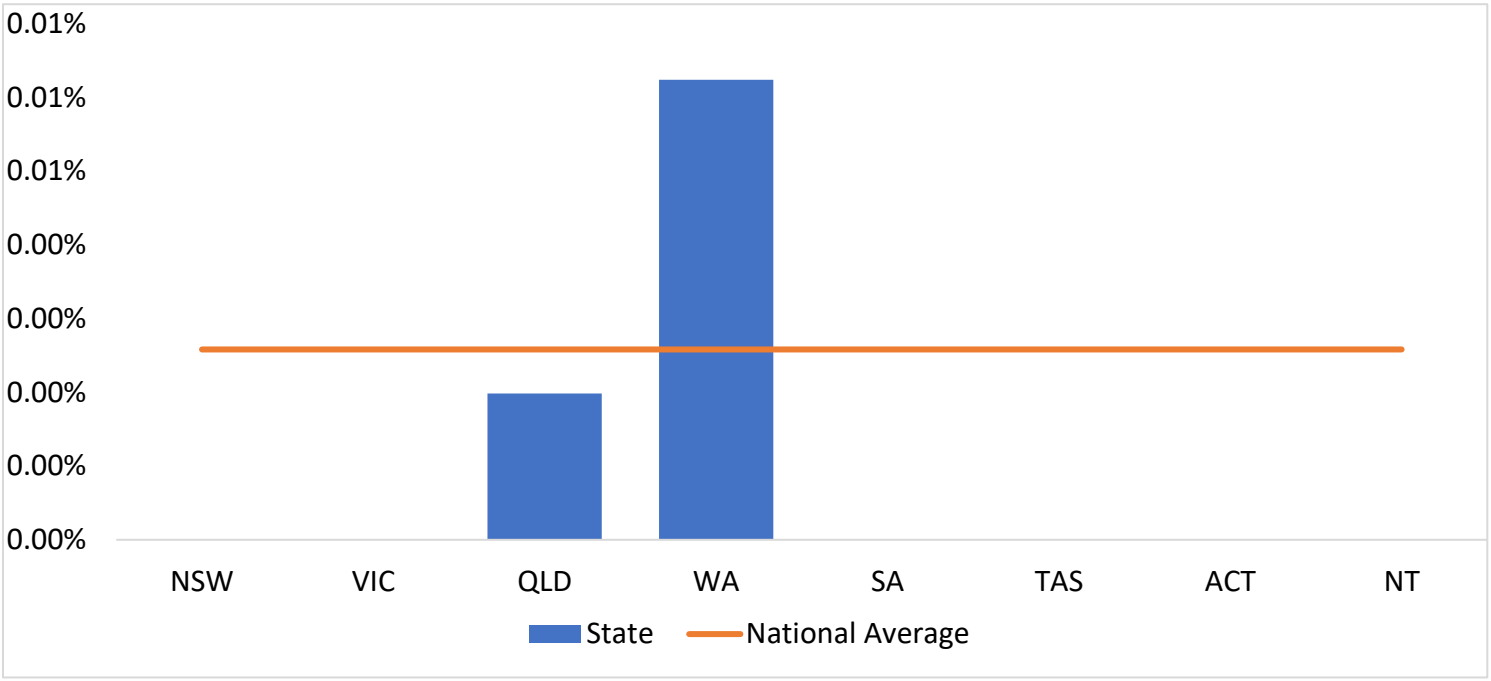
Breakdown Of All References To HM - Material Hoist Operation (Cantilever Operation) (March 2016 - May 2020)



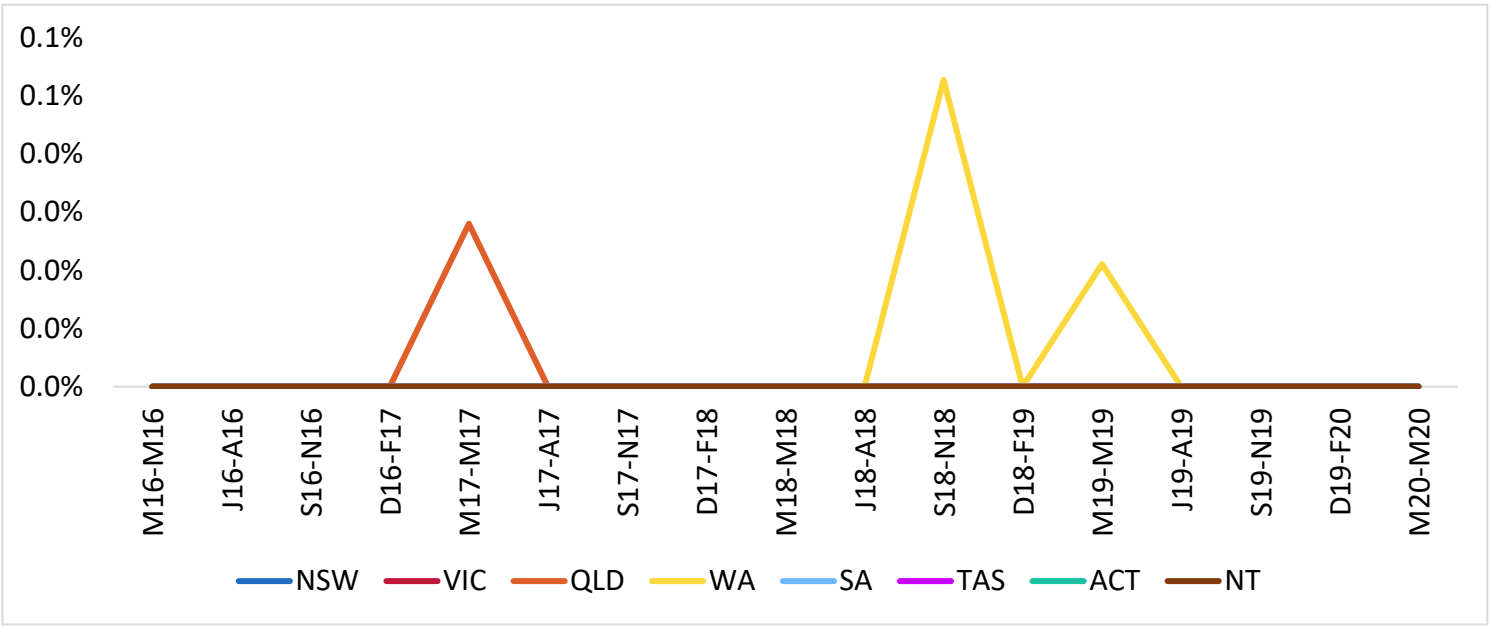
National: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation) (March 2016 - May 2020)



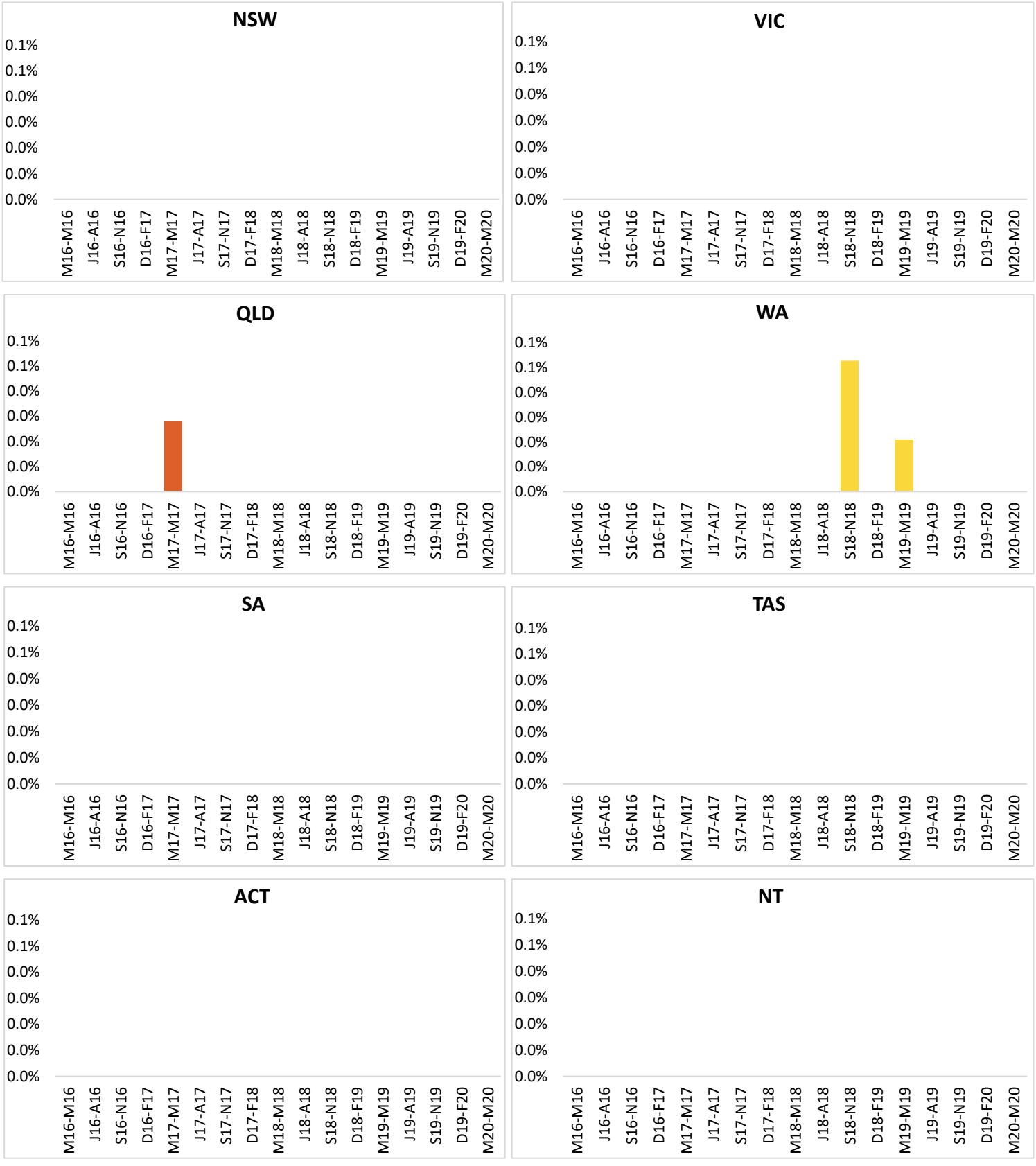
All States: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)



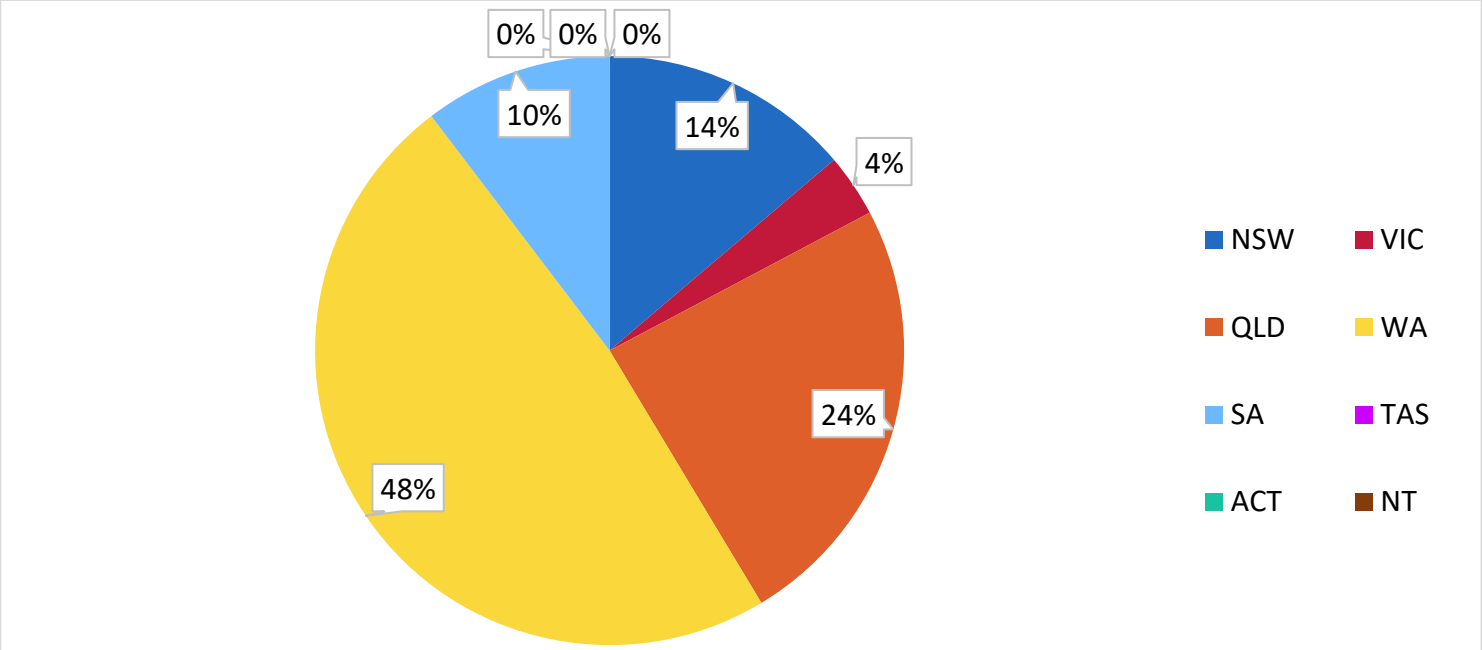
All States: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)



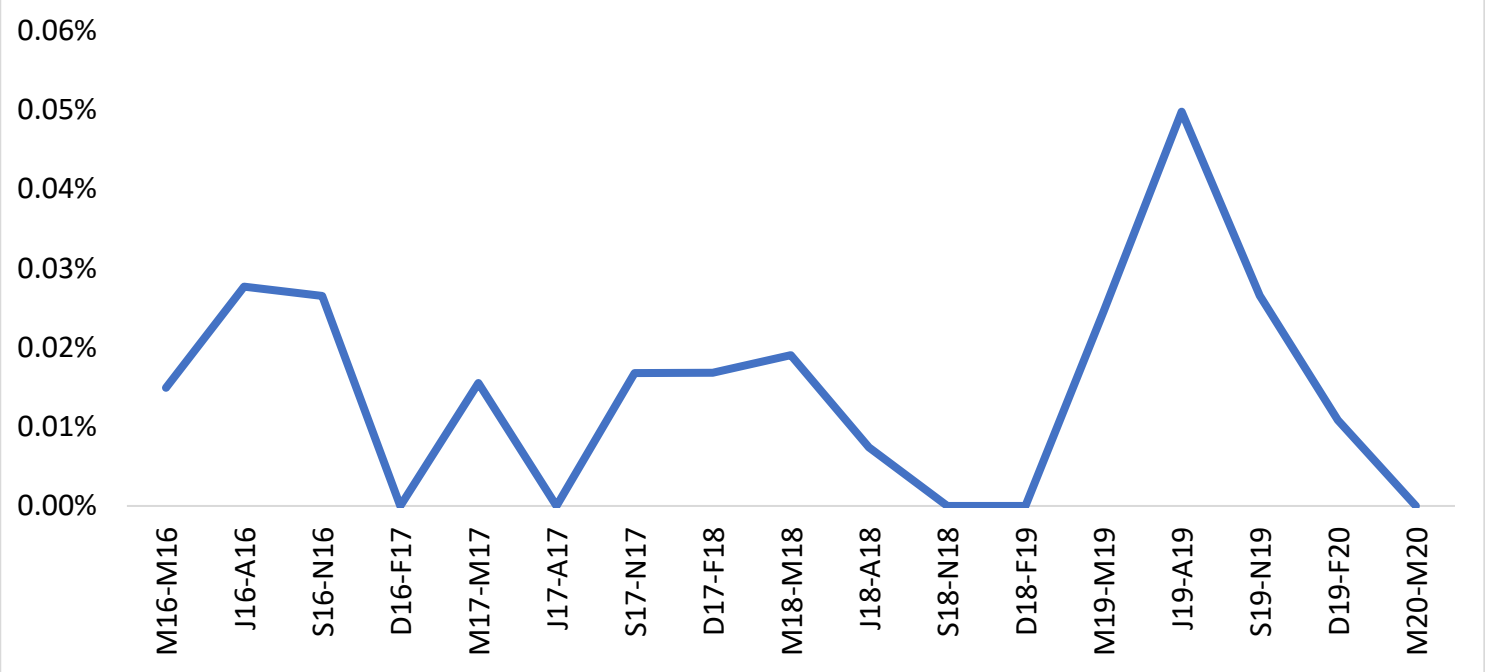
HP - Hoist Operation (Personnel & Materials)

References = 29

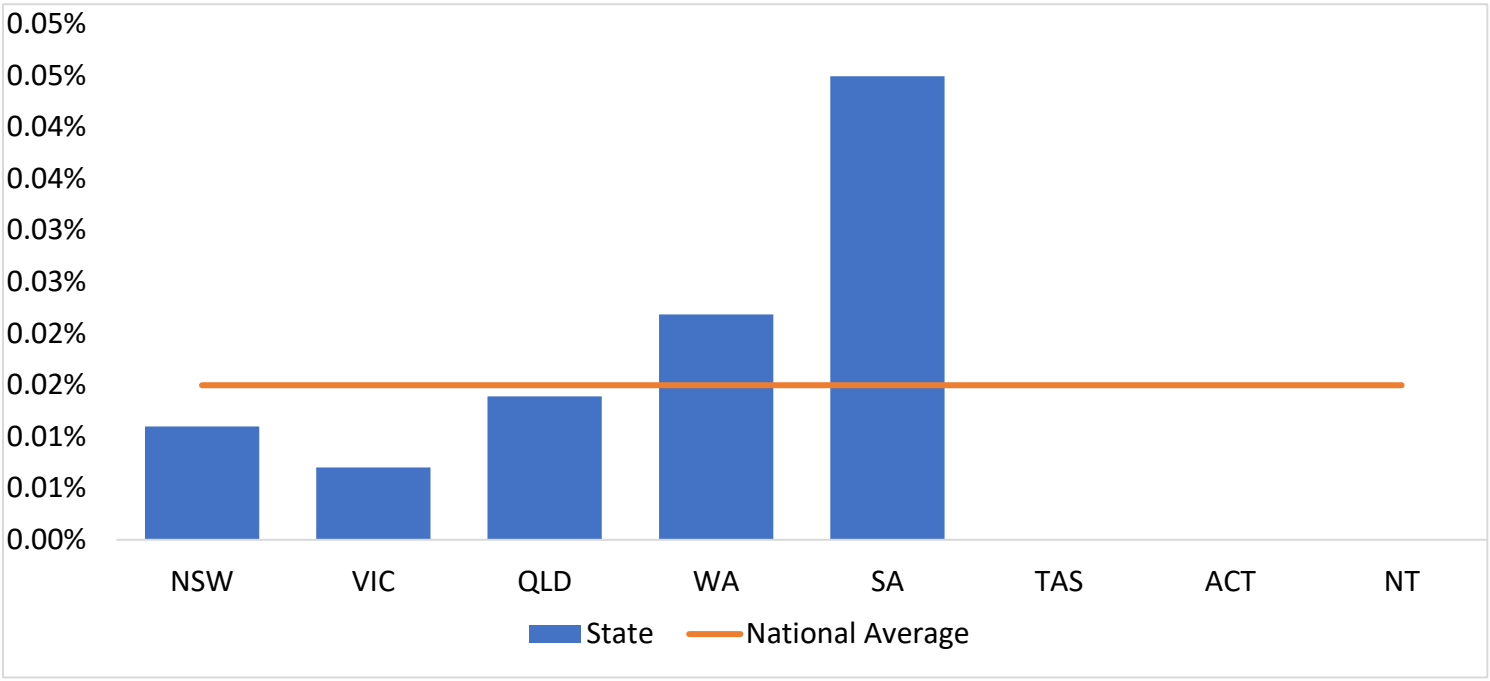
Breakdown Of All References To HP - Hoist Operation (Personnel & Materials) (March 2016 - May 2020)



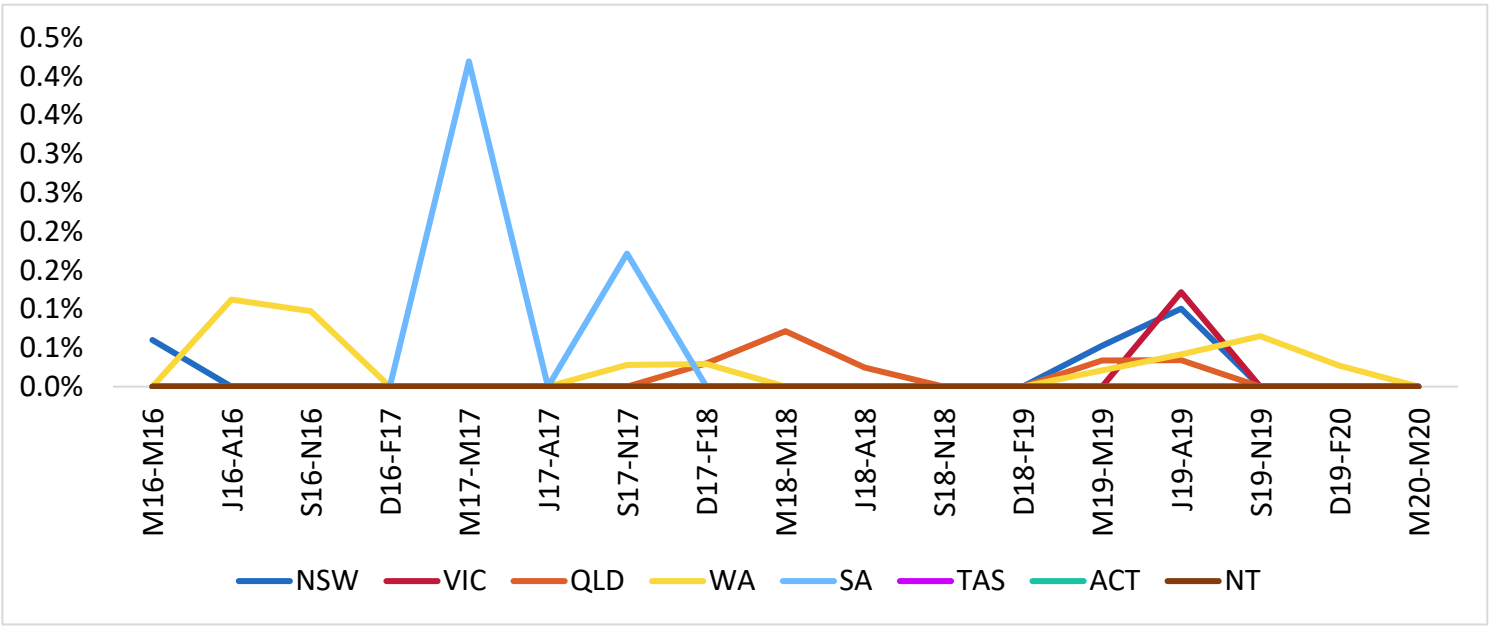
National: Percentage Of Mining Jobs Referencing HP - Hoist Operation (Personnel & Materials) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing HP - Hoist Operation (Personnel & Materials) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing HP - Hoist Operation (Personnel & Materials)

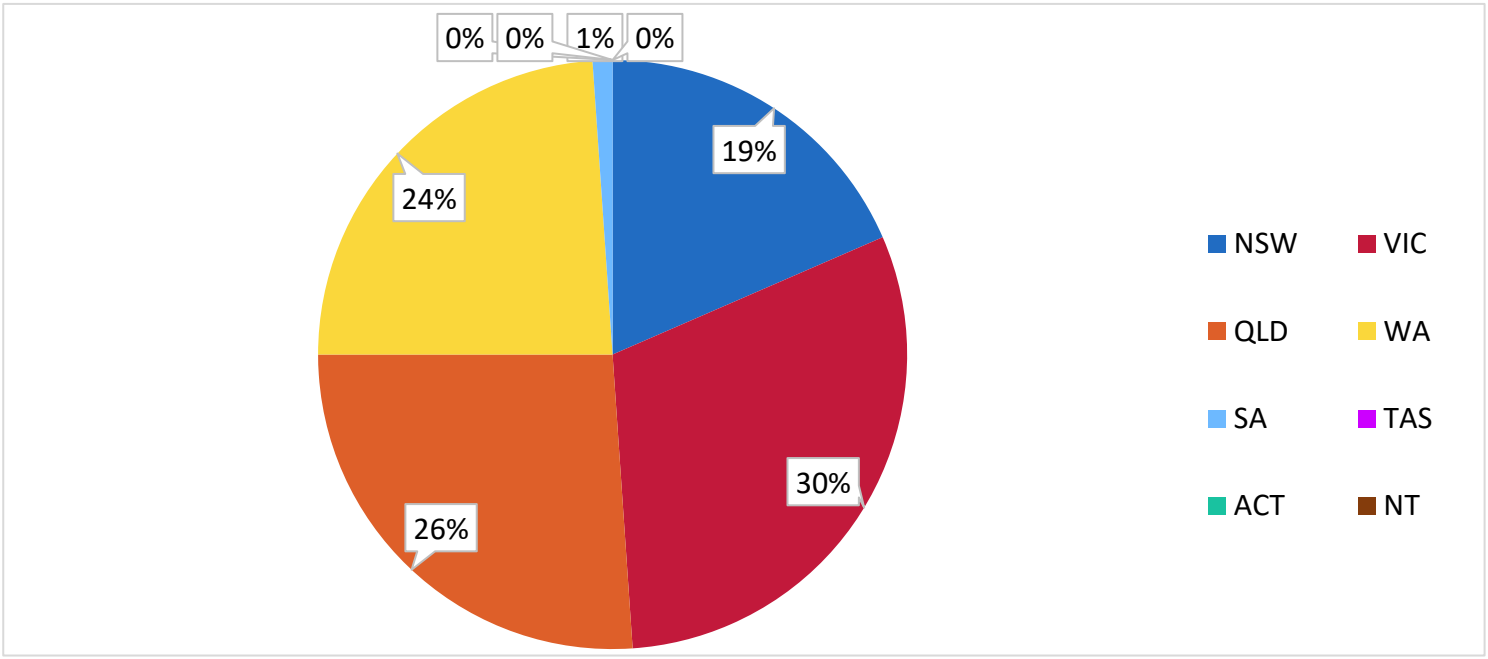


All States: Percentage Of Mining Jobs Referencing HP - Hoist Operation (Personnel & Materials)

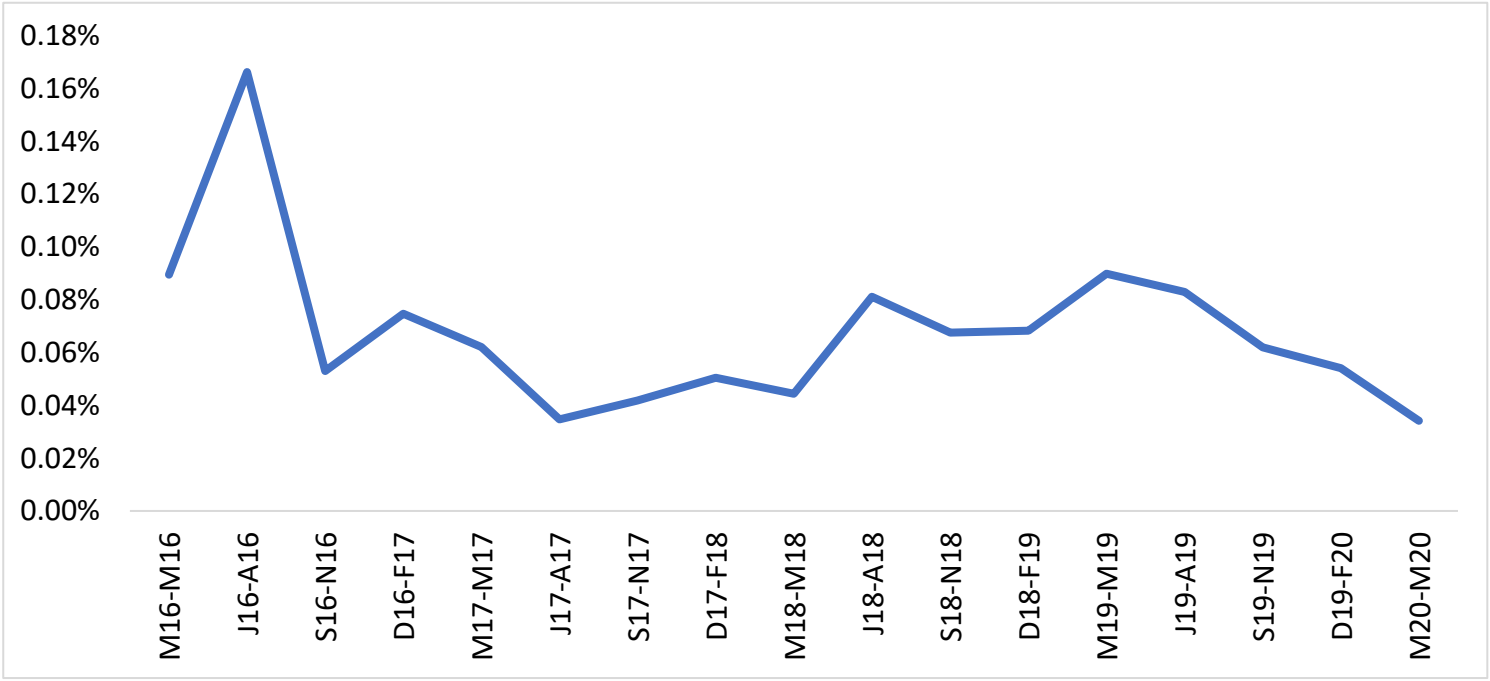
CT - Tower Crane Operation

References = 127

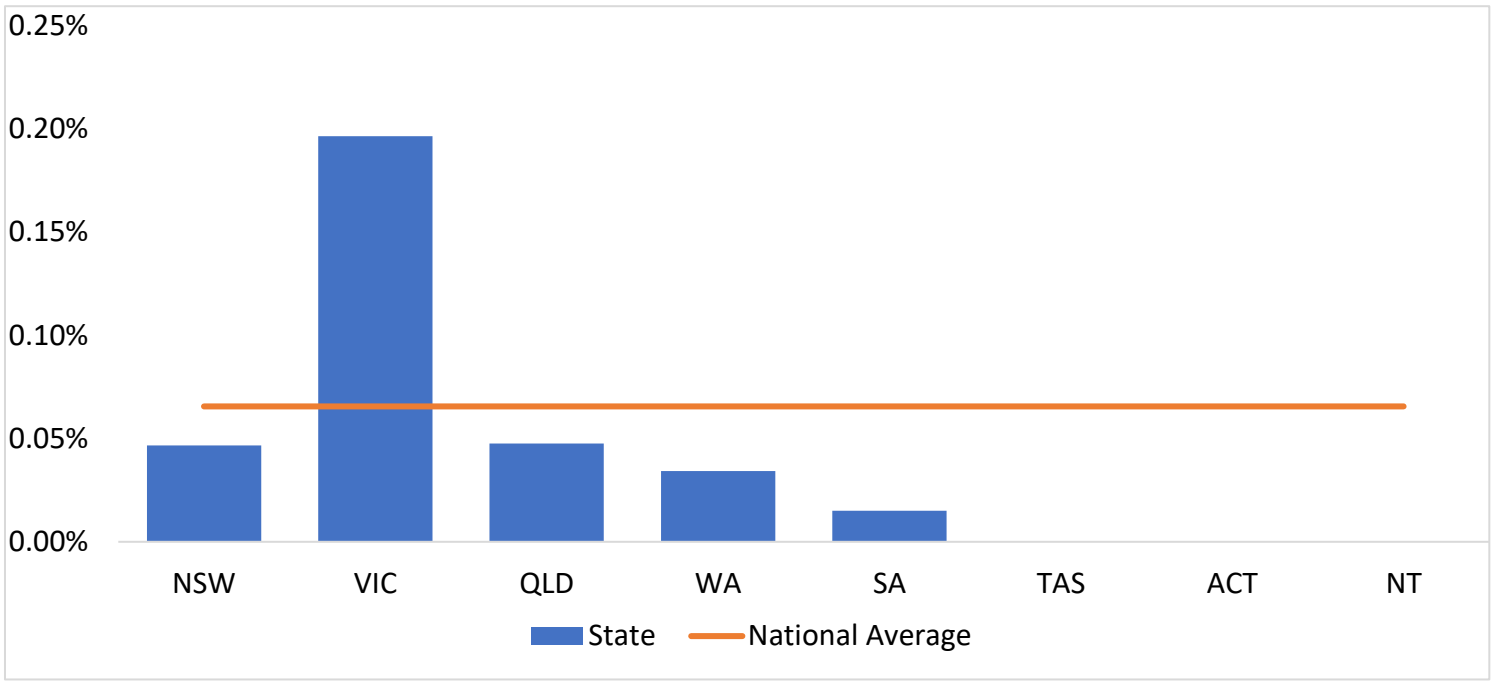
Breakdown Of All References To CT - Tower Crane Operation (March 2016 - May 2020)



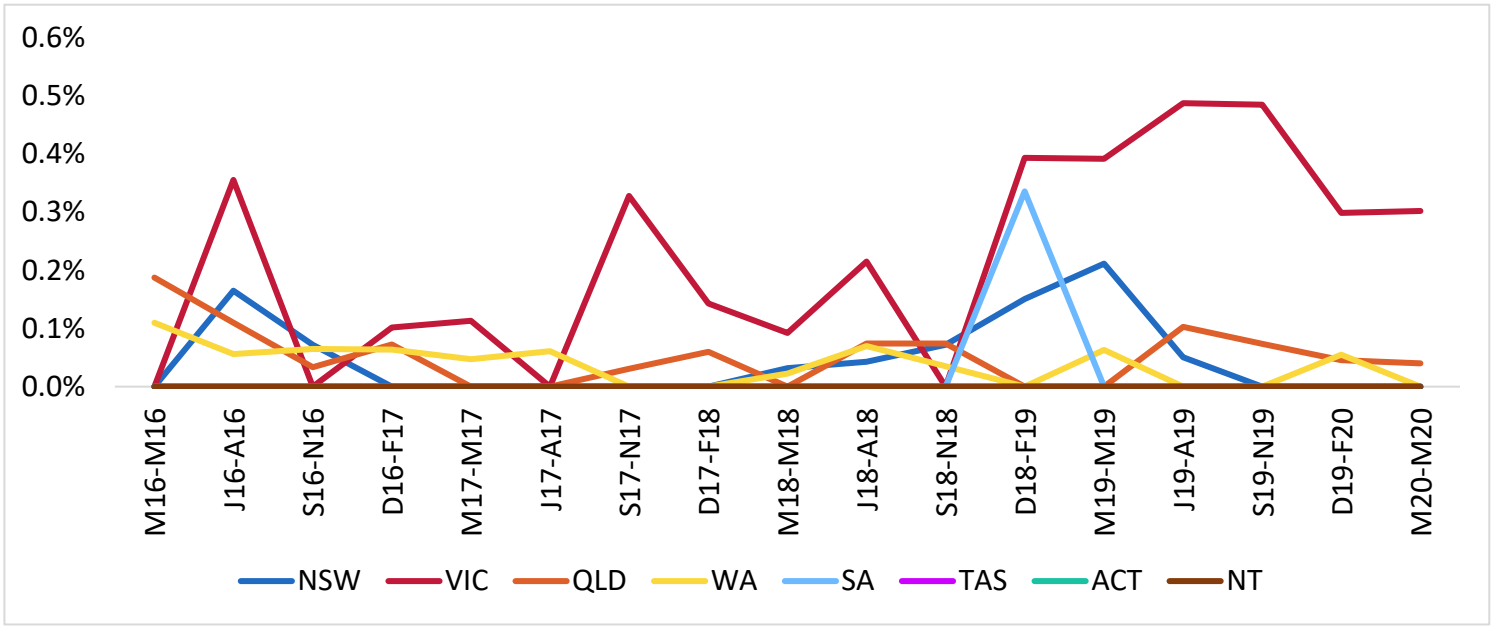
National: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation (March 2016 - May 2020)



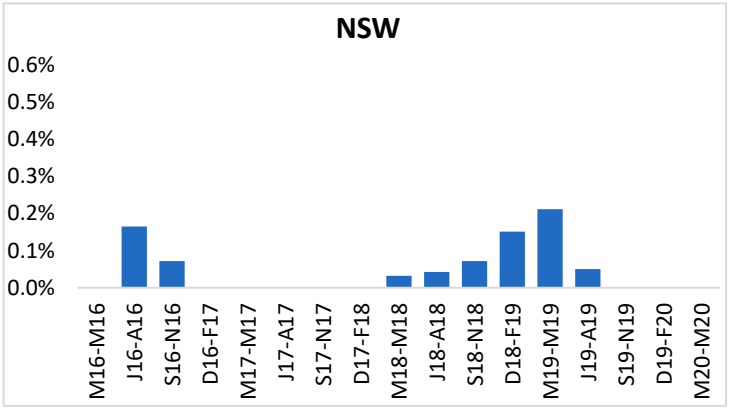
All States: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation (March 2016 - May 2020)

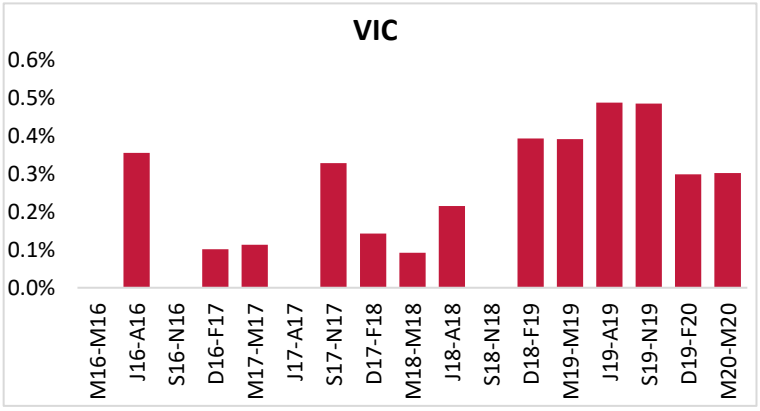


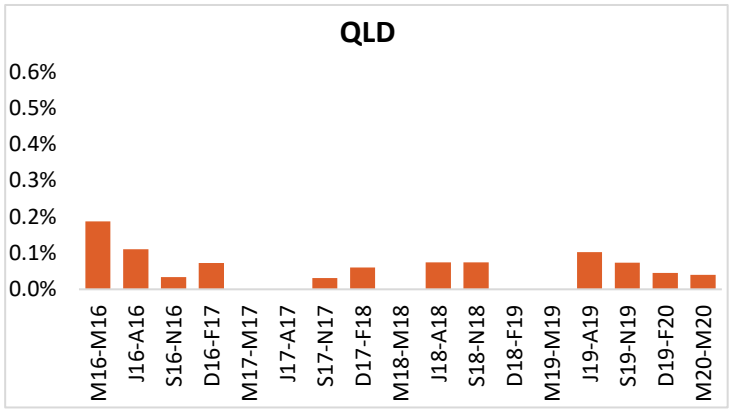
All States: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation

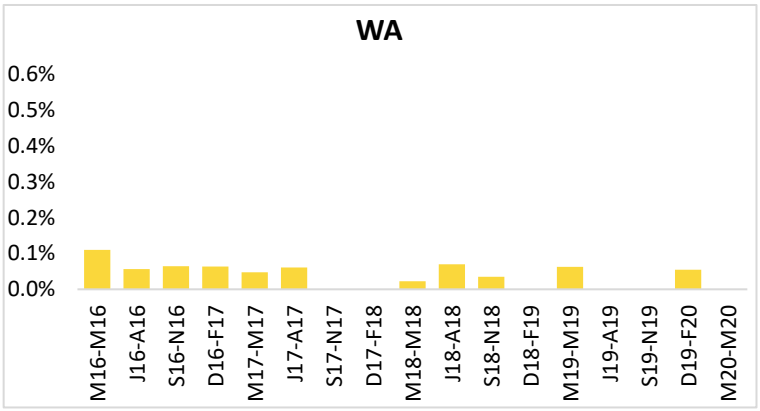


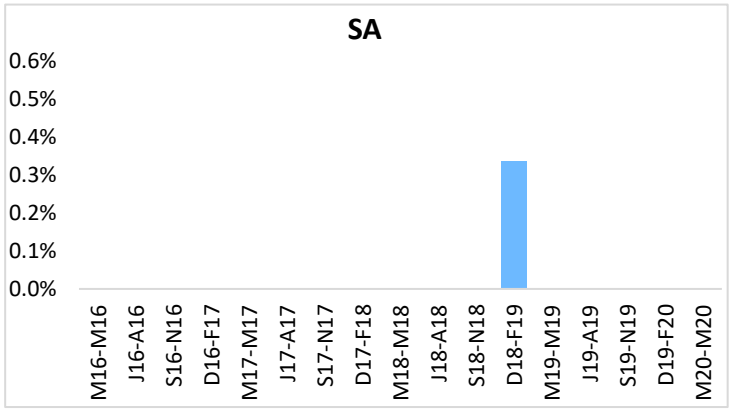
All States: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation

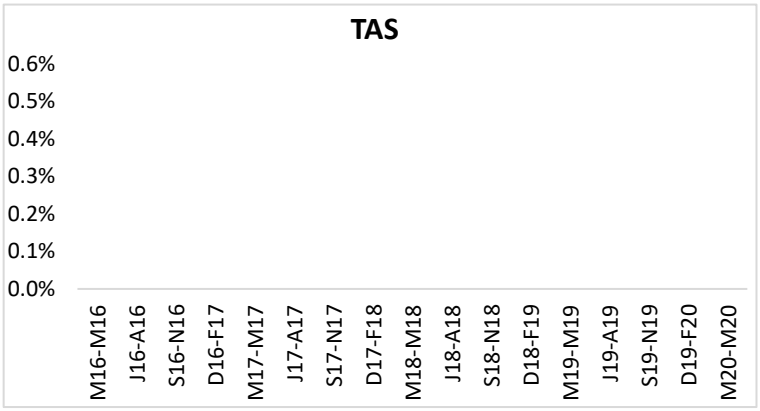


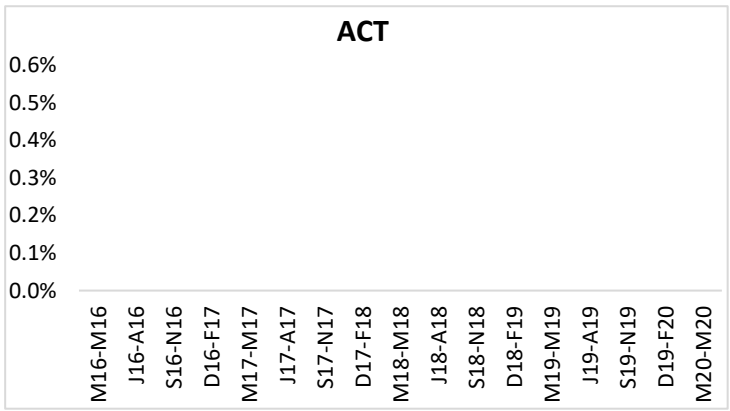


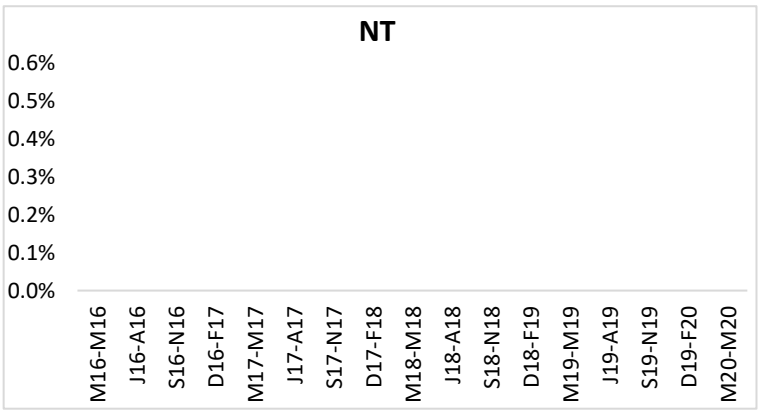








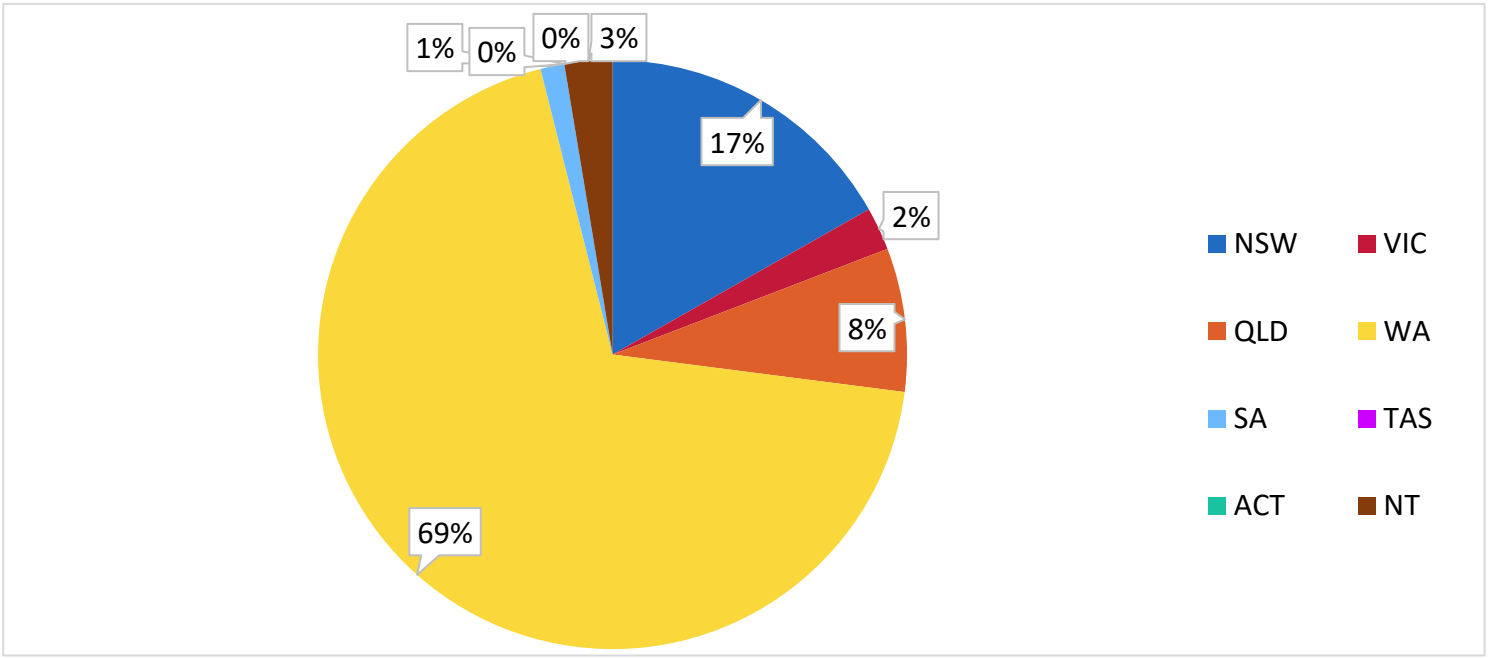




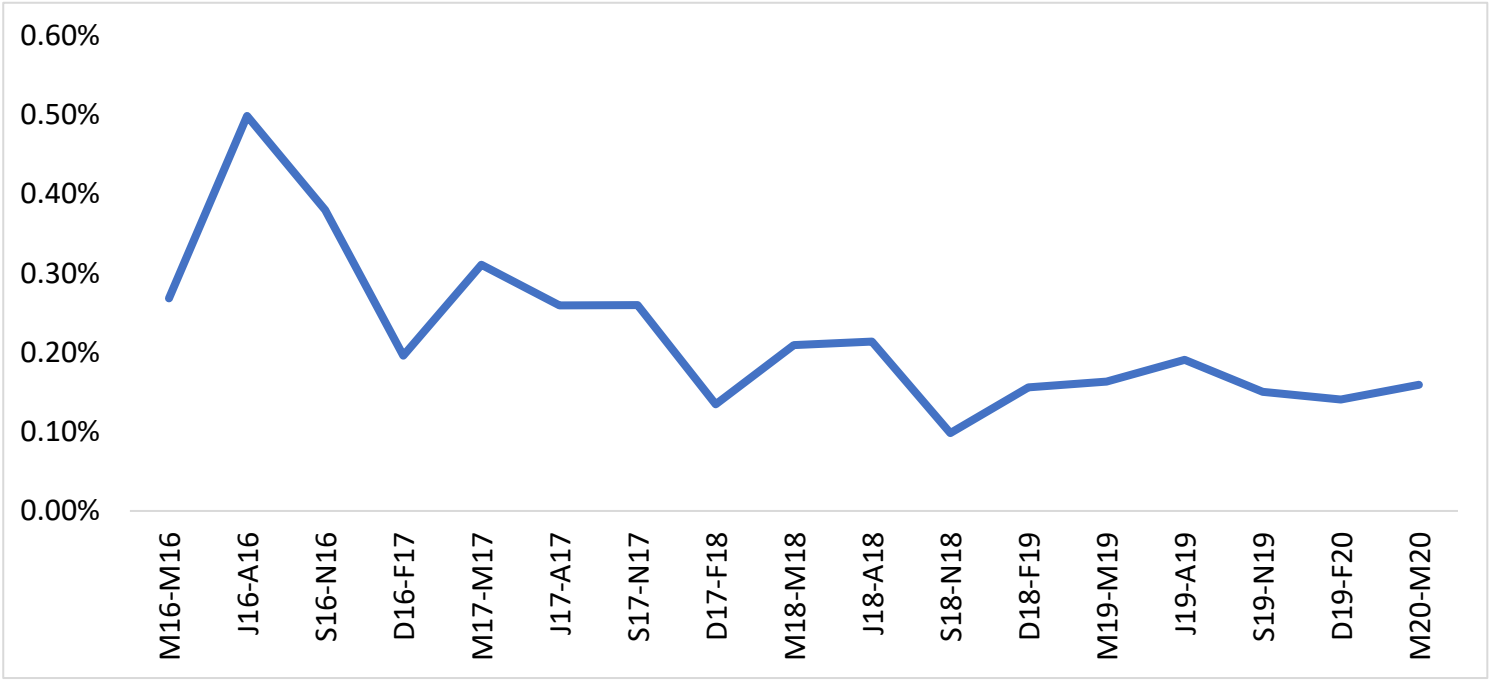
CN - Non-slewing Mobile Crane Operation (> 3 Tonnes)

References = 416

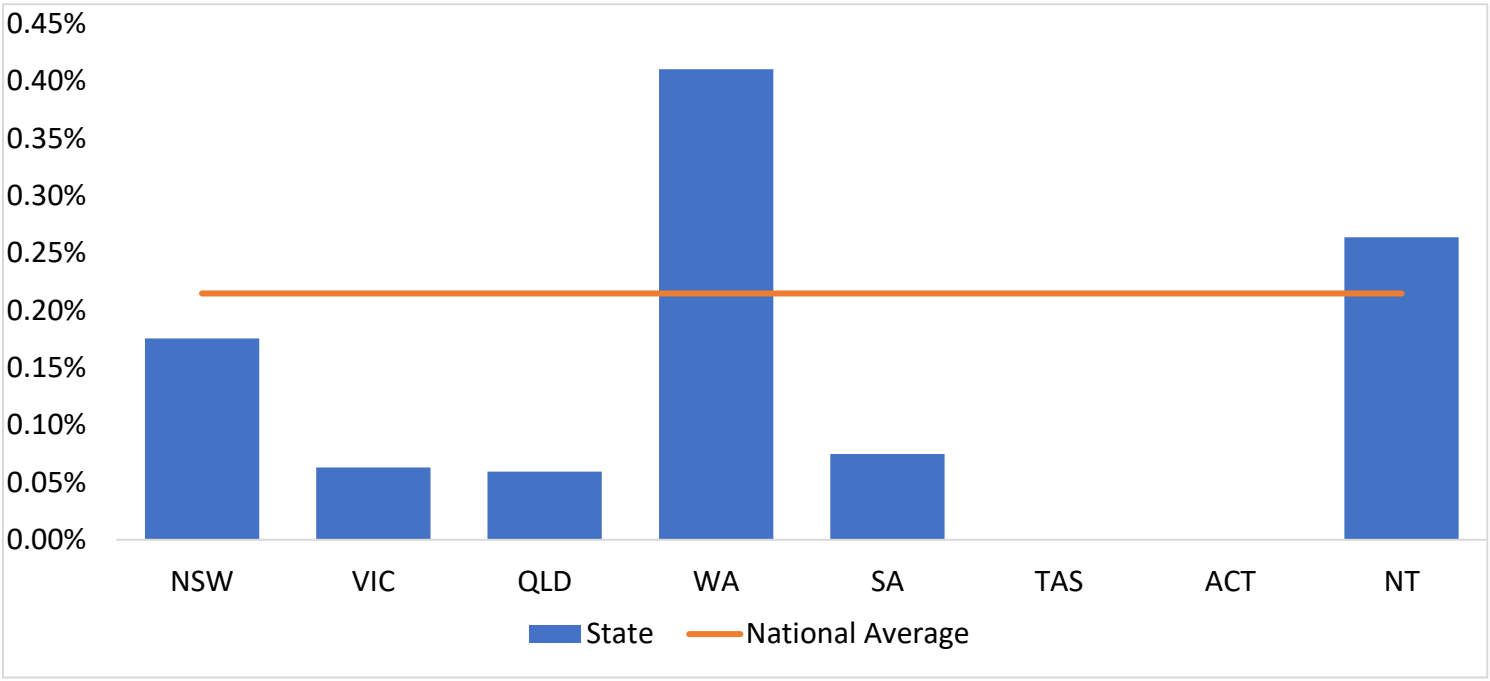
Breakdown Of All References To CN - Non-slewing Mobile Crane Operation (Greater Than 3 Tonnes) (March 2016 - May 2020)



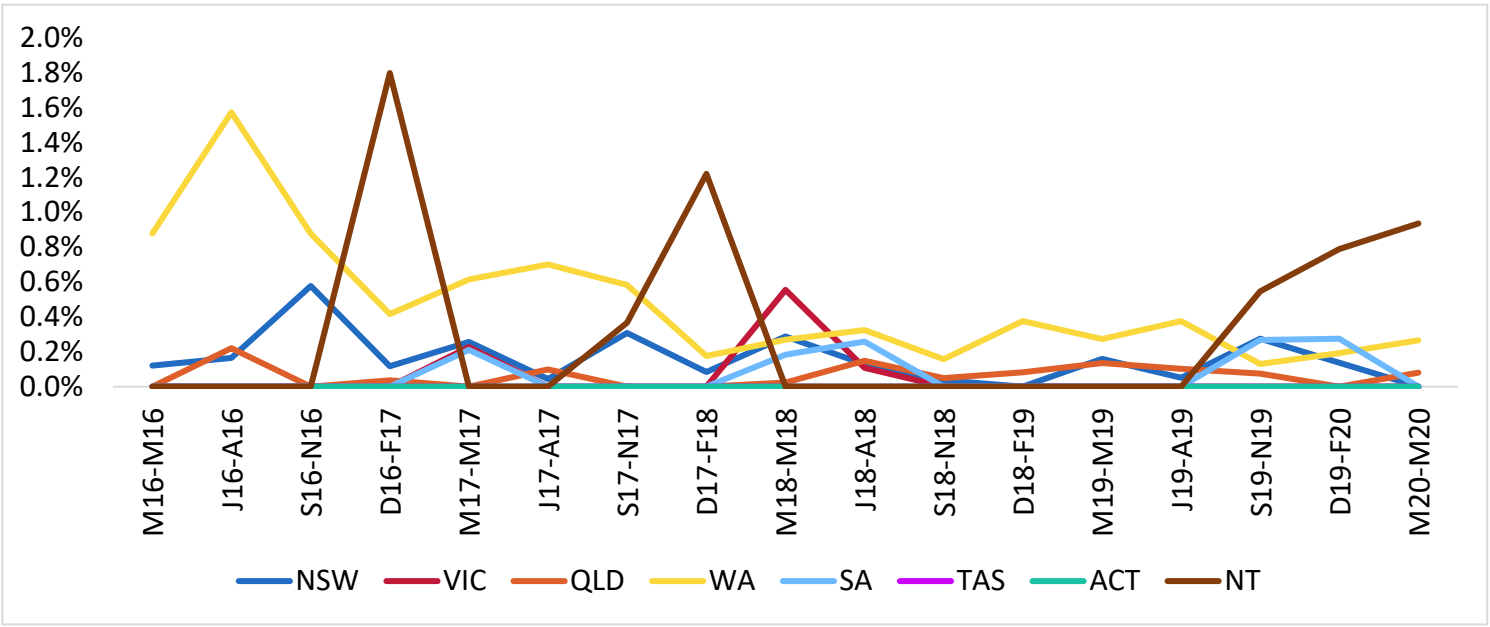
National: Percentage Of Mining Jobs Referencing CN - Non-slewing Mobile Crane Operation (Greater Than 3 Tonnes) (March 2016 - May 2020)



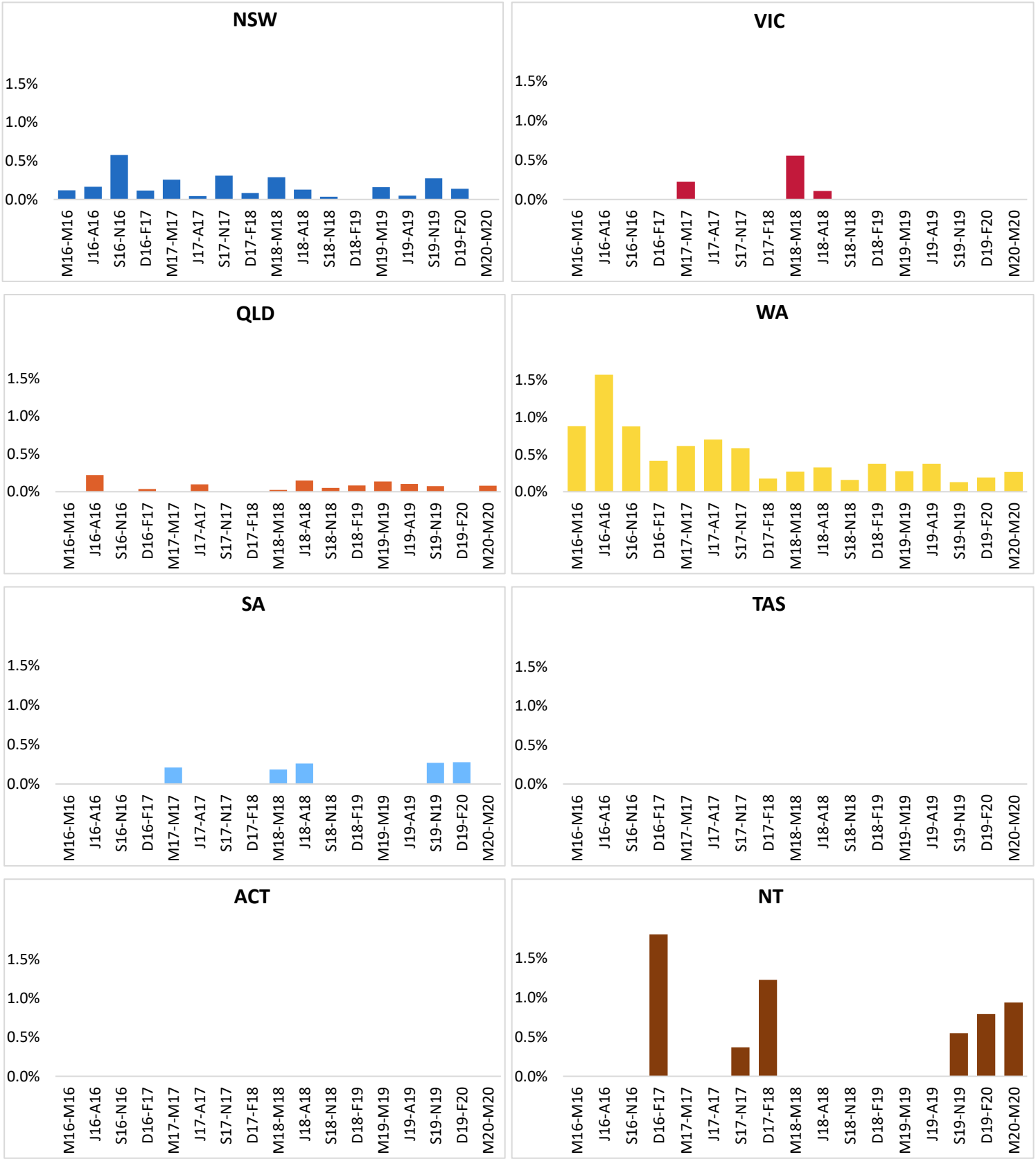
All States: Percentage Of Mining Jobs Referencing CN - Non-slewing Mobile Crane Operation (Greater Than 3 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing CN - Non-slewing Mobile Crane Operation (Greater Than 3 Tonness)



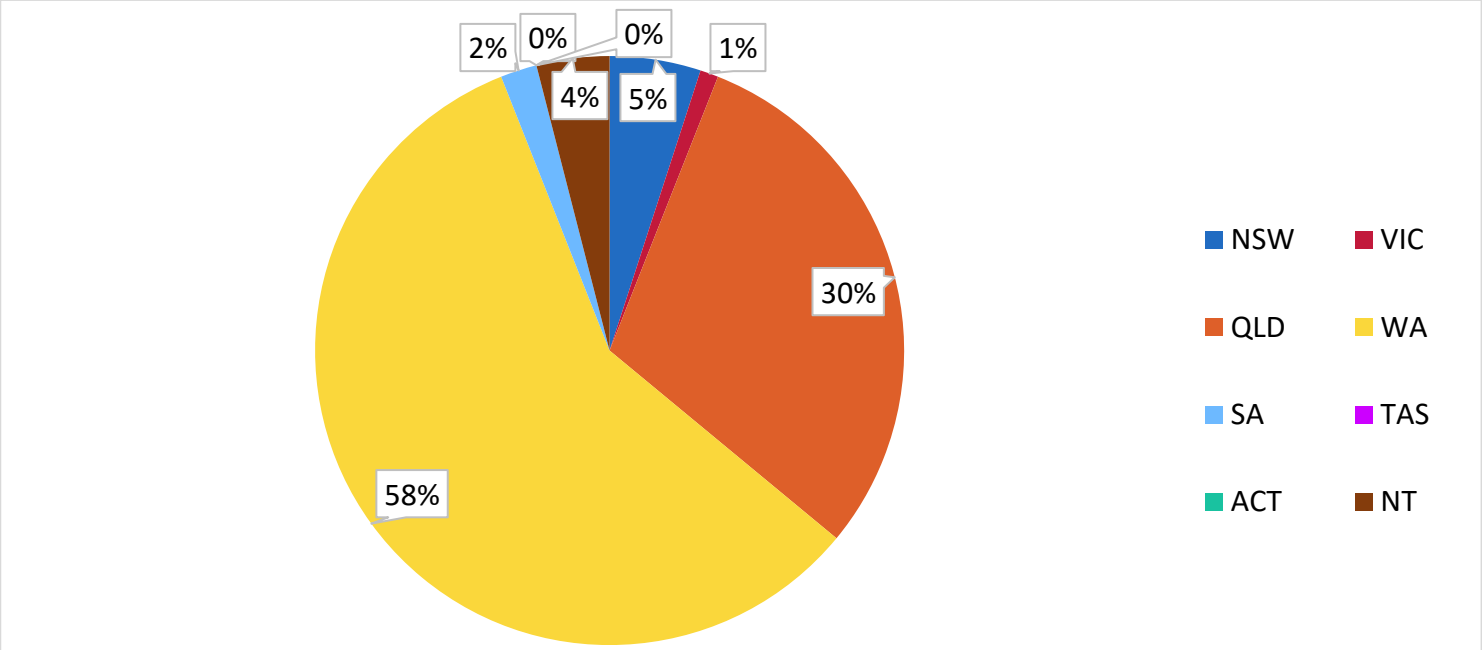
All States: Percentage Of Mining Jobs Referencing CN - Non-slewing Mobile Crane Operation (Greater Than 3 Tonness)



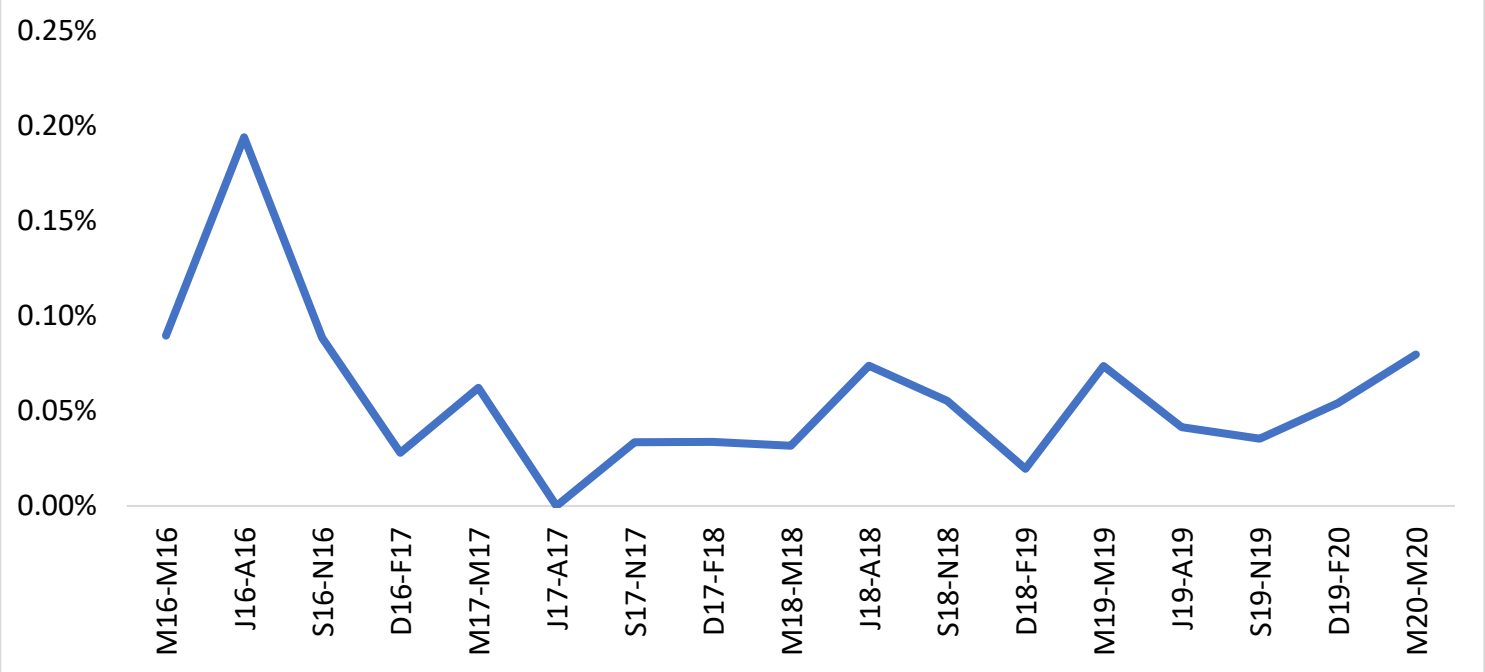
CV - Vehicle-loading Crane Operation (10+ Tonnes)

References = 105

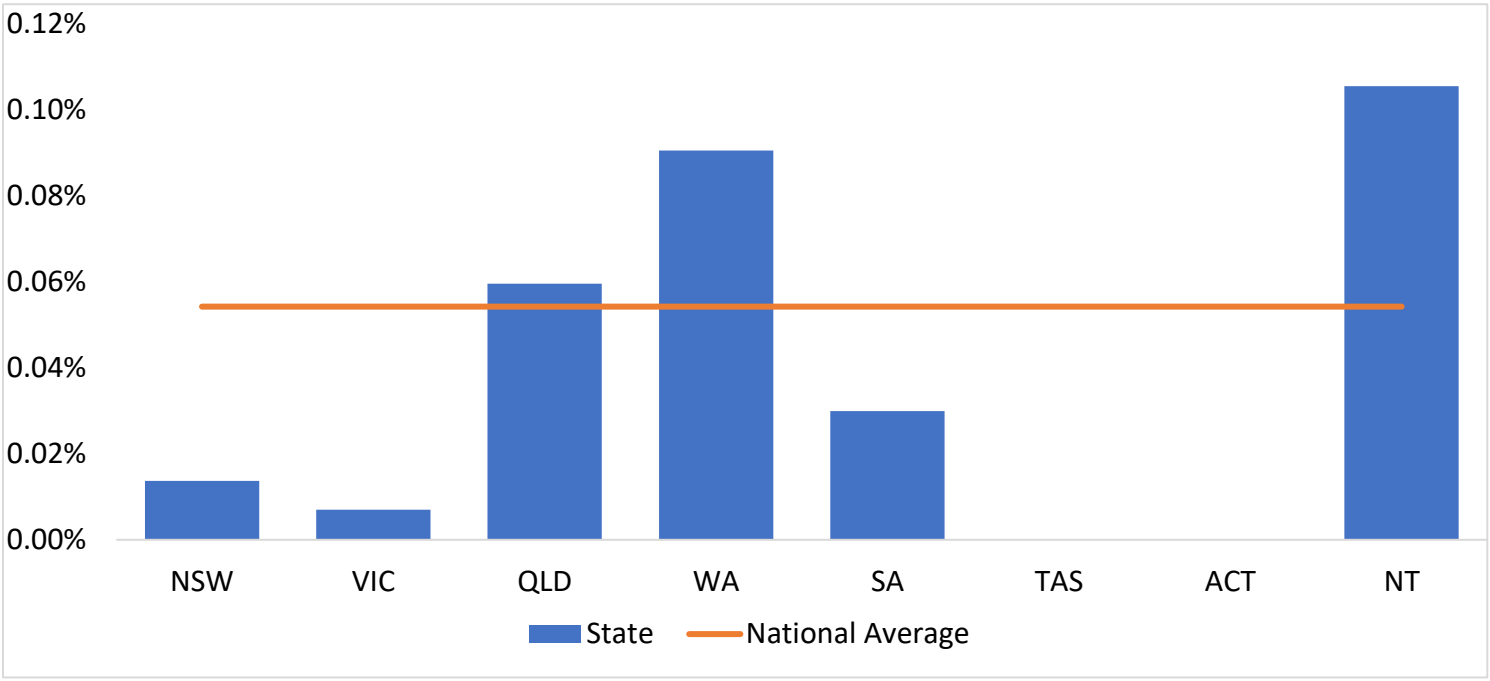
Breakdown Of All References To CV - Vehicle-loading Crane Operation (Greater Than Or Equal To 10 Tonnes) (March 2016 - May 2020)



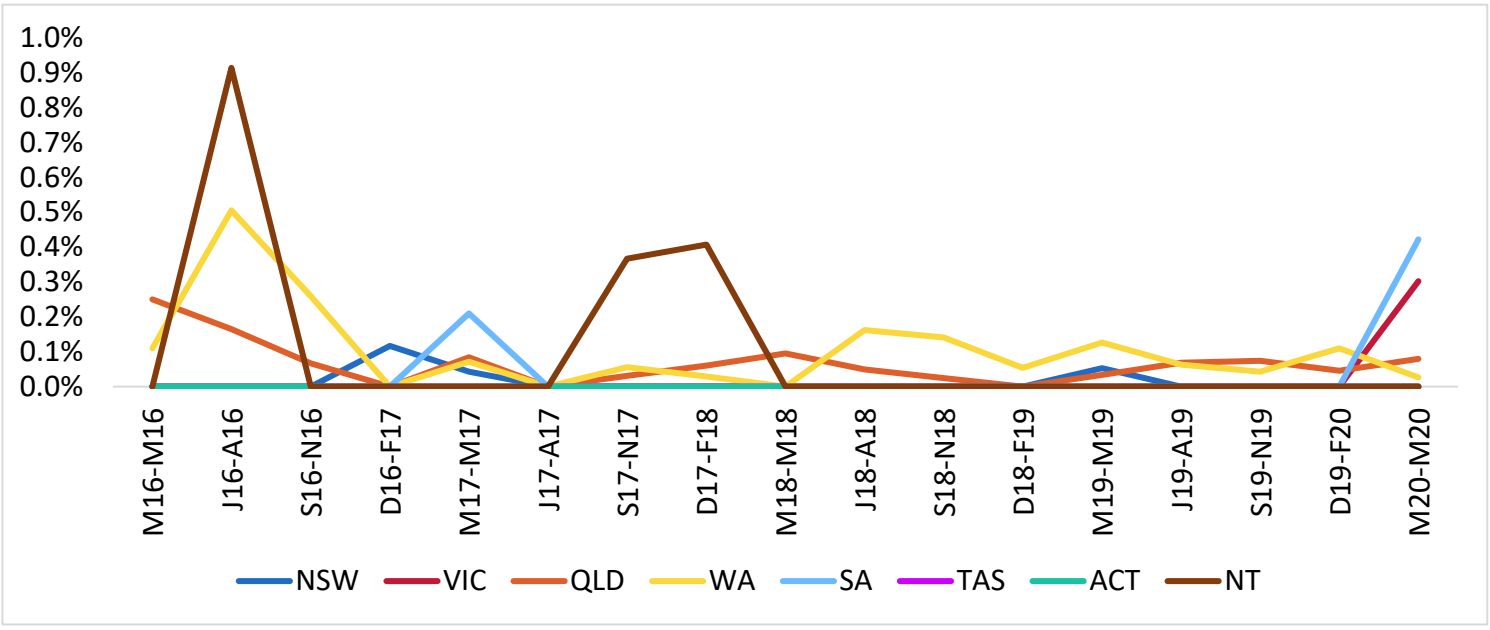
National: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (Greater Than Or Equal To 10 Tonnes) (March 2016 - May 2020)



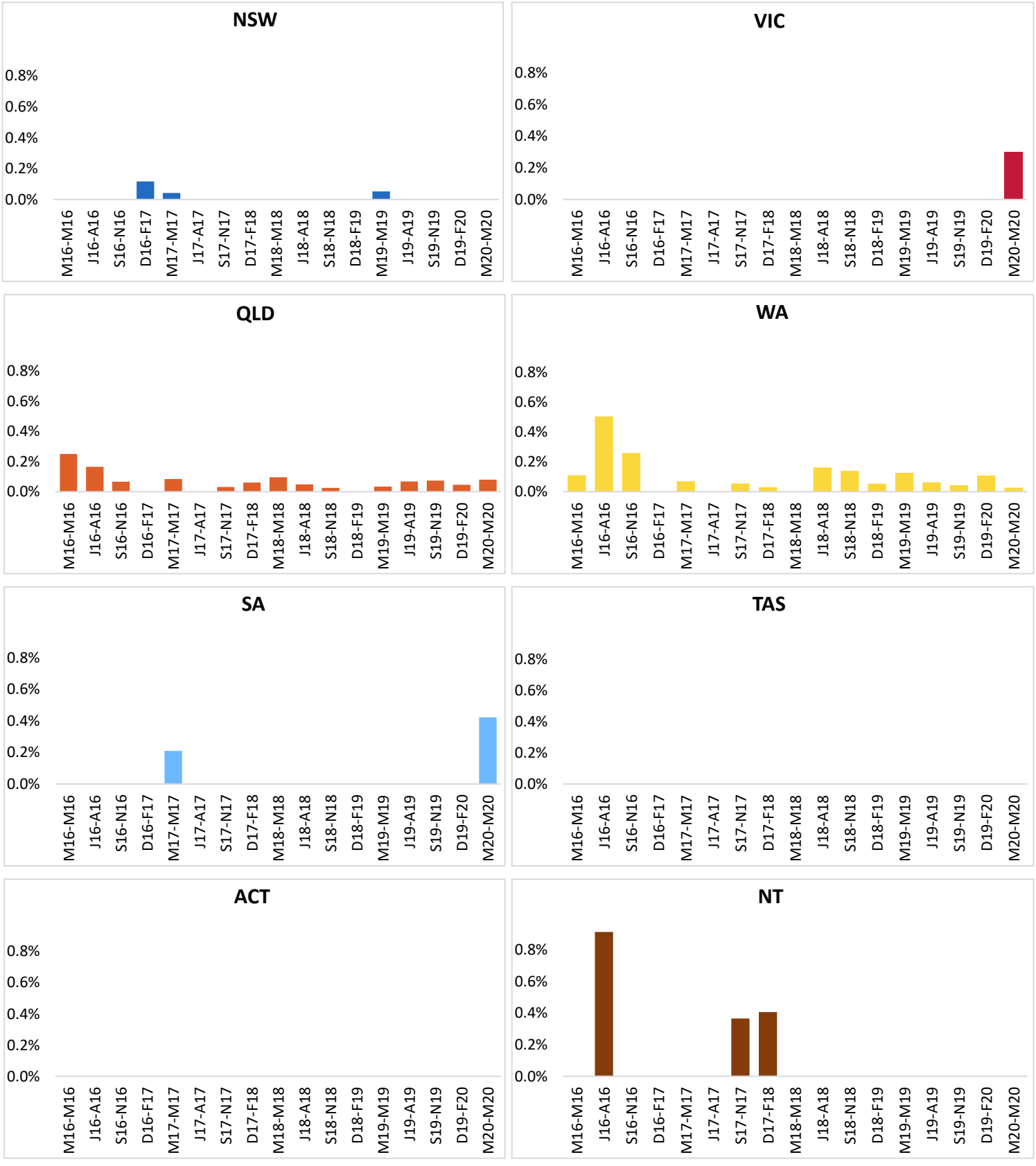
All States: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (Greater Than Or Equal To 10 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (Greater Than Or Equal To 10 Tonnes)



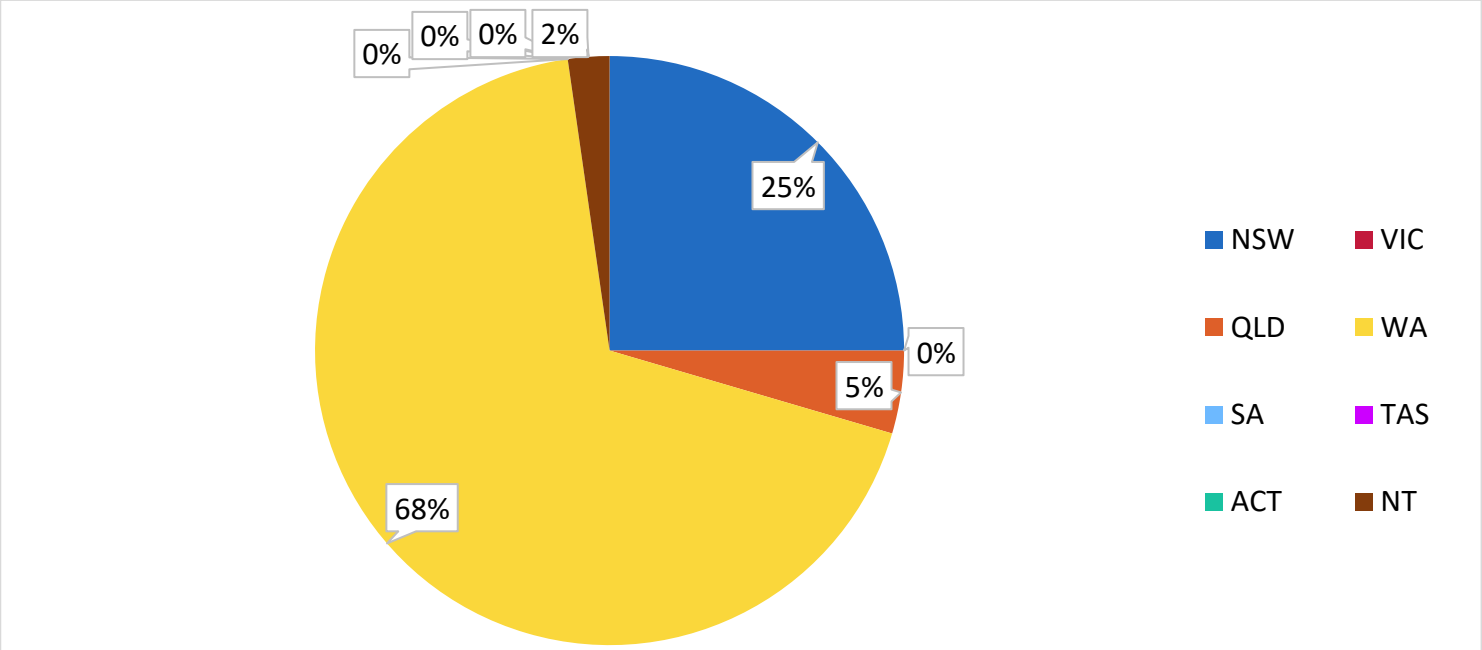
All States: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (Greater Than Or Equal To 10 Tonnes)



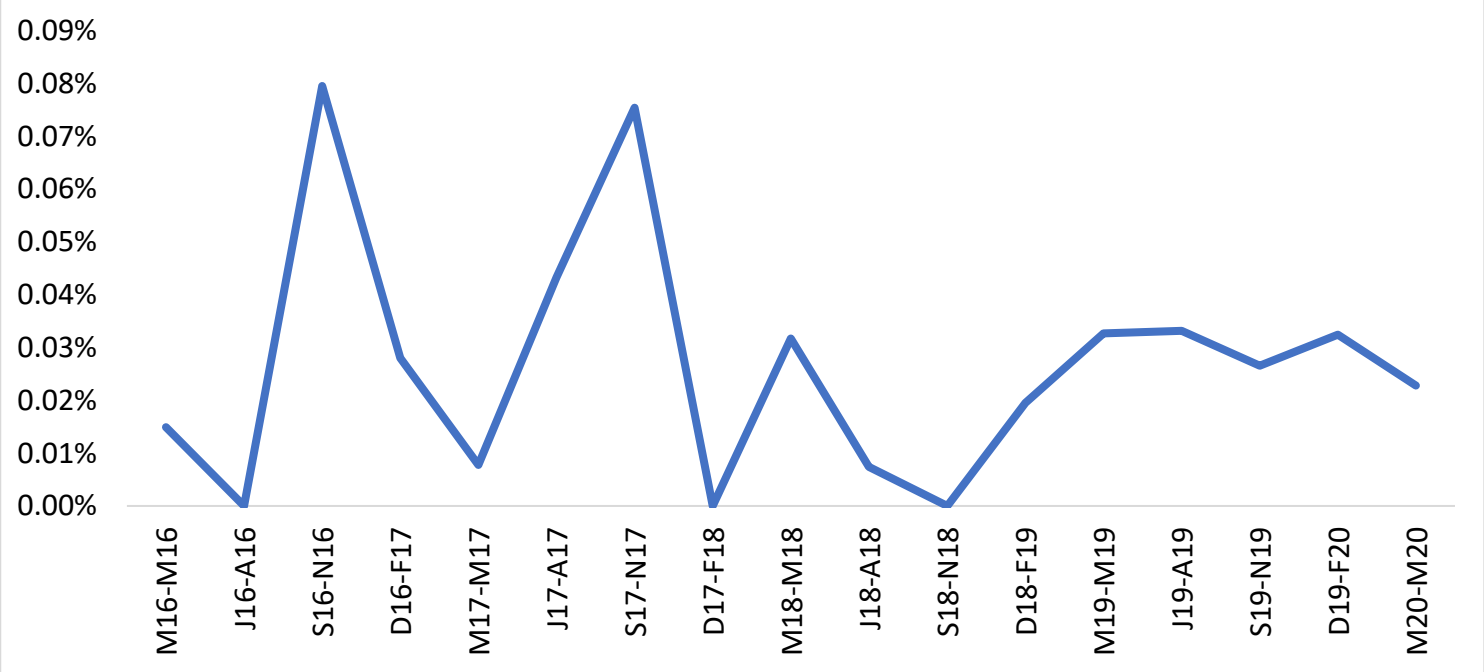
C2 - Slewing Mobile Crane Operation (Up To 20 Tonnes)

References = 52

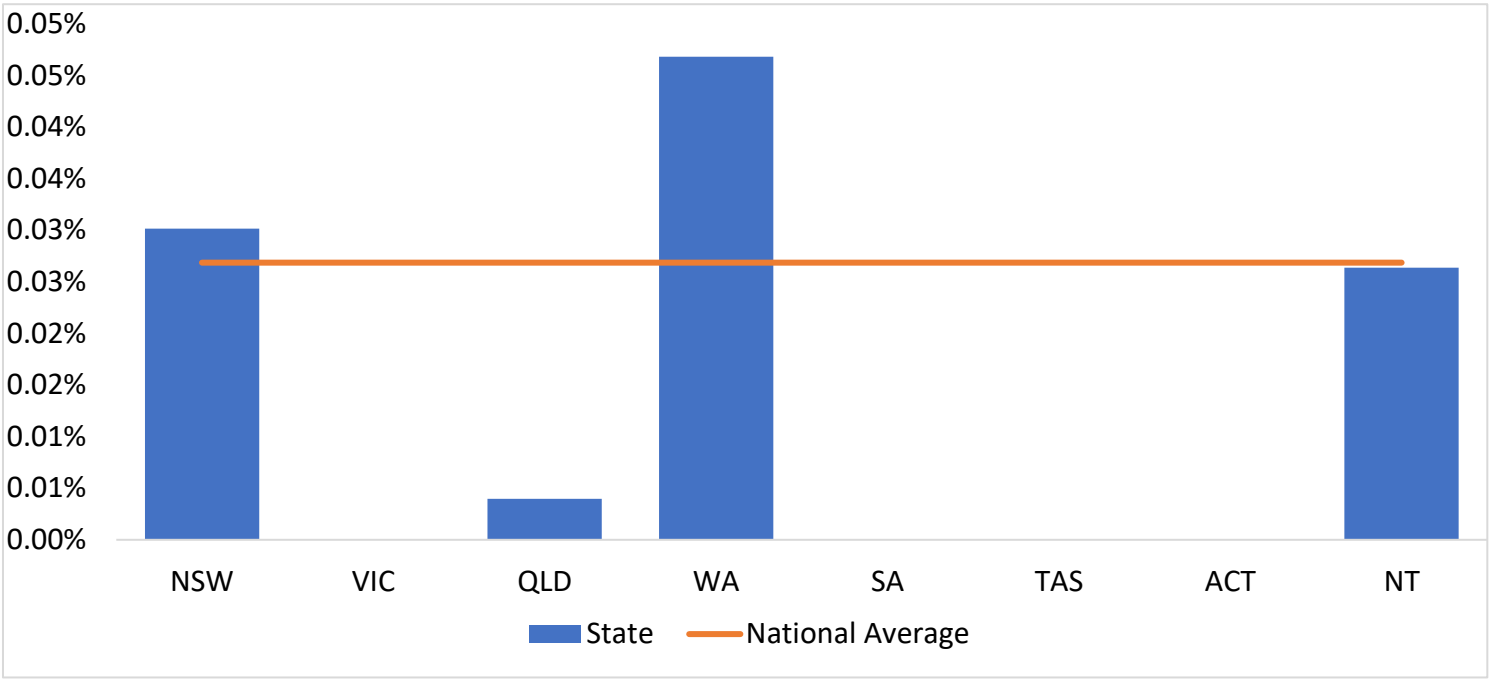
Breakdown Of All References To C2 - Slewing Mobile Crane Operation (Up To 20 Tonnes) (March 2016 - May 2020)



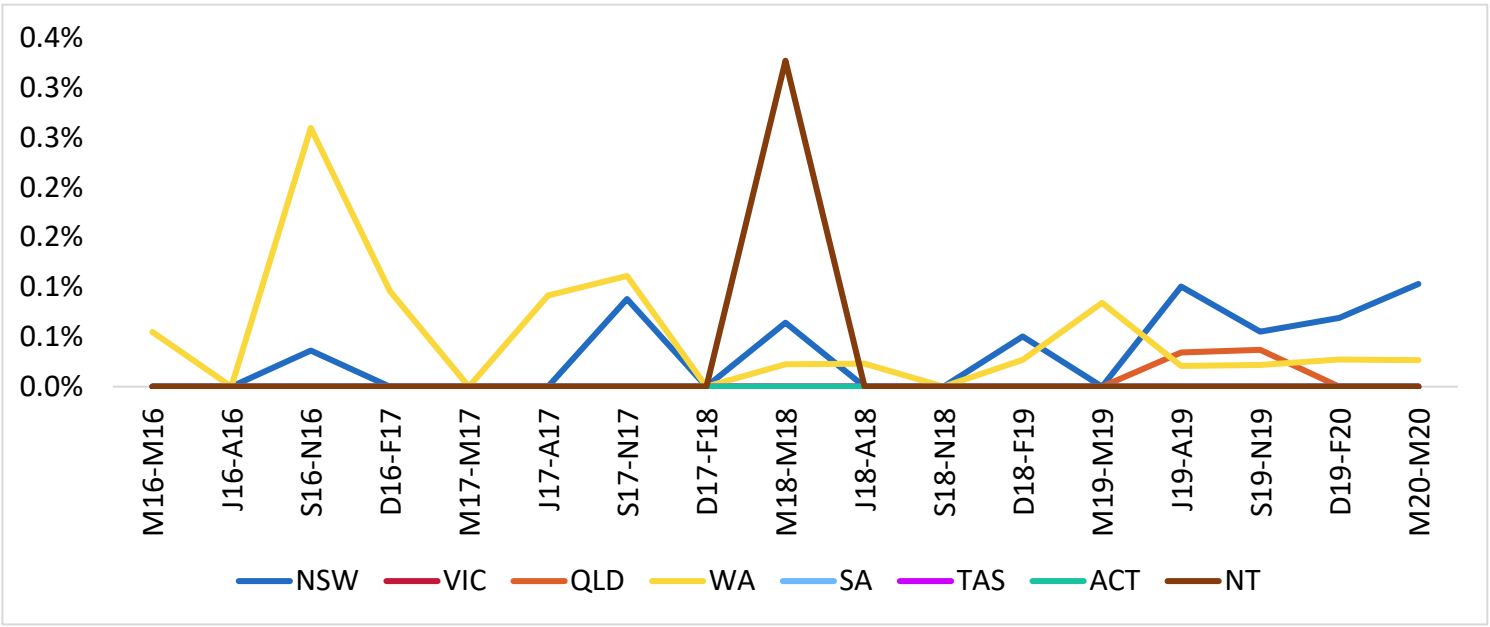
National: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (Up To 20 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (Up To 20 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (Up To 20 Tonnes)

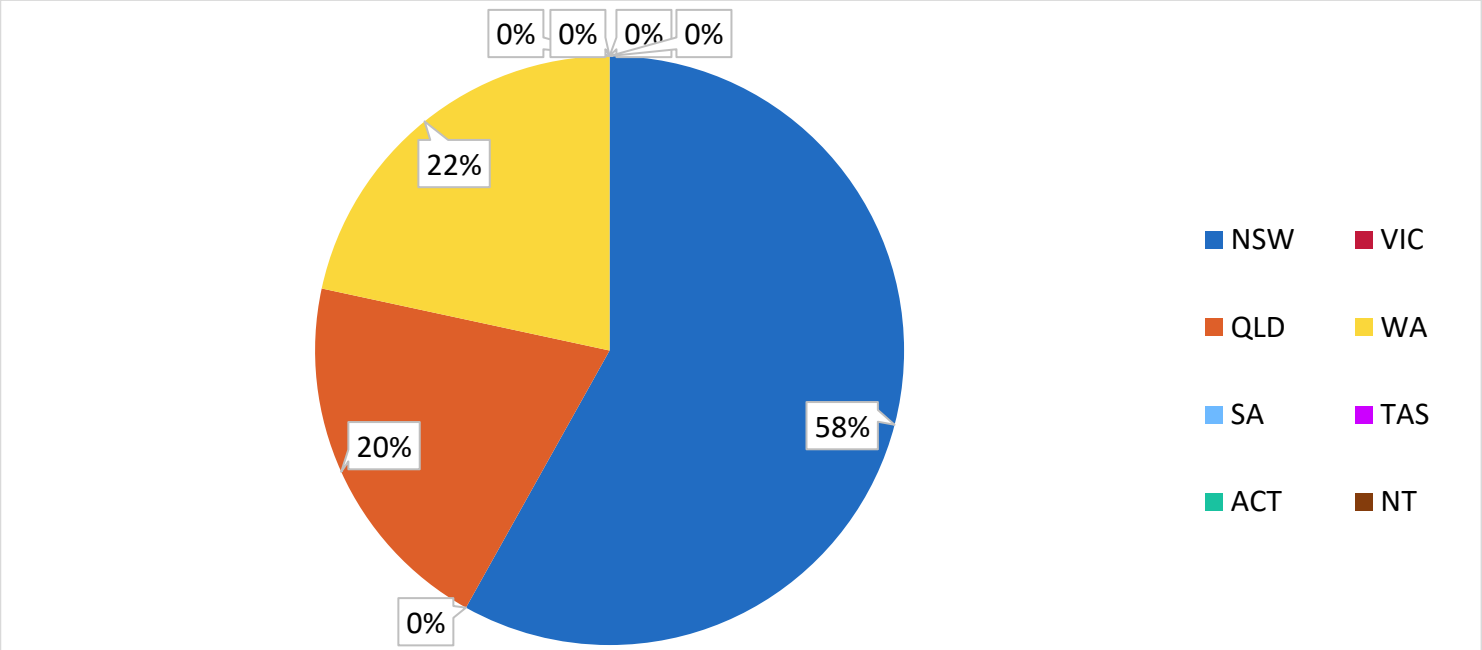


All States: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (Up To 20 Tonnes)

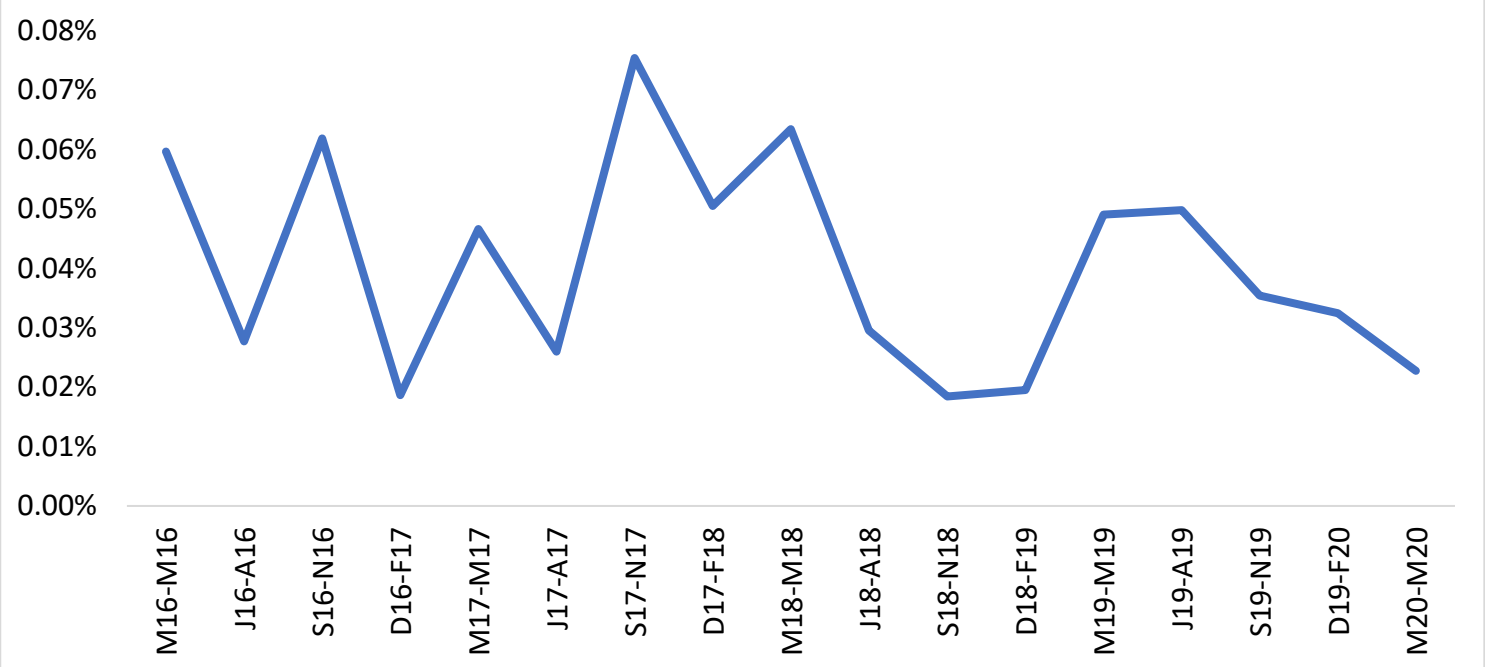
C6 - Slewing Mobile Crane Operation (Up To 60 Tonnes)

References = 79

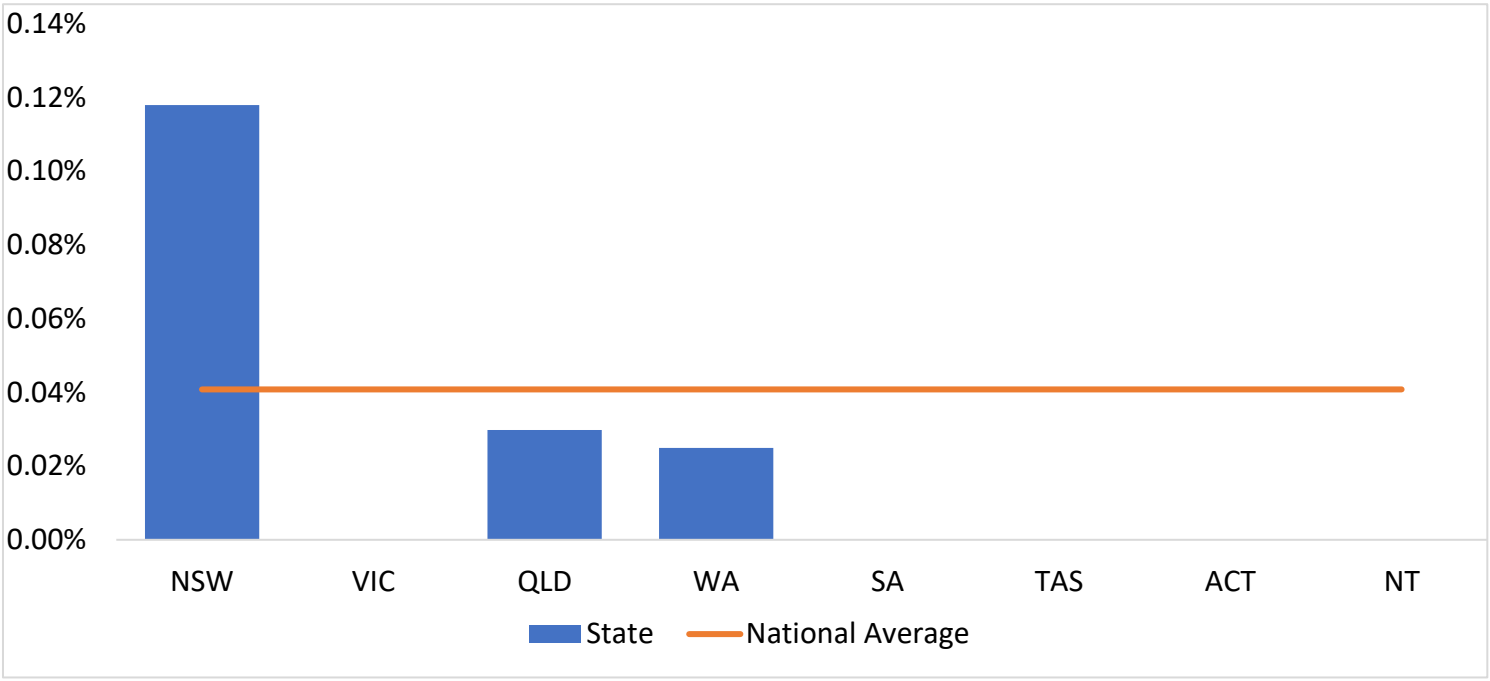
Breakdown Of All References To C6 - Slewing Mobile Crane Operation (Up To 60 Tonnes) (March 2016 - May 2020)



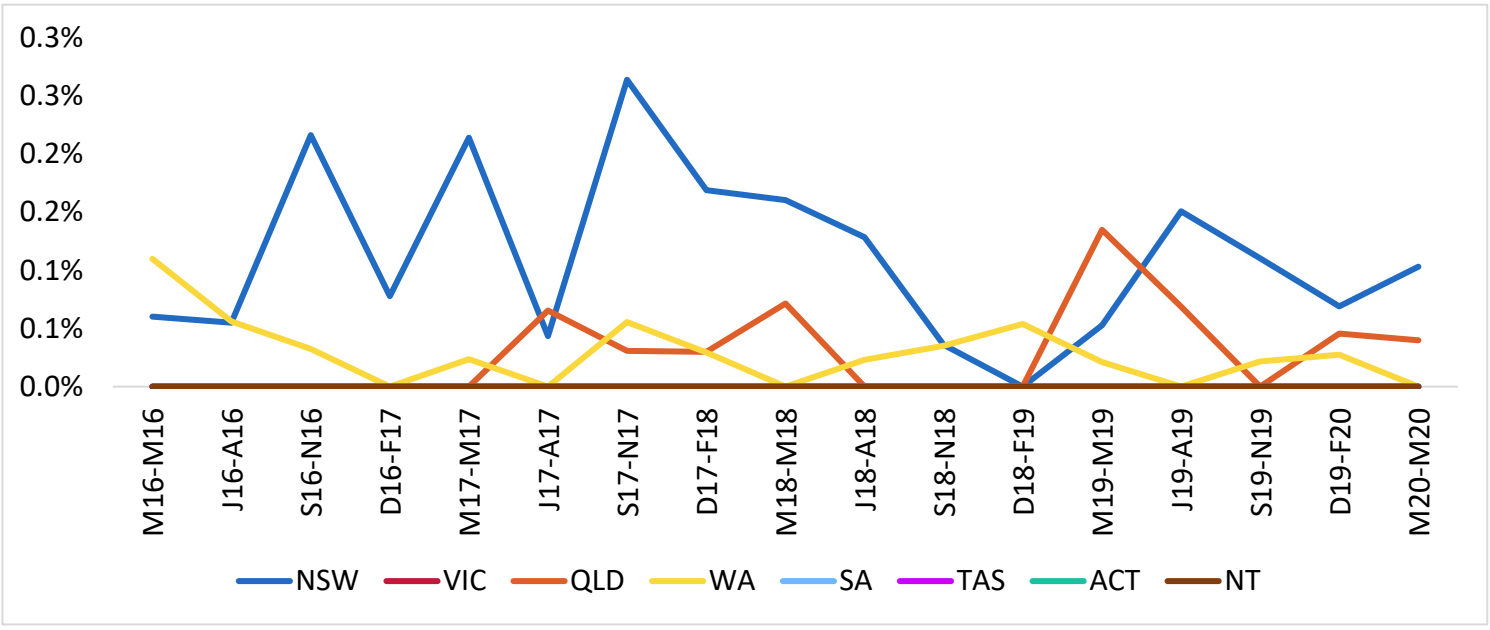
National: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (Up To 60 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (Up To 60 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (Up To 60 Tonnes)

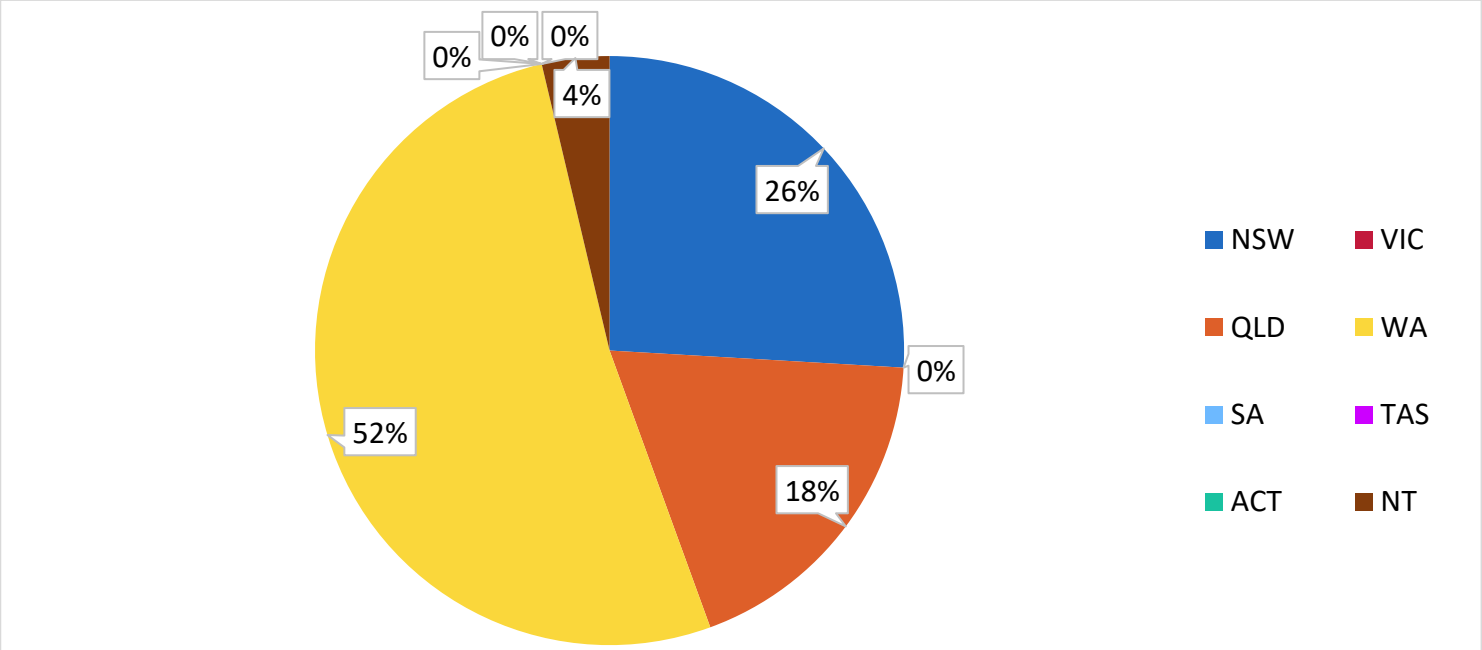


All States: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (Up To 60 Tonnes)

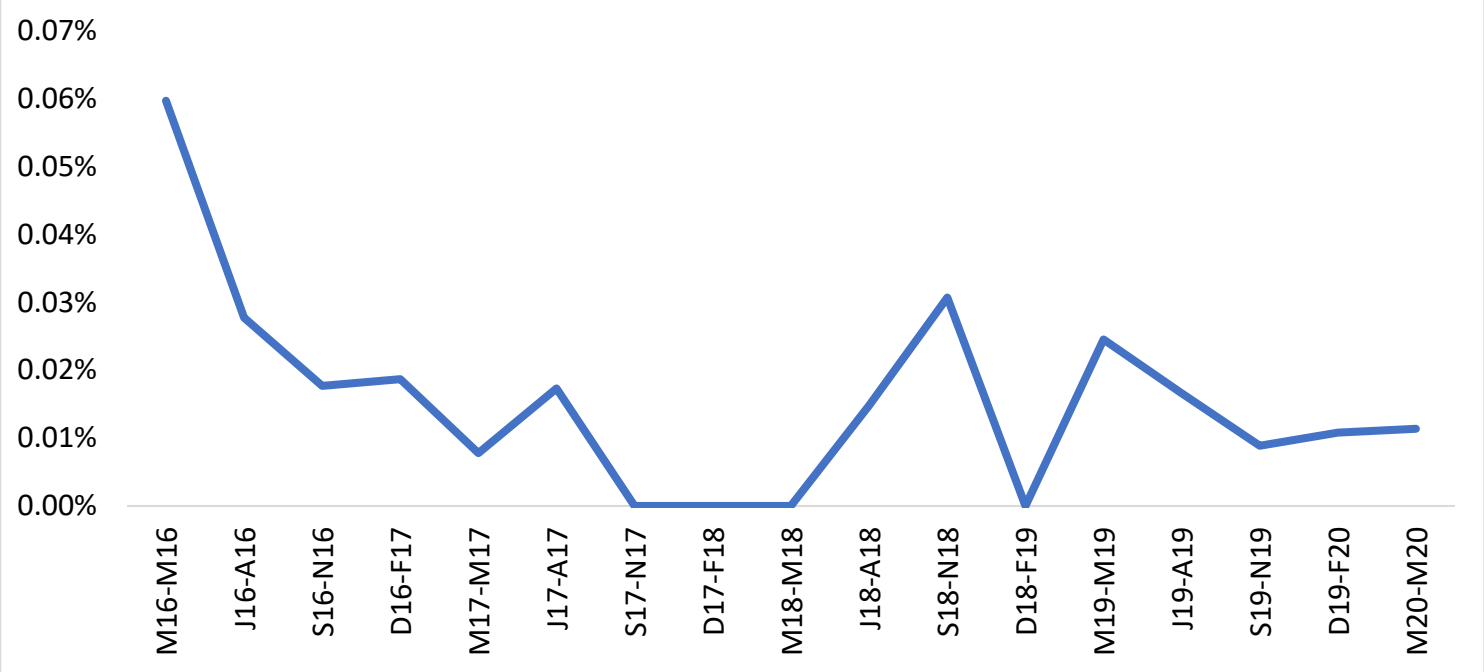
C1 - Slewing Mobile Crane Operation (Up To 100 Tonnes)

References = 28

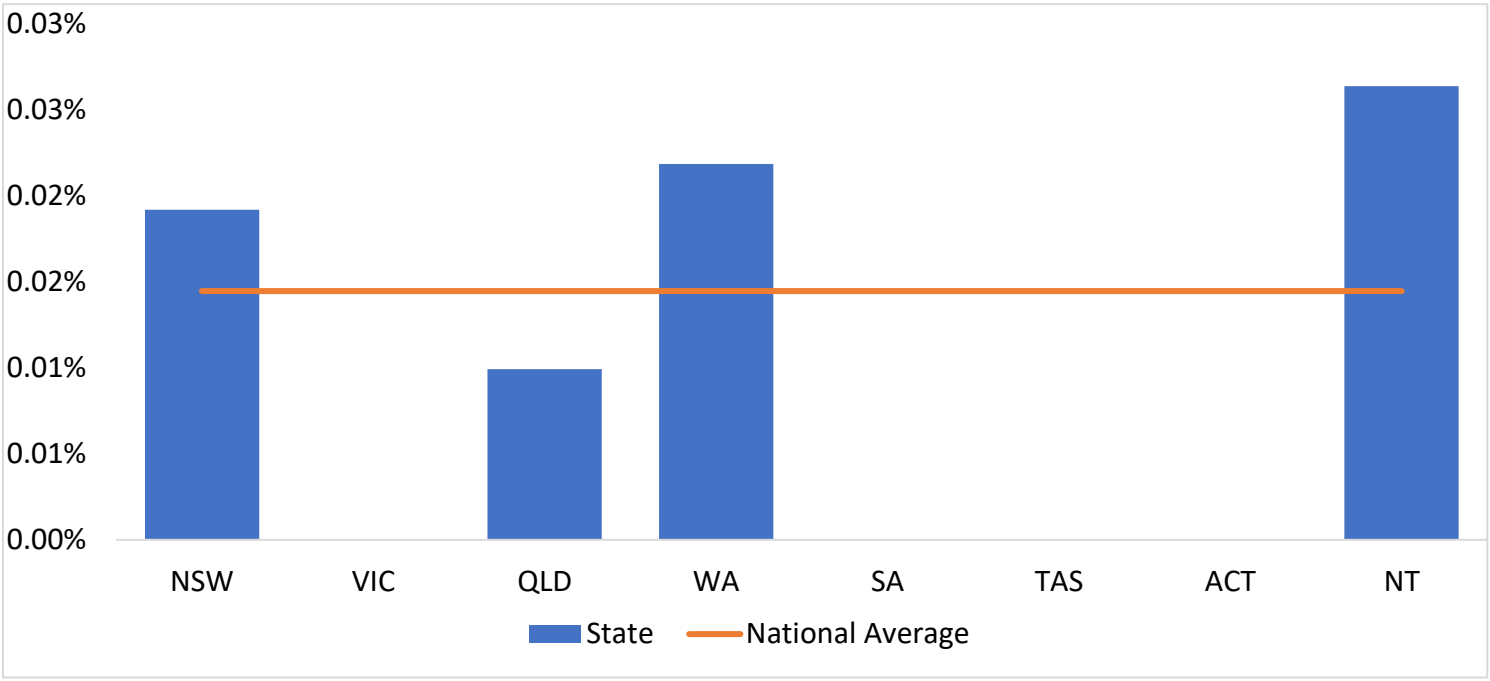
Breakdown Of All References To C1 - Slewing Mobile Crane Operation (Up To 100 Tonnes) (March 2016 - May 2020)



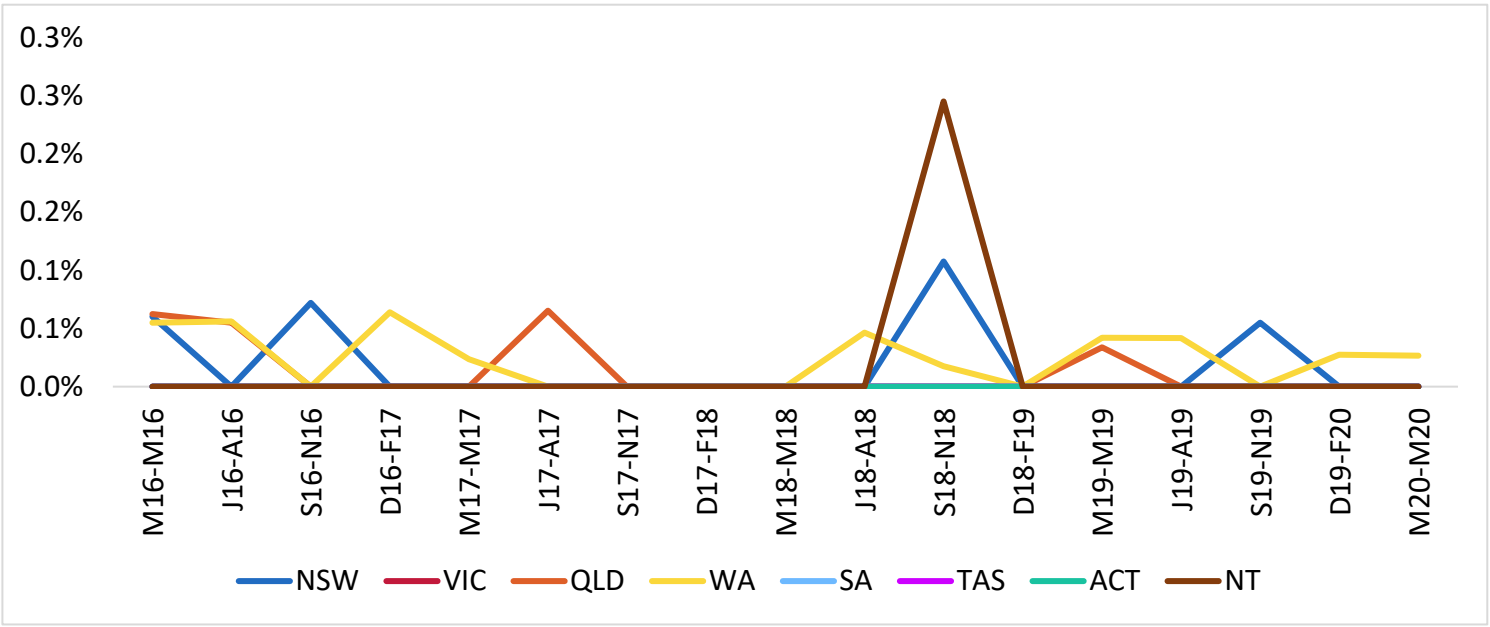
National: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (Up To 100 Tonnes) (March 2016 - May 2020)



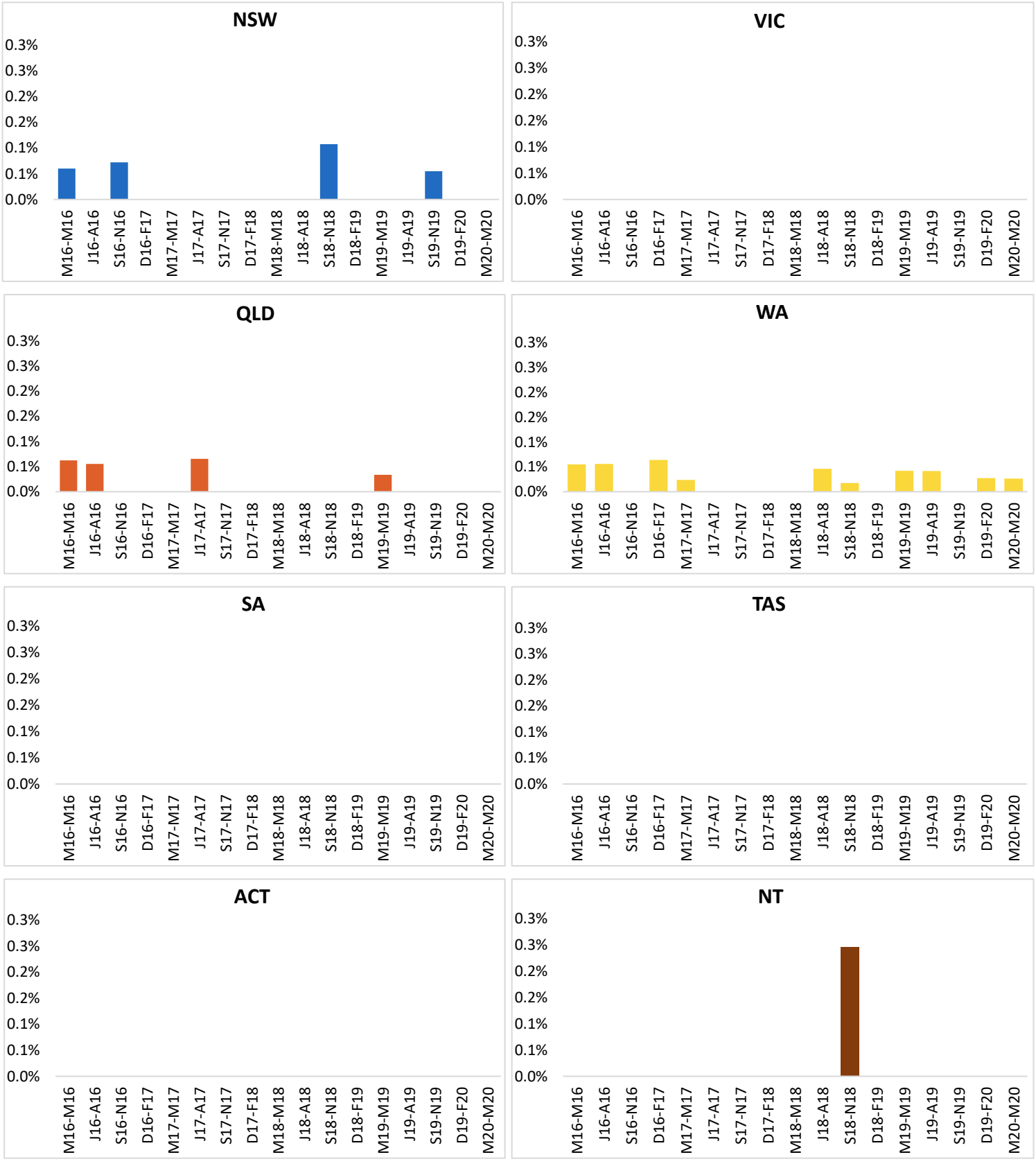
All States: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (Up To 100 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (Up To 100 Tonnes)



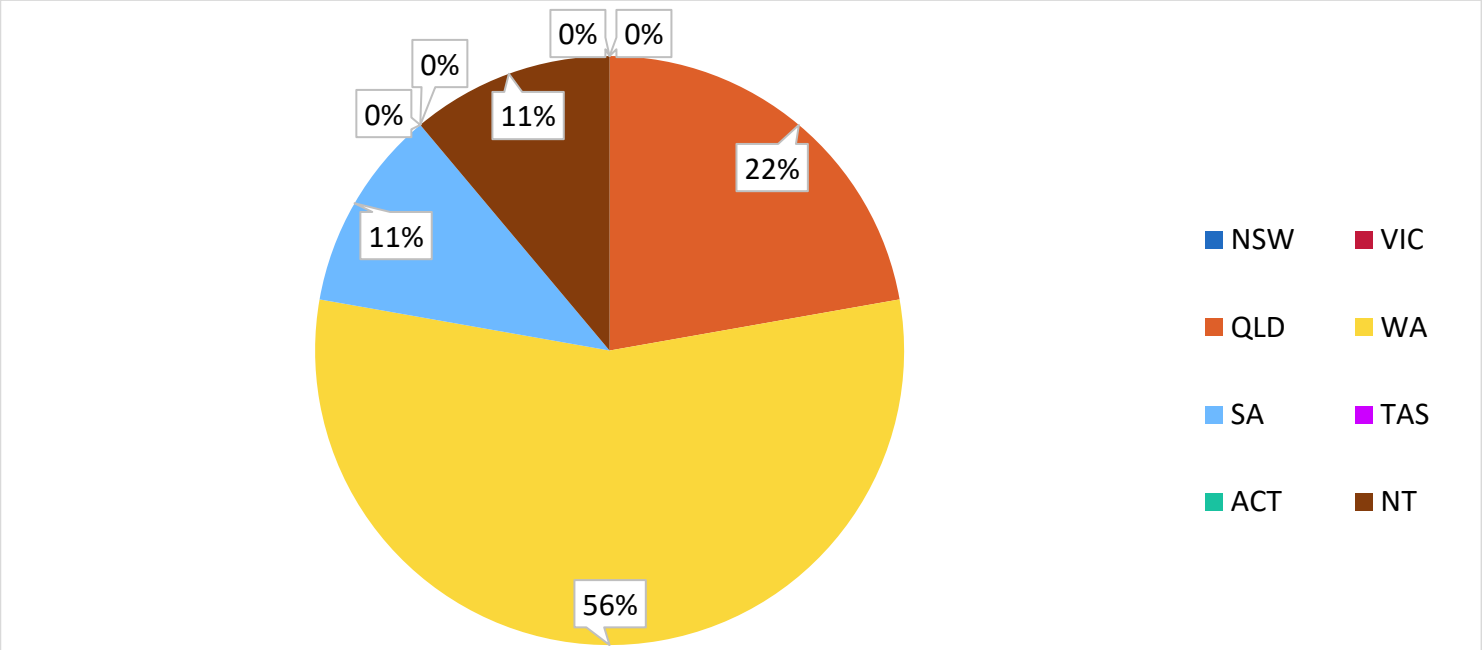
All States: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (Up To 100 Tonnes)



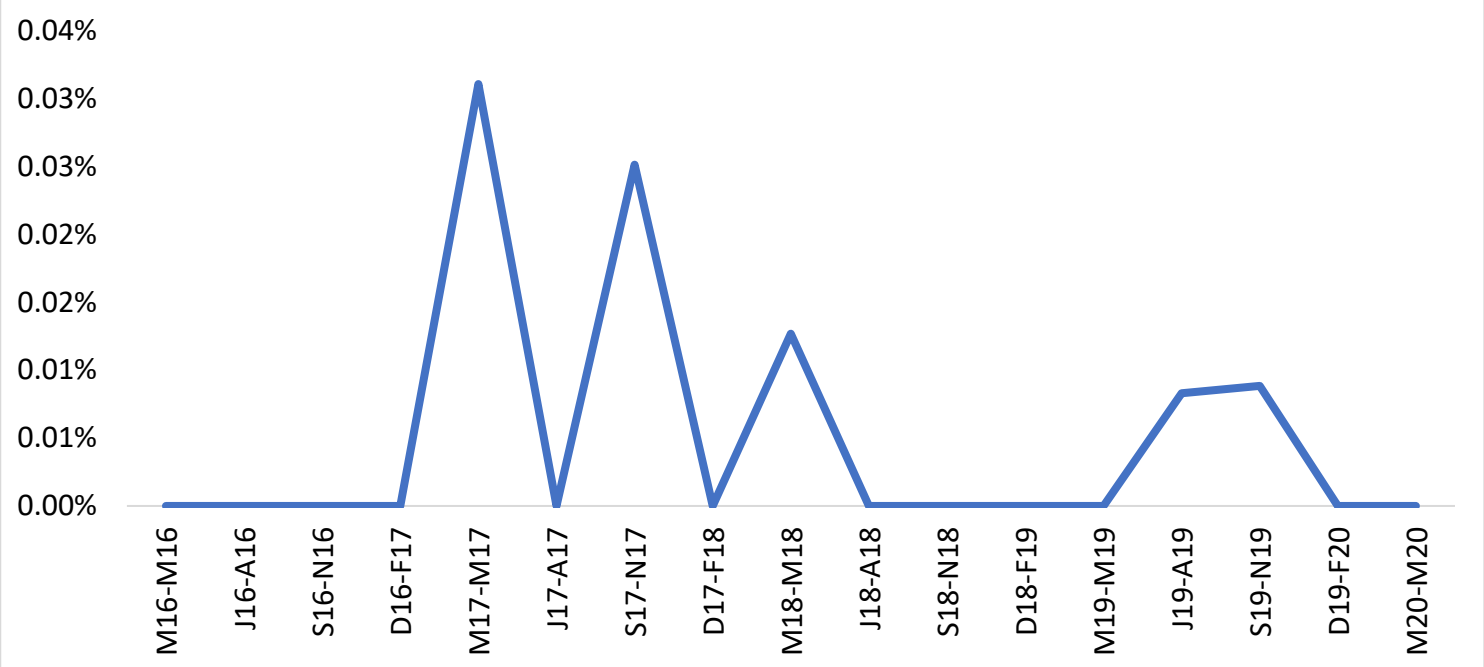
C0 - Slewing Mobile Crane Operation (Open Or > 100 Tonnes)

References = 11

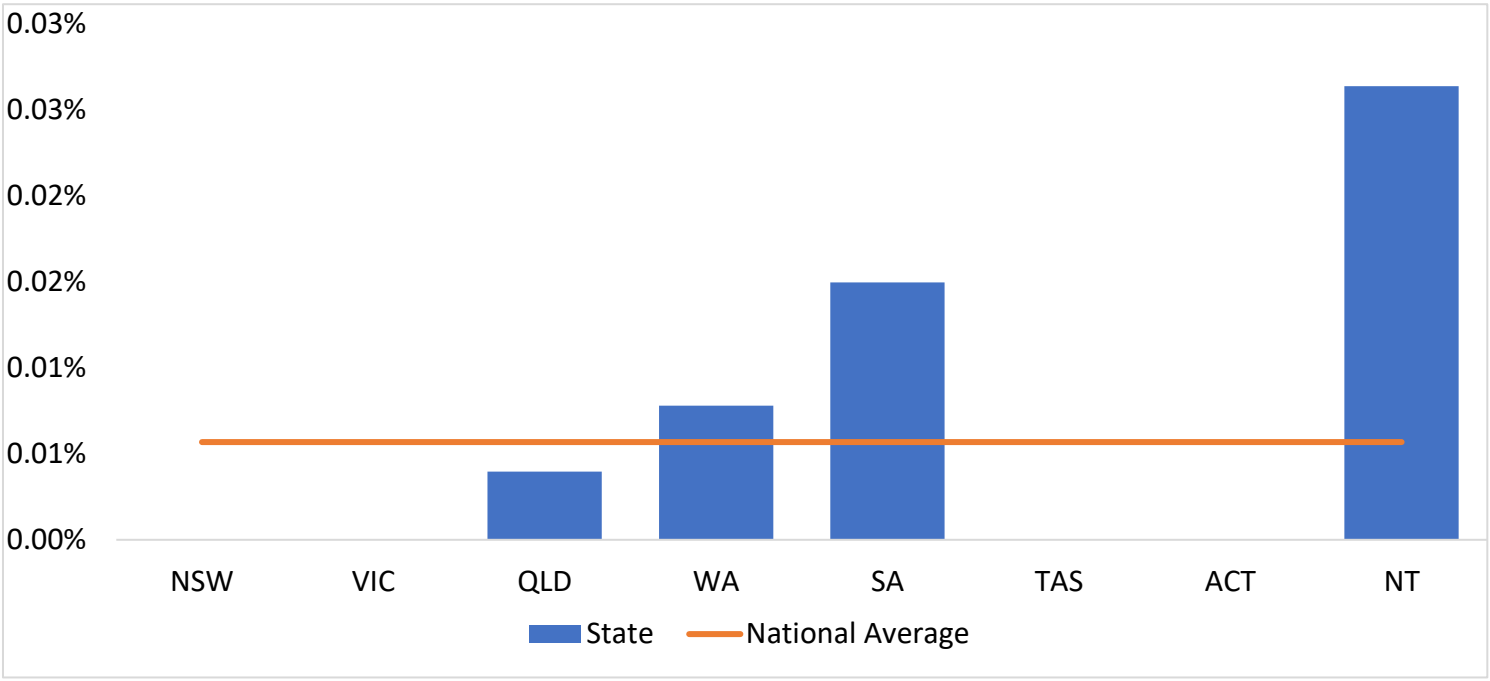
Breakdown Of All References To C0 - Slewing Mobile Crane Operation (Open Or Greater Than 100 Tonnes) (March 2016 - May 2020)



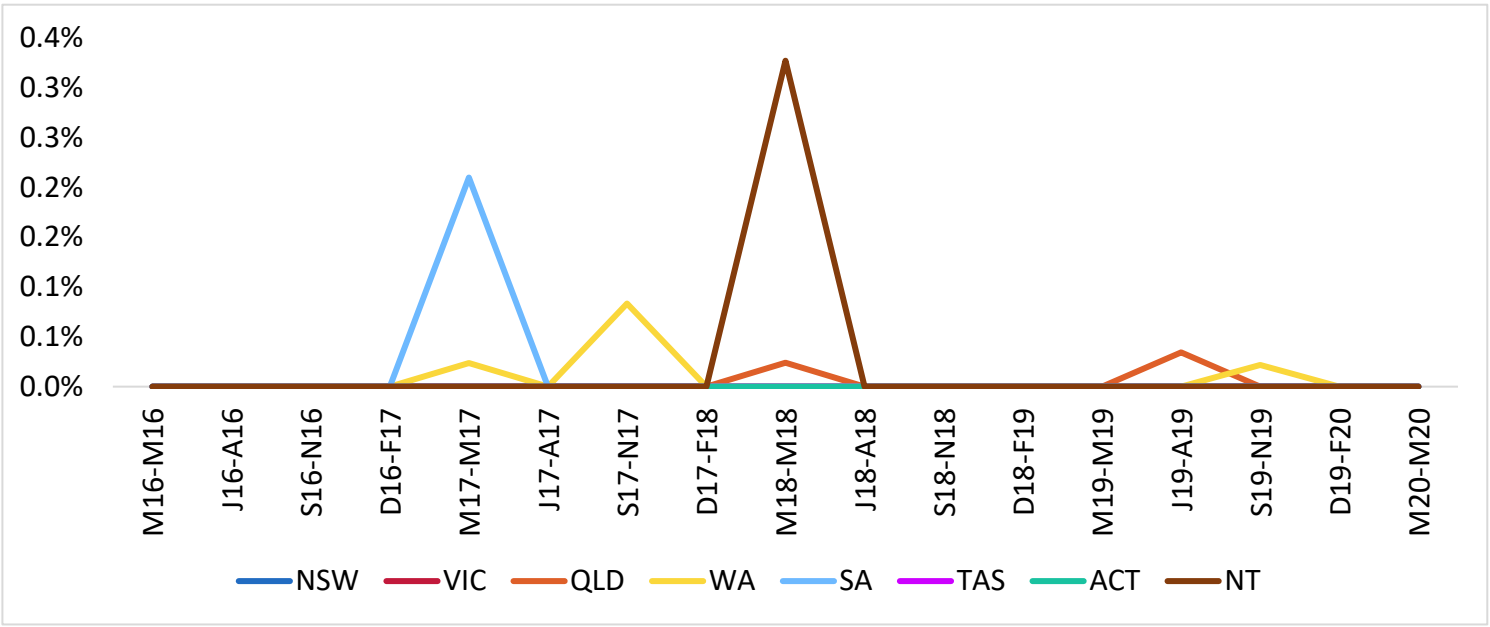
National: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (Open Or Greater Than 100 Tonnes) (March 2016 - May 2020)



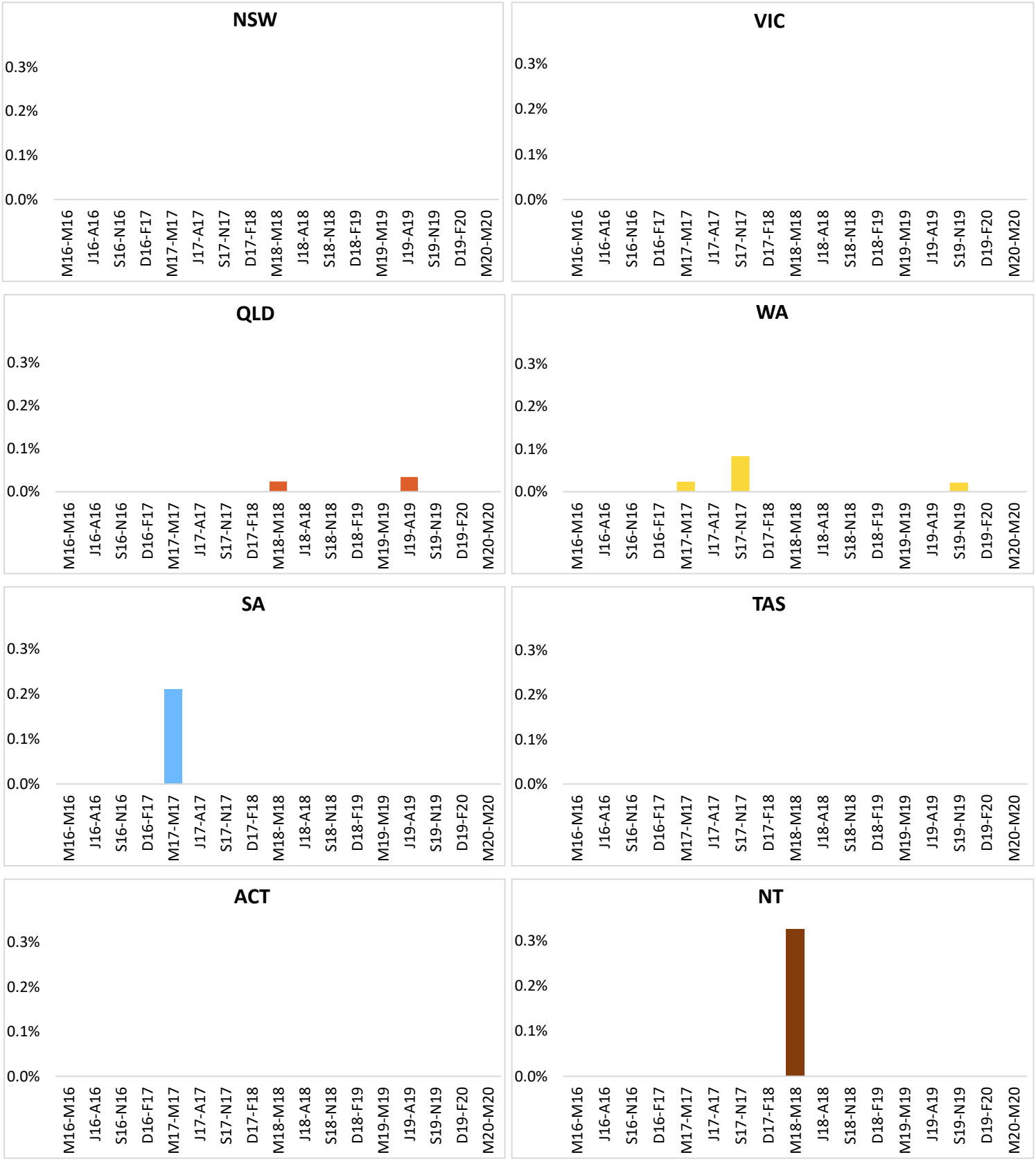
All States: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (Open Or Greater Than 100 Tonnes) (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (Open Or Greater Than 100 Tonnes)



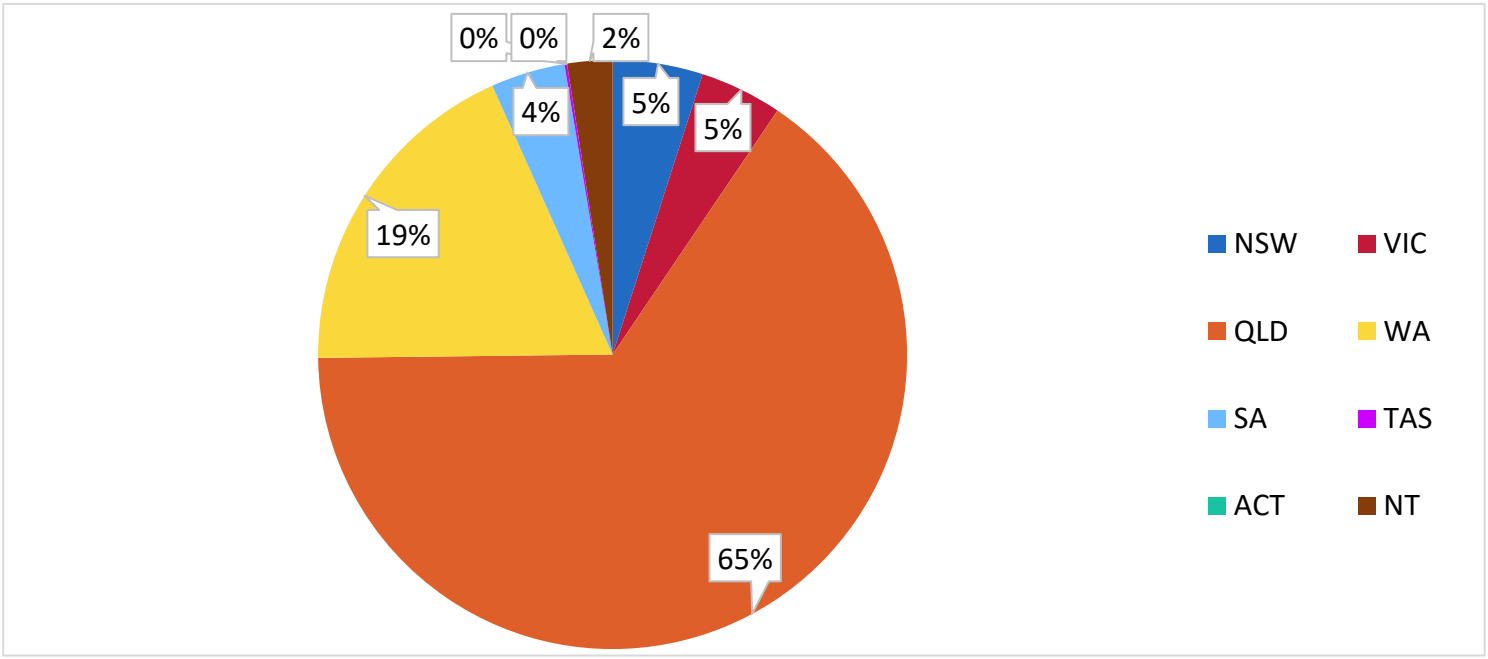
All States: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (Open Or Greater Than 100 Tonnes)



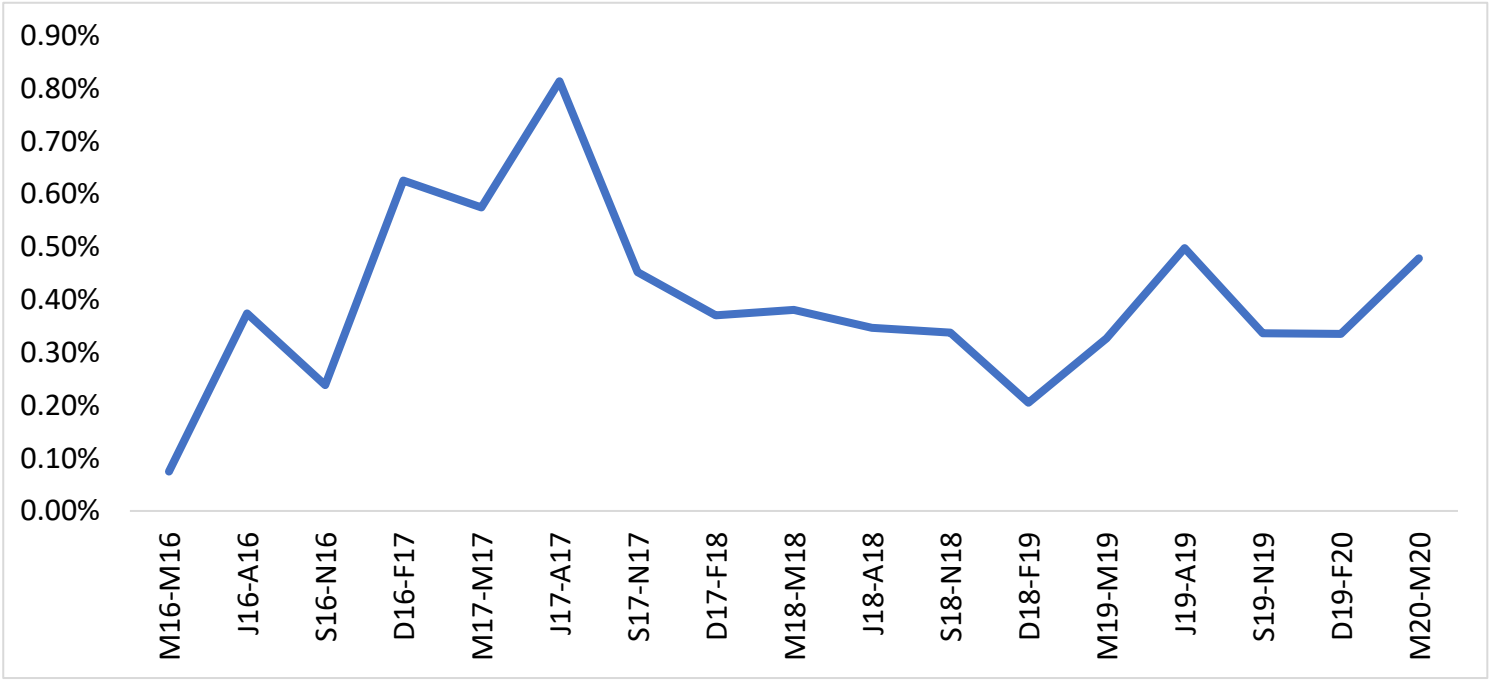
CB - Bridge and Gantry Crane Operation

References = 786

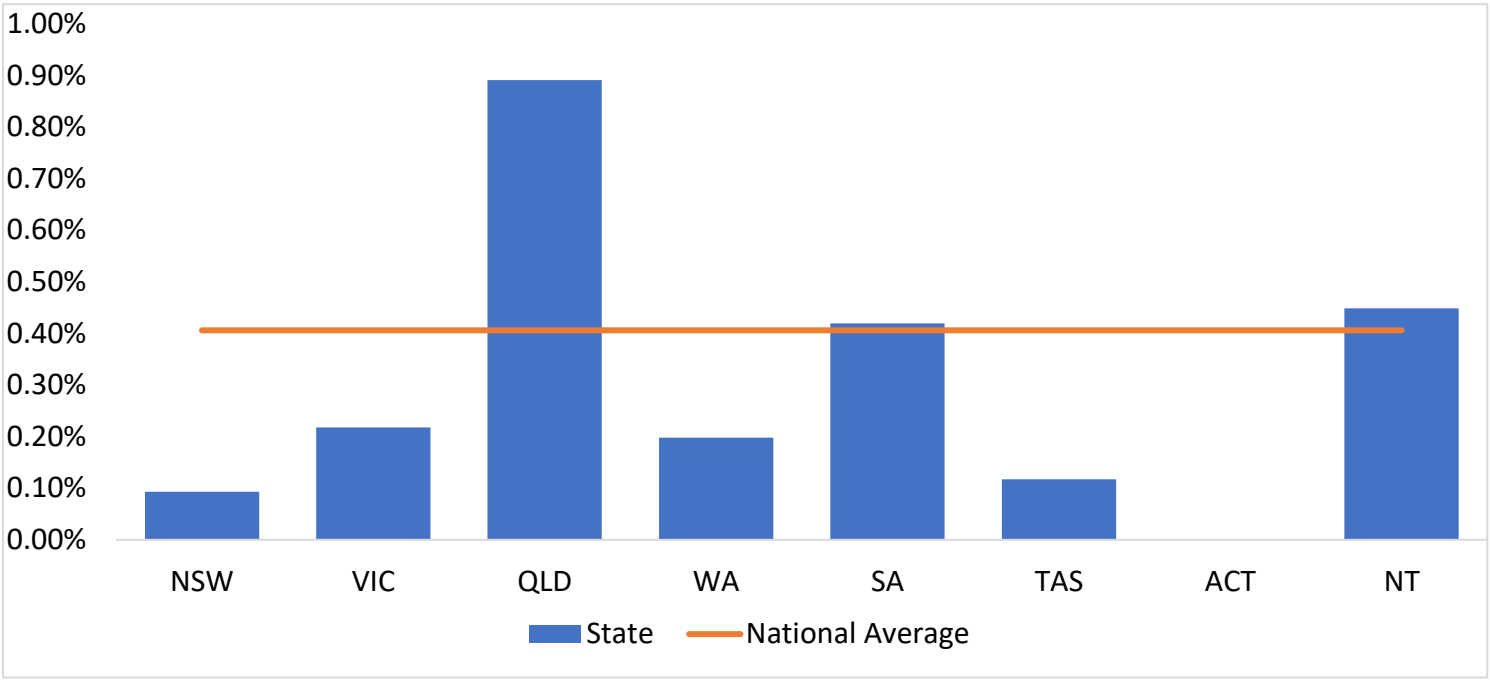
Breakdown Of All References To CB - Bridge and Gantry Crane Operation (March 2016 - May 2020)



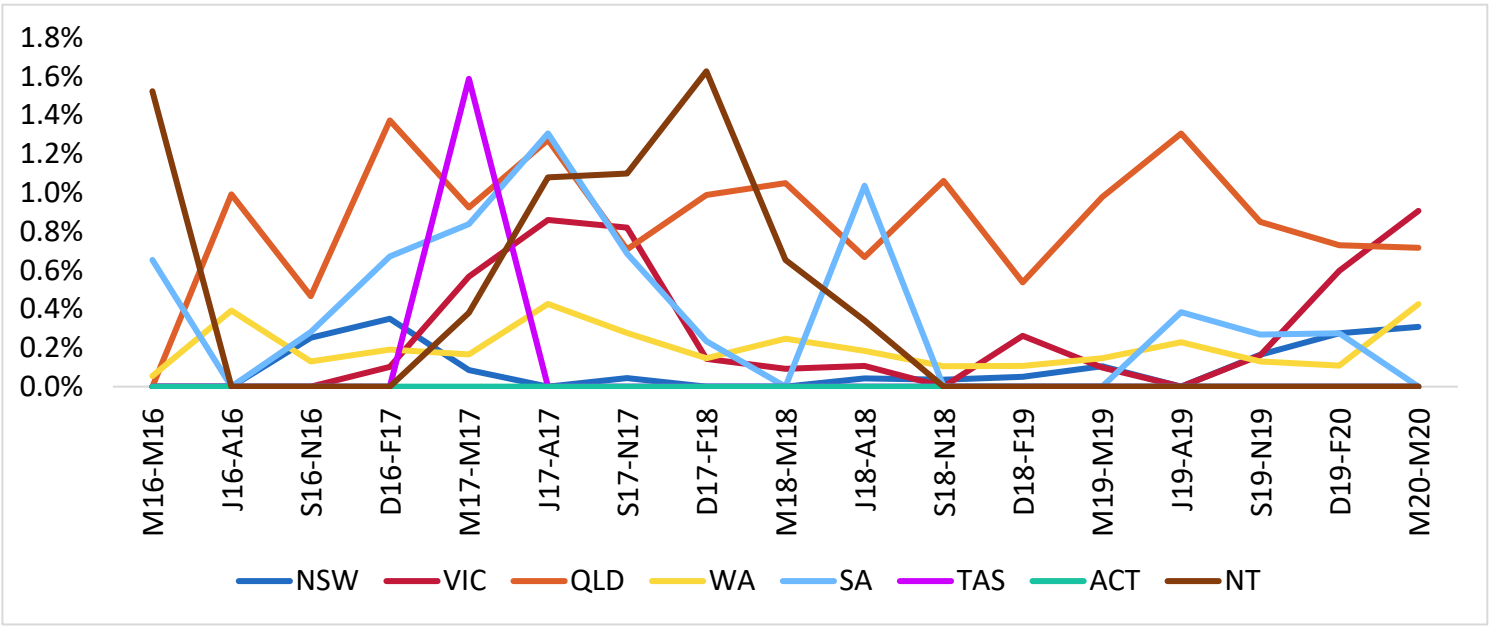
National: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation (March 2016 - May 2020)



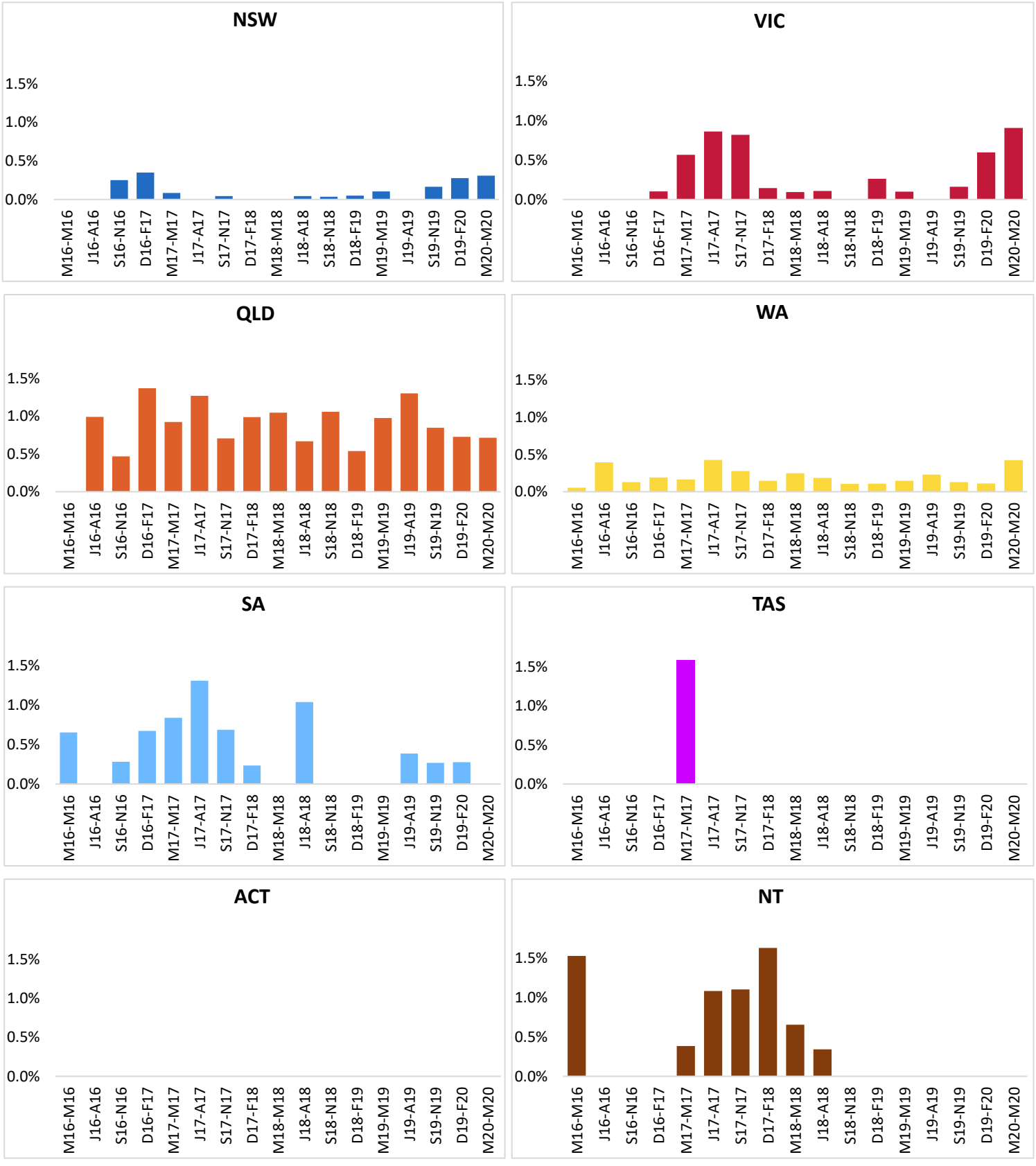
All States: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation



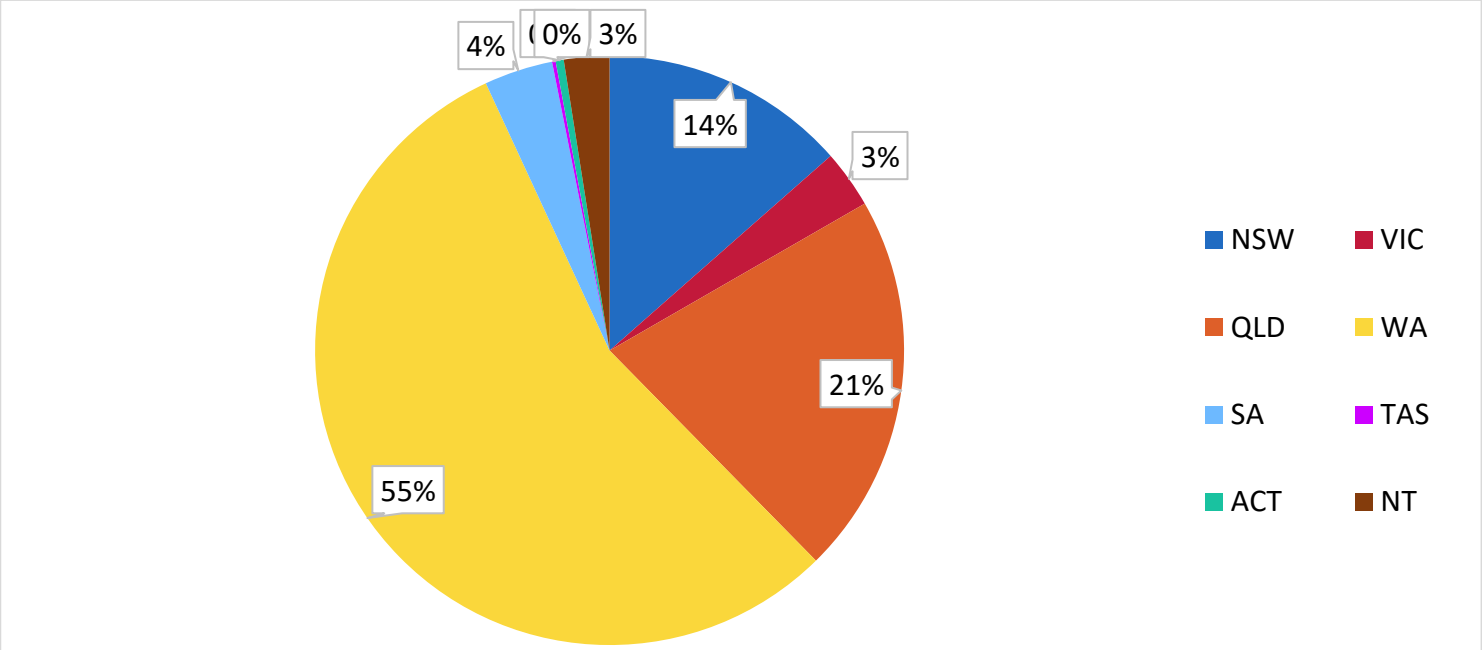
All States: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation



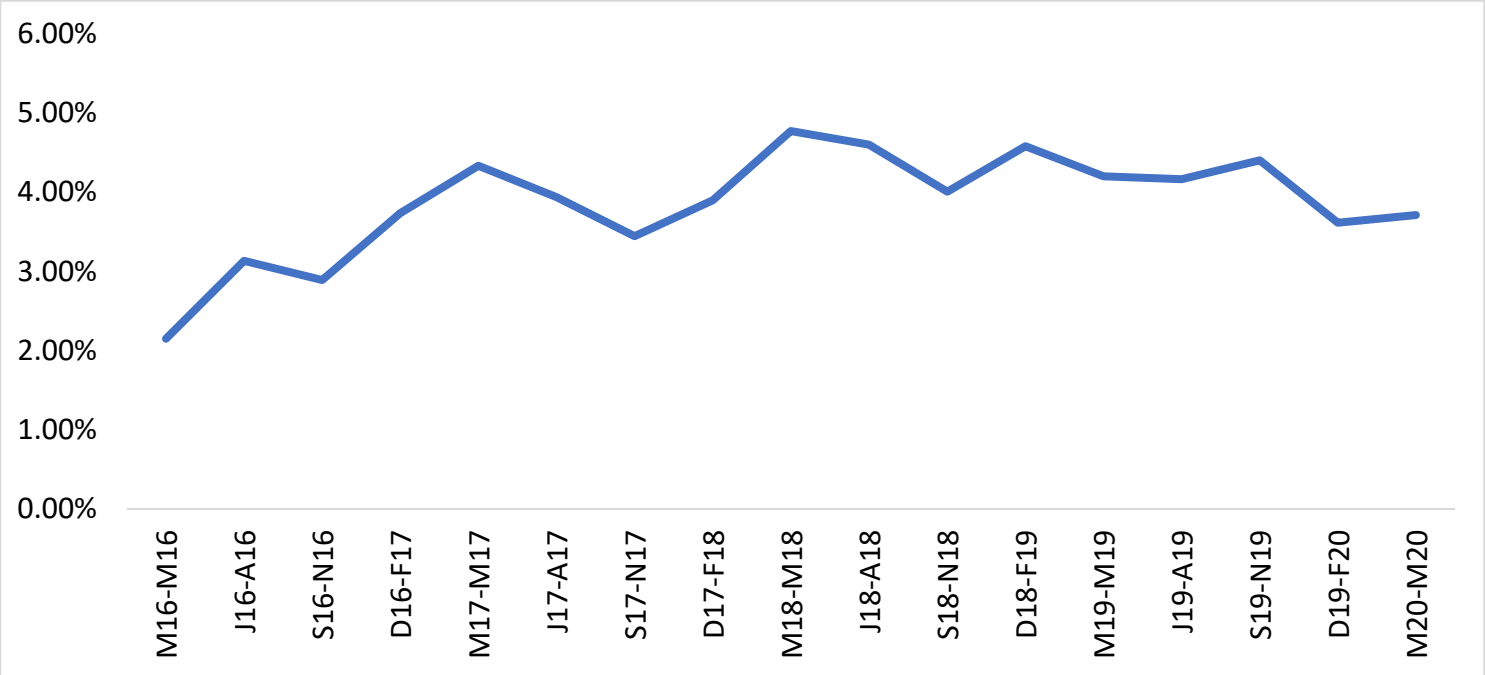
WP - Boom-type Elevating Work Platform (> 11 Metres)

References = 7653

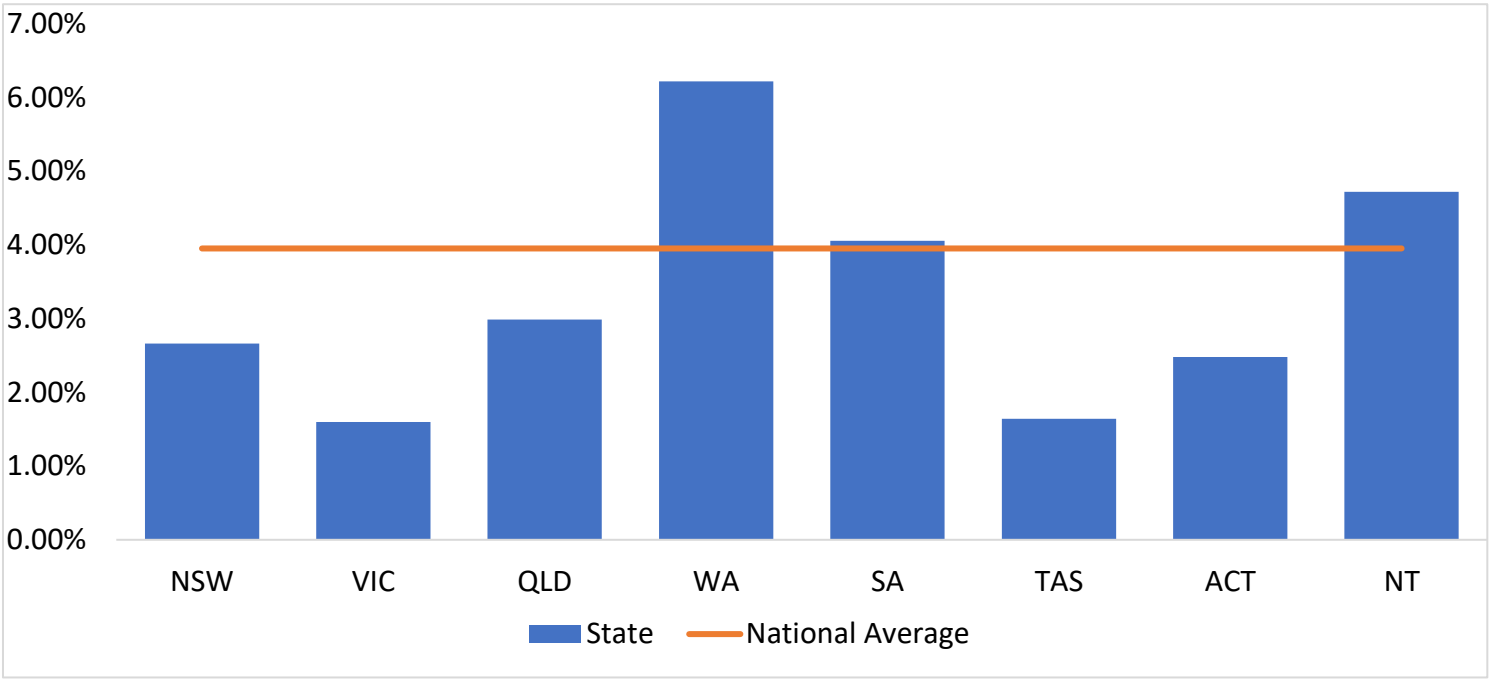
Breakdown Of All References To WP - Boom-type Elevating Work Platform Greater Than 11 Metres (March 2016 - May 2020)



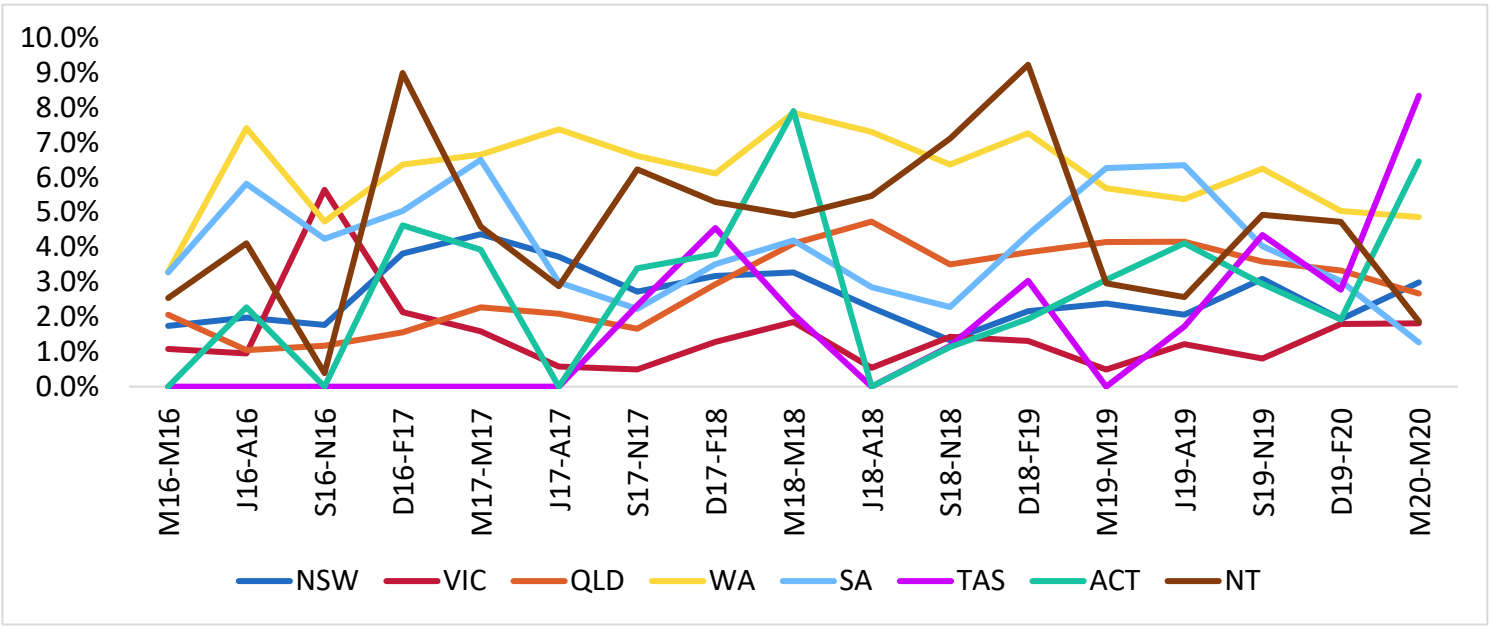
National: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform Greater Than 11 Metres (March 2016 - May 2020)



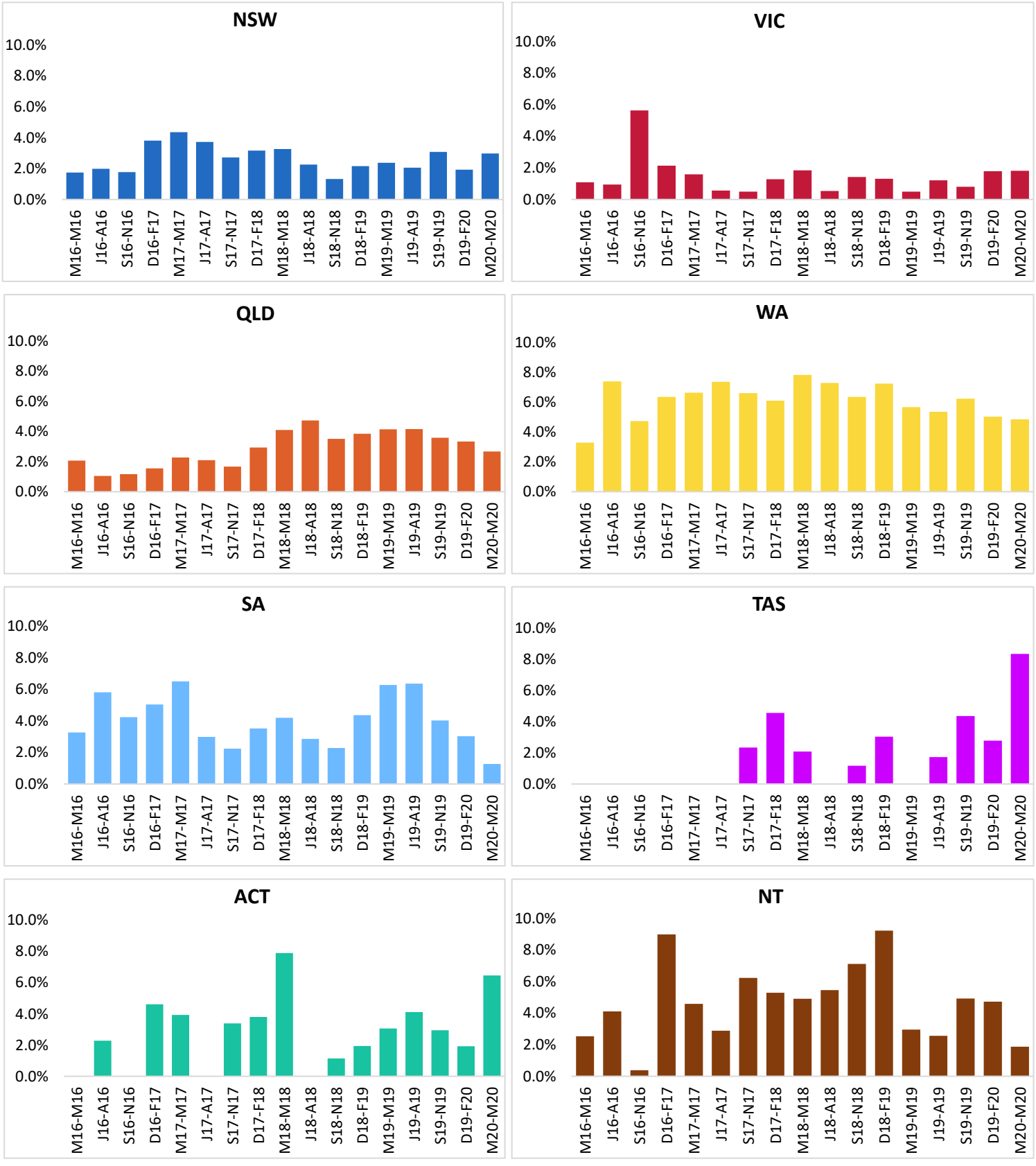
All States: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform Greater Than 11 Metres (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform Greater Than 11 Metres



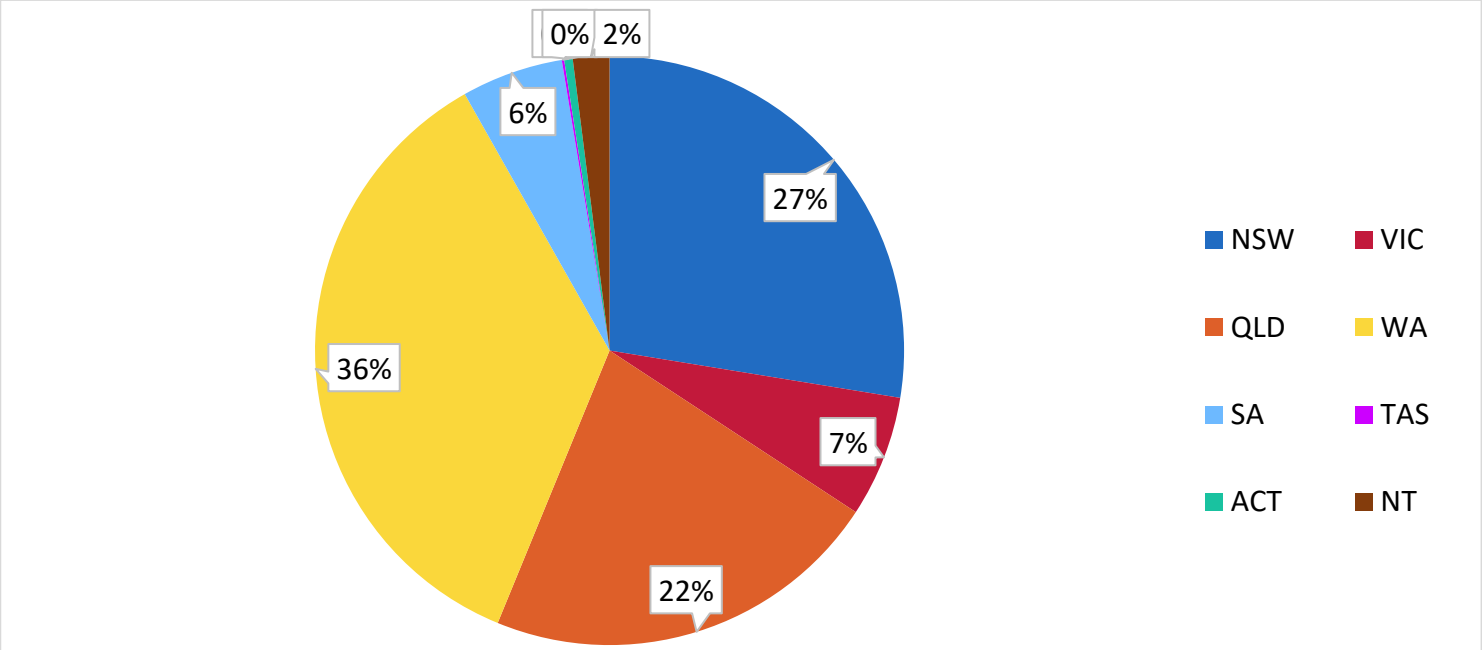
All States: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform Greater Than 11 Metres



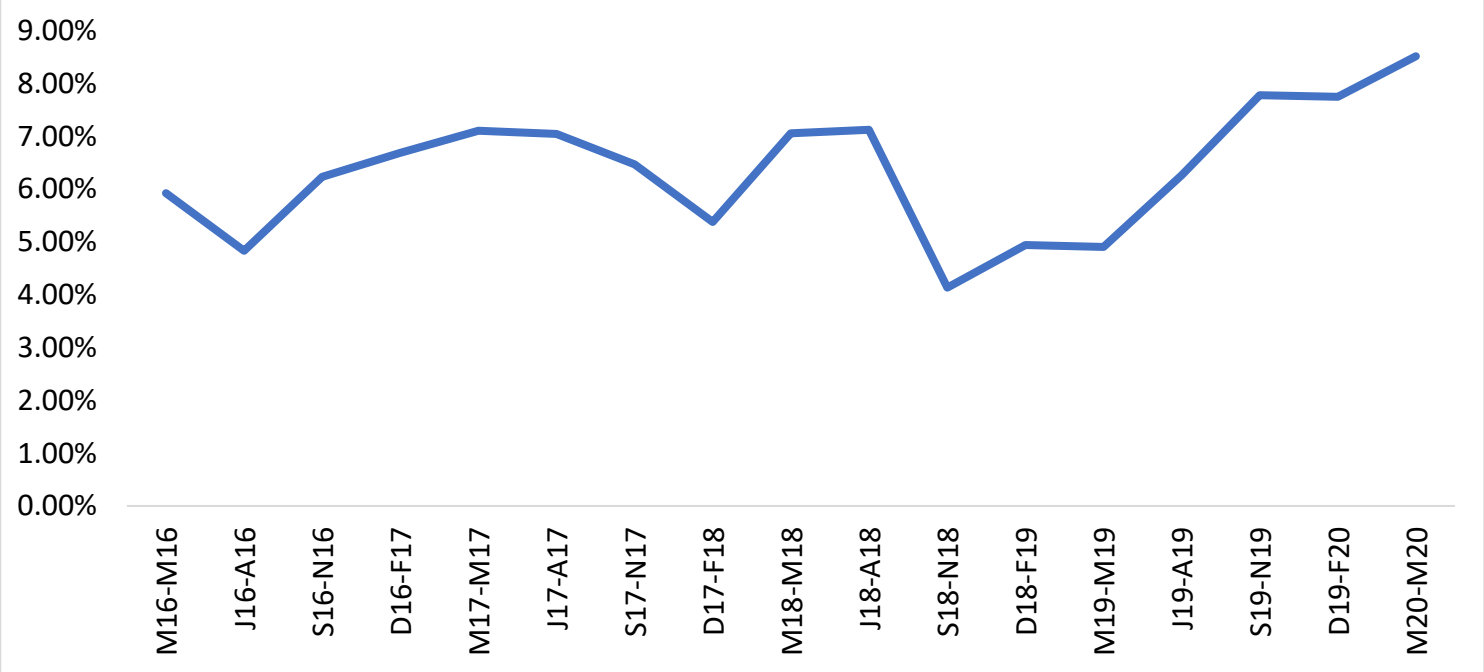
Construction Induction Card

References = 12261

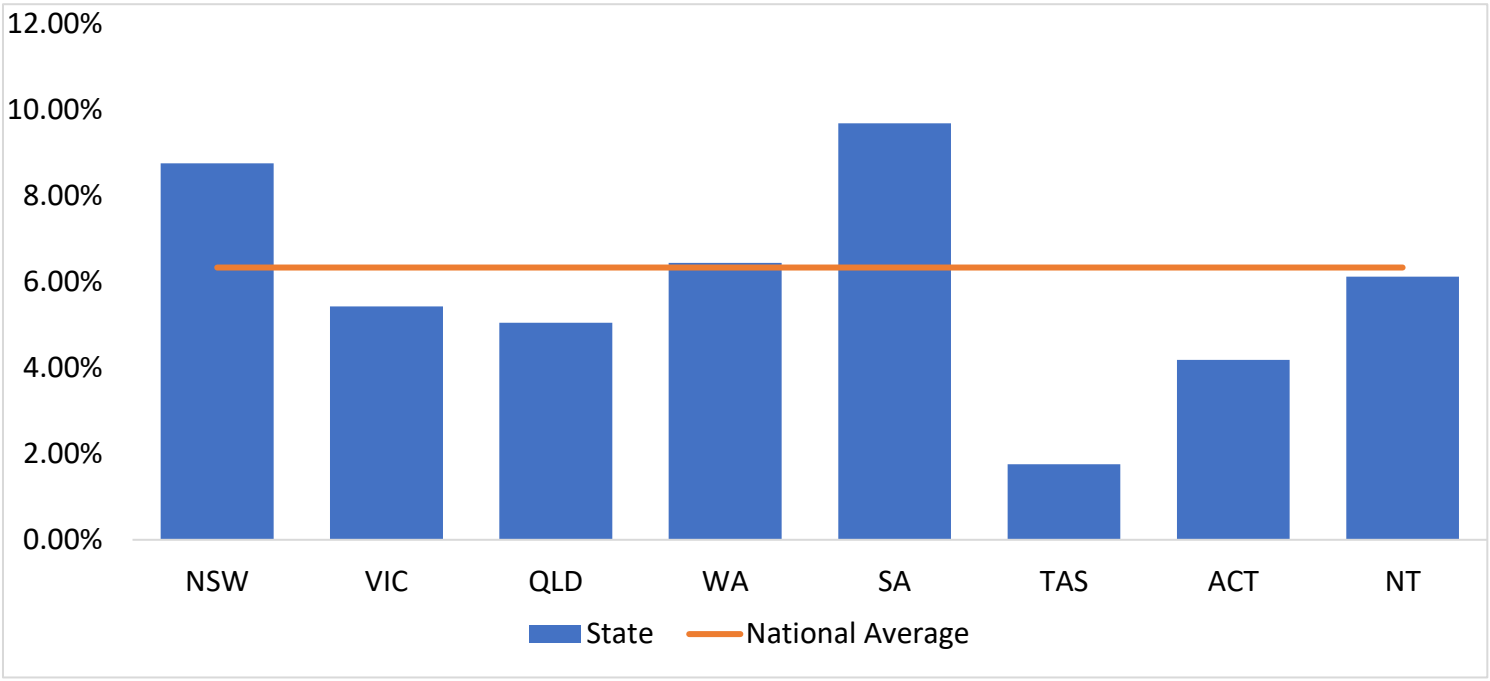
Breakdown Of All References To Construction Induction Card (March 2016 - May 2020)



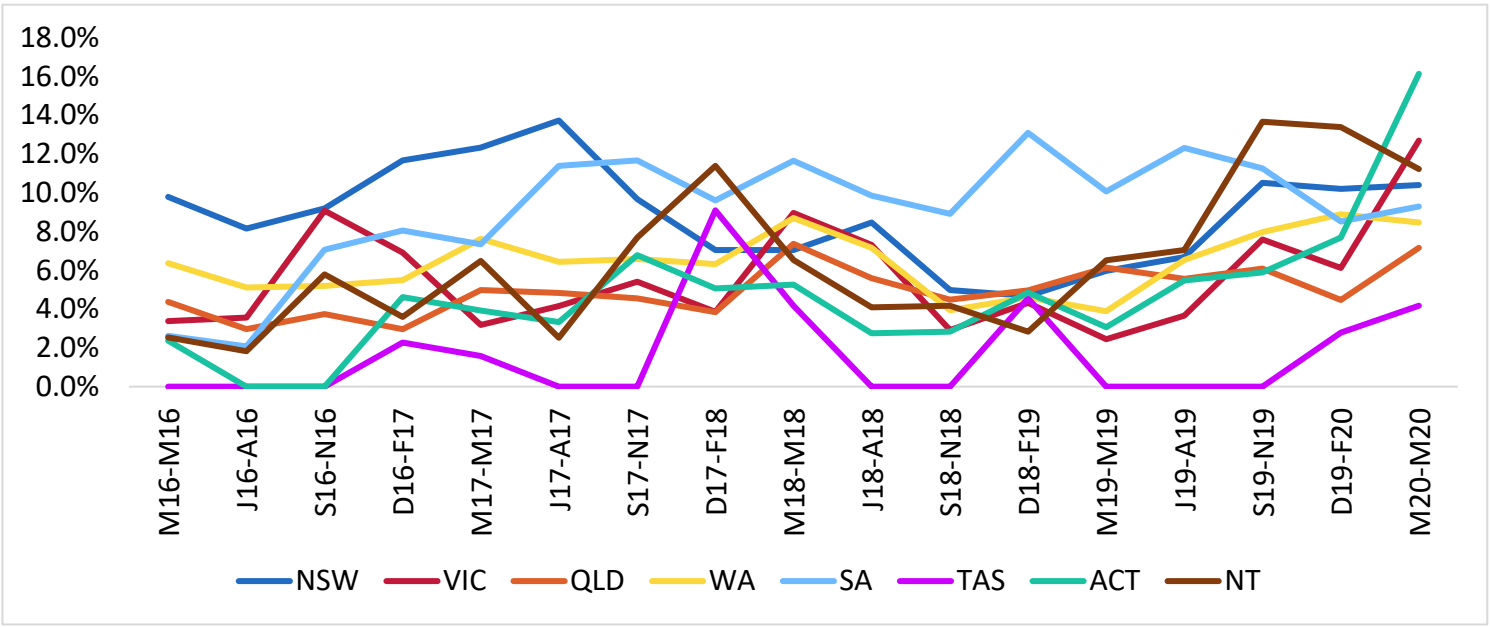
National: Percentage Of Mining Jobs Referencing Construction Induction Card (March 2016 - May 2020)



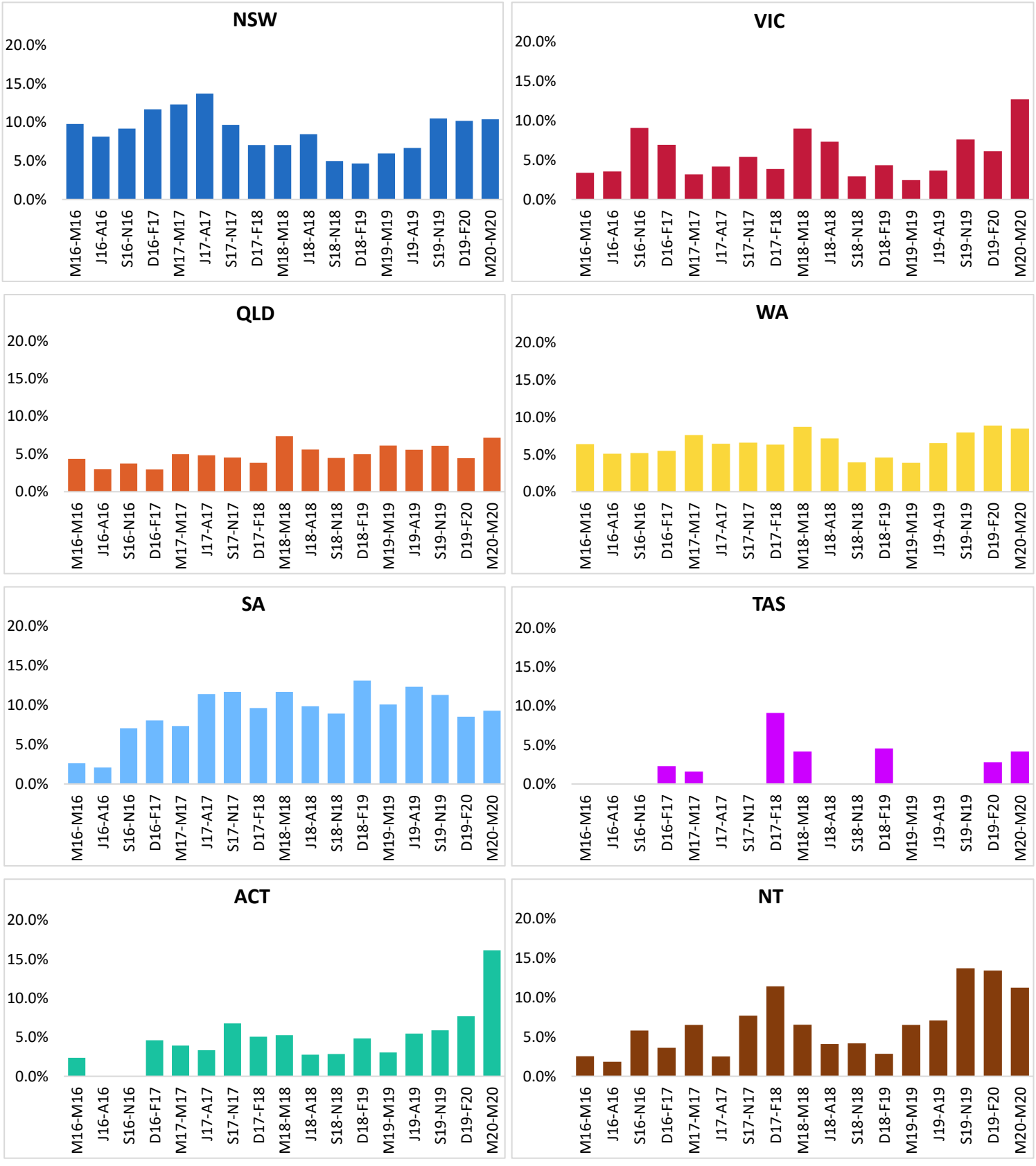
All States: Percentage Of Mining Jobs Referencing Construction Induction Card (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing Construction Induction Card



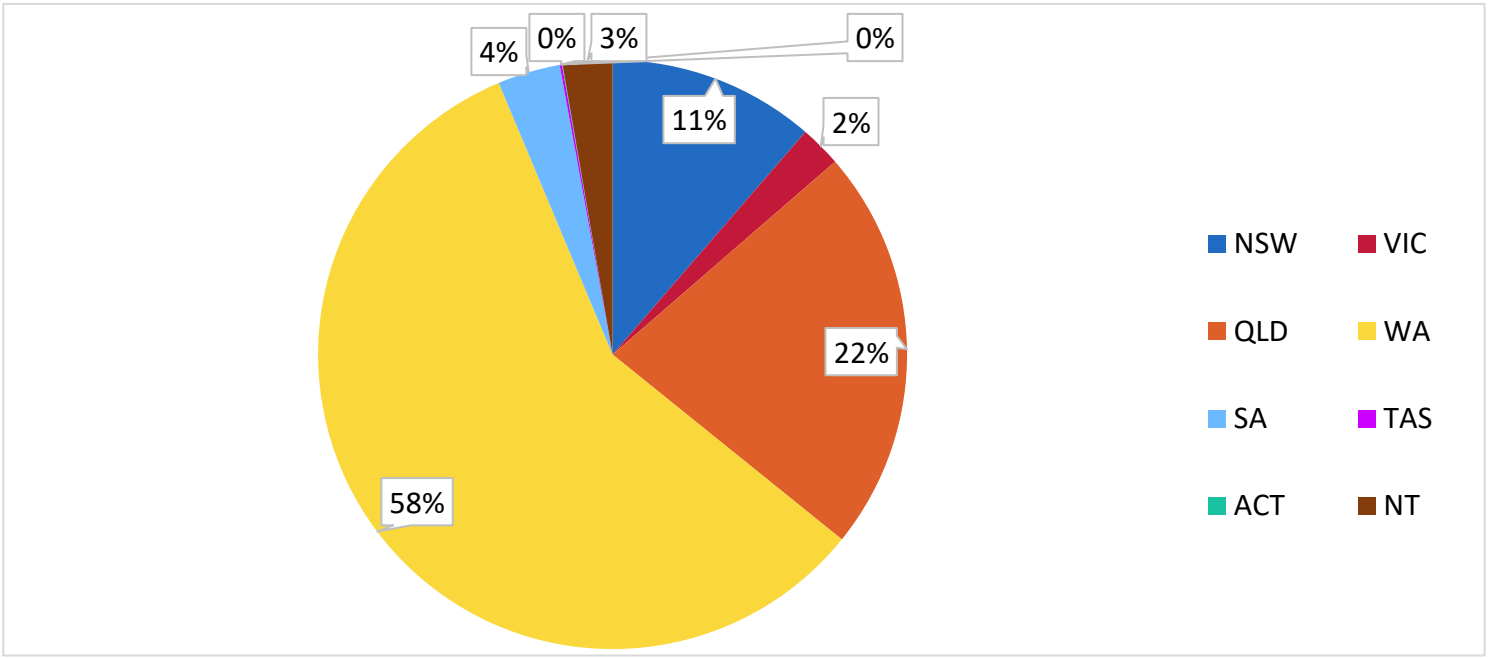
All States: Percentage Of Mining Jobs Referencing Construction Induction Card



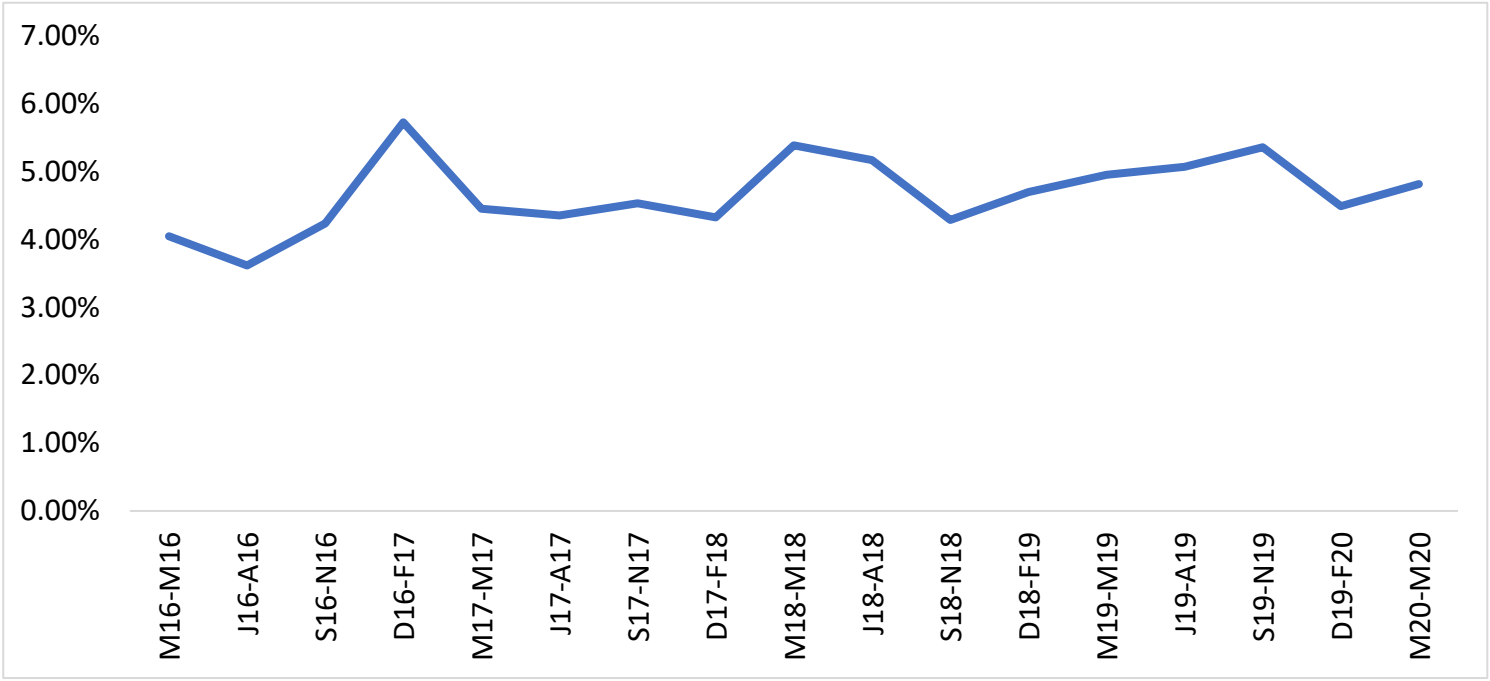
Enter and Work in a Confined Space

References = 9143

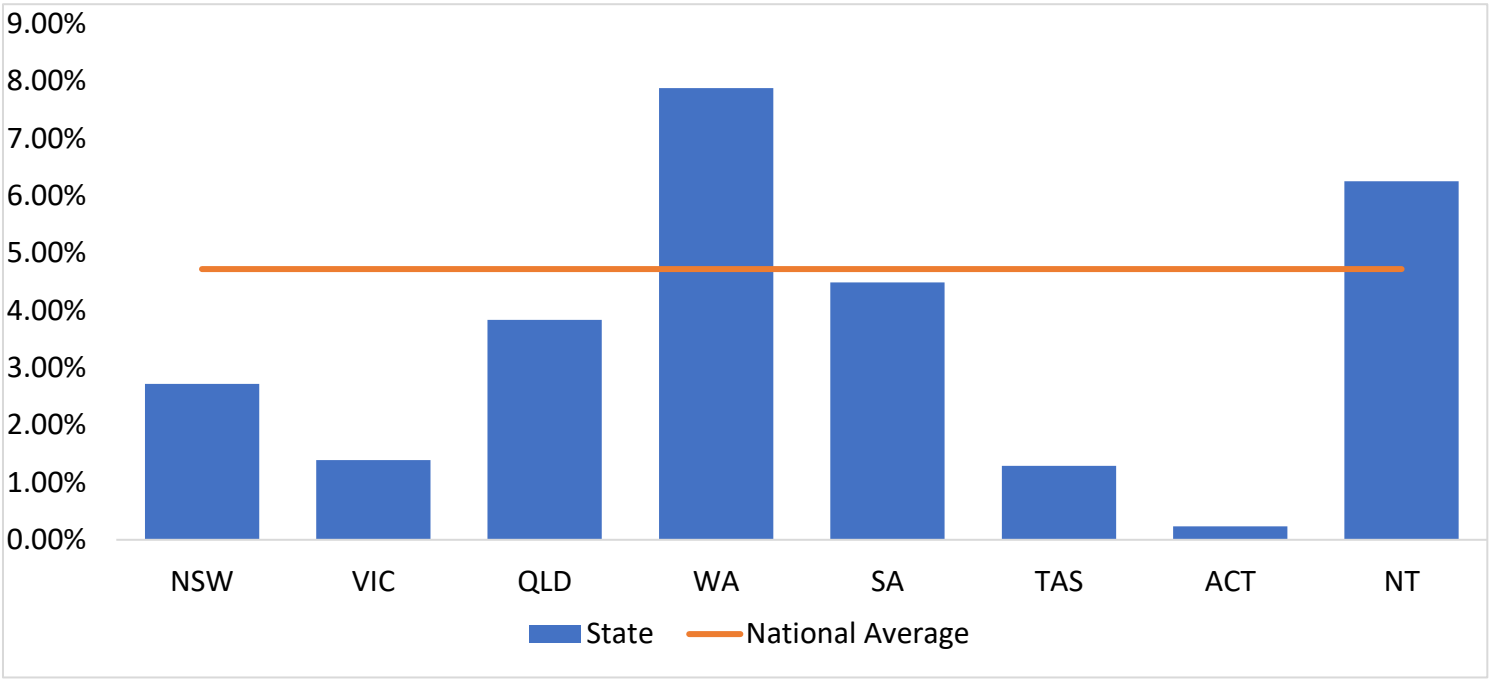
Breakdown Of All References To Enter and Work in a Confined Space (March 2016 - May 2020)



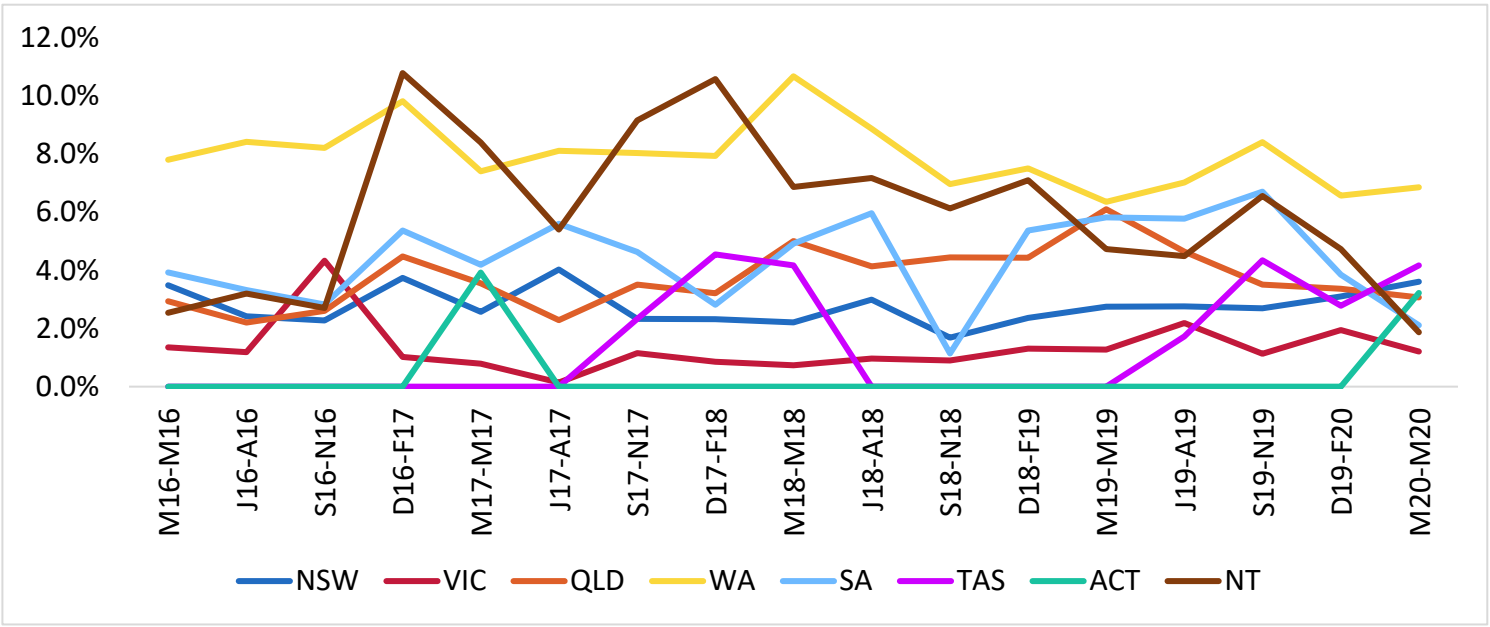
National: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space (March 2016 - May 2020)



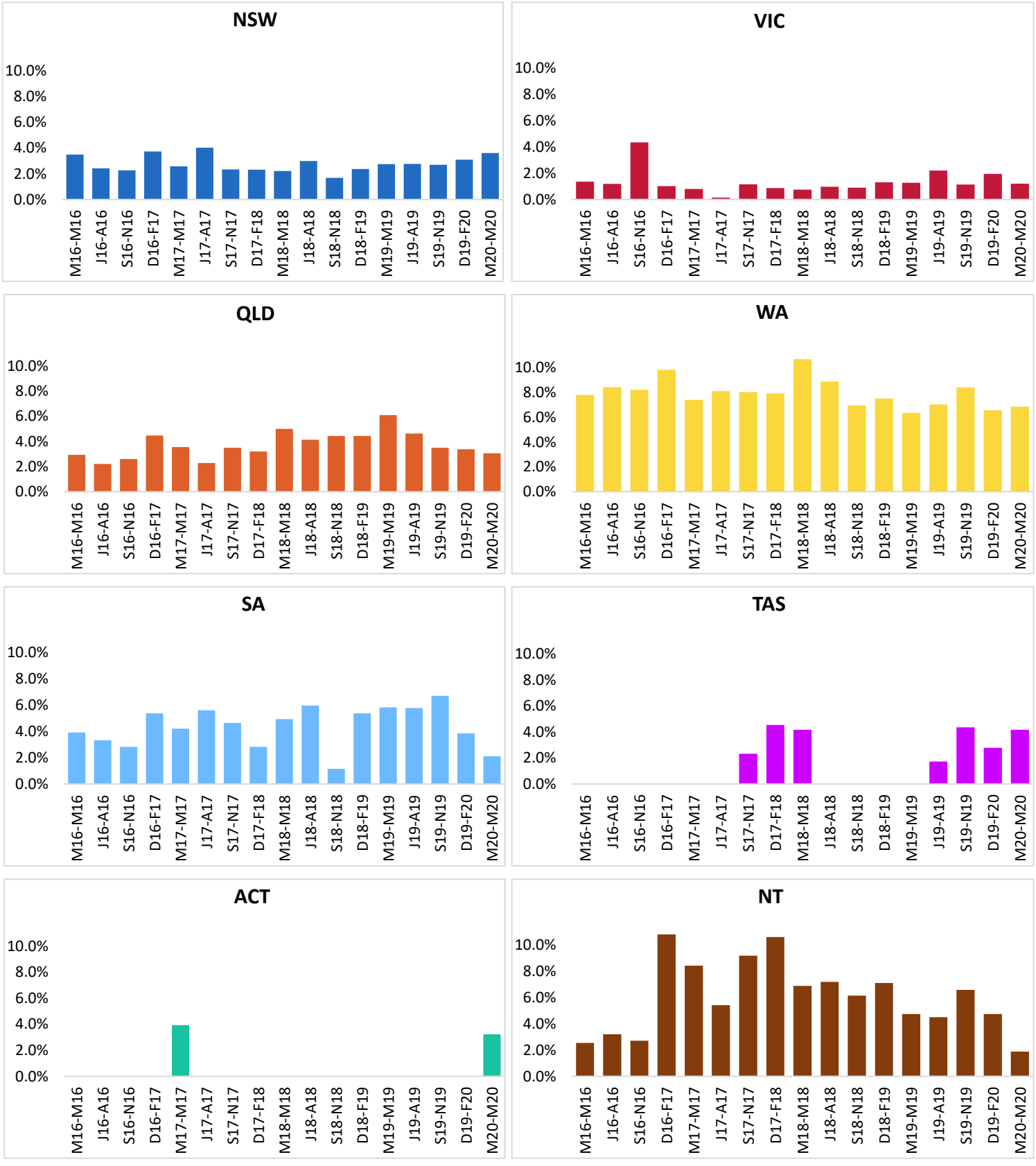
All States: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space



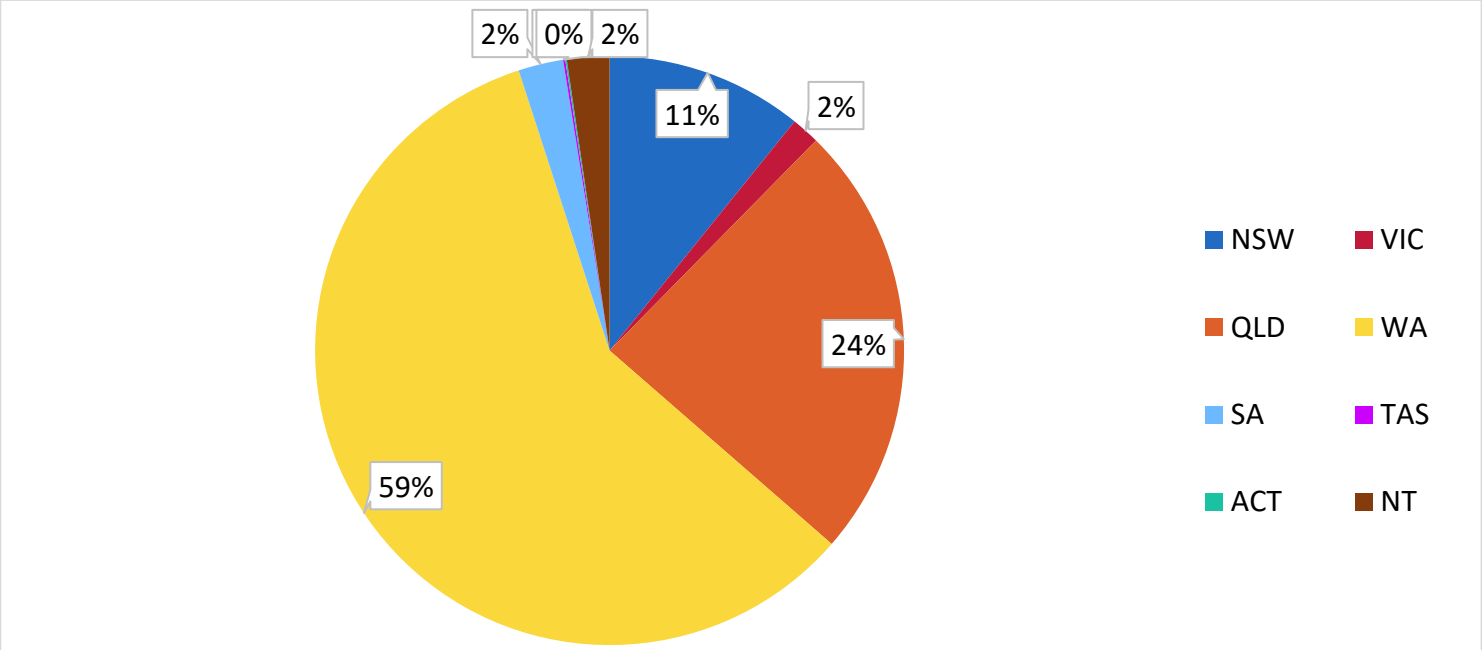
All States: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space



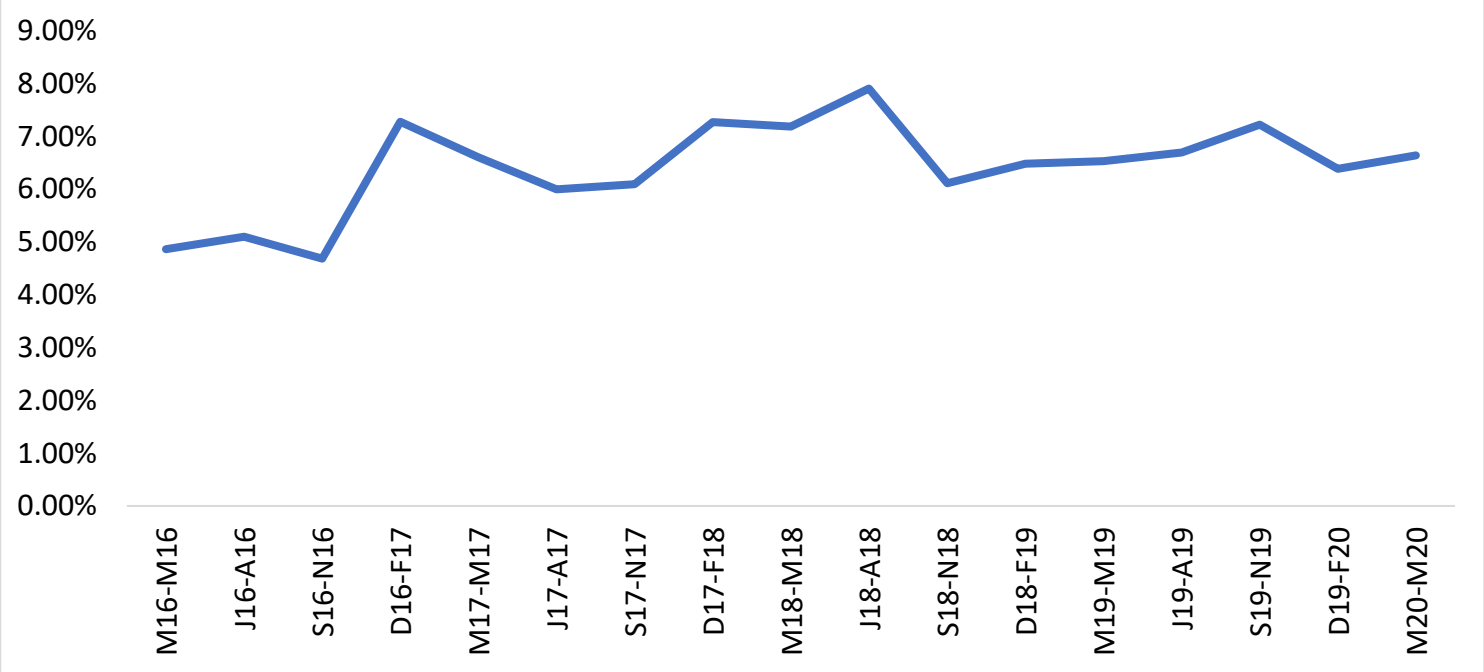
Work Safely at Heights

References = 12594

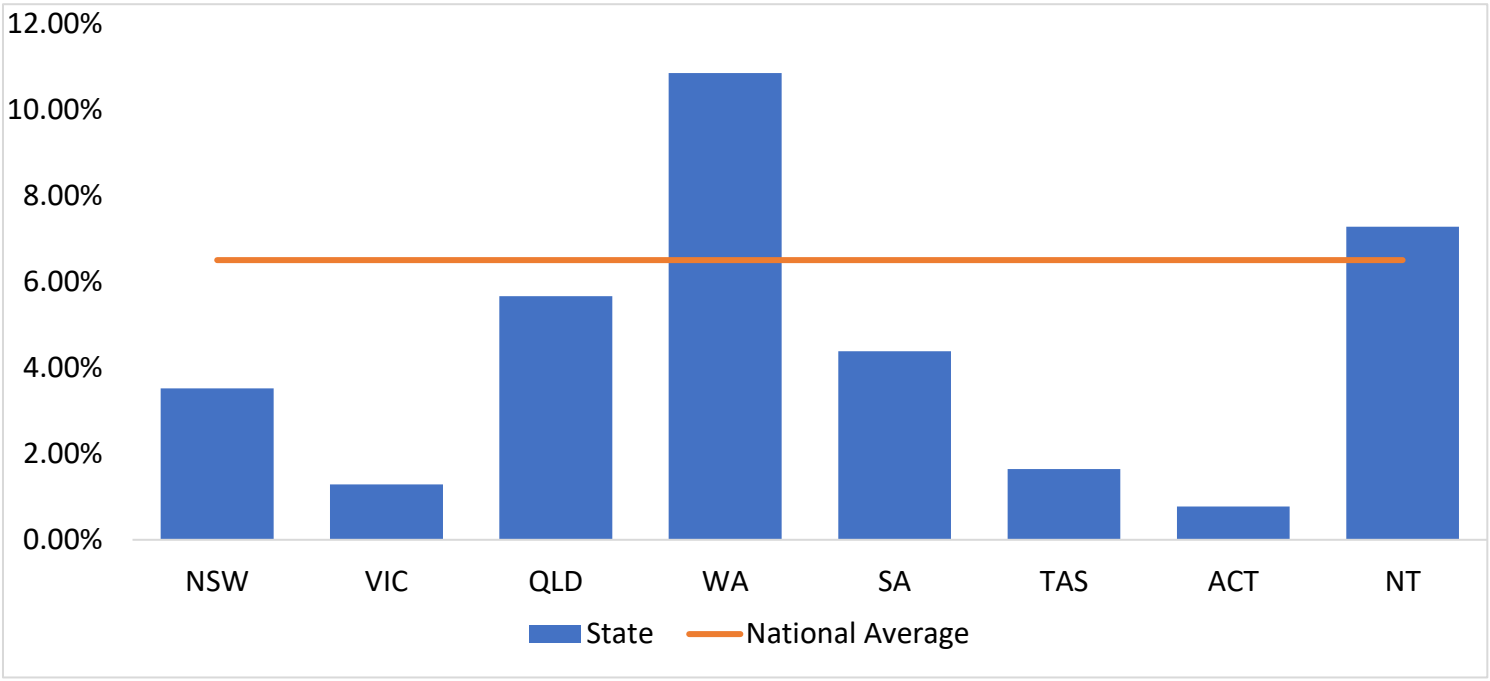
Breakdown Of All References To Work Safely at Heights (March 2016 - May 2020)



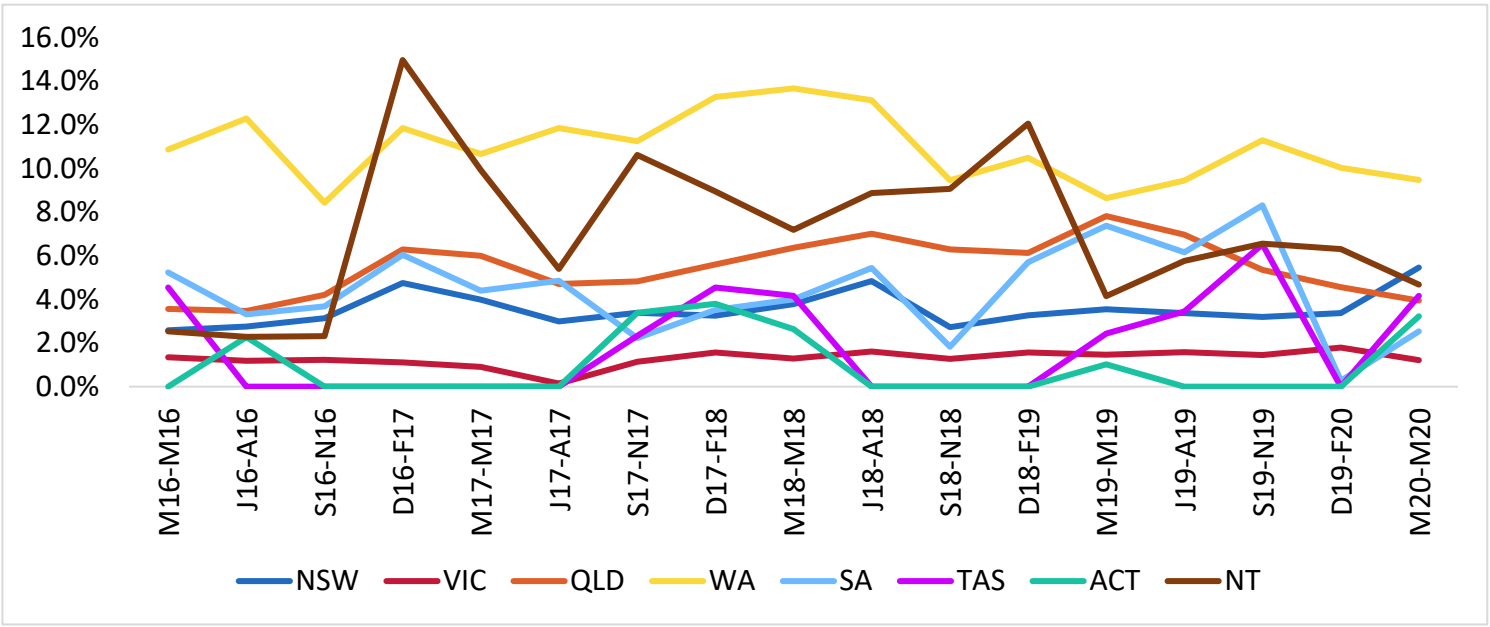
National: Percentage Of Mining Jobs Referencing Work Safely at Heights (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing Work Safely at Heights (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing Work Safely at Heights

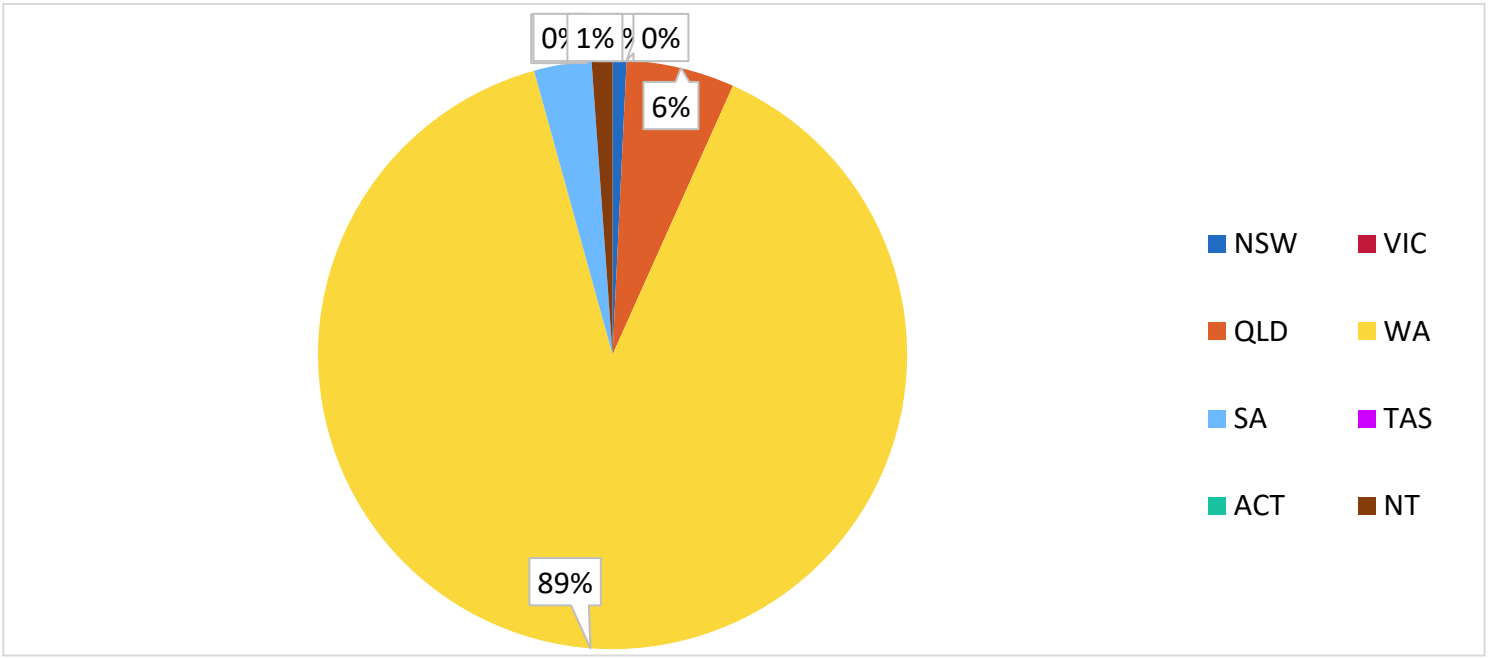


All States: Percentage Of Mining Jobs Referencing Work Safely at Heights

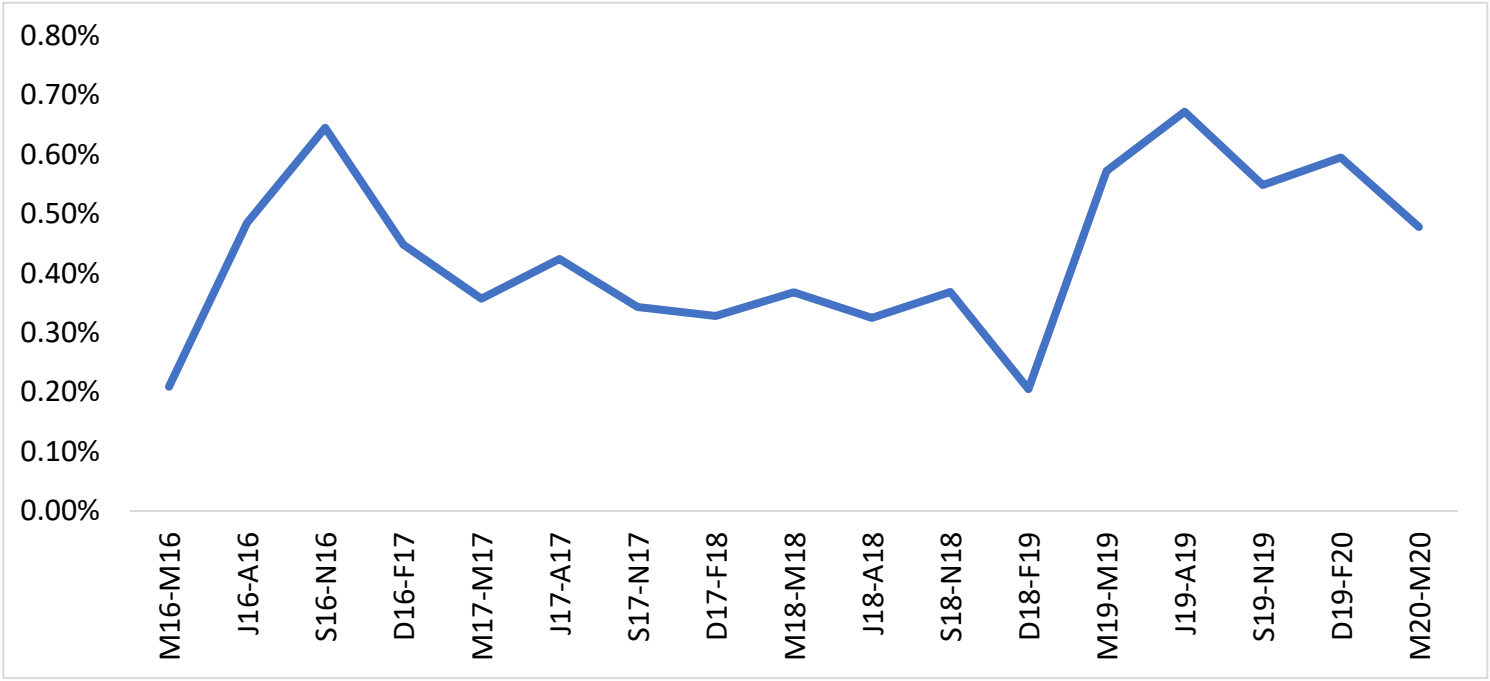
Gas Test Atmospheres

References = 838

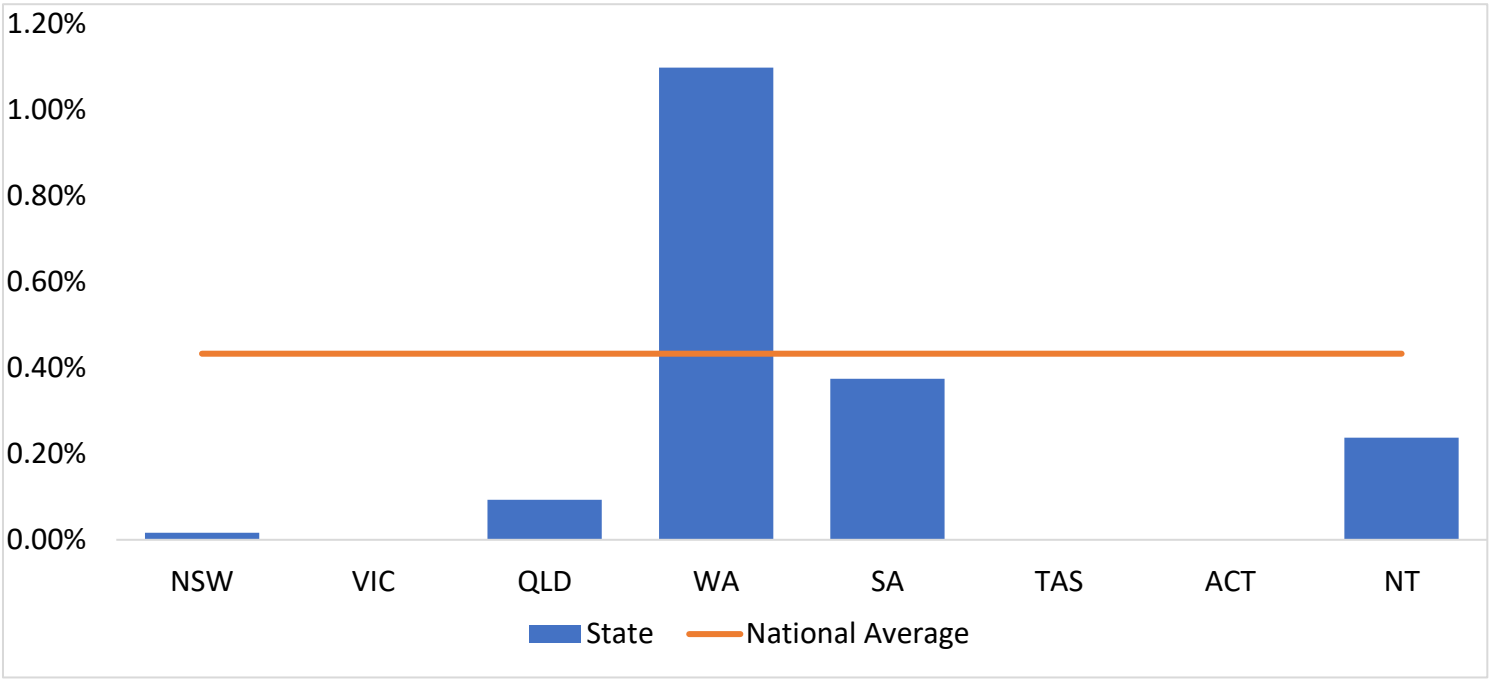
Breakdown Of All References To Gas Test Atmospheres (March 2016 - May 2020)



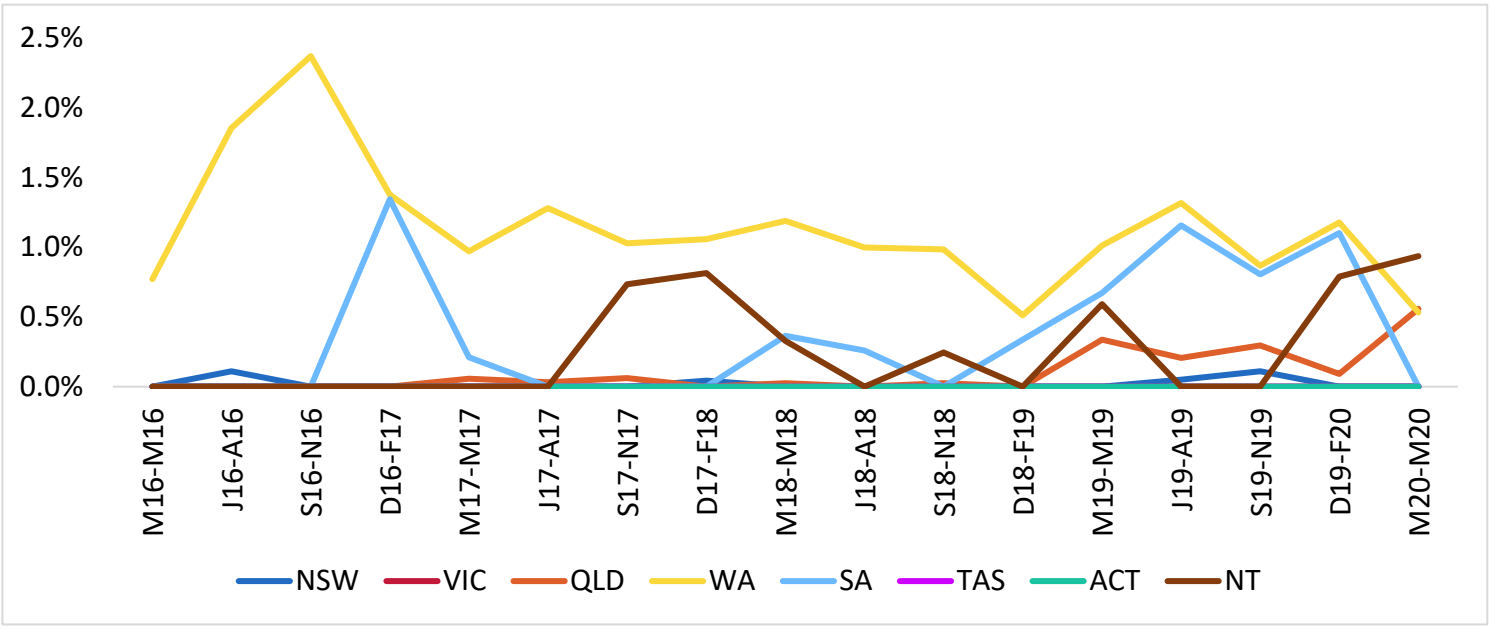
National: Percentage Of Mining Jobs Referencing Gas Test Atmospheres (March 2016 - May 2020)



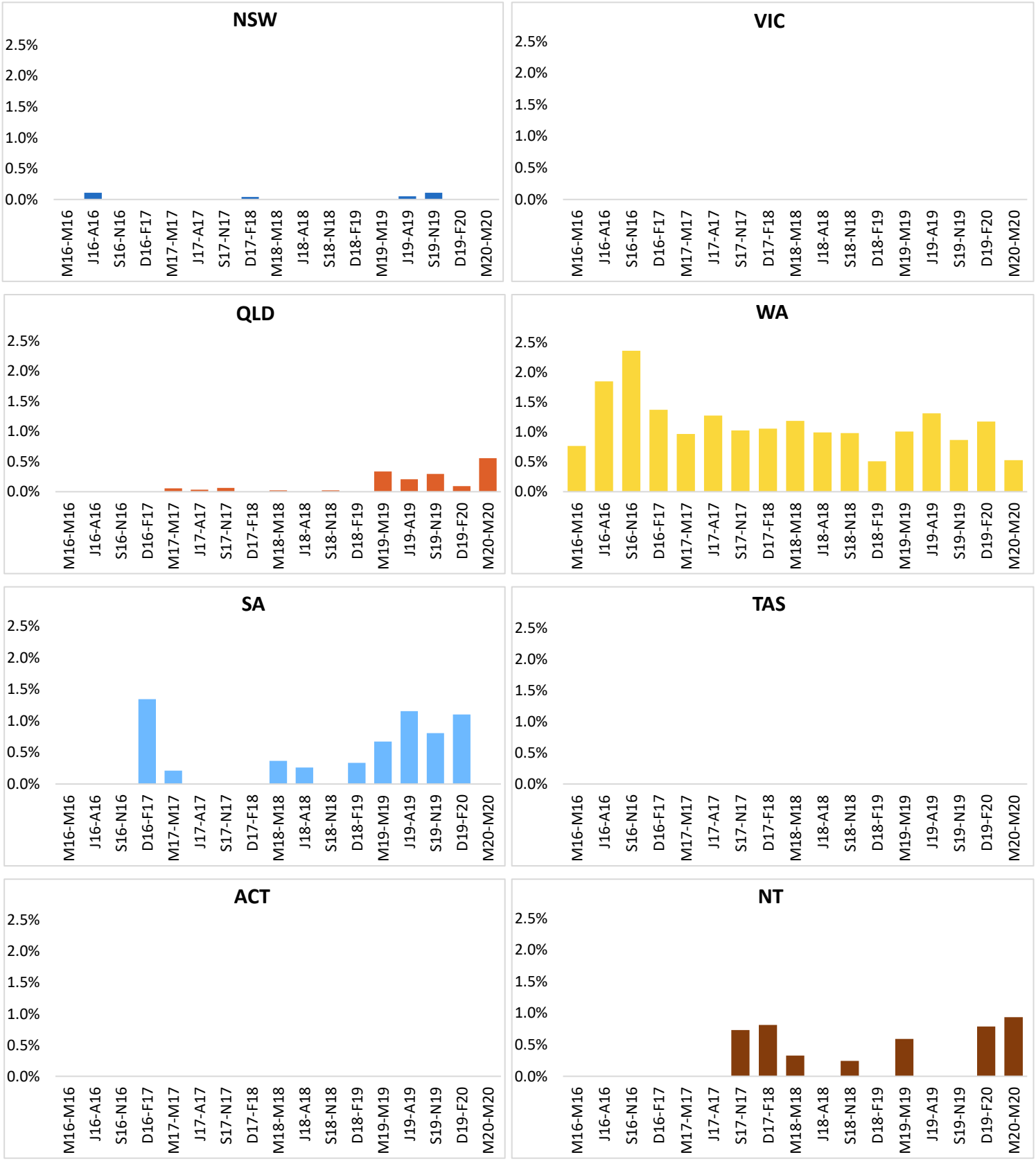
All States: Percentage Of Mining Jobs Referencing Gas Test Atmospheres (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing Gas Test Atmospheres



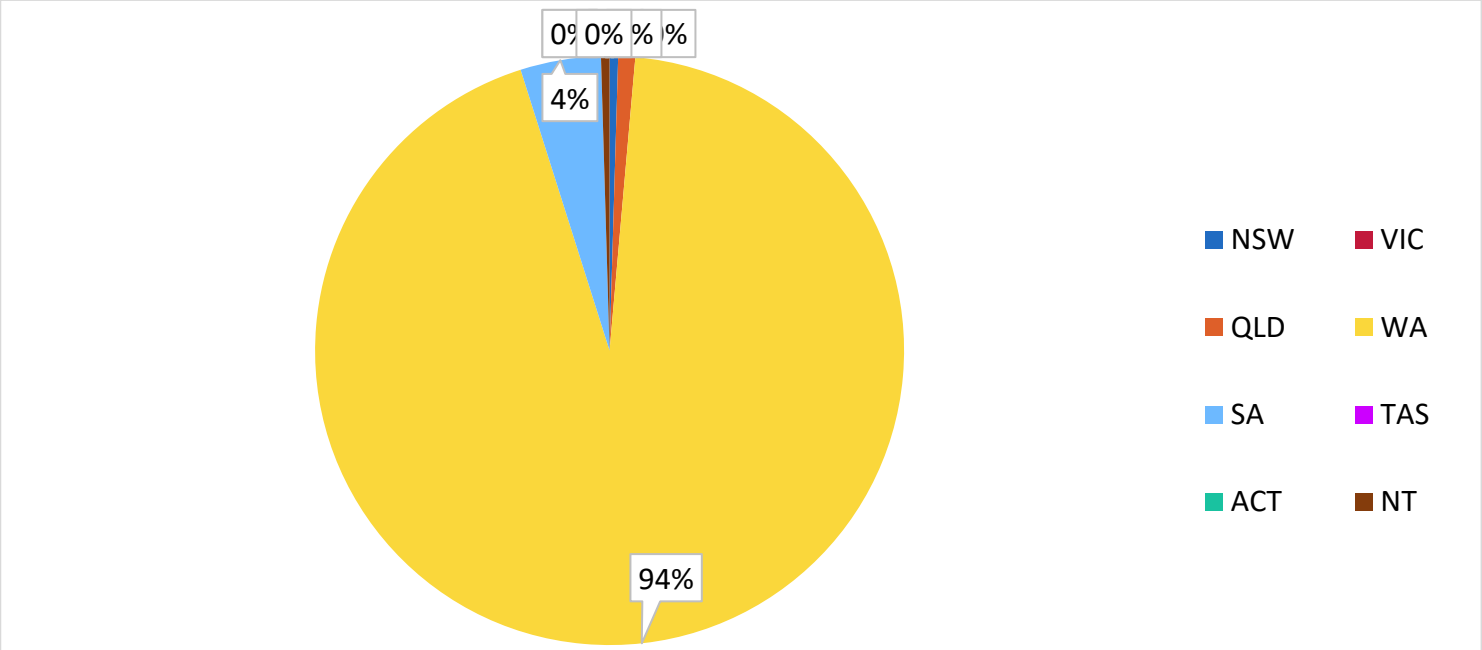
All States: Percentage Of Mining Jobs Referencing Gas Test Atmospheres



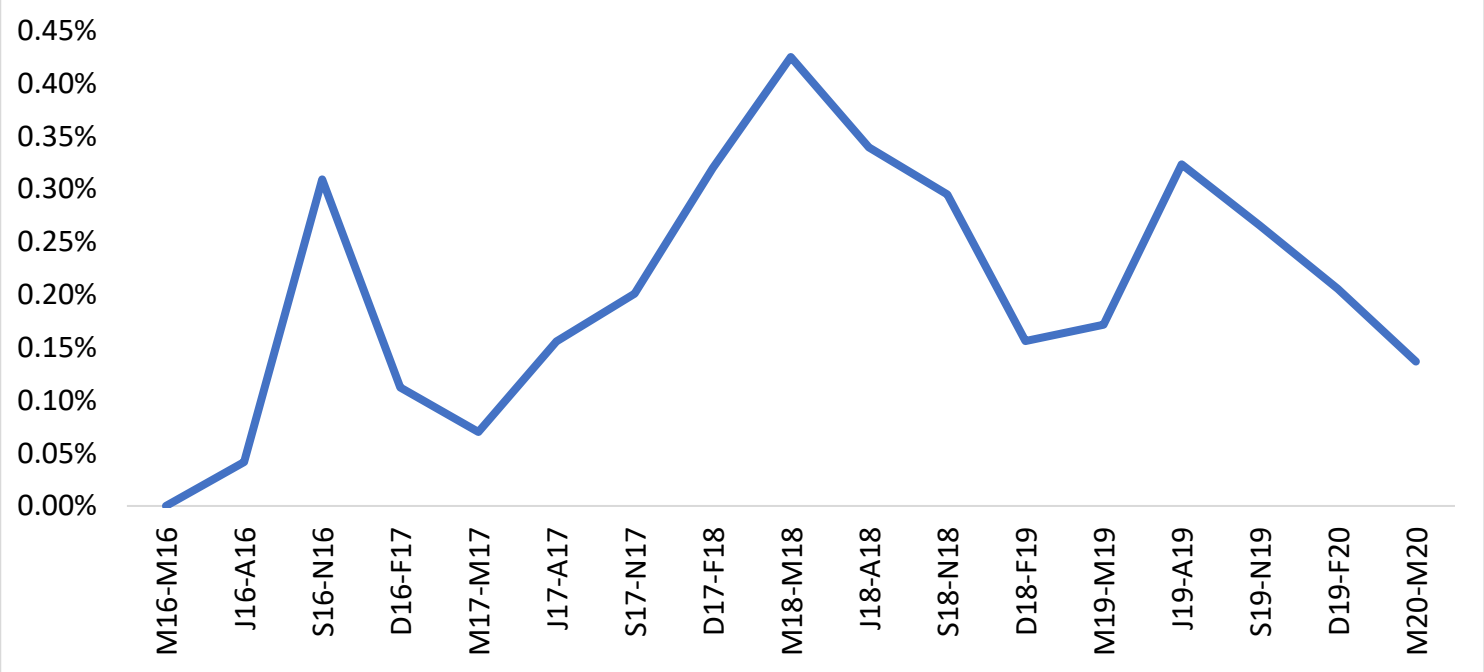
Demonstrate First Attack Firefighting Equipment

References = 437

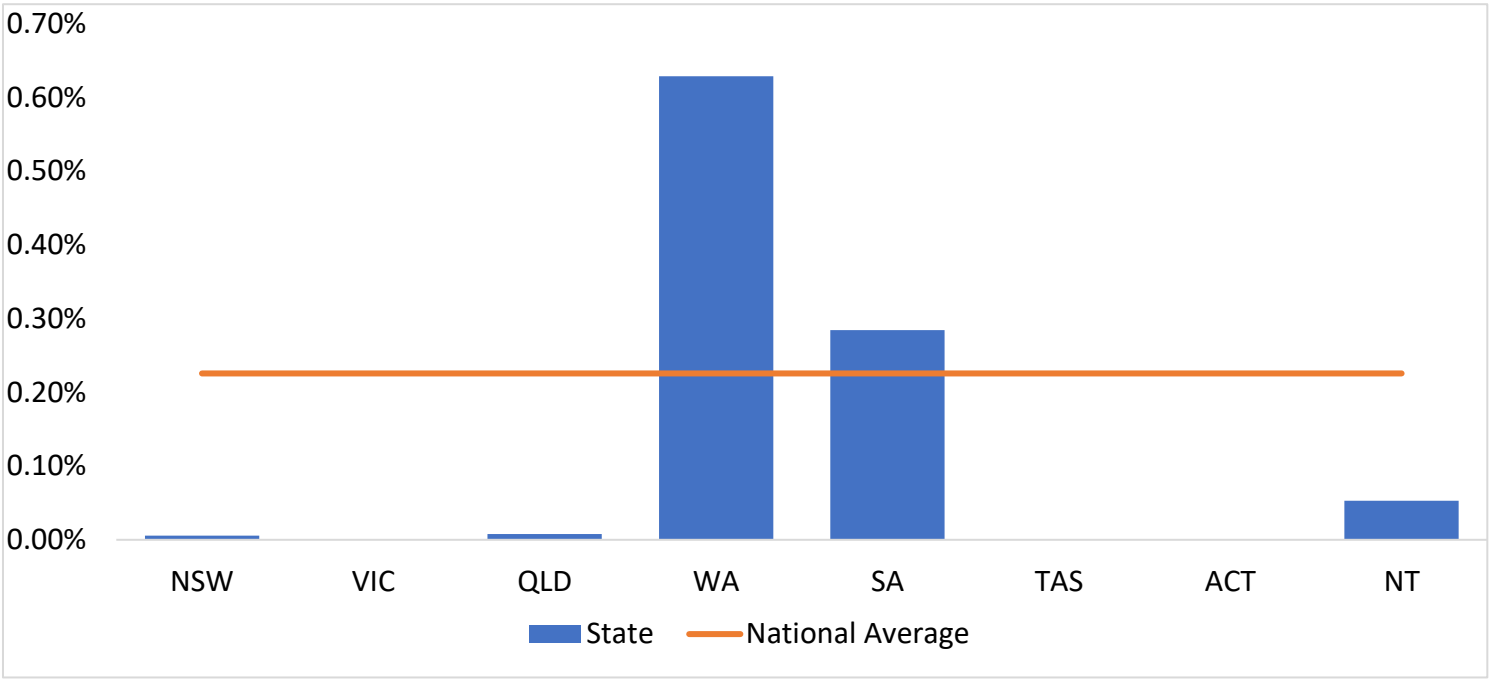
Breakdown Of All References To Demonstrate First Attack Firefighting Equipment (March 2016 - May 2020)



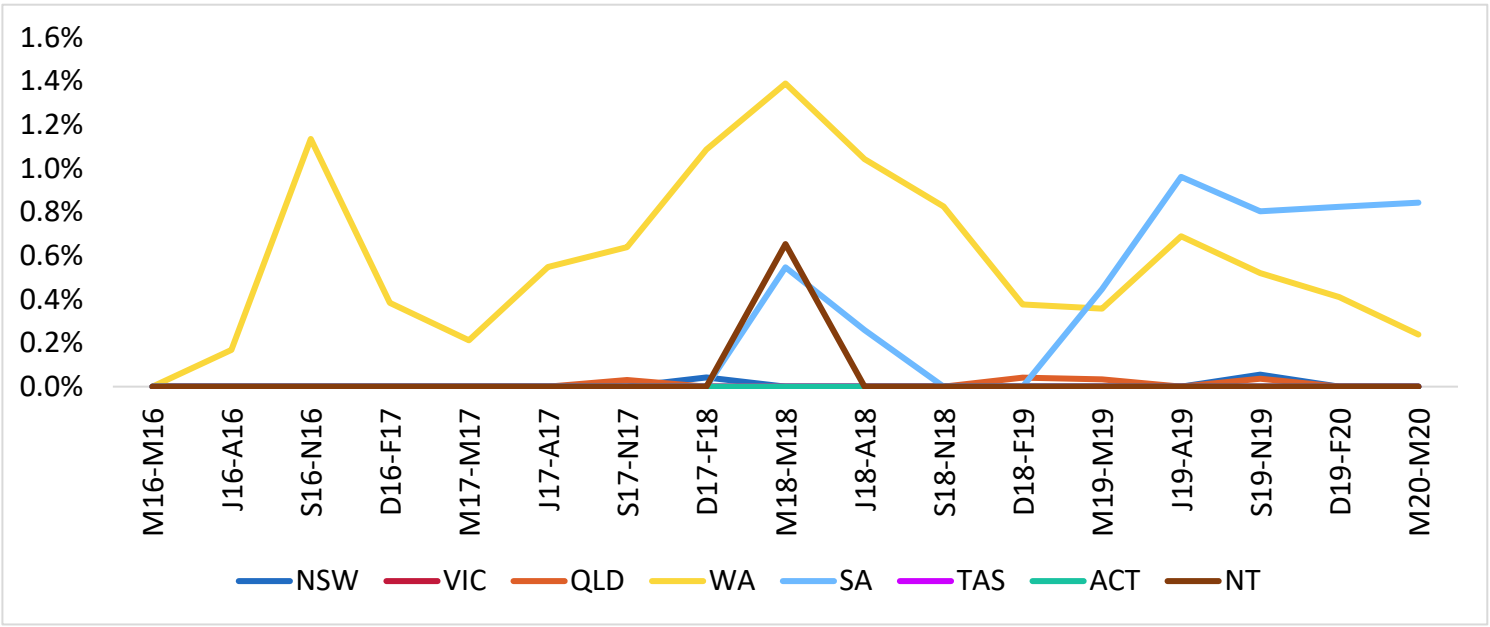
National: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment (March 2016 - May 2020)



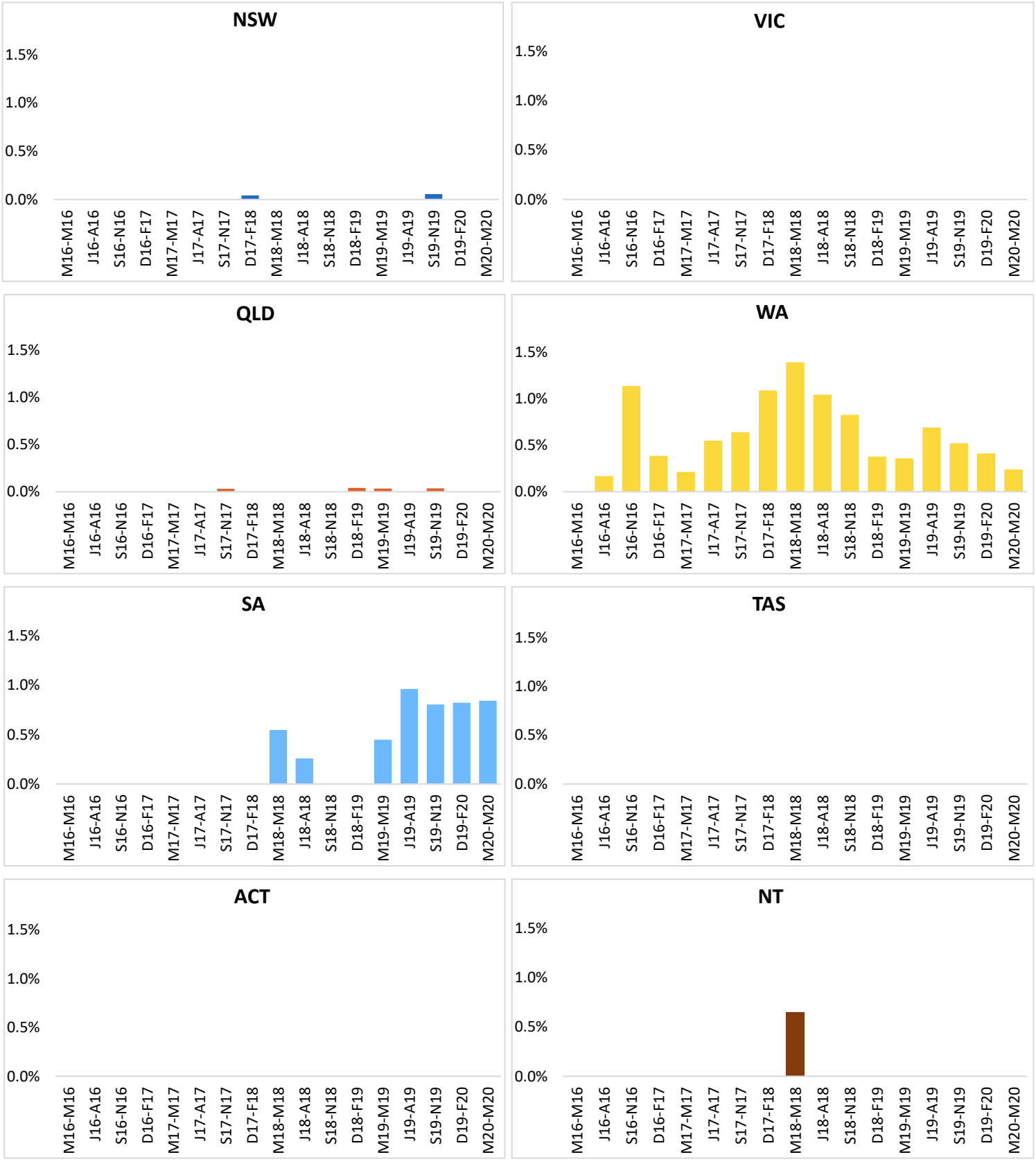
All States: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment



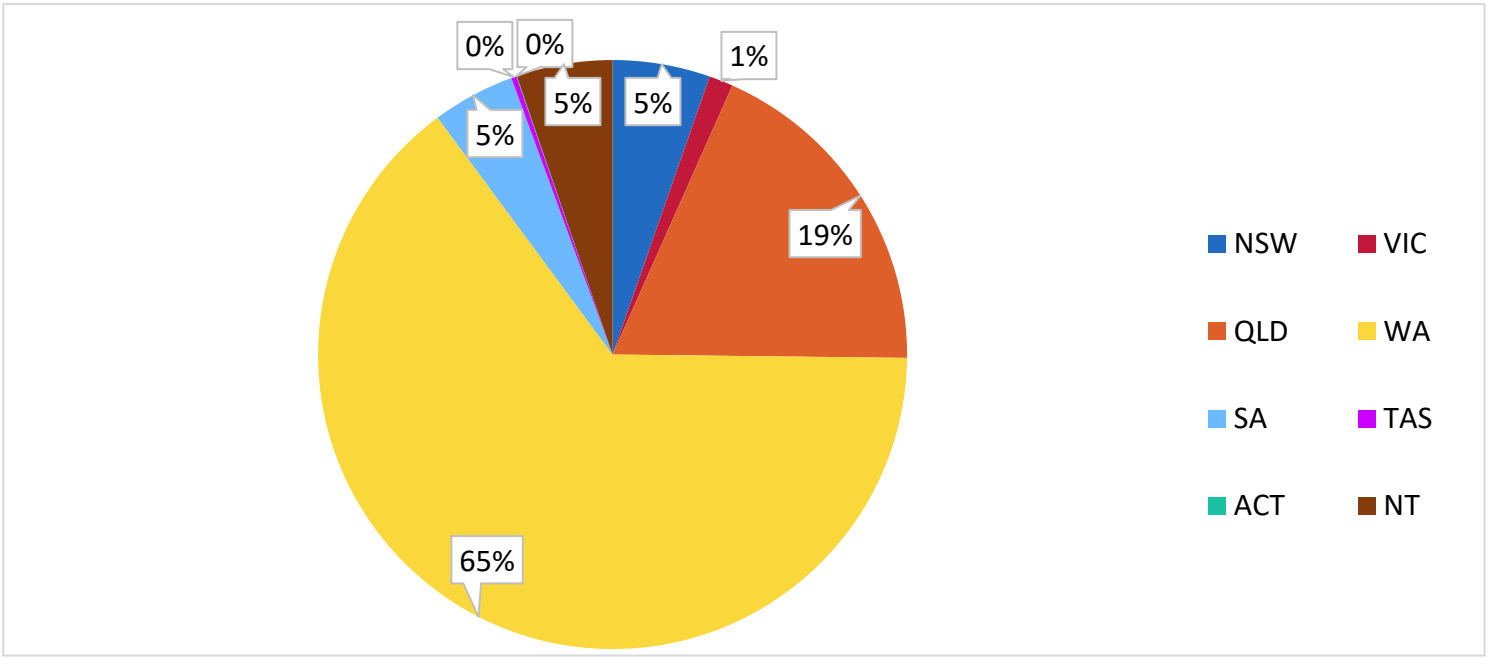
All States: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment



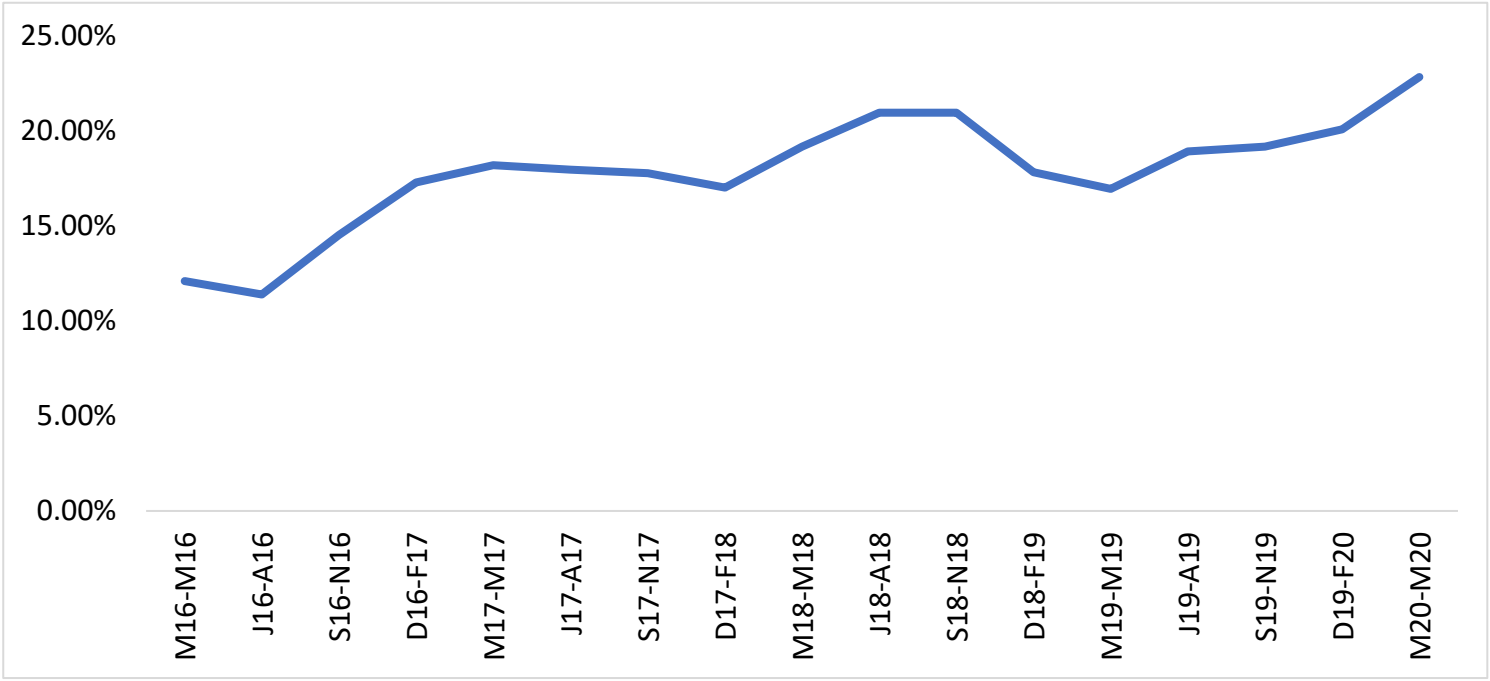
FIFO

References = 35155

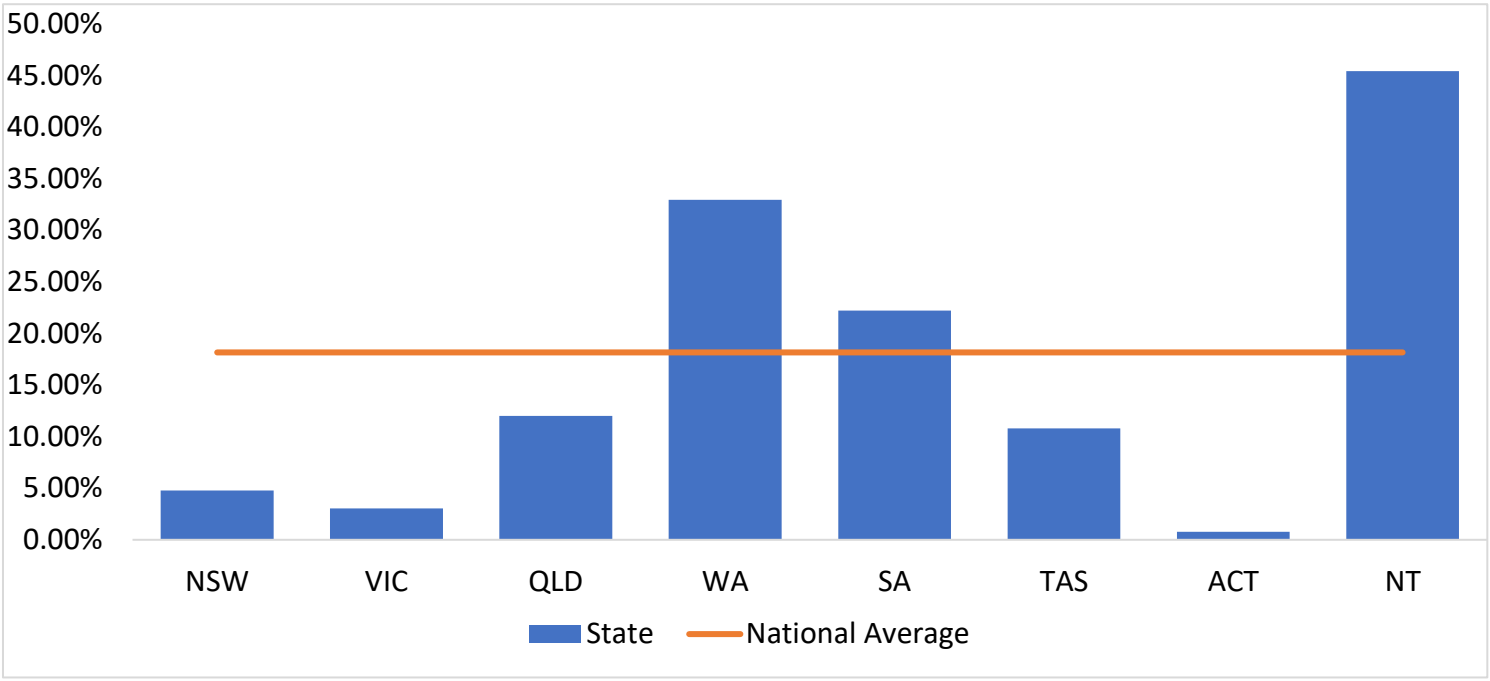
Breakdown Of All References To FIFO (March 2016 - May 2020)



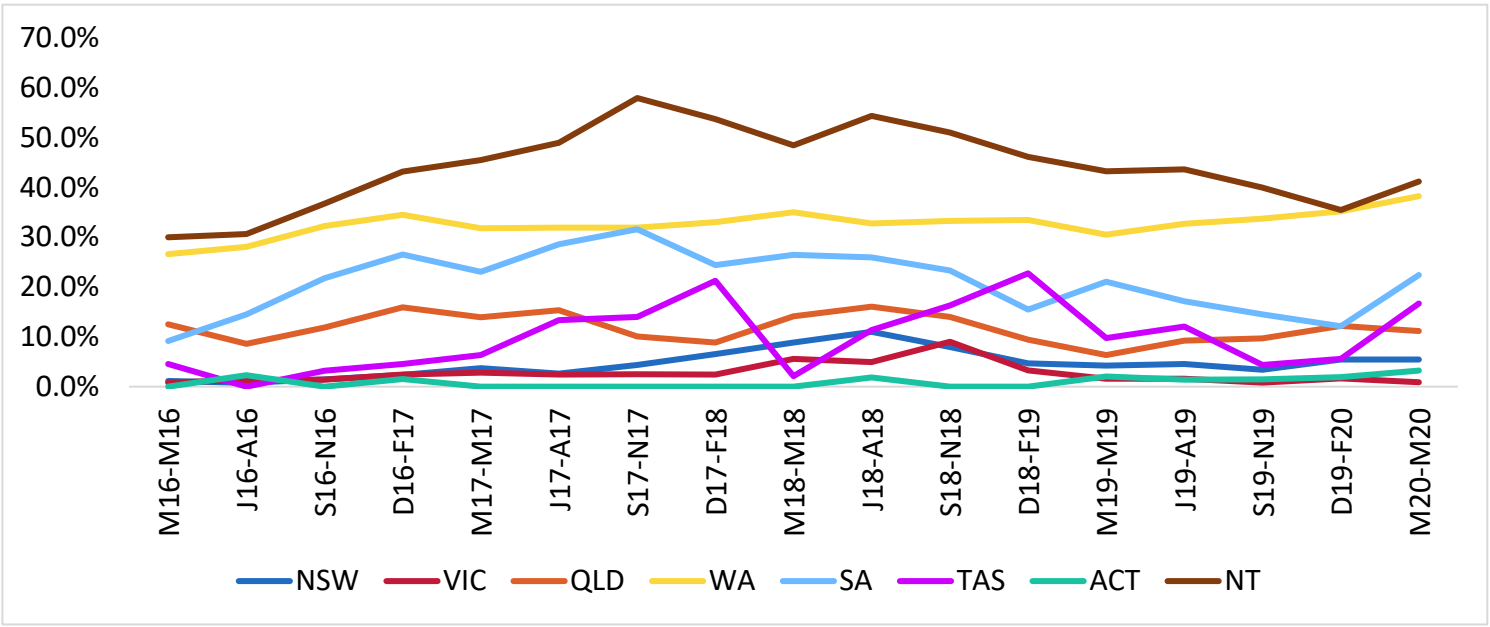
National: Percentage Of Mining Jobs Referencing FIFO (March 2016 - May 2020)



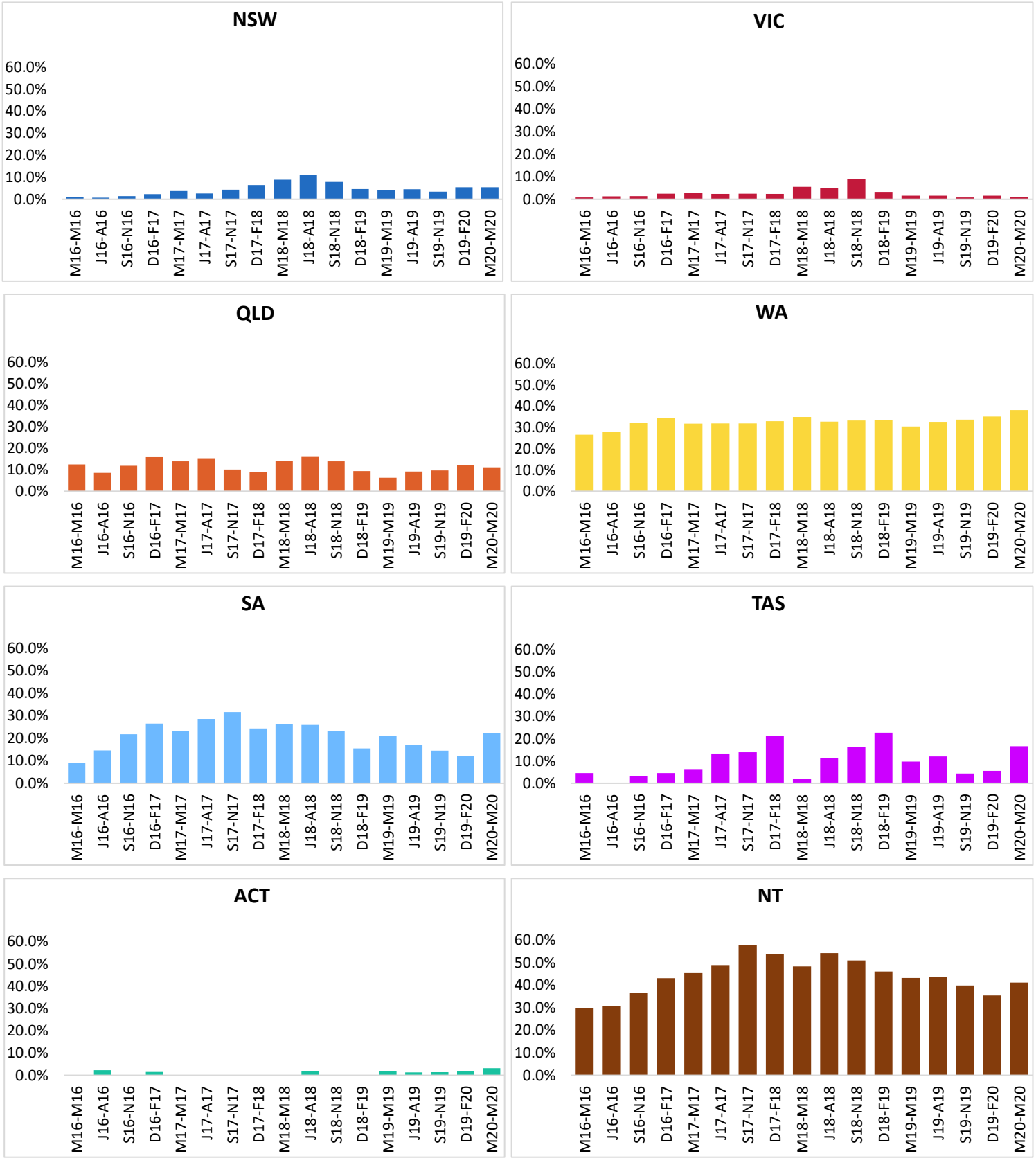
All States: Percentage Of Mining Jobs Referencing FIFO (March 2016 - May 2020)



All States: Percentage Of Mining Jobs Referencing FIFO



All States: Percentage Of Mining Jobs Referencing FIFO



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Minerals Council of Australia and CoverCard Mining Job Advertisement Analysis Pilot

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CC: Sid Marris, Principal Adviser Future Workforce, Minerals Council of Australia
Karolina Szukalska, Minerals Council of Australia

Final Prepared by: Matt Tomlins, CEO and Co-Founder, CoverCard

Date: March 7 2019

Background and Overview

The Minerals Council of Australia (MCA) represents Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable development and society. A key component of this is advocating for the impact of the minerals sector on the employment market, including understanding job market trends and the skills and qualifications in demand.

CoverCard has built unique technology to automate at scale the identification and categorisation of key information from digital job advertisements, with a focus on blue collar job qualifications. To CoverCard's knowledge there is no other company currently able to match the extent of this capability.

CoverCard has Partnered with a major job search engine to provide the input data needed. This includes all job advertisements from the last three years, creating a powerful research and analytics proposition.

This document defines the opportunity and outlines a proposed approach for a pilot project that applies CoverCard's unique capability to the mining sector in order to assist MCA in its mission to understand and advocate for skill and employment outcomes.

Research Scope

It is proposed that relevant mining job advertisements from March 1 2016 to February 28 2019 are included in this analysis to determine changes over time, and that the output data is then updated quarterly.

The analysis proposed below will be performed on a quarter-by-quarter basis covering the 36 months (12 quarters) to February 28 2019 to ascertain changes over time, and then updated for two additional quarters. Analysis for each of the six states and two territories will be split out separately, and then rolled up to a national level for each item, creating nine sets of data for each item below.

The following items are proposed for inclusion in the analysis:

- Mining job advertisement growth / change – month on month, by states and territories, and nationally (NOTE: this will be monthly analysis, where all other items will be quarterly);
- Share of jobs that are FIFO vs non-FIFO – quarter on quarter, by states and territories, and nationally;
- Growth / change in demand for High Risk Work Licence (HRWL) Types – there are 28 different HRWL categories that are state regulated but consistent across Australia. A HRWL is a very common requirement in the mining industry and this analysis will determine the change in demand for each of the 28 licence classes, quarter on quarter, by states and territories, and nationally, across the research period;
- Growth / change in demand for five other key qualifications that are of particular interest to MCA – quarter on quarter, by states and territories, and nationally. A few common options are below, but the targeted qualifications can be negotiated;
    - Construction Induction Card
    - Enter and Work in a Confined Space
    - Work Safely at Heights
    - Gas Test Atmospheres
    - Demonstrate First Attack Firefighting Equipment.

Further Research Options

The following are other potential options, that may be included in the Pilot by negotiation (these are suggestions and other options of interest to MCA can be explored):

- Growth / change in demand for Drivers Licence Types – there are 10 different Drivers Licence categories that are state regulated but consistent across Australia. This analysis will determine the change in demand for each of the 10 licence classes, quarter on quarter, by states and territories, and nationally, across the research period;
- Growth / change in demand for additional blue-collar qualifications – i.e. exploring more than five target qualifications of interest;
- Analysis of common Job Titles in the mining industry for growth / change in demand over the research period – this is potentially highly valuable and will require MCA and CoverCard to work together to identify an appropriate taxonomy. It is proposed that CoverCard's technology be used to create a count of all job titles from the prior 36 months of mining job advertisements, and these counts are then reviewed and grouped where the job titles are effectively the same;
- Analysis of growth / change in demand for soft skills / skills of the future – CoverCard's technology may be adapted to identify references to key skills of interest. For example, this could include parameters such as leadership, innovation / creativity, adaptability / agility, digital and others. A suggested starting point is to identify three to five discrete skills for analysis. Implementation of this approach will require further collaboration between MCA and CoverCard.

Job Advertisement Scope

The job advertisements used in this Pilot will be those in the mining sector. This will include all job advertisements that include the key industry term of 'mining.' The job listing will be de-duped to ensure multiple listings of the same job are removed. In addition, CoverCard will identify and remove false positives for known errors, such as the term 'data mining.'

This approach will provide a robust job advertisement listing with which to perform the required analysis. This methodology will be held consistent across the three years of job advertisements to be analysed, ensuring validity of the changes that are observed over time.

Model Outputs

The outputs will be provided visually to best demonstrate changes over time. This will include an extensive series of graphs and charts. Based on the Research Scope outlined above the output will potentially contain approximately 300 graphs (states, territories and nationally for each item and qualification under investigation).

There is the opportunity to collaborate to determine the exact format of the research output.

Use of Model Outputs

CoverCard owns the Intellectual Property associated with the research output and will grant MCA the rights to use the outputs internally to inform policy and advocacy work, as MCA sees fit.

External reproduction, for example in reporting, media releases, or any other format, is limited to 10% of the graphical outputs in any one activity. Attribution to CoverCard is also required where the model outputs are used externally.

This approach will enable MCA to share industry key insights externally (for example headline growth and changes in mining job advertisements by state and nationally) whilst enabling CoverCard to further commercialise its unique technology. This approach can be reviewed and discussed during and after the Pilot period.

Investment

CoverCard will provide the services described above under 'Research Scope' at a cost of:

- $15,000 (ex. GST) for system set-up and providing model outputs for the prior three years of job advertisement data;
- A subscription fee of $2,500 (ex. GST) per quarter for updating the data outputs, with this Pilot proposed to include two future quarters, through to end August 2019.

The items under 'Other Research Options' are open for negotiation and may be provided in addition or in substitute of the other items.

The analysis scope and associated subscription fee will be reviewed and negotiated following the Pilot.

CoverCard Capability

CoverCard's technology is currently focussed on blue collar skills and qualifications and is based on a comprehensive taxonomy of tickets, licences, trades and other qualifications. This taxonomy also powers CoverCard's public website (www.covercard.com.au) which connects workers and employers based on the specific qualifications required for the role, along with related complementary benefits for both parties.

CoverCard is an awarded technology startup. We have received Queensland Government funding as one of 25 technology startups from around the world selected to participate in the inaugural Hot DesQ program. CoverCard have been featured in numerous media and startup publications.

CoverCard was co-founded by Jon Gwynne, a trade qualified boilermaker, and Matt Tomlins, who has previously consulted in the resources sector and holds an MBA. Gordon Craick is CoverCard's Technical Lead and has over 15 years experience in software development working for both corporates and startups. CoverCard's advisory network is lead by Phil de Courcey whose current substantive role is CEO of the Resources and Engineering Skills Alliance. Phil has extensive mining and skills development experience and networks.

About our Job Advertisement Partner
CoverCard's Job Advertisement Partner is a search engine for job advertisements used by over 2 million visitors per month that aims to list every job, everywhere. They search thousands of websites, bringing together millions of ads in one place to give jobseekers the information they need to take control of their careers.

Their Australian team is based in Sydney and they currently have approximately 130,000 jobs listed from across Australia. Our arrangement with our Job Advertisement Partner provides access to a back series of approximately four million job advertisements over the last three years. We have strong alignment with our Job Advertisement Partner and have extensively tested their job advertisement inputs within CoverCard's software model.

We look forward to working with you.

Best Regards,

Matt Tomlins
CoverCard CEO and Co-Founder

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Minerals Council of Australia and CoverCard Mining Job Advertisement Analysis Pilot – Model Outputs and Summary Analysis

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Date: April 9 2019

Introduction

This Pilot Project was based on the proposal dated March 7 2019, titled 'Minerals Council of Australia and CoverCard Mining Job Advertisement Analysis Pilot' (included in the Appendix to this document).

The data set included 140,047 job advertisements identified as being within the mining industry between March 2016 and February 2019. This volume of jobs enabled algorithmic analysis to identify references to the items and parameters outlined in the Pilot proposal.

Structure of the Output Information

This output information is comprised of six sections:

1. Key Observations: Overview of Process and Approach
2. Key Observations: Top Line Summary
3. Key Observations: Each Item Assessed within the Pilot
4. Discussion of Mining Job Advertisement Trends
5. Description of Graphs Provided For Each Item
6. Graphical Outputs For Each Item

The first section provides initial framing for the key insights in the second and third sections.

Section two provides the top line insights as identified by CoverCard, with section three covering off each of the items included in the Pilot in further detail. These sections provide CoverCard's first view based on the output of CoverCard's algorithm, with the Minerals Council of Australia the acknowledged subject matter experts.

Section four discusses the job advertisements included in the Pilot and the overall trends that are evident.

Section five outlines details about the consistent set of graphs provided for each of the items in the Pilot.

Section six provides the graphical output. There are 16 graphs included for each of the 27 items where references have been identified and collected, providing a total of 432 graphs.

1. Key Observations: Overview of Process and Approach

Given the volume of data and the uniqueness of the analysis undertaken, significant insights can be identified through this process. CoverCard has performed an initial assessment of these insights in addition to the 432 graphs that follow.

This insights work is segmented into two sections. The first captures the absolute top line observations about the qualifications within this analysis that are most referenced, where the focus is geographically and how it has changed over time.

The second insights section lists all 34 items that were analysed as per the Pilot proposal and discusses observations for each. This includes the 28 High Risk Licence Types, 5 other common qualifications and references to FIFO.

The Minerals Council of Australia is the subject matter expert and may identify many other areas of insight. As such, this written analysis work prepared by CoverCard should be considered a starting point rather than exhaustive.

2. Key Observations: Top Line Summary

CoverCard data showed a steady upward trend in mining jobs advertised over the three year period in line with other industry reports. As would be expected, Western Australia had the highest percentage of advertised mining jobs (33%), followed by Queensland (29%) and New South Wales (22%).

Of the licences and qualifications included in this research there are five that stood out to CoverCard's algorithm as being highly referenced and should be a focus of further investigation for training and investment activities.

Rank	Qualification	Key States / Territories	Demand Growth	CoverCard Comments
1	High Risk Licence: LF – Forklift Truck Operation	Western Australia most overall references (but most overall jobs) Relatively consistent across States and Territories on a percentage of jobs basis (with exception	Steady and consistent – growth broadly in line with increase in overall mining jobs over the period	This is a common requirement to perform many different roles in the mining sector – mechanical and operational roles as well as logistics, warehousing etc.

Rank	Qualification	Key States / Territories	Demand Growth	CoverCard Comments
		of minimal references in the ACT)		
2	Work Safely at Heights	Particularly popular in Western Australia, followed by Queensland On a percentage of jobs basis the qualification is also highly valued in the Northern Territory	Generally exceeded the overall growth in mining jobs, although this has moderated in the last 12 months Shows a little more volatility than other top ranked qualifications	A desirable qualification with strong overall demand Appears to be often paired with High Risk Licence: WP – Boom-type Elevating Work Platform Observed to be common in shutdowns, particularly in Western Australia
3	Construction Induction Card	Relatively even split across Western Australia, Queensland and New South Wales, in line with greatest concentration of mining jobs On a percentage of jobs basis the qualification is also highly valued in South Australia	Broadly in line with growth in overall mining job listings On a percentage basis references peaked in mid-2018 and are tapering. Accentuated by lower jobs detected in last quarter (Dec 2018 to Feb 2019)	Demonstrated to be a very common requirement, and likely to have a particular emphasis in the construction phase of mining projects
4	Enter and Work in a Confined Space	Highest overall references in Western Australia, followed by Queensland On a percentage basis the qualification is also highly relevant in the Northern Territory, and to some extent South Australia	Steady growth in demand, generally in line with overall mining job listings Western Australian demand has remained strong with greater volatility in Queensland	Another qualification previously observed to be common in shutdowns, particularly in Western Australia, with data to now support this hypothesis

Rank	Qualification	Key States / Territories	Demand Growth	CoverCard Comments
5	High Risk Licence: WP – Boom-type Elevating Work Platform	Most prevalent in Western Australia, on both an overall and percentage of jobs basis Also above the national average in the Northern Territory on a percentage of jobs basis	The volume of references has steadily increased over the 3 year period, on both an overall and percentage of jobs basis	Appears as the second most common high risk licence type Growth appears related / linked to Work Safely at Heights (i.e. similar pattern)

High Risk Licence Types DG – Dogging and RB – Rigging were the next most referenced qualifications, albeit at a lower level than the five mentioned above. However, they both showed increasing references as the analysis period progressed suggesting a growing importance.

There were qualifications that showed a particular focus in certain geographic regions and therefore could be the focus of tightly targeted activities. The two prime examples are Gas Test Atmospheres (appears solid demand in Western Australia and represents 95% of total references nationally) and High Risk Licence: CB Bridge and Gantry Crane Operation (66% of references nationally were in Queensland versus 29% of total mining job advertisements).

The CoverCard algorithm also picked up a number of references to 'scaffolder' or 'scaffolding,' at approximately 1.3% of mining jobs nationally. However, delineation of the level of scaffolding skills between basic, intermediate and advanced was challenging.

The remaining qualifications assessed have comparatively lower to no importance in the mining sector. This is useful information when considering policy and where time and effort should be focussed.

References to FIFO were highest in percentage terms in job advertisements in the Northern Territory, where 46.5% of ads referenced FIFO. Western Australia was second with 32.5% of jobs referencing FIFO.

More details on these insights are provided in the table below and the graphs that follow. There may be other top line insights uncovered with further scrutiny of the algorithmic outputs.

3. Key Observations: Each Item Assessed within the Pilot

Item	Commentary
High Risk Licence: DG - Dogging	• Western Australia is the dominant state for DG – Dogging licenses. Western Australia represents 33% of the jobs analysed during the 3 year period, whilst accounting for 61% of the references to DG – Dogging

	• Conversely this qualification is less often required in Queensland, which accounts for 29% of the total jobs analysed and only 13% of relevant references • New South Wales (22% of jobs analysed) accounts for 17% of the references to this qualification • The percentage of mining jobs in Western Australia referencing this license has ranged between 3% and 5%, with the trend showing a general increase in demand over the 3 year period • Queensland has experienced a trend increase (from a low base and peaking later in the period) whilst New South Wales has remained flat • Other states have experienced peaks and troughs over the 3 year period, due to low overall references likely being impacted by particular project requirements • The overall growth in references to DG – Dogging has outstripped the growth in mining jobs in the period, suggesting this has become a more relevant qualification overall in recent years
High Risk Licence: RB – Basic Rigging	• Western Australia dominate the references to RB – Basic Rigging, with 65% of total references over the 3 year period, followed by Queensland (16%) and New South Wales (13%) • Over the three year period, 5.2% of mining jobs advertised in Western Australia contained a reference to the requirement for a rigging qualification, versus a national average of 2.5%. If looking for work in the mining industry in Western Australia it is a desirable qualification to hold • By comparison, only 1.5% of mining jobs in both Queensland and New South Wales reference this requirement. It is slightly more popular in South Australia, with 2% of jobs referencing it, however South Australia represents only 4% of the mining job advertisements covered in this analysis • Overall references to the qualification peaked in March to May 2018, but otherwise has broadly matched the overall growth in demand for mining jobs across the 3 year period
High Risk Licence: RI - Intermediate Rigging	• The overall number of references to this qualification in the job advertisement data set was low meaning that this qualification is rarely specifically requested in mining job advertisements • Western Australia constituted 59% of references to RI – Intermediate Rigging, disproportionately greater than the 33% of jobs the state represented • Both New South Wales and Queensland represented 17% each of the demand for this qualification (versus 22% and 29% of total jobs analysed respectively) • Further analysis showed that the number of references to RB – Basic Rigging and RA – Advanced Rigging was greater, suggesting a specific requirement for intermediate skills is low. i.e. either basic or advanced rigging skills are sought

	• Overall references to rigging were approximately 85% for RB – Basic Rigging, 11% for RA – Advanced Rigging and less than 5% for RI – Intermediate Rigging
High Risk Licence: RA - Advanced Rigging	• Overall references to this qualification have fluctuated over the survey period, with the relatively low overall demand meaning that specific projects requiring this qualification may be responsible for the volatility • Western Australia was again the overall dominant state, with 76% of references to RA – Advanced Rigging • Queensland was the only other state to record more than 10%, sitting at 13% of references • 0.6% of mining job advertisements in Western Australia contained a specific reference to this qualification • The Northern Territory was next highest at 0.2%, with references in other locations negligible
High Risk Licence: SB - Basic Scaffolding	• The overall number of references to this qualification was low • However, closer inspection of the CoverCard algorithm showed that the number of references to 'scaffolder' or 'scaffolding' was reasonably significant at approximately 1.3% of mining jobs nationally, suggesting that the demand for this qualification may be higher than uncovered • Delineation of the level of scaffolding skills required was challenging for the algorithm, however this can be expected to improve further over time • Western Australia was responsible for 69% of the specific references to SB – Basic Scaffolding, followed by New South Wales on 17% • On a percentage of jobs basis, South Australia had the highest percentage of mining jobs referencing this qualification
High Risk Licence: SI - Intermediate Scaffolding	• The overall references to this qualification were low so results should be viewed with this in mind. As stated above, there is reasonable overall evidence that scaffolding skills are desirable in the mining sector • References to SI – Intermediate Scaffolding showed a more even split across states, closer to the relative percentage job advertisement share of each state. Western Australia was on 44%, NSW 24% and Queensland 22%
High Risk Licence: SA - Advanced Scaffolding	• References to SA – Advanced Scaffolding were again dominated by Western Australia with 69% • Proportionately, the Northern Territory had a significantly higher percentage of references to this qualification, with 5% of references nationally whilst representing 2% of mining jobs over the 3 year period • Both Western Australia and the Northern Territory had 0.4% of jobs in their region referencing this qualification

	• As opposed to Basic and Intermediate Scaffolding, Advanced Scaffolding had a greater number of references, suggesting that career opportunities are greatest for those with the Advanced qualification. This aligns with CoverCard's anecdotal observations of the job market and is in contrast to Rigging where a Basic qualification is sufficient for significant job opportunities
High Risk Licence: LF - Forklift Truck Operation	• References to Forklift Operation were very high, with 9% of mining jobs nationally containing references to this qualification. This was behind only references to the need for a C Class Drivers Licence (a qualification not part of this research scope) • Demand for this qualification was more evenly spread, roughly in line with the number of mining jobs in each state. For example, Western Australia contained 40% of references (versus 33% of jobs), Queensland 25% (versus 29% of jobs) and New South Wales 22% (versus 22% of jobs) • On a percentage of jobs basis, Western Australia held top position with just over 11%, followed by the Northern Territory on 10.5% • Overall references to this qualification have broadly moved in line with the growth in mining job advertisements over the 3 year period
High Risk Licence: LO - Order-picking Forklift Truck	• References to LO – Order-picking Forklift Truck were low, representing just 0.2% of mining jobs nationally • This is expected, given that the requirements for an order-picking forklift (more in logistics and warehousing) versus the operation of a regular forklift are significantly different • The split between states of references to this qualification was consistent with the overall spread of job advertisements across states. I.e. Western Australia 42%, New South Wales 29% and Queensland 22% • Given the relatively low number of references overall, there is some volatility observed in the graphical outputs
High Risk Licence: PB – Concrete Placing Boom Operation	• Insufficient references to this qualification were identified to enable meaningful analysis • Pursuing this qualification, or providing training in this qualification, will not improve employment outcomes in the mining sector
High Risk Licence: HM - Material Hoist Operation (Cantilever Operation)	• Similar to above, only a small number of references to this qualification were identified (all of these were in Western Australia) • This qualification is not important or relevant to the mining sector

High Risk Licence: HP - Hoist Operation (Personnel & Materials)	• A slightly higher number of references to this qualification were identified, however the quantum was still too low to draw meaningful conclusions • This qualification cannot be considered relevant or important in the mining sector given the low number of overall references • Western Australia held 44% of the references, with Queensland on 31% and South Australia 19%
High Risk Licence: CT - Tower Crane Operation	• There is low demand for this qualification in the mining industry with 0.1% of mining jobs referencing the qualification so results should be interpreted with caution • The split amongst states was overall relatively equal between Western Australia, Victoria, New South Wales and Queensland over the 3 year period, with significant volatility • This type of crane is typically required for certain maintenance and shutdown activities so the qualification is expected to be advertised only when needed, with other types of crane licences more common
High Risk Licence: CD – Derrick Crane Operation	• There were no references to CD – Derrick Crane Operation; this qualification is not important or relevant to the mining sector
High Risk Licence: CN – Non-slewing Mobile Crane Operation (greater than 3 Tonne)	• This type of crane licence is the second most referenced crane licence behind only CB – Bridge and Gantry Crane Operation, making these the most desirable crane High Risk Licence types to hold • 70% of the references to CN – Non-slewing Mobile Crane Operation (greater than 3 Tonne) were in jobs in Western Australia, followed by New South Wales on 18% • In relative percentage terms the Northern Territory job set also contained a higher share of references (albeit with more peaks and troughs given the smaller overall demand in the Territory) • The total references to this qualification was relatively consistent over the 3 year period
High Risk Licence: CV – Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)	• Whilst some references were made to High Risk Licence: CV – Vehicle-loading Crane Operation (greater than or equal to 10 Tonne) the overall frequency was low and interpretation of the data must bear this in mind • Western Australia (58%) and Queensland (30%) accounted for the greatest number of overall references • Due to the low number of references, change in demand was volatile over the 3 year period • This should not be a priority qualification for training in the mining sector
High Risk Licence: C2 - Slewing Mobile Crane	• A low number of overall references were detected • Western Australia was again the dominant state with 76% of references and New South Wales 21%

Operation (up to 20 Tonne)	• The low overall number of references suggests this qualification should not be a priority in the mining sector
High Risk Licence: C6 – Slewing Mobile Crane Operation (up to 60 Tonne)	• Similarly, a low number of references to High Risk Licence: C6 – Slewing Mobile Crane Operation (up to 60 Tonne) were detected so it is not a priority qualification in the mining sector • Demand for this qualification was led by New South Wales on 64% (versus accounting for 22% of the mining jobs that formed the job ad data set) so there may be a specific site or location where it is relevant within this state (albeit with a small number of references any conclusions must be treated with caution)
High Risk Licence: C1 - Slewing Mobile Crane Operation (up to 100 Tonne)	• There were a very small number of references to this specific qualification over the 3 year period of job advertisements so it is not relevant in the mining sector • Within this very small number, Western Australia accounted for 42% of references, followed by New South Wales with 32% and Queensland with 21%
High Risk Licence: C0 - Slewing Mobile Crane Operation (open/greater than 100 Tonne)	• There were a very small number of references to this specific qualification over the 3 year period of job advertisements • This qualification is therefore not relevant in the mining sector • Western Australia accounted for 50% of this small number of references
High Risk Licence: CB - Bridge and Gantry Crane Operation	• This type of crane licence has considerably more references in the job advertisement set that most other crane qualification types (along with CN – Non-slewing Mobile Crane Operation (greater than 3 Tonne)) • Greatest references to CB - Bridge and Gantry Crane Operation were in Queensland, at 64% share of all references to this qualification. This may be due to the nature of mining in the state however greater industry knowledge is required to better interpret this result • States other then Queensland experienced significant volatility in their references to this qualification, primarily due to a low volume of references • The particularly low number of references in the first (index) quarter in March to May 2016 has also contributed to the high volatility in the graphs • Queensland showed more consistent higher levels of demand than other states. Further exploration is recommended to determine whether greater specific focus (e.g. training and investment) for this qualification should be considered in Queensland
High Risk Licence: CP - Portal Boom Crane Operation	• There were no references to CP - Portal Boom Crane Operation; this qualification is not important or relevant to the mining sector

High Risk Licence: BB - Basic Boiler Operation OR BS – Standard Boiler Operation	• There were no references to BB - Basic Boiler Operation or BS – Standard Boiler Operation; this qualification is not important or relevant to the mining sector • Note: this qualification has changed names during the job advertisement period, however no references were found to either name for this qualification
High Risk Licence: BI - Intermediate Boiler Operation	• There were no references to BI - Intermediate Boiler Operation; this qualification is not important or relevant to the mining sector • Note: This qualification ceased to exist during the job advertisement time period. Boiler Operation qualifications now have two categories, being Standard or Advanced Boiler Operation
High Risk Licence: BA - Advanced Boiler Operation	• There were no specific references to BA - Advanced Boiler Operation; this qualification is not important or relevant to the mining sector
High Risk Licence: TO - Turbine Operation	• There were no specific references to TO - Turbine Operation; this qualification is not important or relevant to the mining sector
High Risk Licence: ES - Reciprocating Steam Engine Operation	• There were no specific references to ES - Reciprocating Steam Engine Operation; this qualification is not important or relevant to the mining sector
High Risk Licence: WP - Boom-type Elevating Work Platform >11 metres	• Accreditation to work with an elevated work platform is a common one in the mining sector, with 3.9% of mining job advertisements nationally referencing it through the 3 year period • It was particularly popular in Western Australia with 6.6% of jobs advertised in Western Australia containing references to it. It was also a desired qualification in the Northern Territory with 5% of mining jobs in the Territory referring to it • Overall, Western Australia represented 54% of the total references, with Queensland 20% and New South Wales 15% • National total references to this qualification steadily grew over the three year period, greater than the overall growth in mining job advertisements and suggesting a growth in importance of this qualification • The national percentage of mining jobs referring to this qualification ranged between 3 and 4.8% (except for the first quarter of the survey period which represented 2.1%). • The lower percentage in the first quarter (March to May 2016), which is the index point for the future data, has meant that the change in demand numbers appear somewhat more significant than the impact is likely to be in practice

Qualification: Construction Induction Card	• A Construction Induction Card is another common requirement in the mining sector, with 6.1% of jobs nationally containing a reference to the qualification • South Australian mining jobs have the highest percentage of jobs referencing this qualification of any state or territory, at 9.3% • Western Australia has the highest overall references at 32% of the national total. This is in line with Western Australia representing 33% of jobs in the 3 year period • This is followed by New South Wales on 31%, significantly greater than their share of mining jobs which sits at 22% • Despite some significant fluctuation in some states over the 3 year period (particularly in South Australia), the national percentage of mining jobs referencing a Construction Induction Card has remained relatively steady at between 5% and 7%
Qualification: Enter and Work in a Confined Space	• Enter and Work in a Confined Space is another common requirement in the mining sector, referenced in 4.6% of mining jobs nationally during the 3 year period • Western Australia was the stand out state, with 57% of total references over the period. This was followed by Queensland on 22% and New South Wales on 12% • The qualification was also particularly popular in the Northern Territory, with 6.6% of mining jobs advertised in the territory referencing the qualification • Similar to other qualifications with higher reference percentages, the overall growth in demand references over the 3 year period broadly mirrored the overall growth in mining job advertisements • On a state by state basis, and similar to Enter and Work in a Confined Space, South Australia again experienced some significant fluctuations in demand. South Australia represents a smaller overall percentage of mining job advertisements (4% of job advertisements nationally) so the development of a new site, or significant change in work at one or more sites, has the potential to significantly impact the figures
Qualification: Work Safely at Heights	• Work Safely at Heights is also a very important qualification in the mining sector, with references identified in 6.4% of mining job advertisements nationally over the three year period • Western Australia was dominant, with a national high of 11.4% of jobs in the state referencing this qualification. The Northern Territory was also above the national average at 7.7% • Overall, Western Australia accounted for 57% of references nationally to Work Safely at Heights, followed by Queensland on 24% and New South Wales on 12% • Previous anecdotal observations have suggested this qualification is often paired with High Risk Licence: WP - Boom-

	type Elevating Work Platform >11 metres and the numbers support this hypothesis. References to Elevating Work Platform are split between Western Australia on 54% (versus 57% for Work Safely at Heights) with Queensland 20% (versus 24%) and New South Wales 15% (versus 12%) • Growth in demand has been steady as a percentage of total mining job advertisements over the 3 year period, ranging from 5% to 7%, with the second half of the period typically at the higher end of this range
Qualification: Gas Test Atmospheres	• Gas Test Atmospheres appears to be a qualification that is only in demand in Western Australia. 95% of all references were detected in jobs in the state with negligible scattered references elsewhere • In Western Australia, 1.2% of all mining jobs in the state contained a reference to Gas Test Atmospheres • Whilst this is a useful qualification to hold in Western Australia it is not relevant in any other locations and is therefore relatively non-transferable • However, it may be worth considering training and investment focus in Western Australia given the geographic concentration
Qualification: Demonstrate First Attack Firefighting Equipment	• Similar to above, Demonstrate First Attack Firefighting Equipment is another Western Australian centric qualification, representing 97% of all job advertisements nationally to this qualification • However, this qualification is less popular than Gas Test Atmospheres, with 0.7% of mining jobs in Western Australia referring to it • CoverCard's anecdotal understanding was that Gas Test Atmospheres and Demonstrate First Attack Firefighting are commonly required for shut down work in Western Australia and this data supports that hypothesis
FIFO	• The percentage reference to FIFO within the 3 years of mining job advertisements varied considerably by state and territory • The Northern Territory recorded the highest percentage of jobs referencing FIFO in the respective state or territory, at 46.5% of job advertisements. This was followed by Western Australia at 32.5% and South Australia on 24.2% • At the other end of the scale, New South Wales had just 4.9% of their mining jobs referencing FIFO and Queensland on 12.9% • The figure in Queensland is lower than anticipated, however further exploration has revealed many references to DIDO (drive in drive out) and BIBO (bus in bus out), which are not within the scope of CoverCard's current algorithmic assessment • Overall, jobs in Western Australia were responsible for 60% of references to FIFO, with Queensland on 21% (despite their low result in job advertisements within Queensland, the large scale

	of the mining sector in the state means their percentage of the overall total remains significant at just over 1 in 5) • The national percentage of mining jobs referencing FIFO increased through the first year of the survey period before flattening out through the last 2 years, with total references than rising broadly in line with the overall increase in mining job advertisements • The New South Wales 'Change in References to FIFO' graph appears to show a significant spike, however this is due to the reference quarter (March to May 2016) being extremely low. As stated above, just 4.9% of NSW jobs contain a reference to FIFO

4. Discussion of Mining Job Advertisement Trends

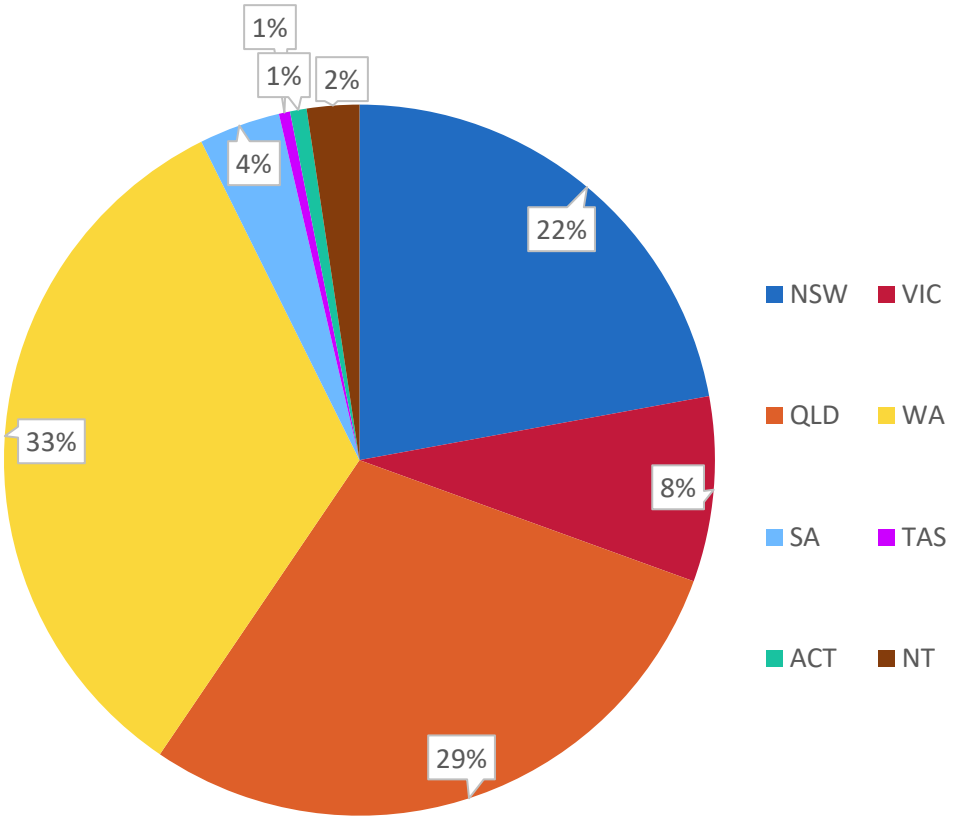
The data set included 140,047 job advertisements identified as being within the mining industry between March 2016 and February 2019.

Mining Job Advertisement Commentary
• As would be expected, Western Australia had the highest percentage of advertised mining jobs (33%), followed by Queensland (29%) and New South Wales (22%) (see graph 1 below for a breakdown) • Steady upward trend in mining jobs advertised over the three year period in line with other industry reports (see graph 2) • Overall national percentage growth in included mining jobs peaked in November 2018, at 120% higher than the first quarter included in this analysis (March to May 2016). This is in line with a recent SEEK job ad report stating a 68% growth in 2018 alone* • Seasonality observed with November a typical peak month with December, and particularly January, typically quieter months • Job ad volumes by state have typically moved in relative unison. However, Western Australia's job advertisement growth has outpaced the other states over the three year period, after commencing at a very similar overall level to Queensland and New South Wales in early 2016 (see graph 3 below) • Queensland has also been critical to overall job advertisement growth. By comparison, New South Wales, South Australia and Victoria have experienced peaks and troughs through the period, with overall growth lower and patchier than that experienced in Western Australia and Queensland • Drop off noted in most recent December 2018 to February 2019 quarter. December and January are typically quieter. A general drop in job advertisements has also been noted in recent economic data, including overall job ads currently reducing at the fastest pace in the last five years.^ In addition, there may be a lag effect in jobs captured by CoverCard's job advertisement partner. However, job readings in the next quarter will be critical

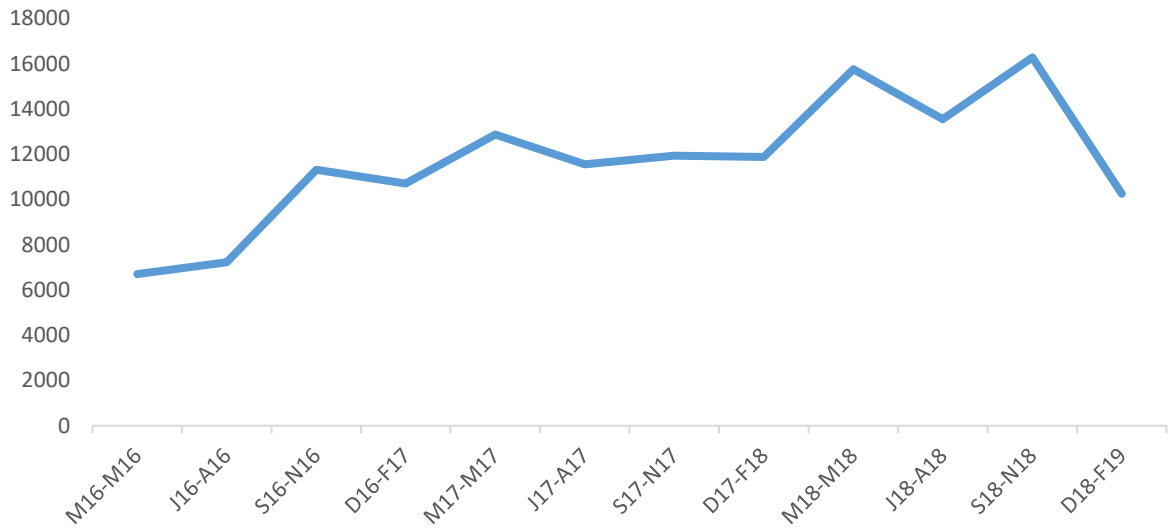
* 'Revealed: Australia's Booming Industries' SEEK, January 2019. Available here: https://insightsresources.seek.com.au/australias-booming-industries

^ 'Australian job ads are falling at the fastest pace in 5 years' Business Insider, April 2019. Available here: https://au.finance.yahoo.com/news/australian-jobs-ads-falling-fastest-022554940.html

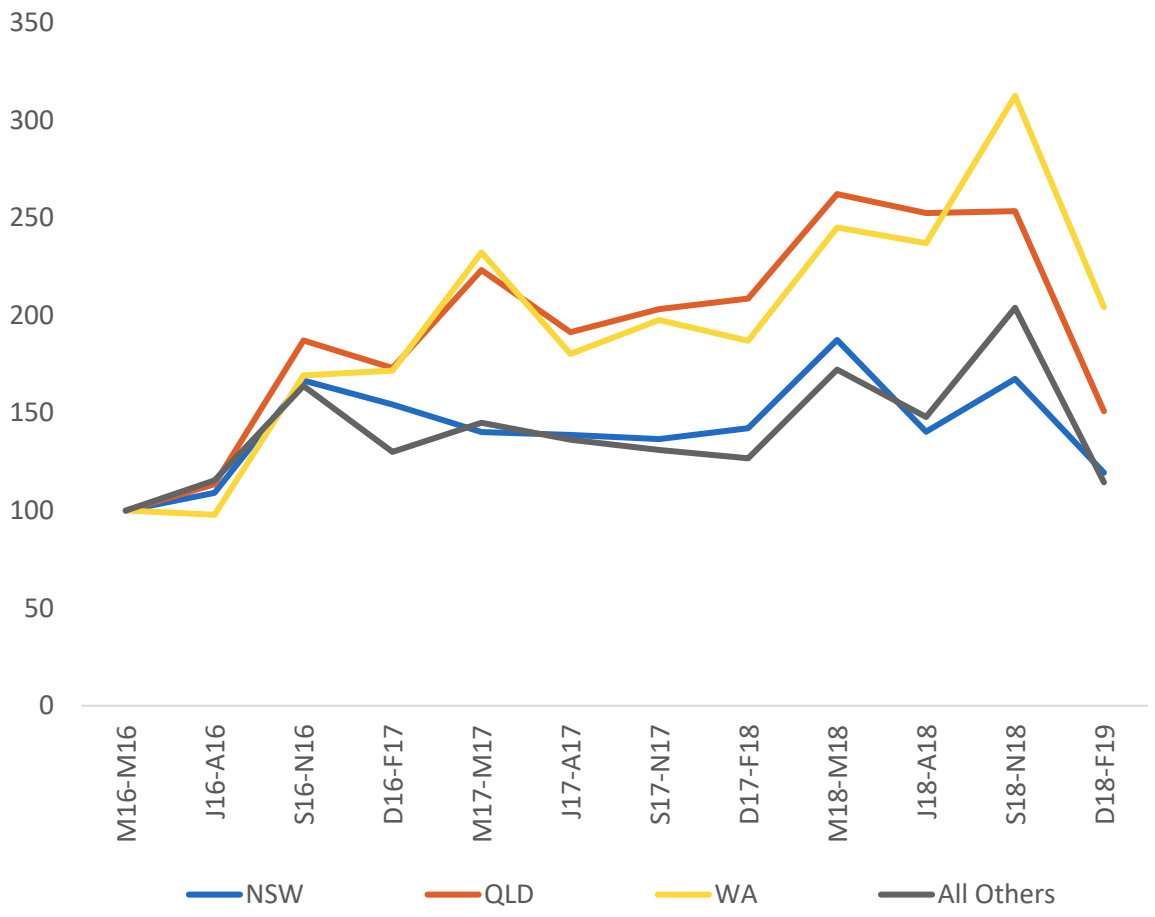
Graph 1 – Breakdown Of Included Jobs By State



Graph 2 – Number Of Mining Jobs Included In This Analysis



Graph 3 – Change In Job Advertisements By State (Index, March – May 2016 = 100)



5. Description of Graphs Provided for Each Item

Graphs are provided for each item where references were identified within the job advertisement data set. This includes 21 of the 28 high risk licence types (with 7 showing no references), all 5 of the other priority qualifications, as well as references to FIFO.

A consistent approach for each of these 27 items has led to the generation of 16 graphs for each (a total of 432 graphs).

To enable graphs to be presented in a readable manner, the naming of each quarter on the graphs has been abbreviated as follows:

- M16-M16 = March to May 2016
- J16-A16 = June to August 2016
- S16-N16 = September to November 2016
- D16-F17 = December 2016 to February 2017
- … and so on.

The following table provides an explanation for each of the 16 graphs for each item.

Graph	Explanation
Breakdown Of Total References To [Item]	This pie chart demonstrates the split by state and territory of all references to the item over the full 3 year job advertisement period.
Change In Total References To [Item] (Index: March – May 2016 = 100)	This line chart shows the nation-wide change in references to the item over the course of the 3 year job advertisement period. To make the graph more insightful, a comparison to the change in the number of job advertisements over the same period is provided. Both of these are indexed to the March – May 2016 result, with this first quarter represented as 100. There are a number of items where the March – May 2016 result was particularly small and this can make the growth in future quarters seem larger than the reality. An alternate method of showing change over time based on the average over the three year period (i.e. each quarter shown as a percentage above or below the average) was considered and can be provided if deemed valuable.
[State Or Other]: Change In References to [Item] (Index)	These are graphs three to six on page two for each item. Similar to the previous graph, these line graphs show the change in references to the item over the course of the 3 year job advertisement period. However, they provide greater granularity about what has happened at a state and territory level. This is provided for each of the three largest job advertisement states (Western Australia, Queensland and New South Wales), with the other states and territories combined. This approach was chosen to highlight the changes in the largest states, whilst also increasing meaningfulness for some items where the total number of references is low. The same indexing approach applies. There are some items where there are no references in the March – May 2016 period and in this case the indexing commences at 100 in the quarter where the first reference to the item has been identified.
Percentage Of Mining Jobs Referencing [Item] (March 2016 - February 2019)	This graph shows the percentage of mining jobs advertised in each state and territory that references the item, across the full three year period. A comparison line for the national average is shown. This graph enables a quick understanding of where the item is mostly greatly referenced on a percentage basis. For example, if a state is showing 5%, it means that 5% of the mining jobs advertised in that state have a reference to the item.

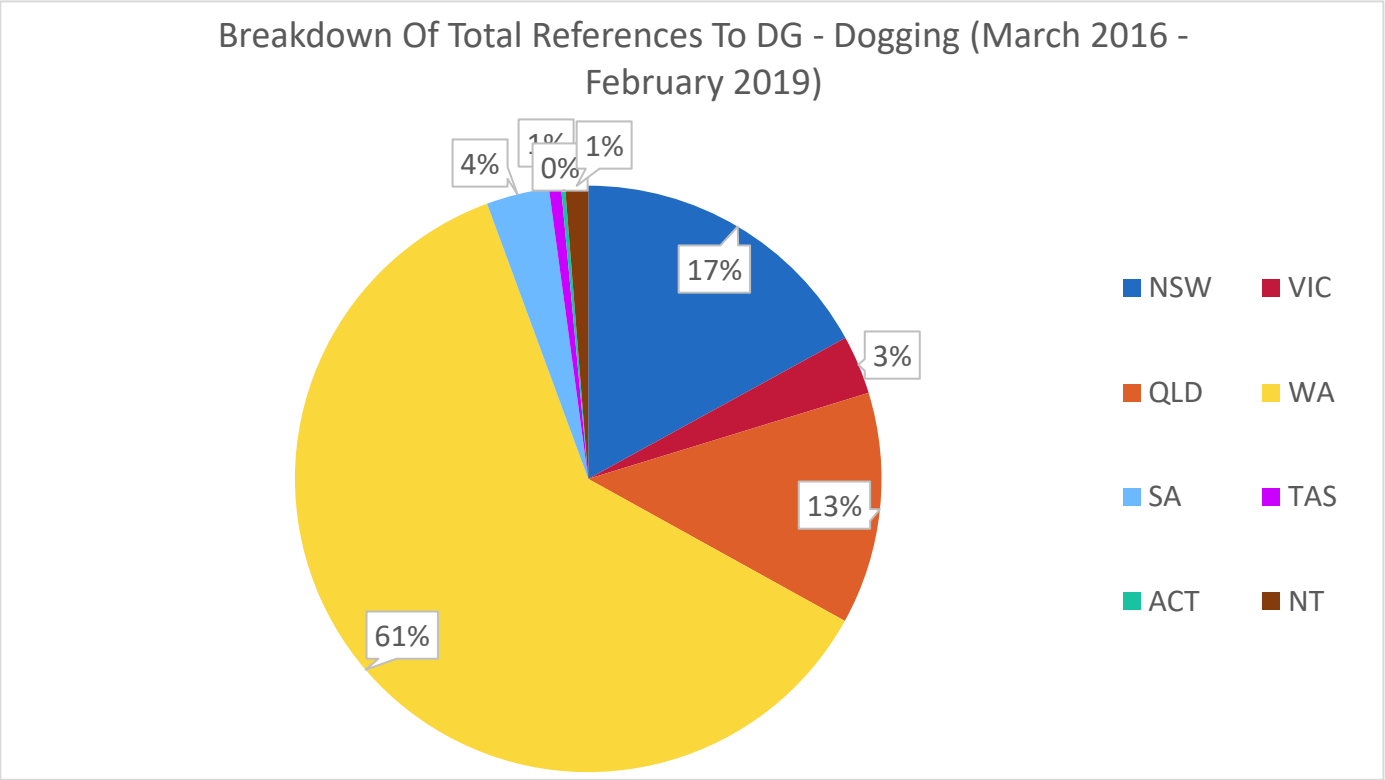
Graph	Explanation
All States: Percentage Of Mining Jobs Referencing [Item]	This graph shows how the percentage references in each state and territory have changed over time. Focussing particularly on Western Australia, Queensland and New South Wales is recommended when viewing this graph. These states typically have a greater overall number of references and the trend shown is a more reliable indicator. Smaller states and territories, and / or items with a low number of overall references must be viewed with significant caution as they demonstrate greater volatility and provide relatively low informational value.
[State or Territory]: Percentage Of Mining Jobs Referencing [Item]	These are the eight graphs on the final page for each item. These bar graphs provide an individual state and territory view of how the percentage of jobs referencing each item has changed over time. As above, larger states provide greater insights with smaller states and territories and / or items with a low number of overall references showing significant volatility.

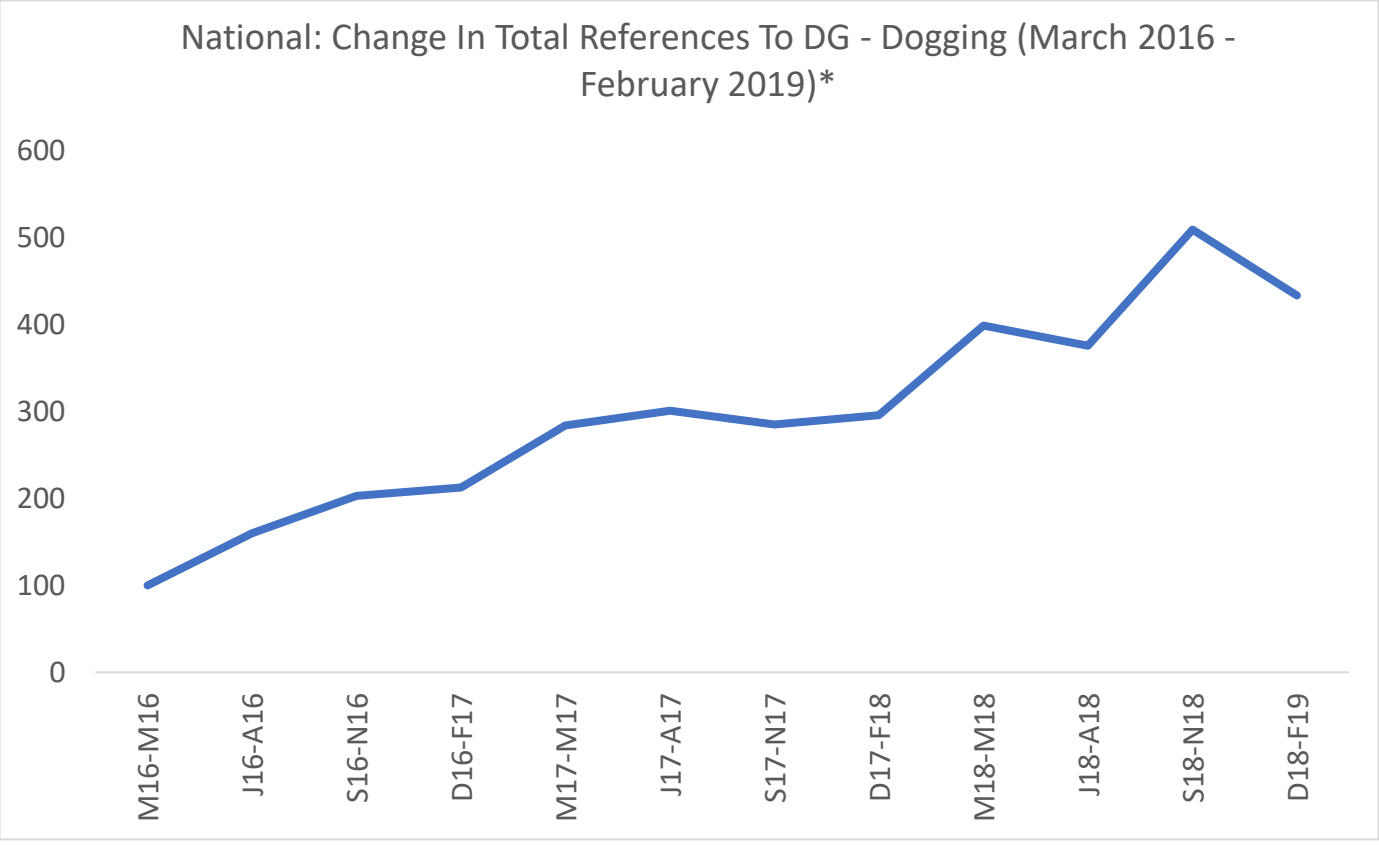
6. Graphical Outputs For Each Item

The following pages contain the graphical outputs for each item where references were identified, in the format outlined above.

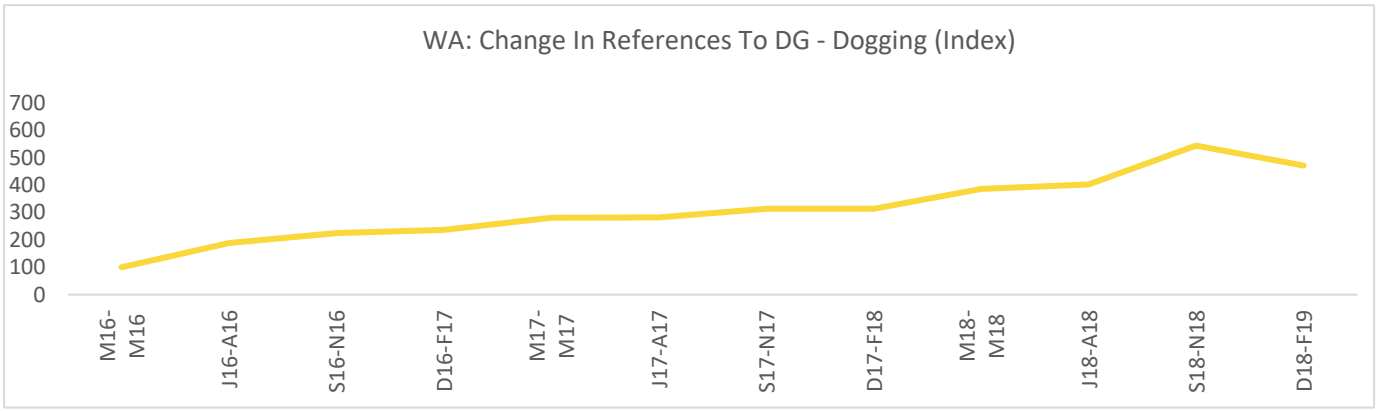
DG - Dogging

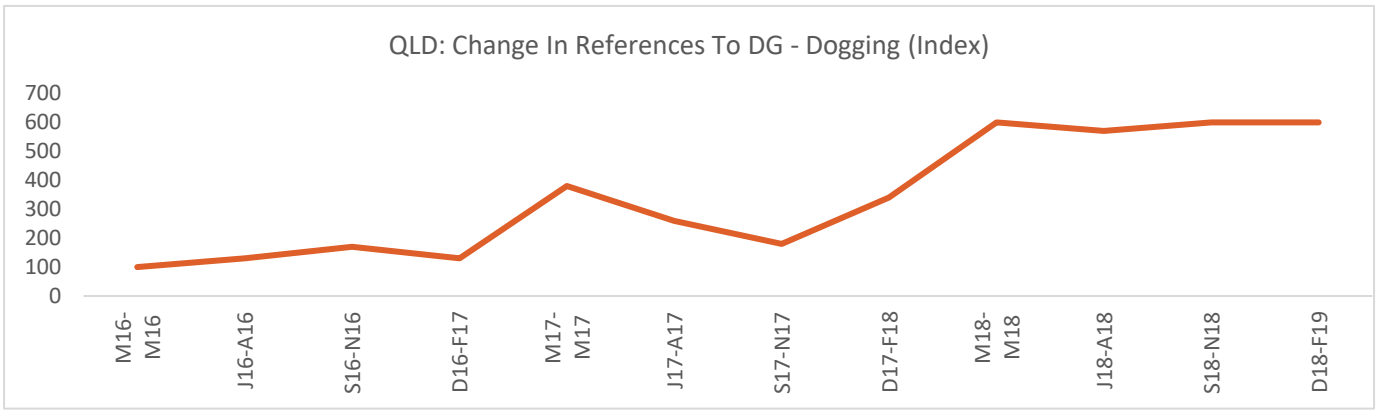
Total References: 3382

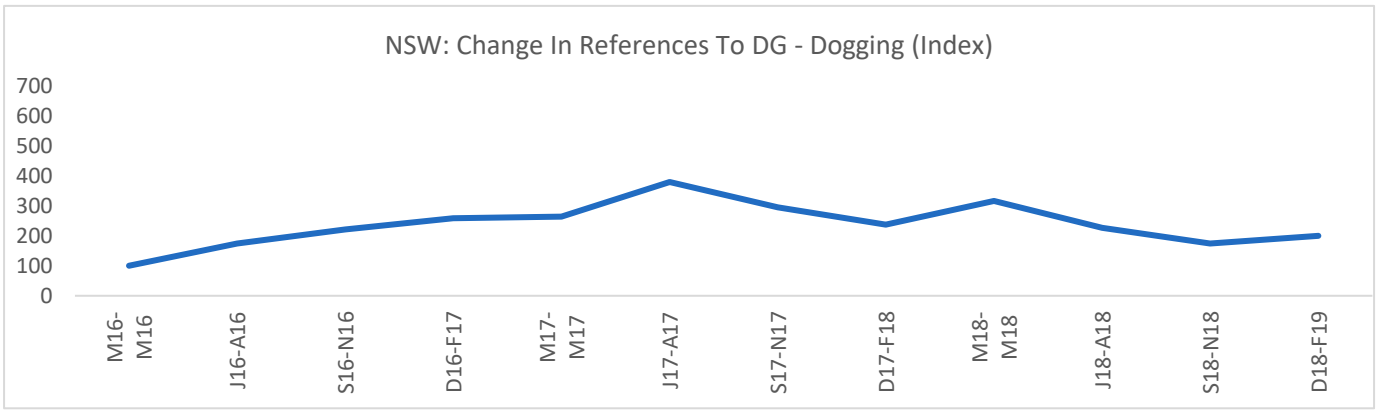




*Index: March - May 2016 = 100


WA: Change In References To DG - Dogging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


QLD: Change In References To DG - Dogging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NSW: Change In References To DG - Dogging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
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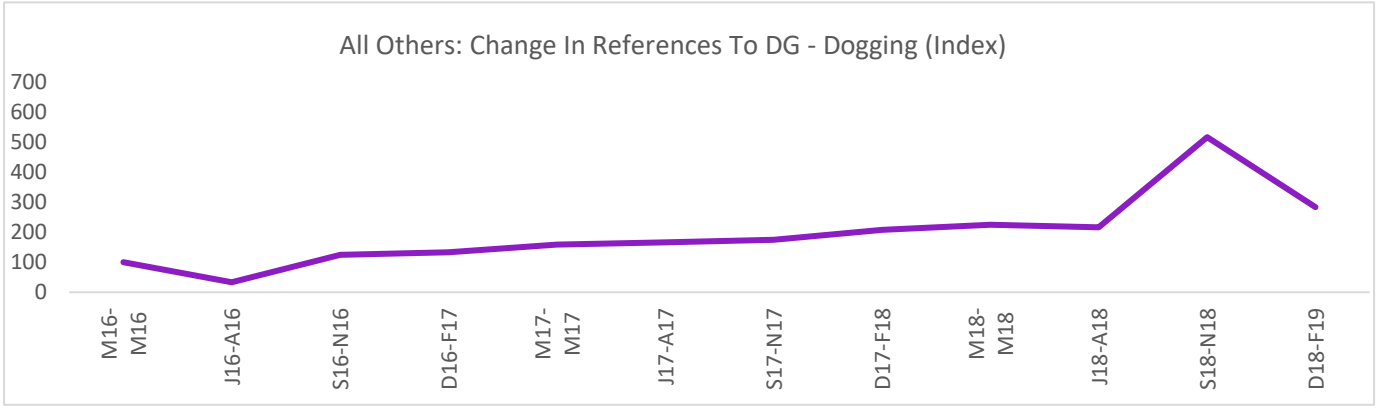
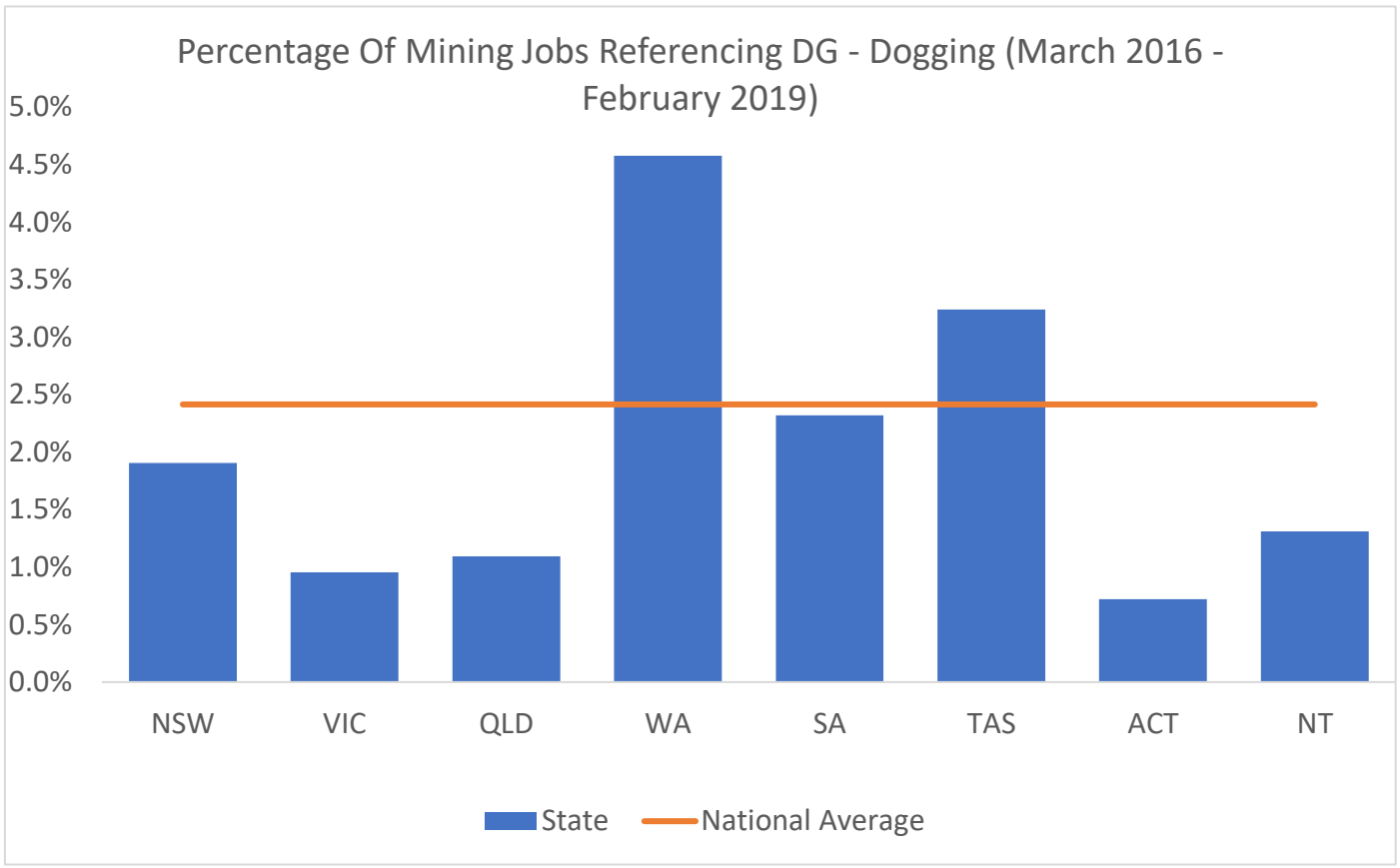
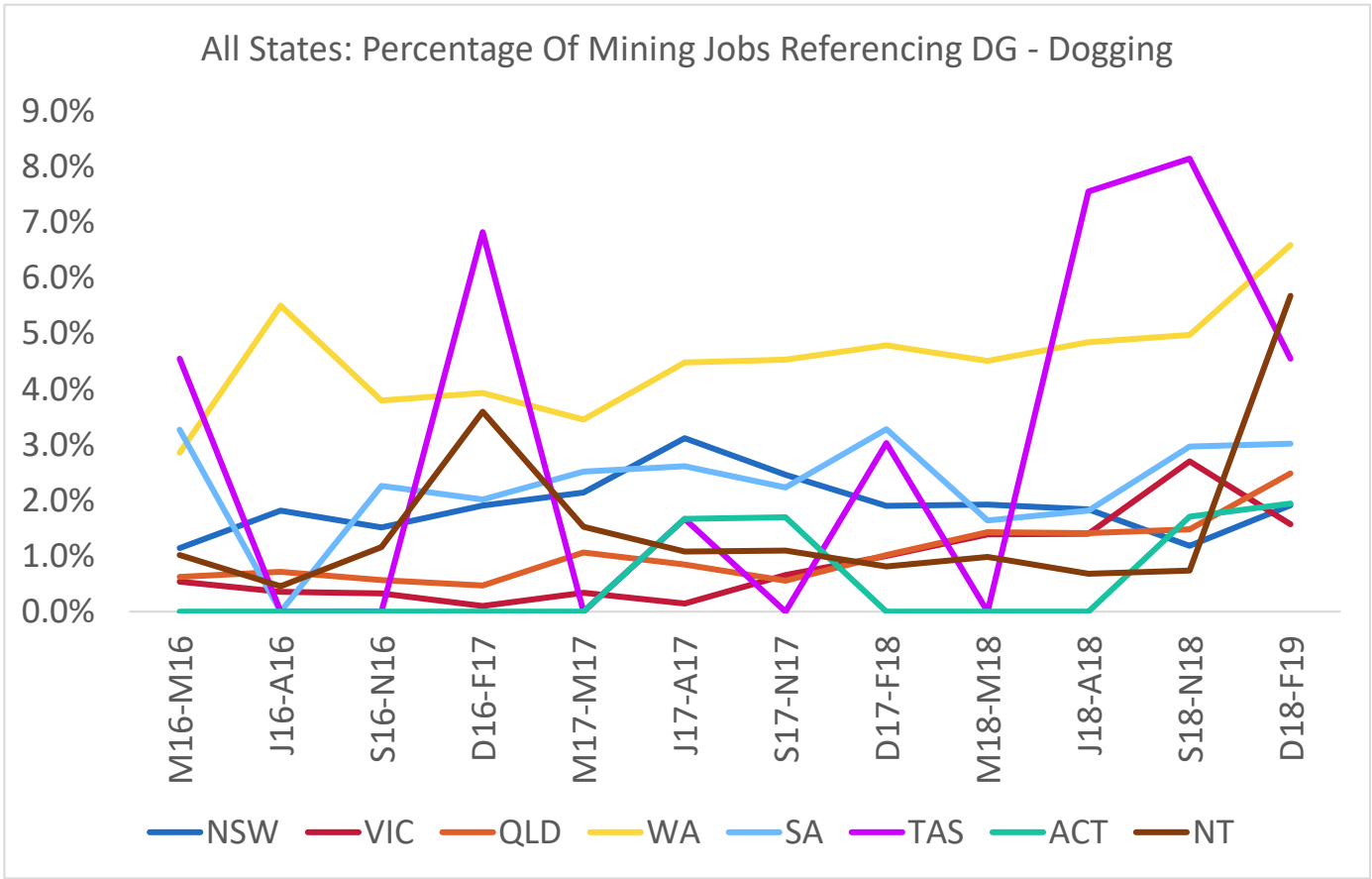
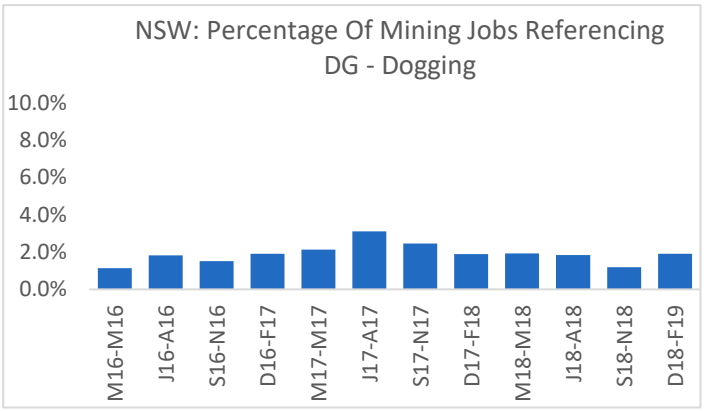
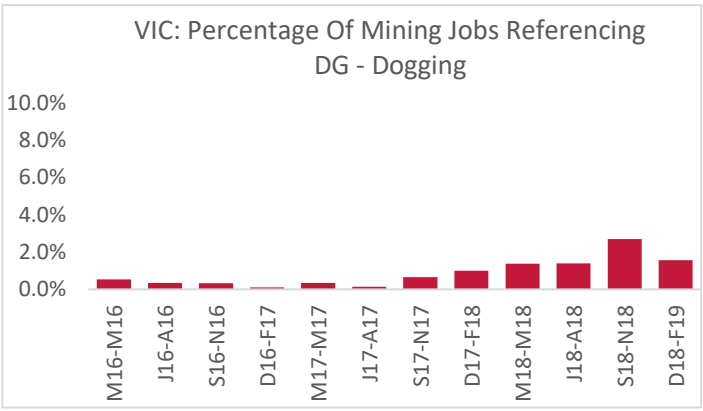
M18-M18
J18-A18
S18-N18
D18-F19

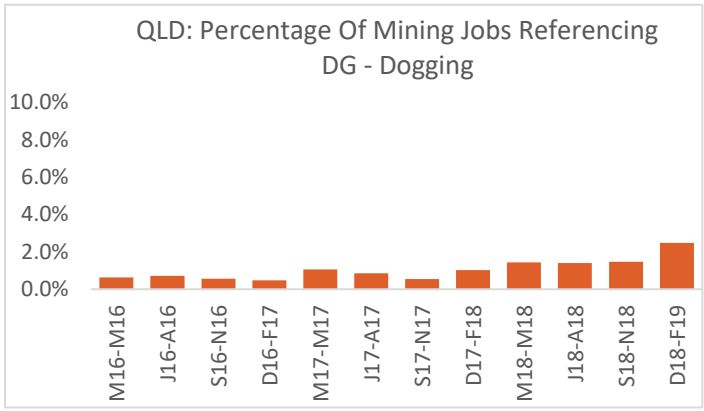

All Others: Change In References To DG - Dogging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

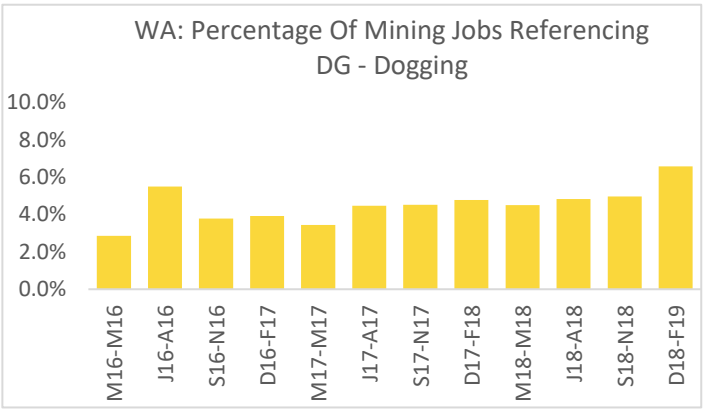

Percentage Of Mining Jobs Referencing DG - Dogging (March 2016 - February 2019)
5.0%
4.5%
4.0%
3.5%
3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

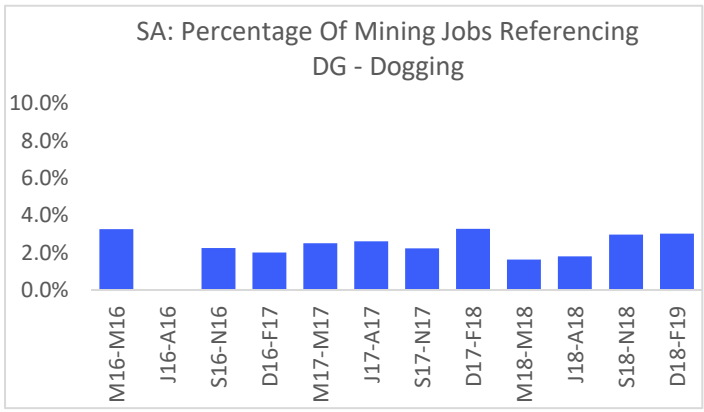

All States: Percentage Of Mining Jobs Referencing DG - Dogging
9.0%
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

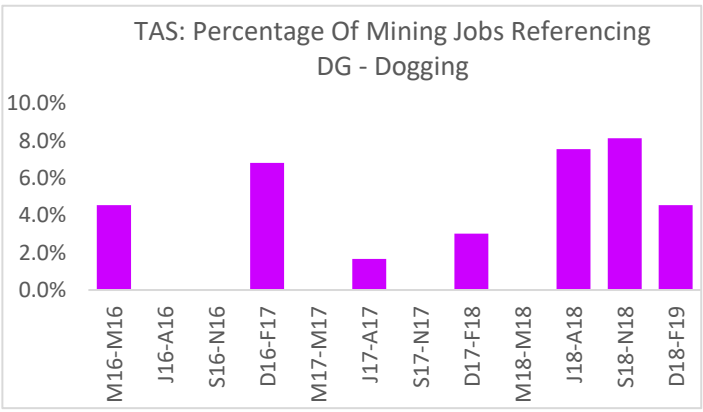

NSW: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

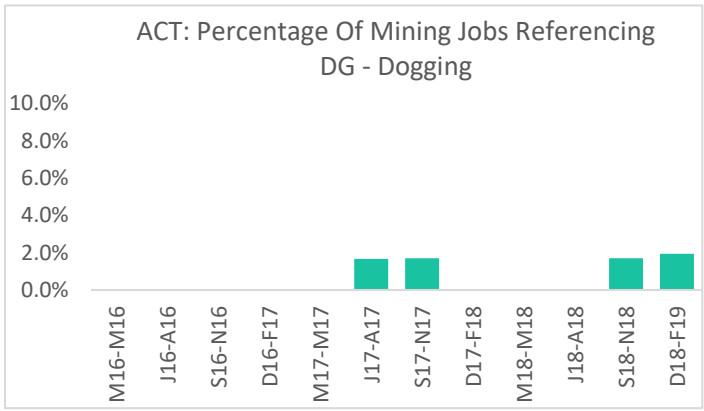

VIC: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

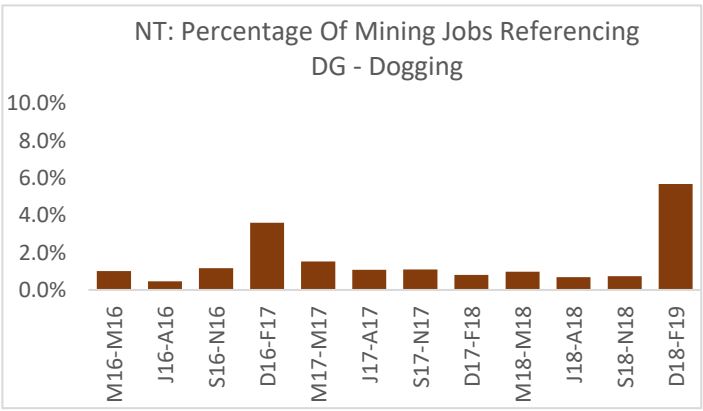

QLD: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

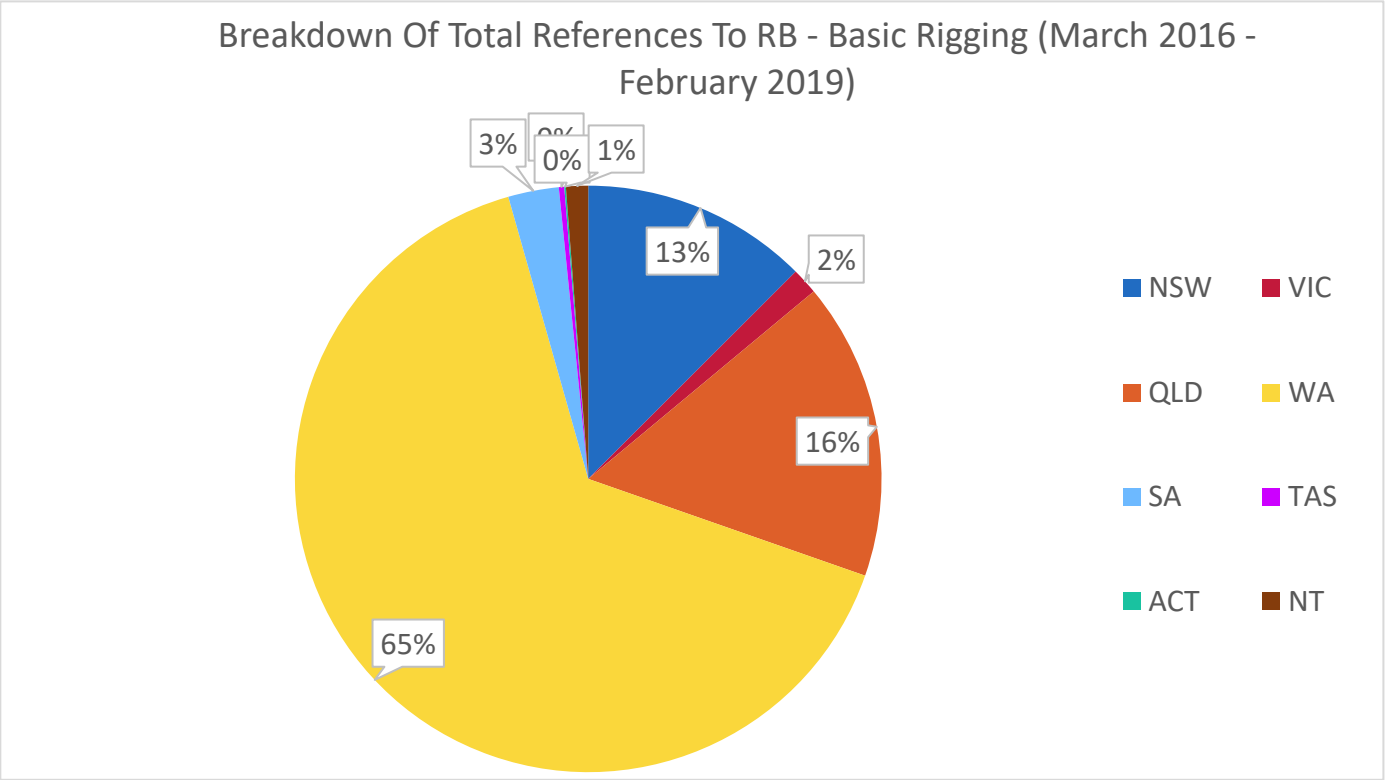

TAS: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

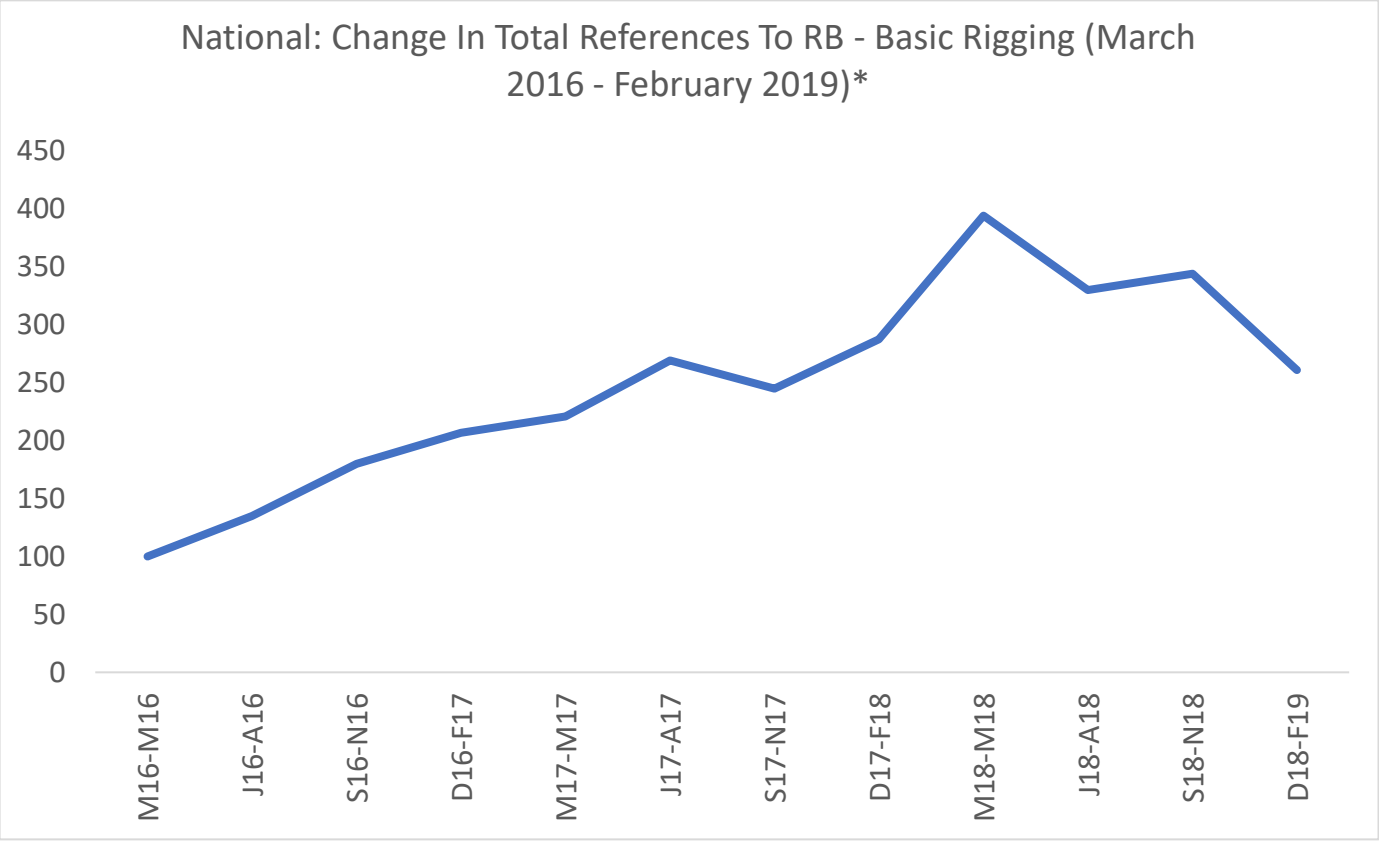

ACT: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing DG - Dogging
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

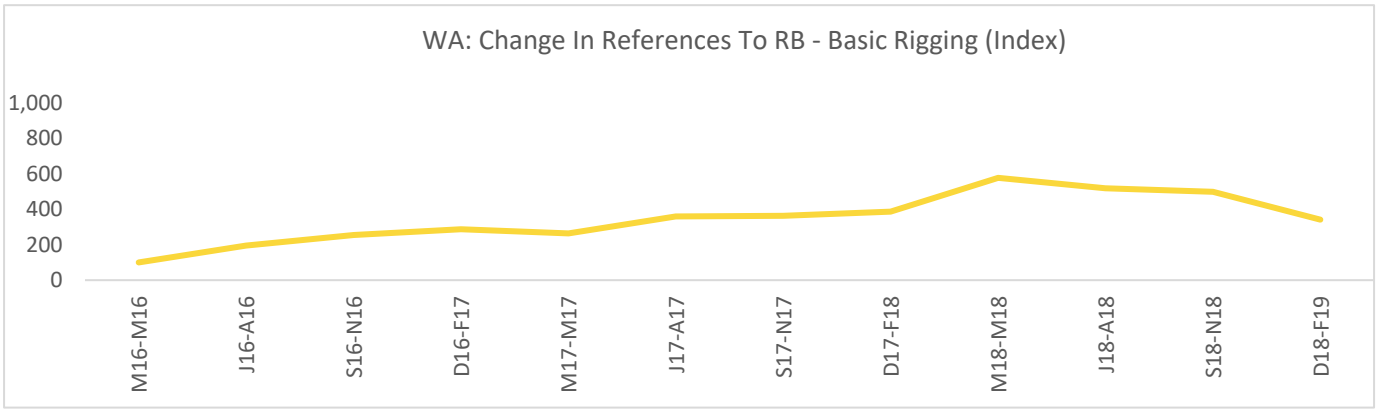
RB - Basic Rigging

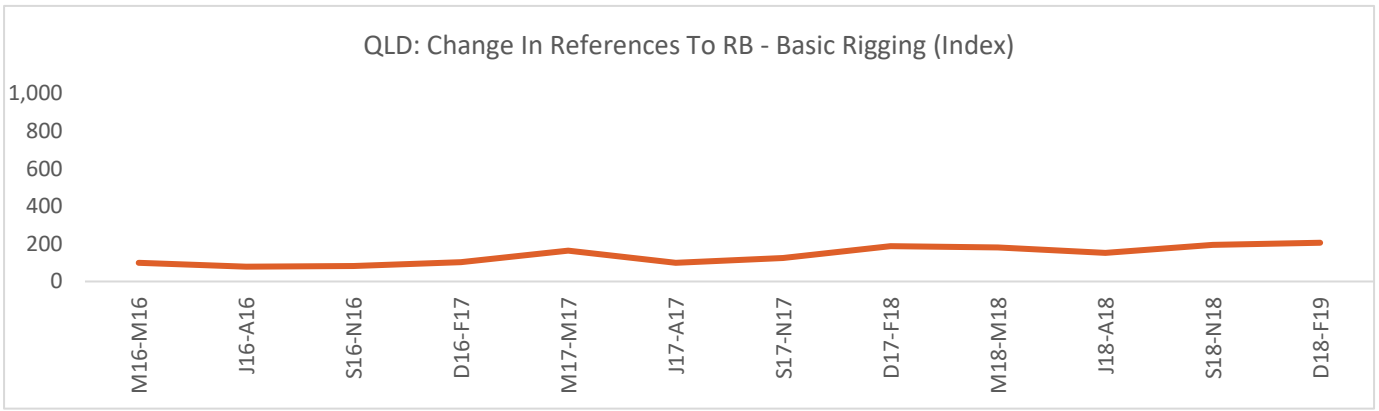
Total References: 3568

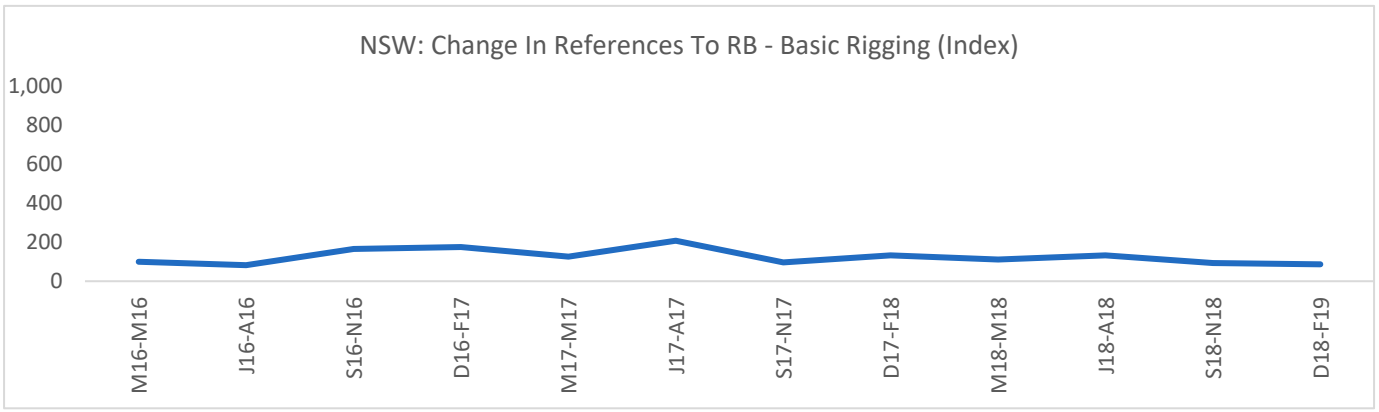


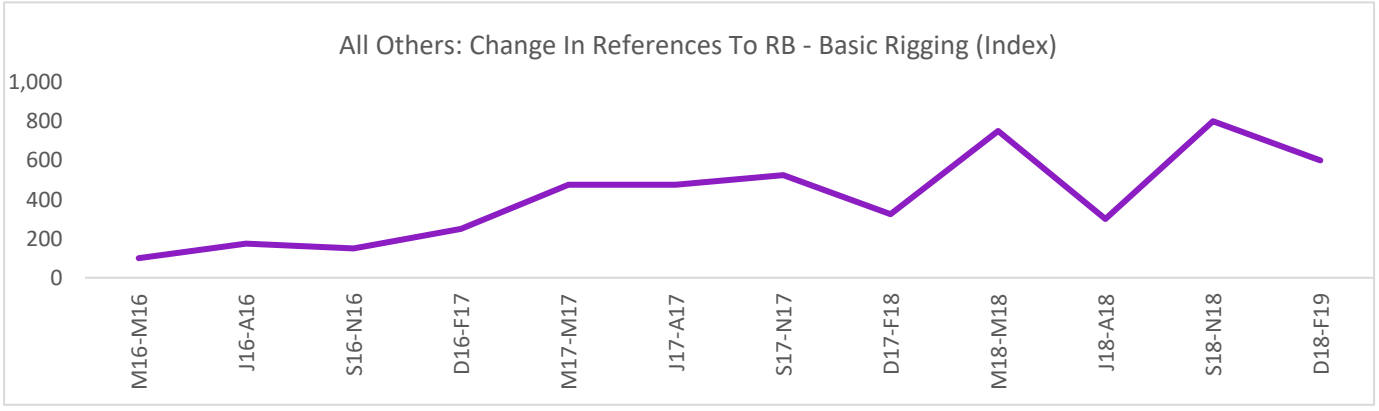


*Index: March - May 2016 = 100


WA: Change In References To RB - Basic Rigging (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


QLD: Change In References To RB - Basic Rigging (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NSW: Change In References To RB - Basic Rigging (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


All Others: Change In References To RB - Basic Rigging (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
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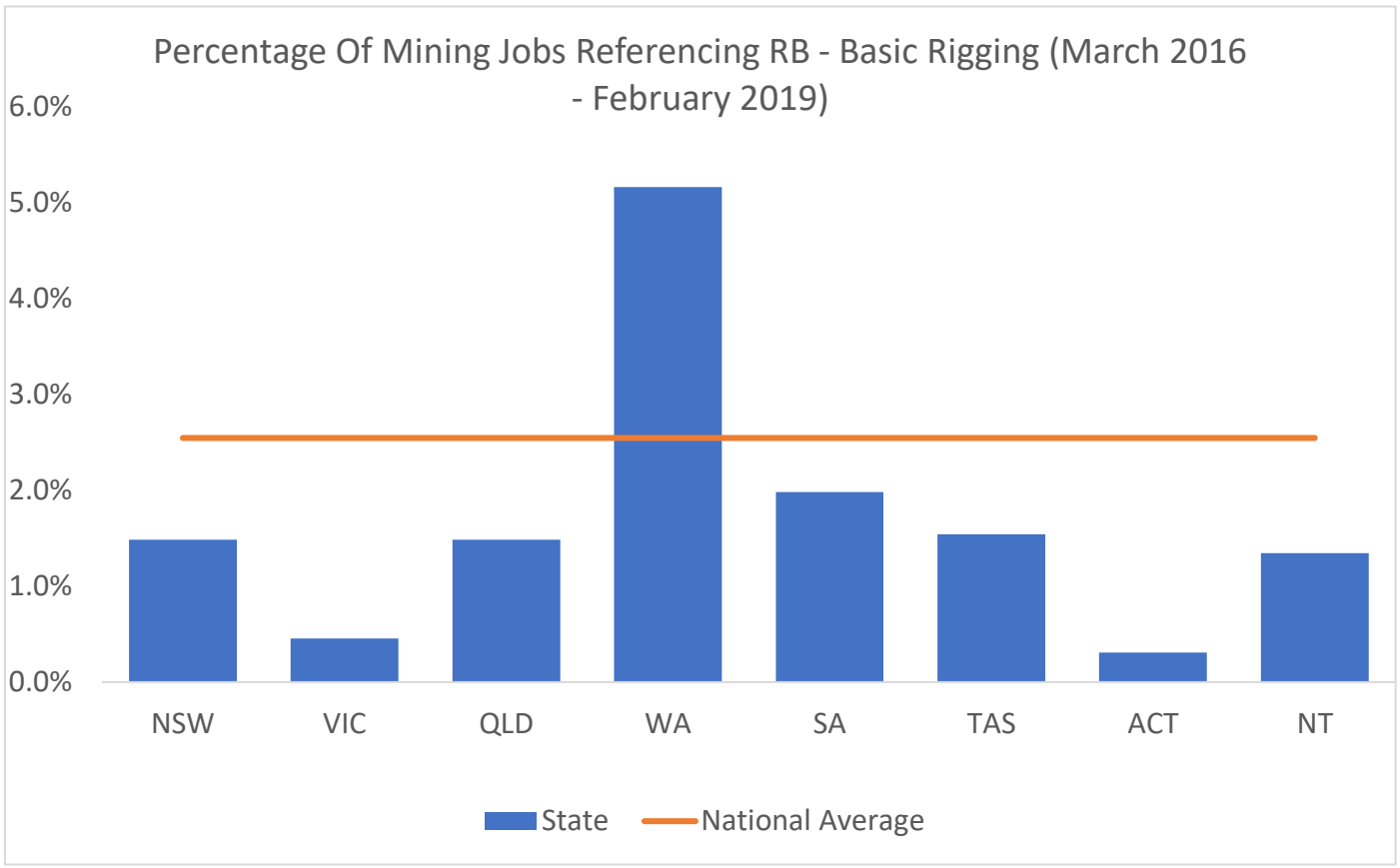
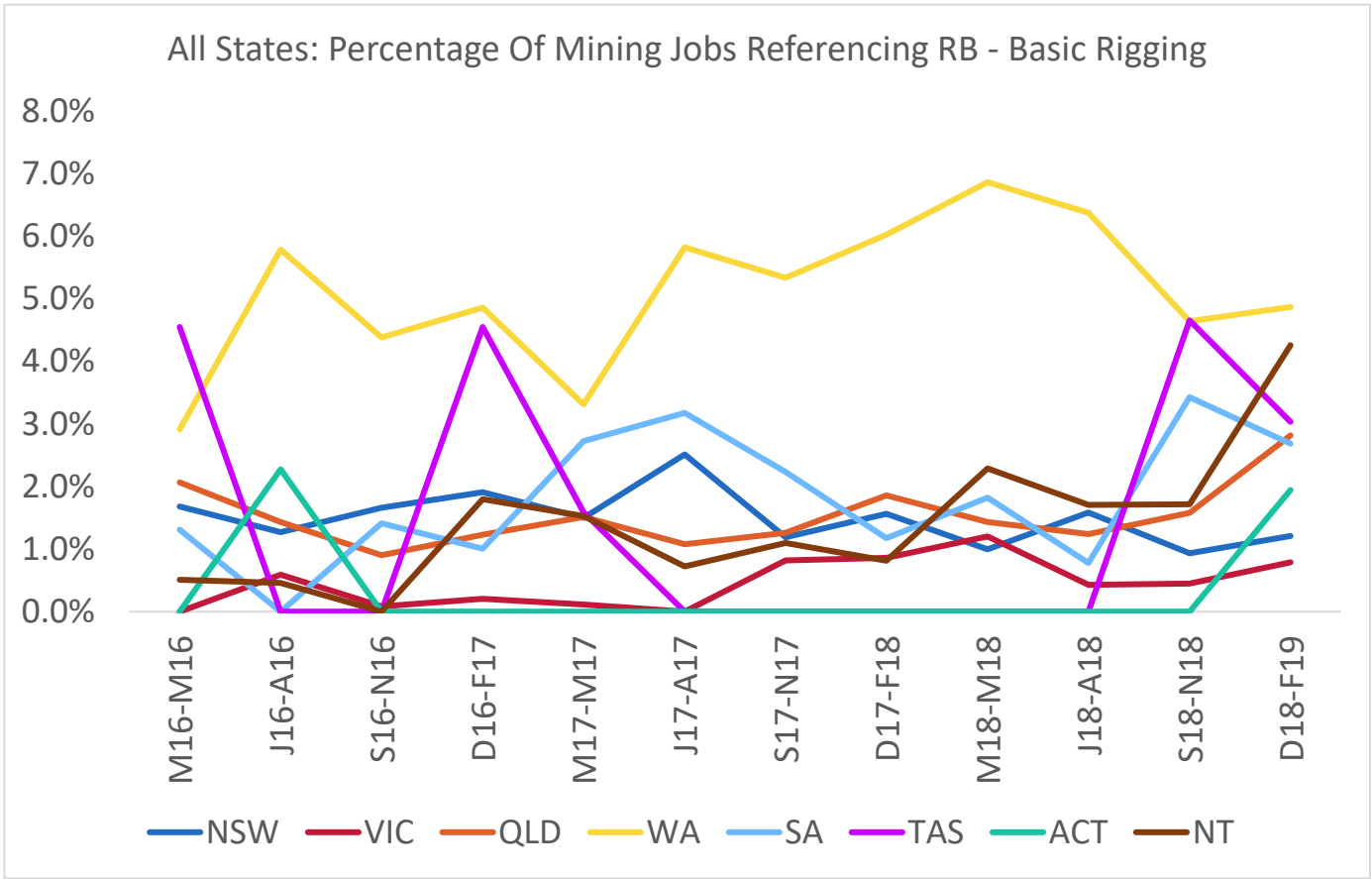
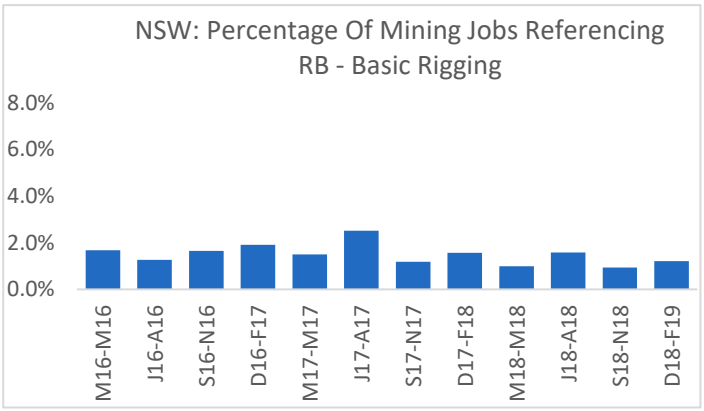
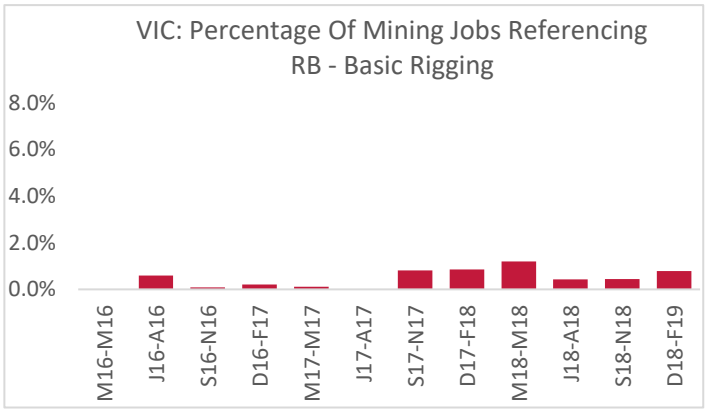
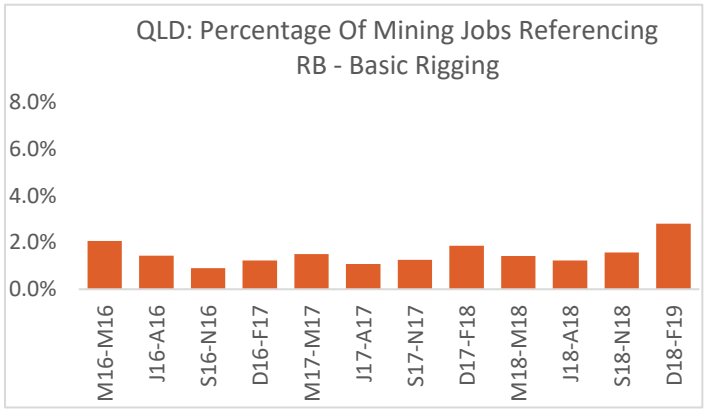
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

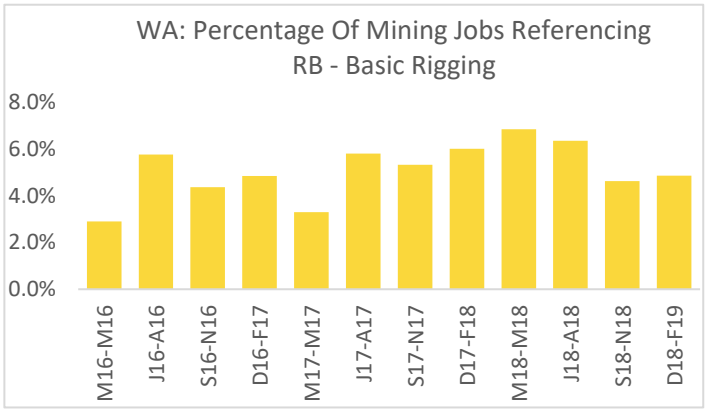

Percentage Of Mining Jobs Referencing RB - Basic Rigging (March 2016 - February 2019)
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

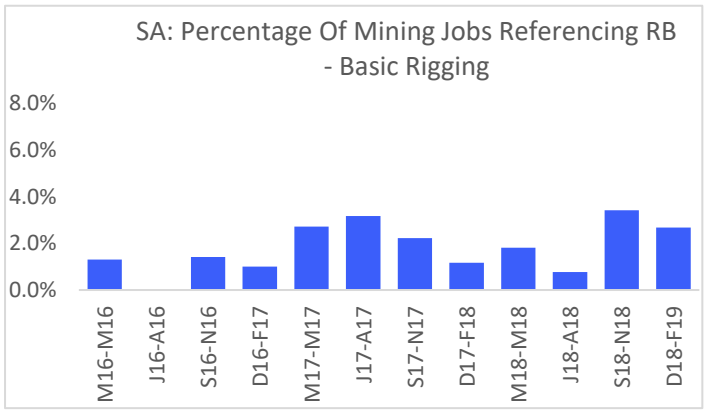

All States: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

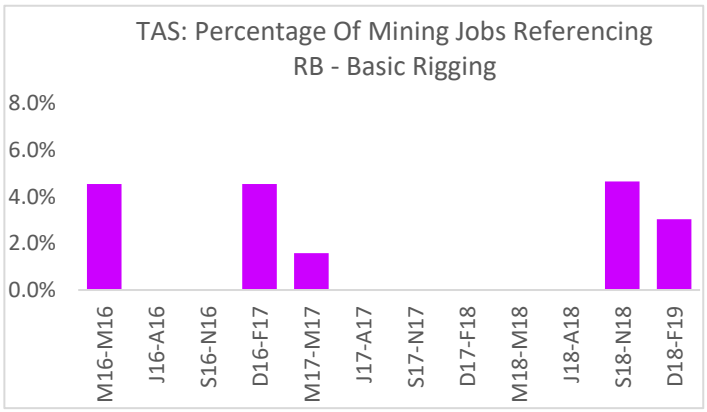

NSW: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

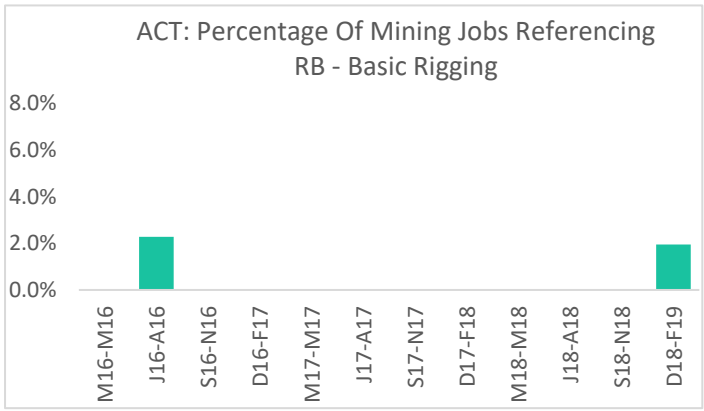

VIC: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

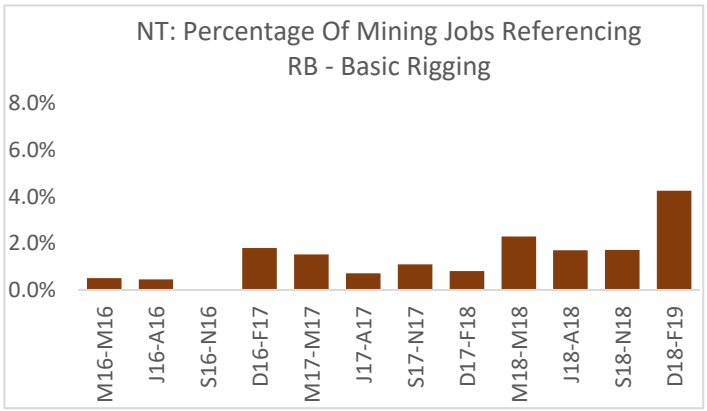

QLD: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

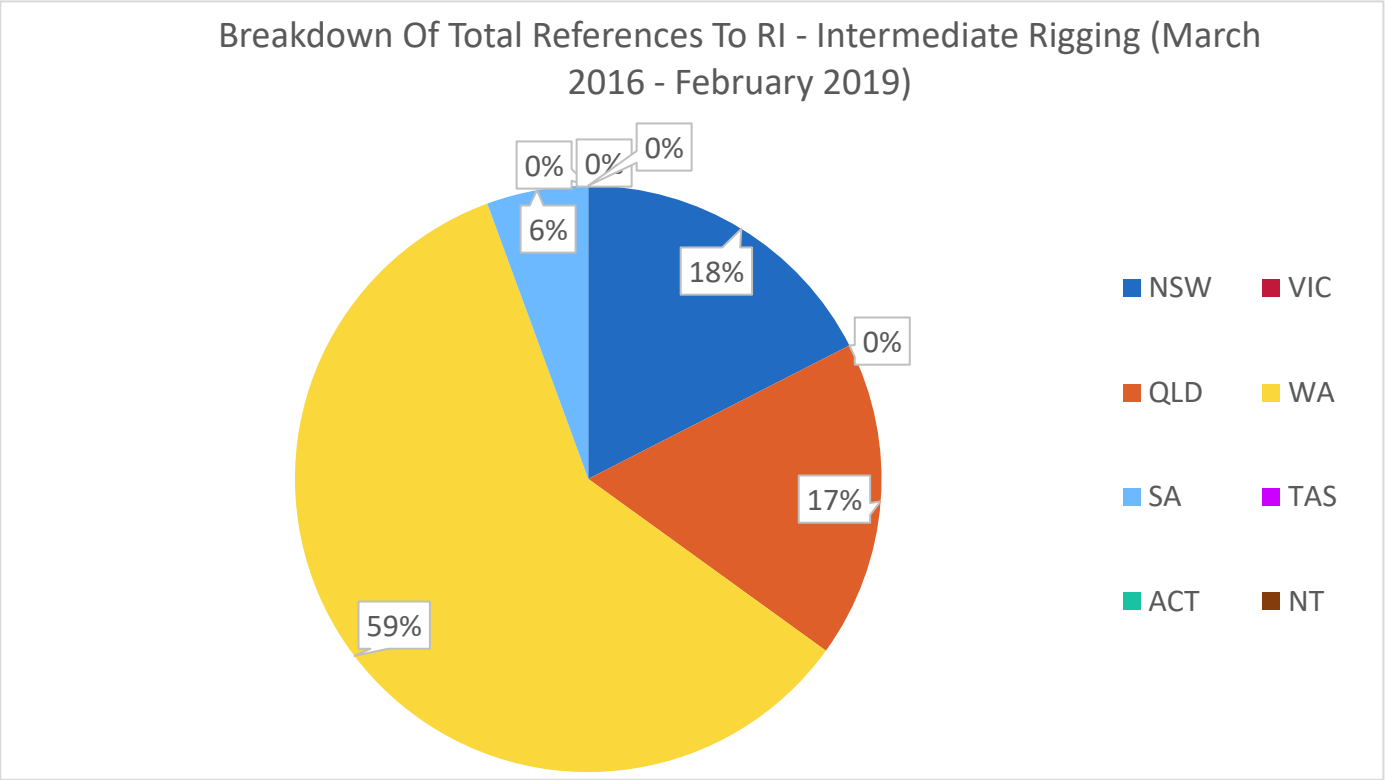

TAS: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

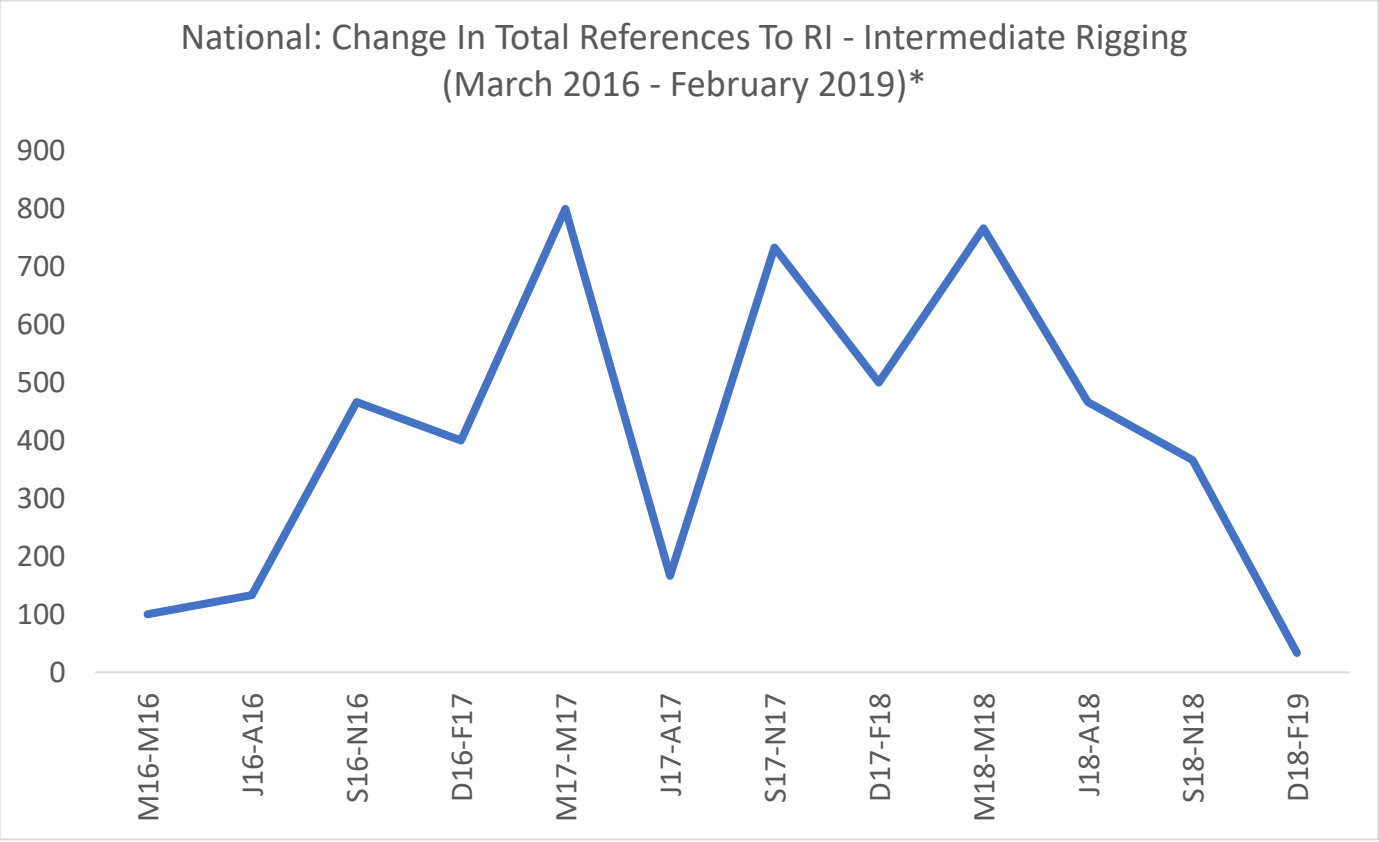

ACT: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing RB - Basic Rigging
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

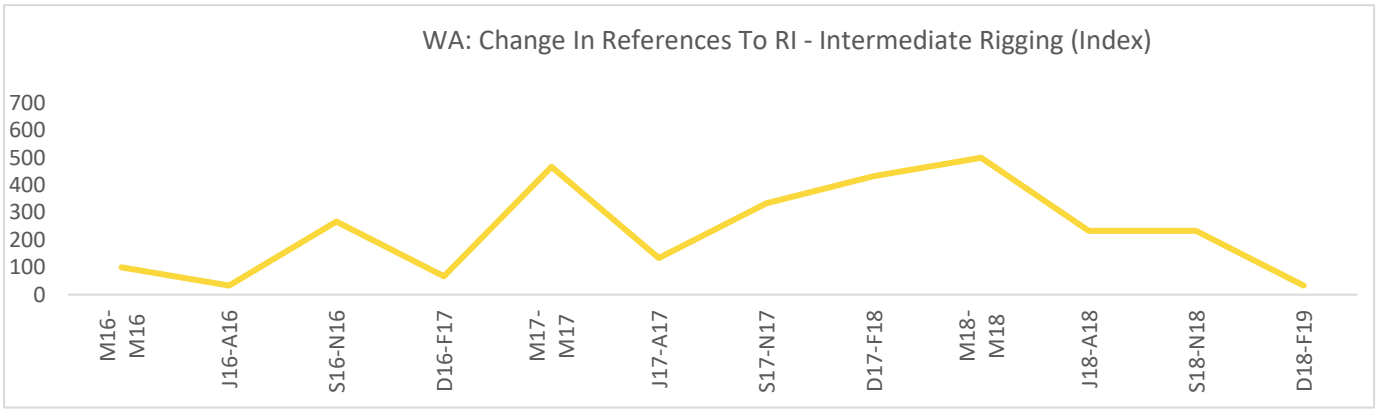
RI - Intermediate Rigging

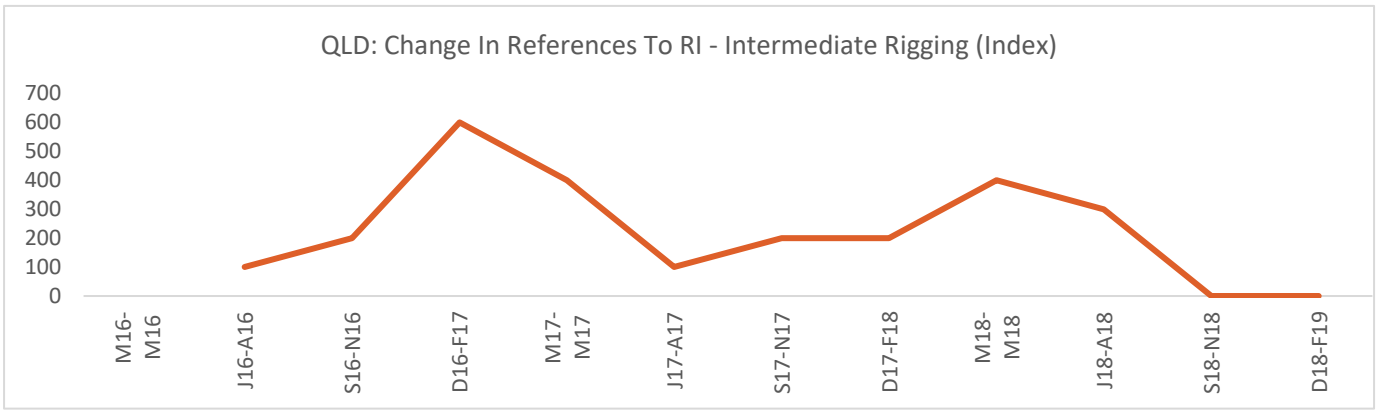
Total References: 148

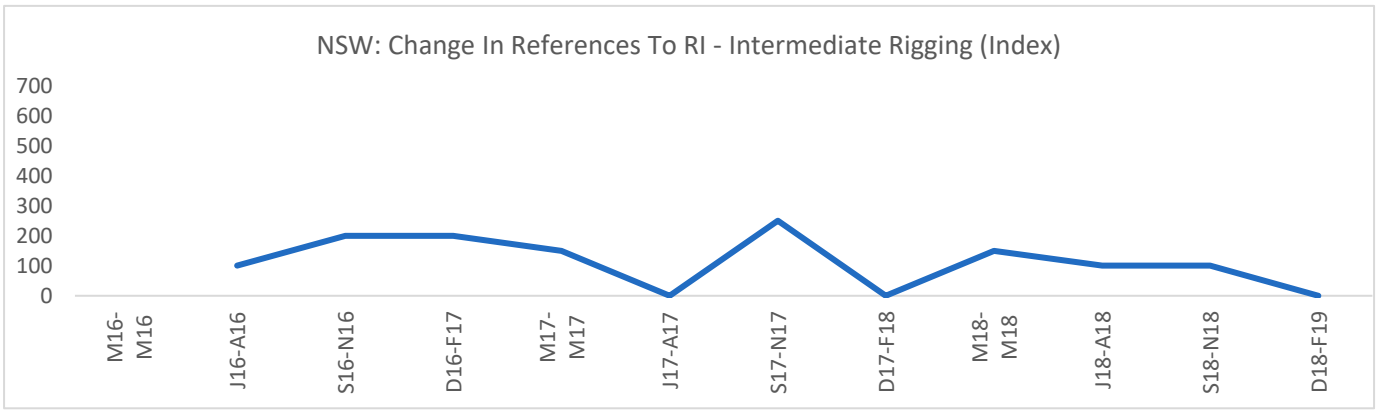


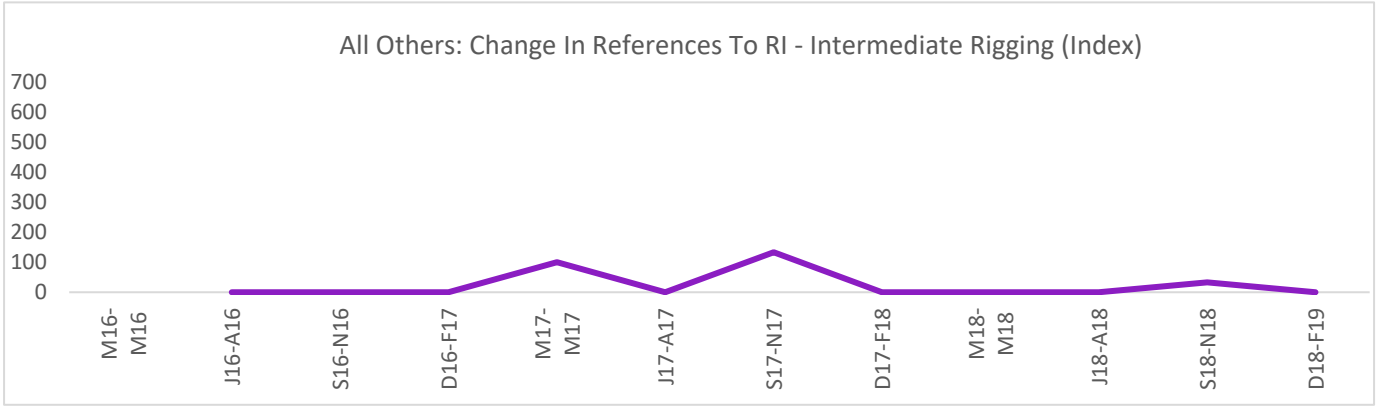


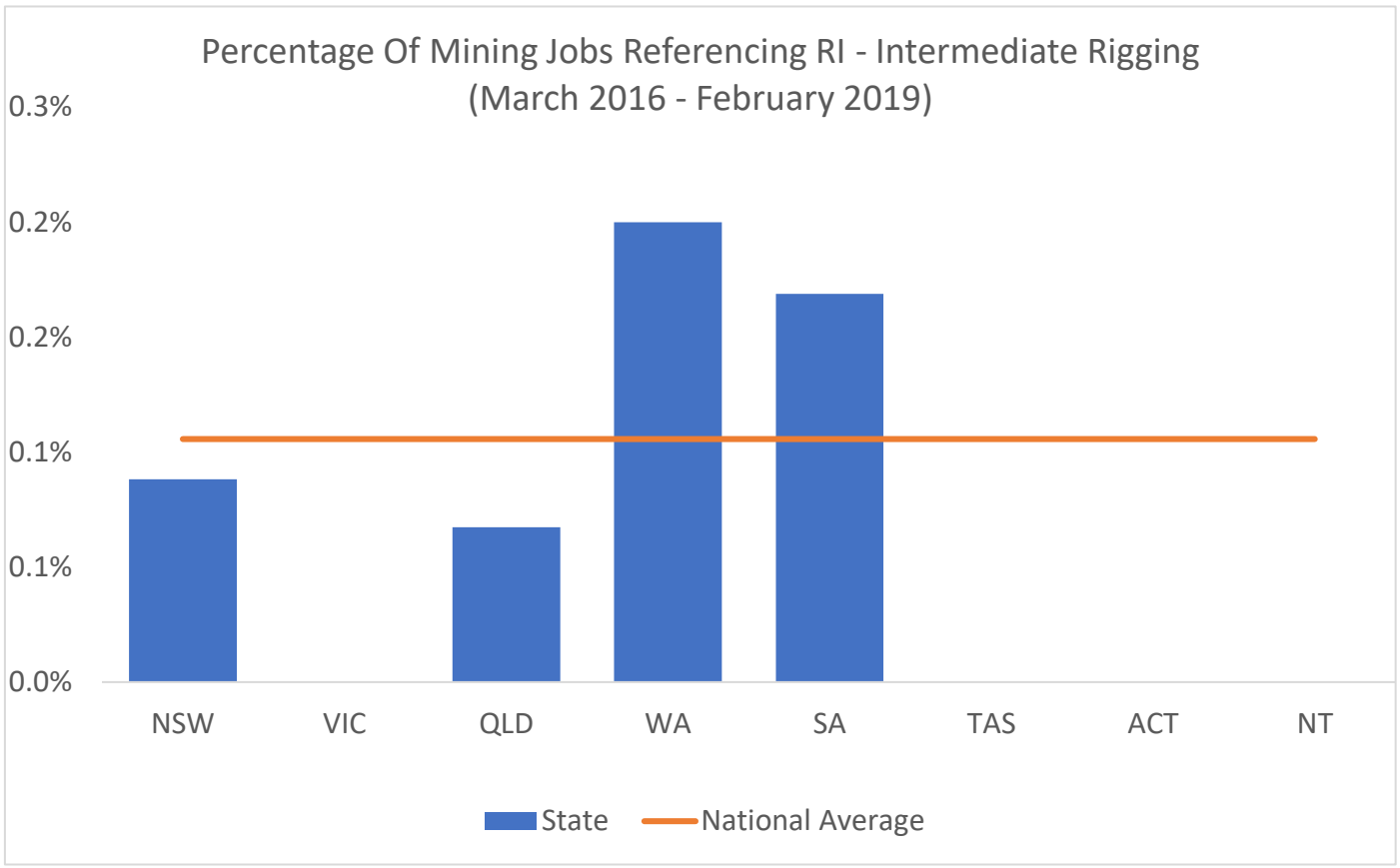
*Index: March - May 2016 = 100

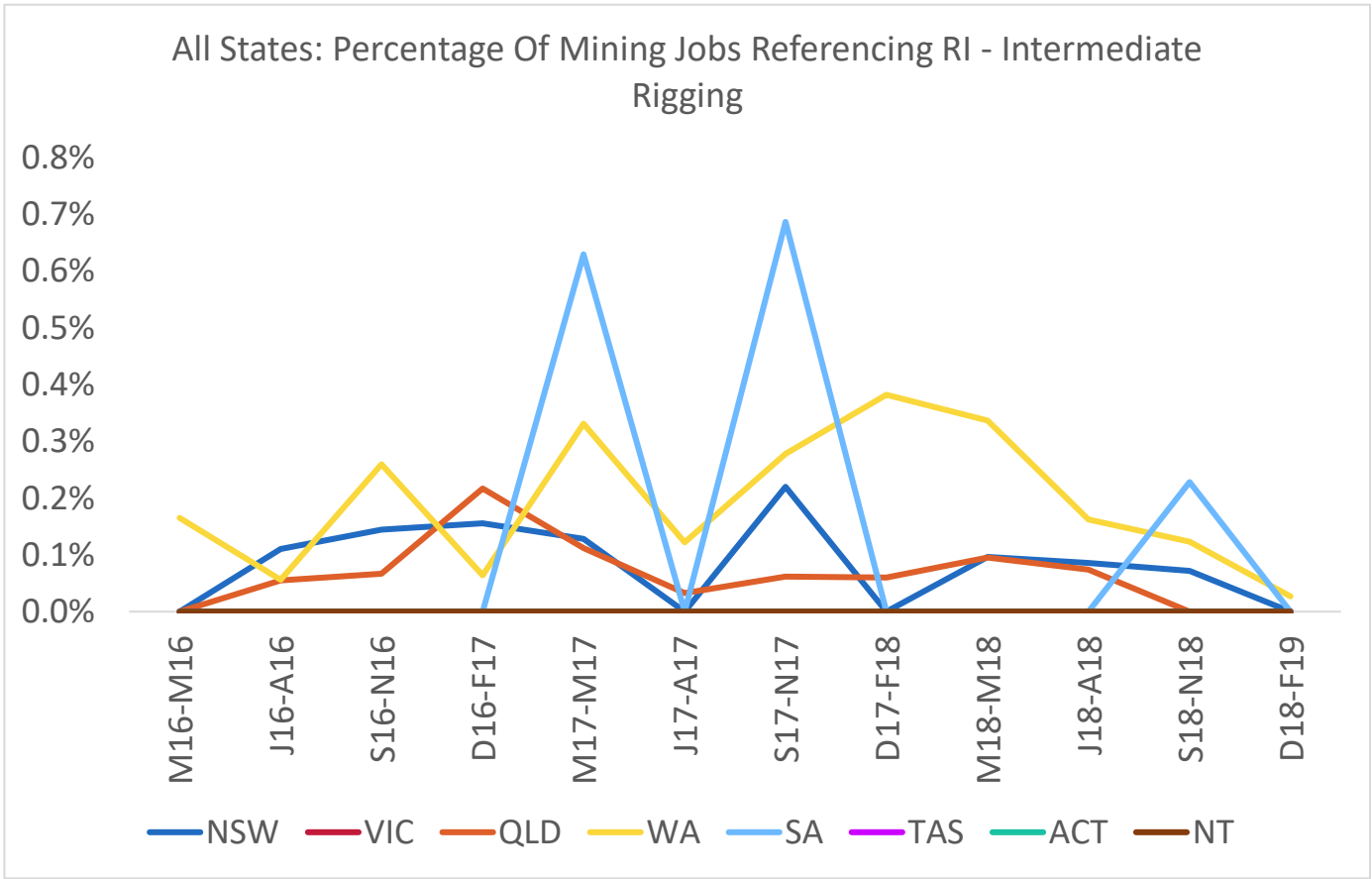

WA: Change In References To RI - Intermediate Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

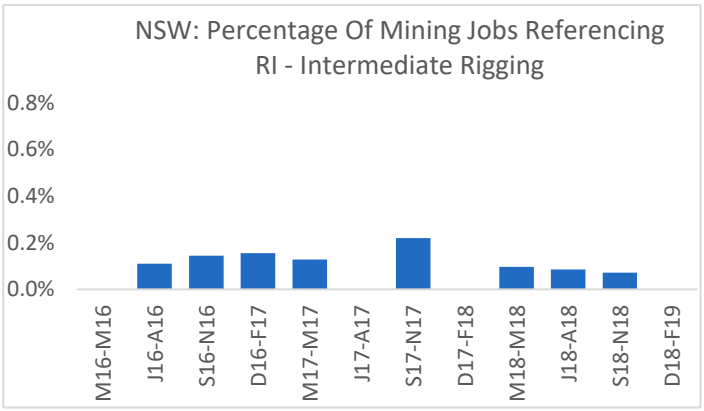

QLD: Change In References To RI - Intermediate Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

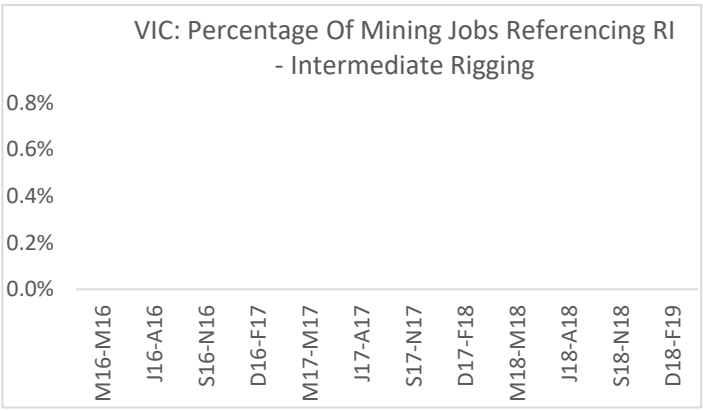

NSW: Change In References To RI - Intermediate Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

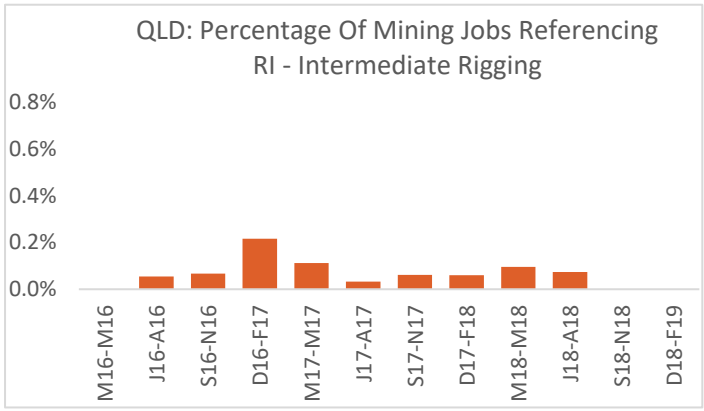

All Others: Change In References To RI - Intermediate Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

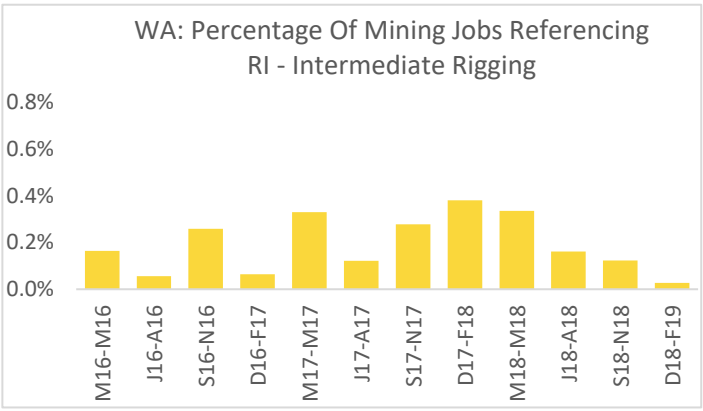

Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
(March 2016 - February 2019)
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

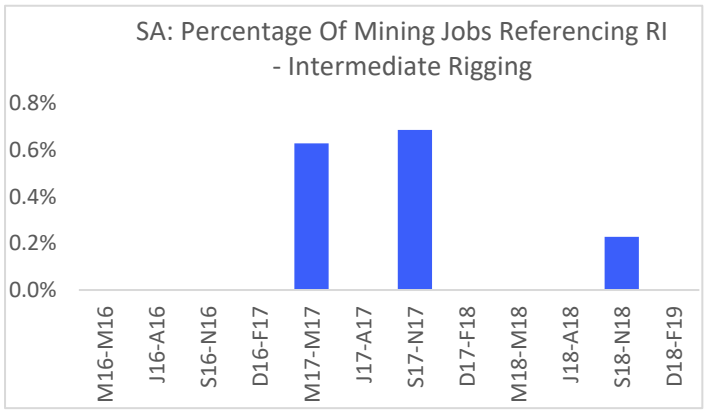

All States: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.7%
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

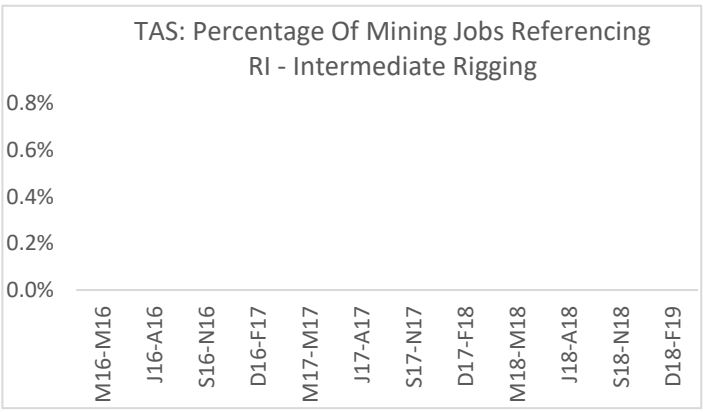

NSW: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

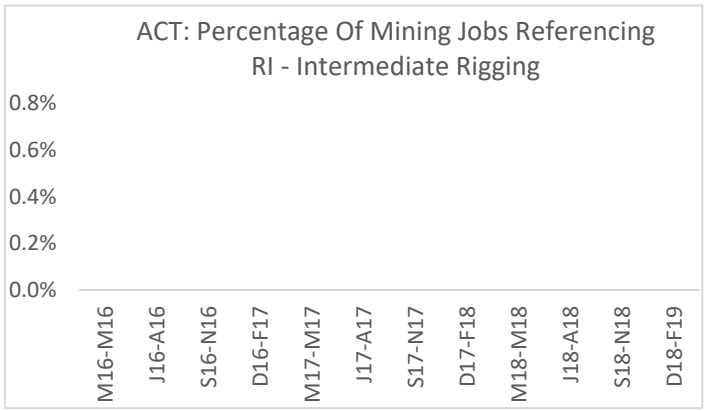

VIC: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

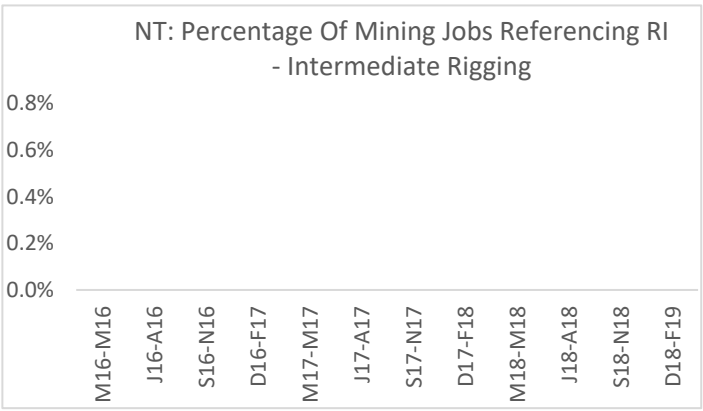

QLD: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

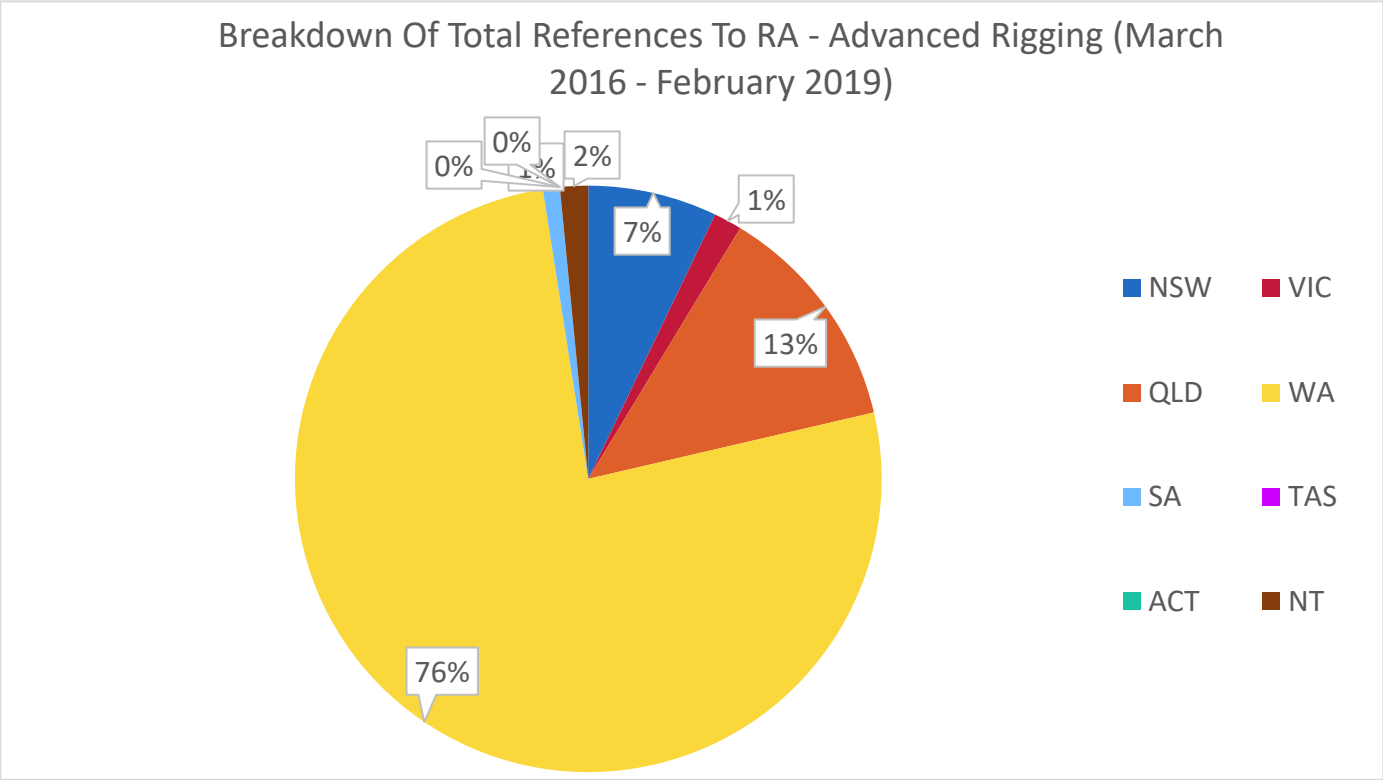

TAS: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

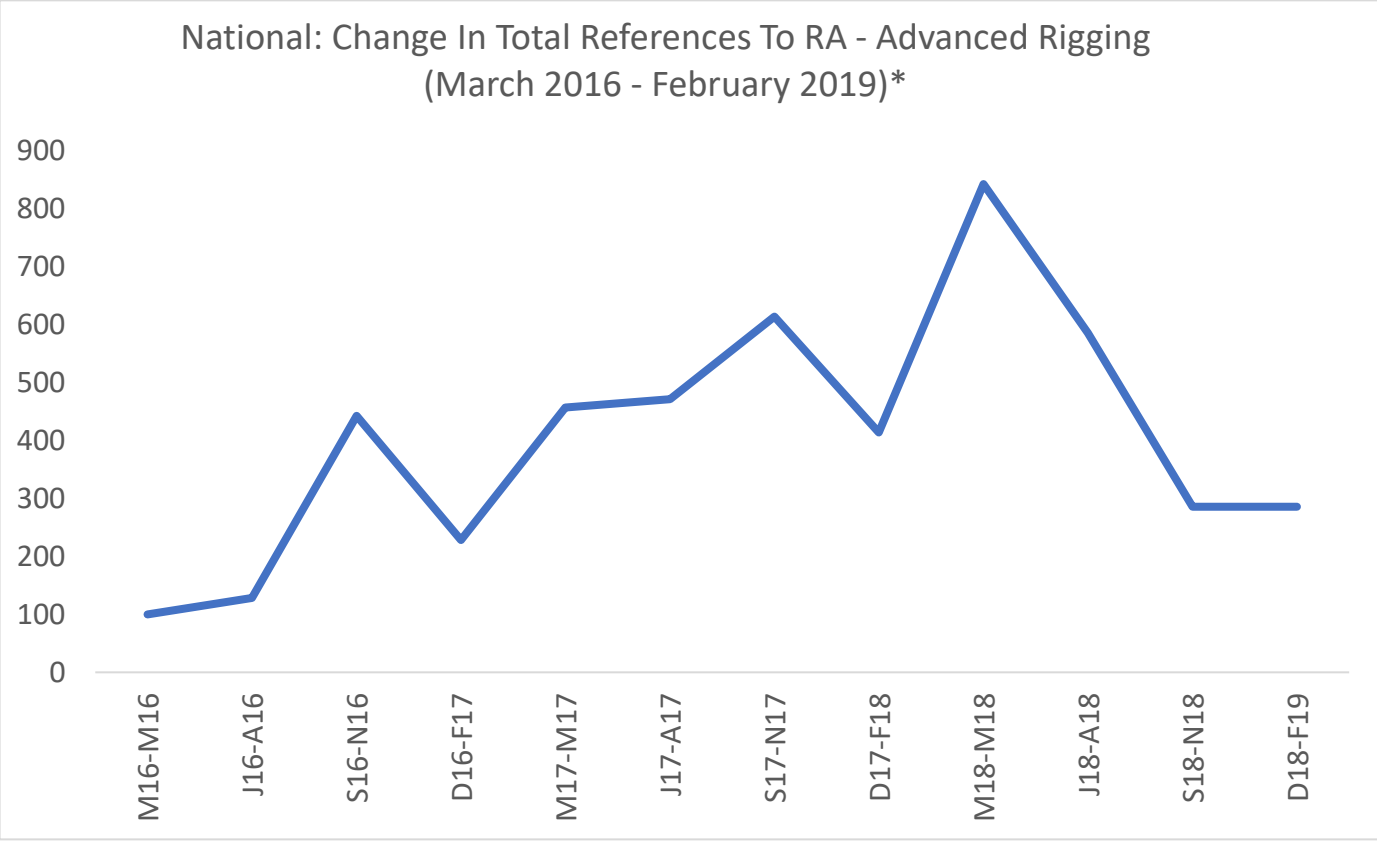

ACT: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing RI - Intermediate Rigging
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

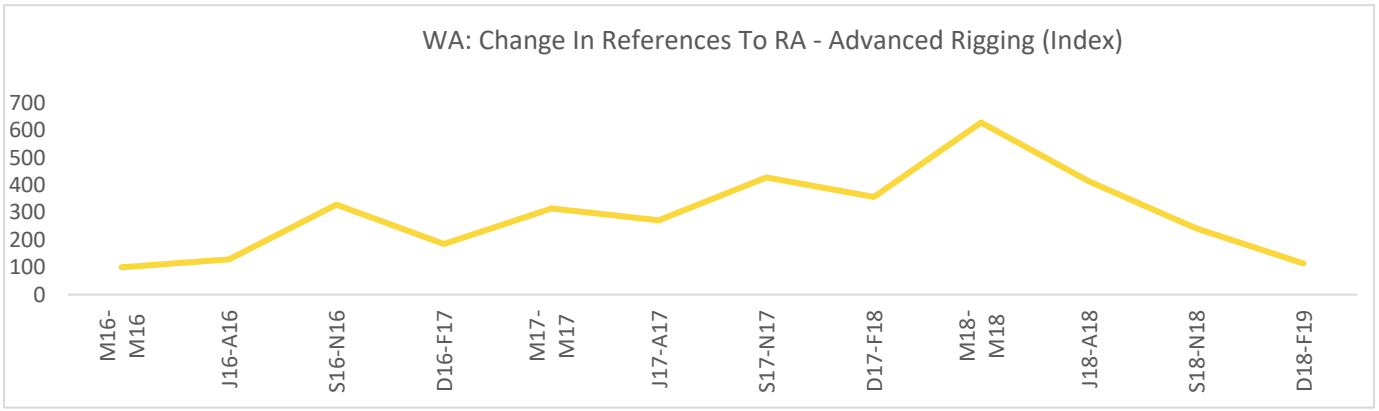
RA - Advanced Rigging

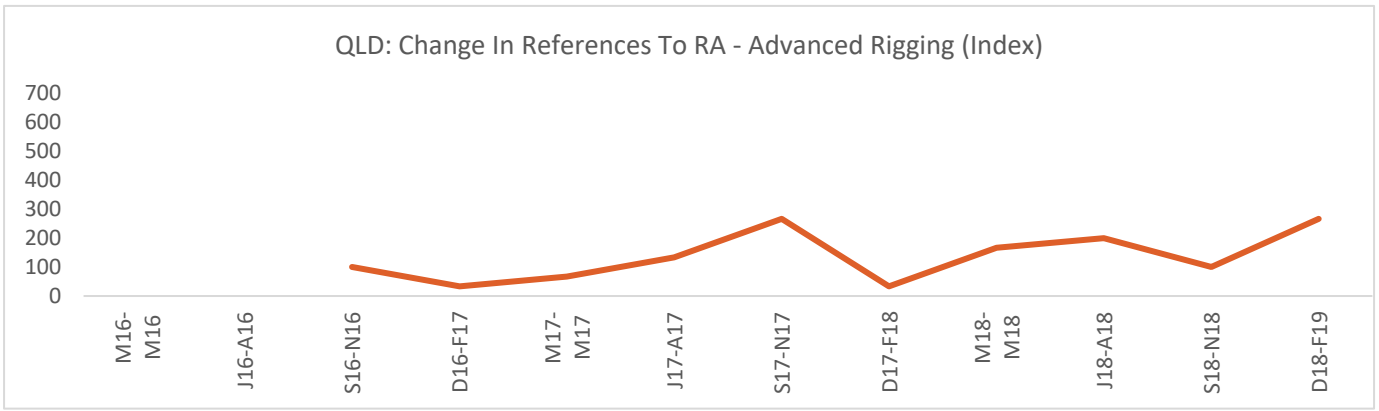
Total References: 340

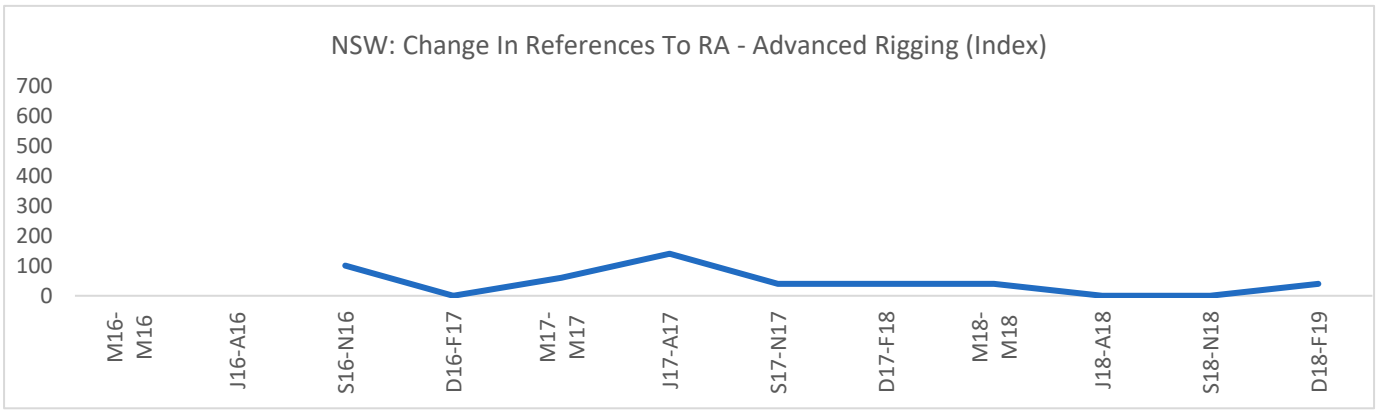


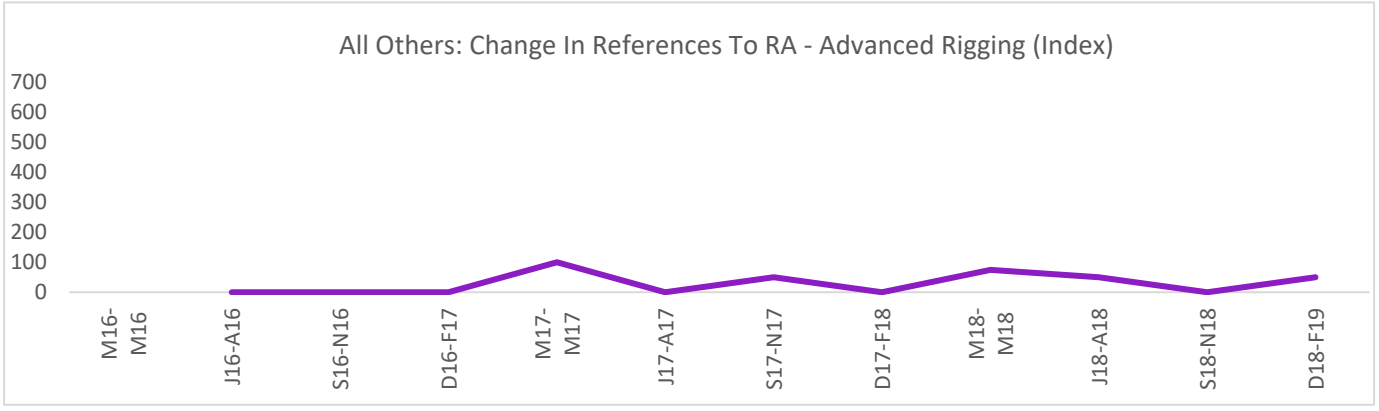


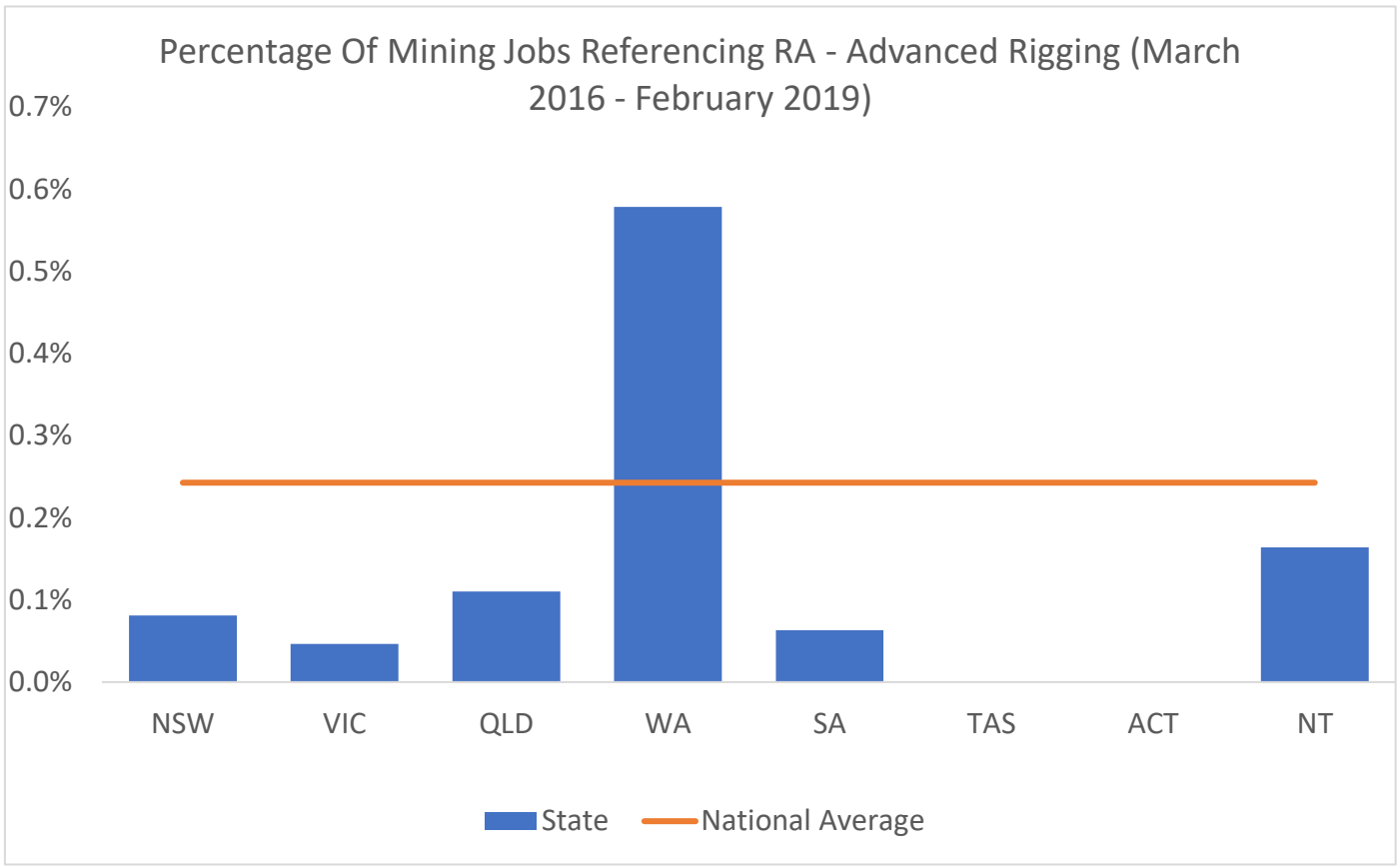
*Index: March - May 2016 = 100

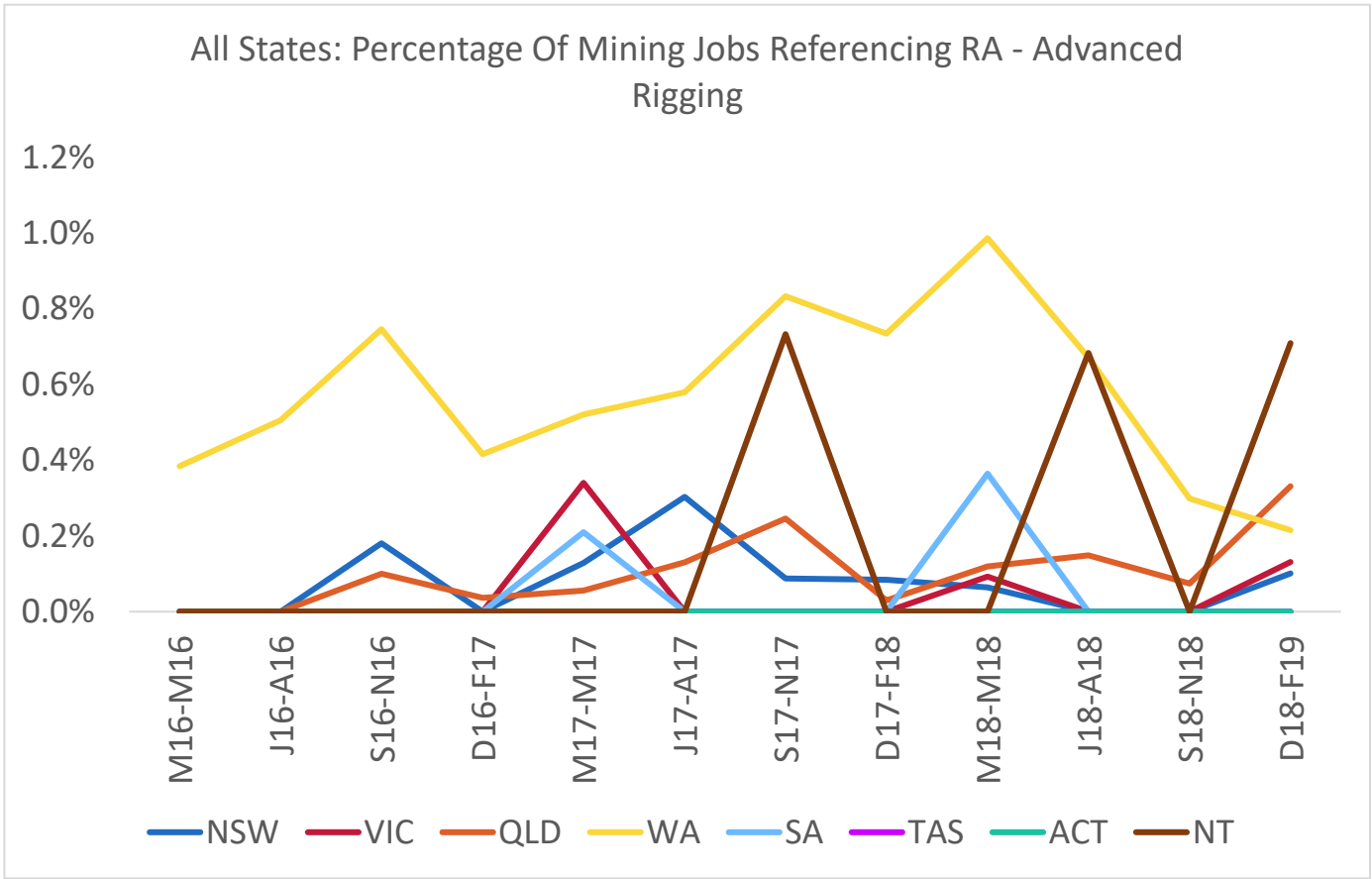

WA: Change In References To RA - Advanced Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

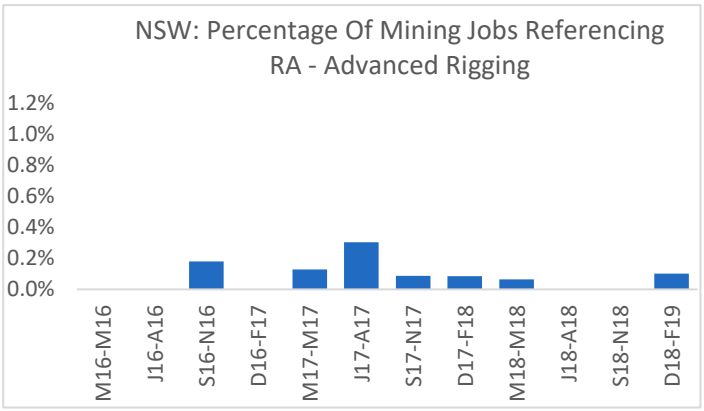

QLD: Change In References To RA - Advanced Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

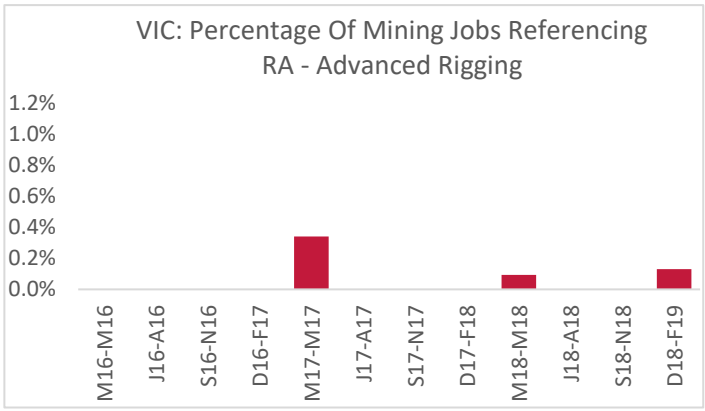

NSW: Change In References To RA - Advanced Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

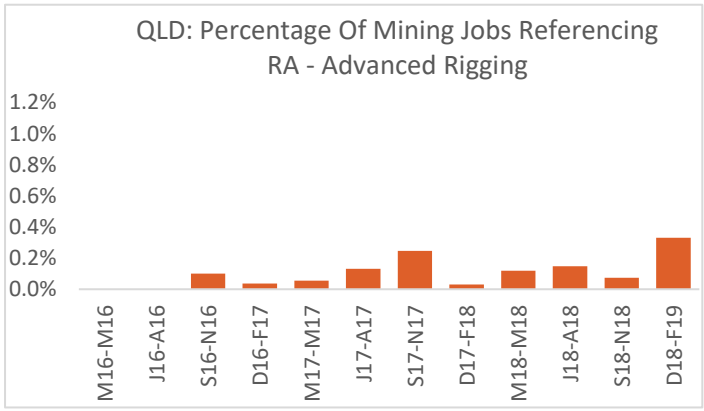

All Others: Change In References To RA - Advanced Rigging (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

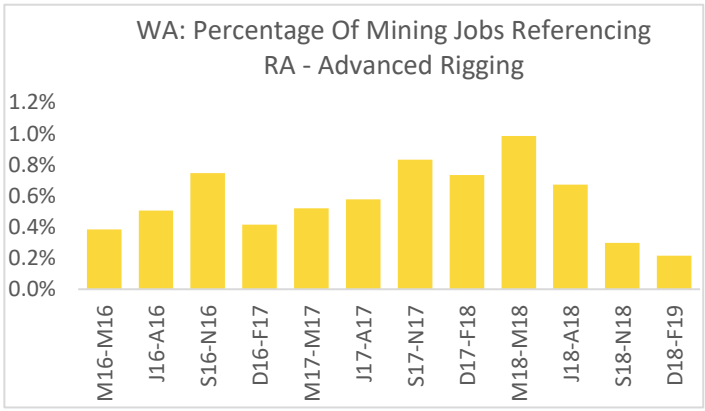

Percentage Of Mining Jobs Referencing RA - Advanced Rigging (March 2016 - February 2019)
0.7%
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

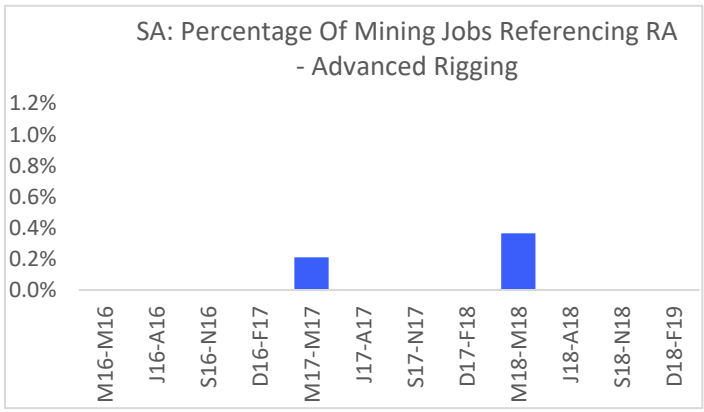

All States: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

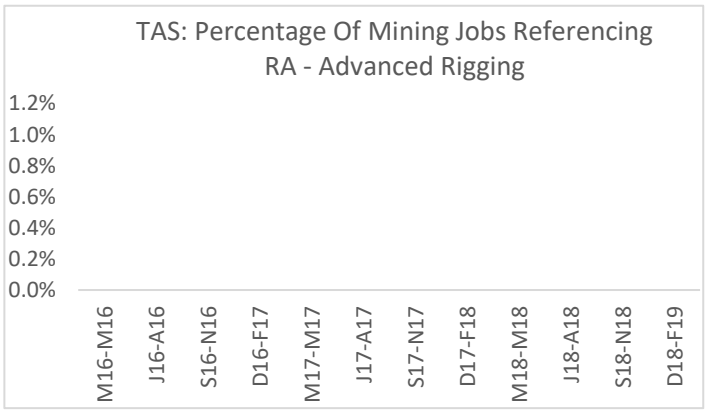

NSW: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

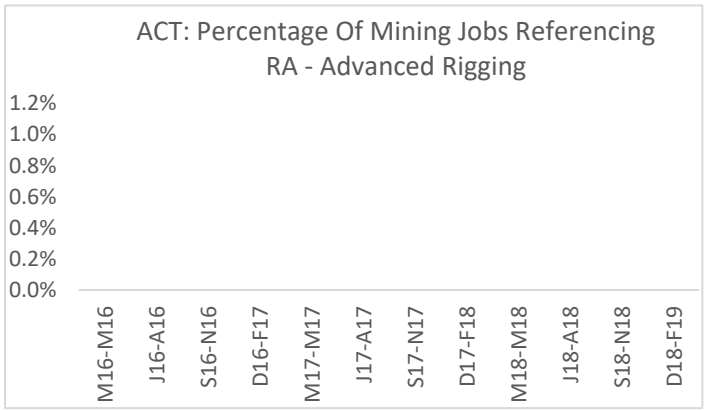

VIC: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

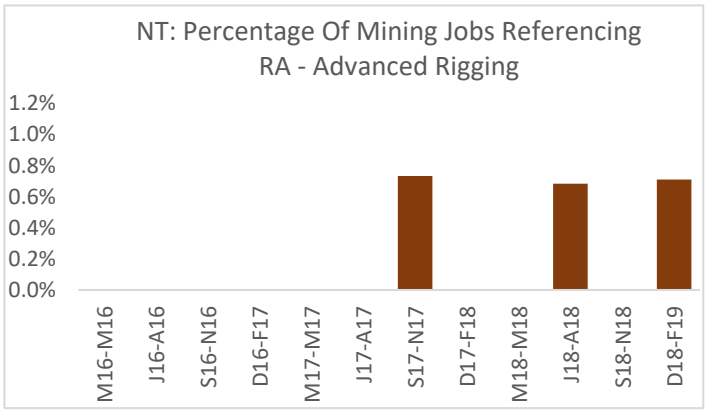

QLD: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

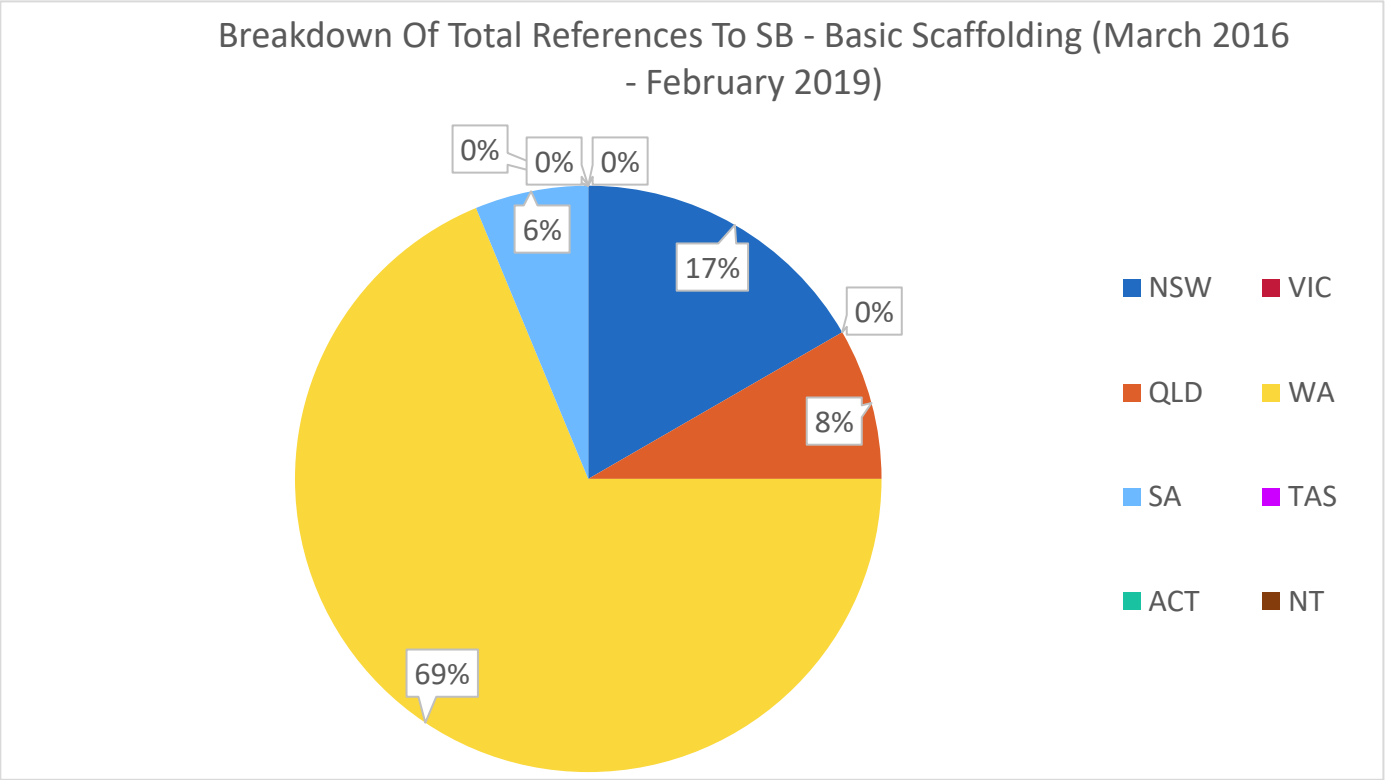

TAS: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

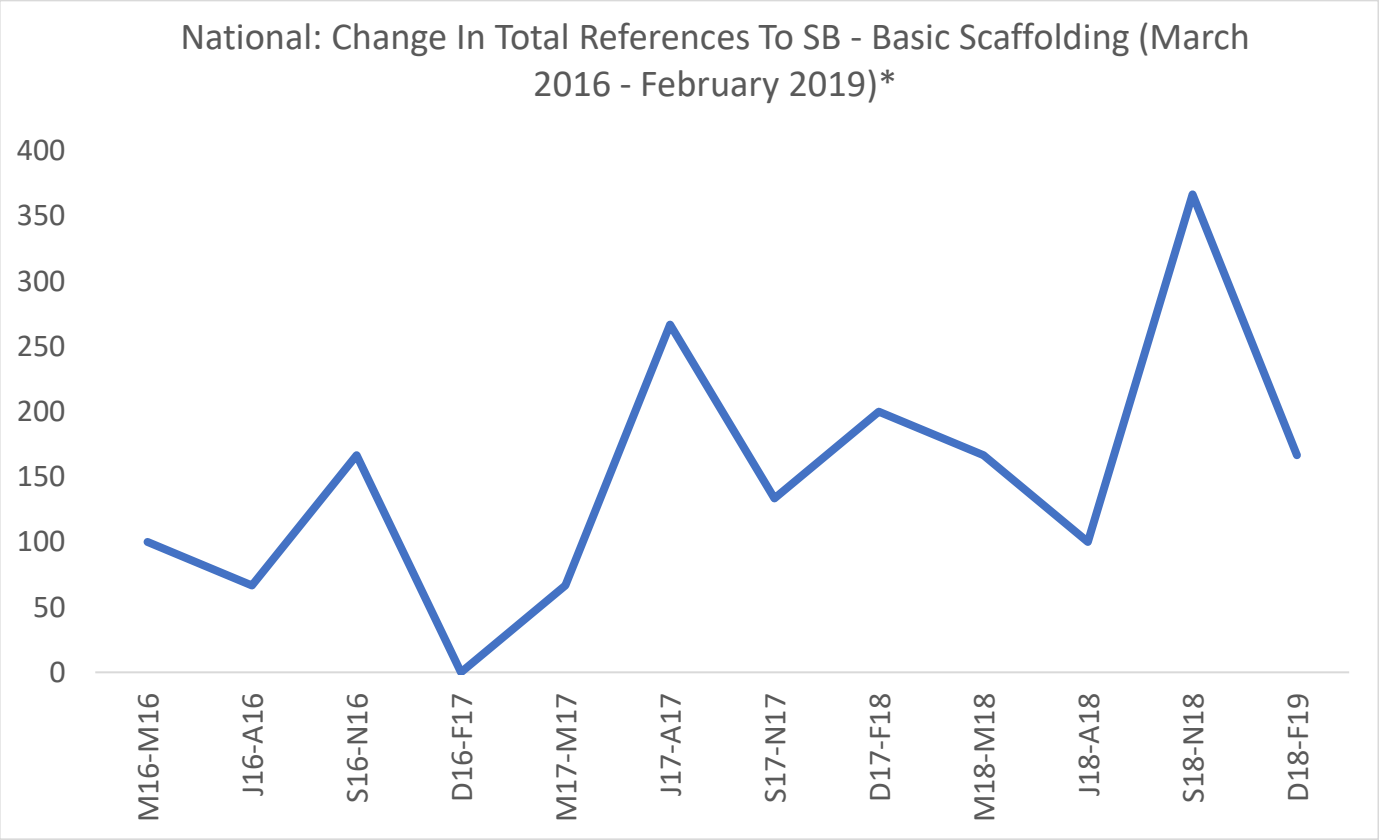

ACT: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing RA - Advanced Rigging
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

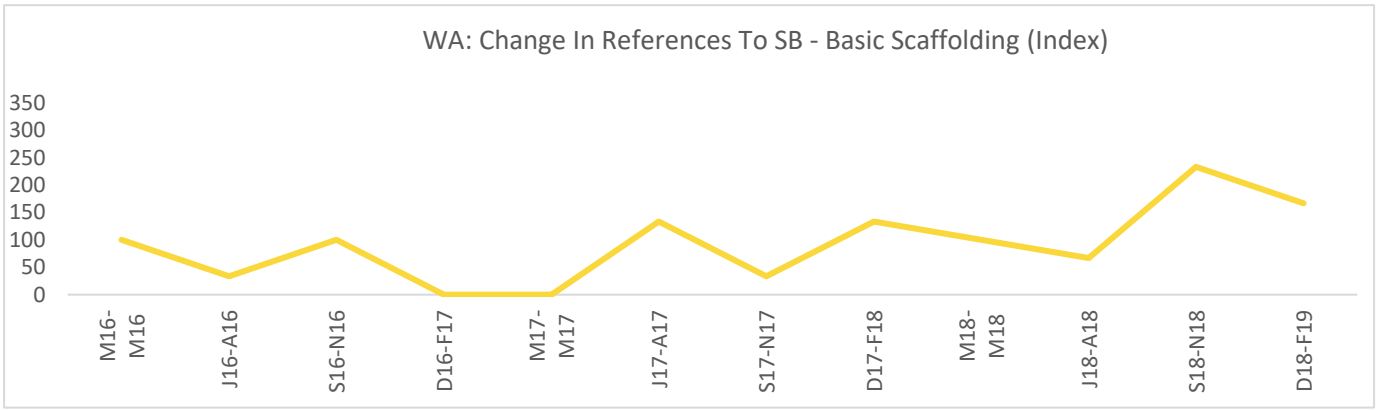
SB - Basic Scaffolding

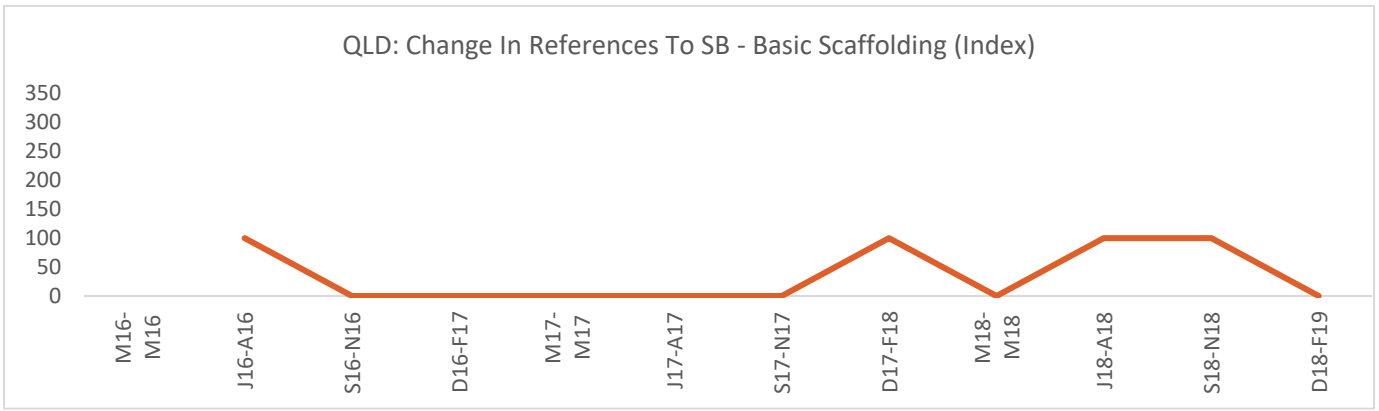
Total References: 54

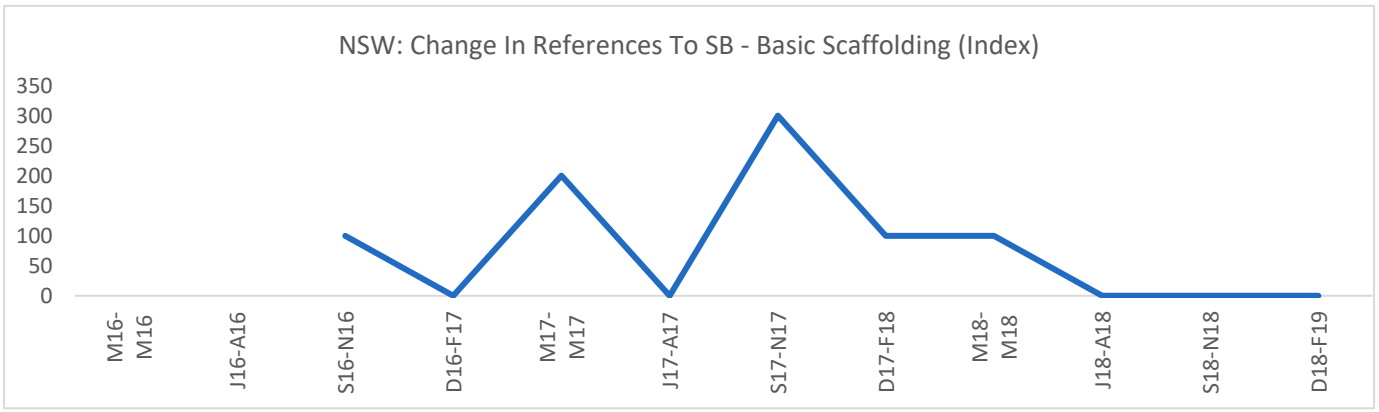


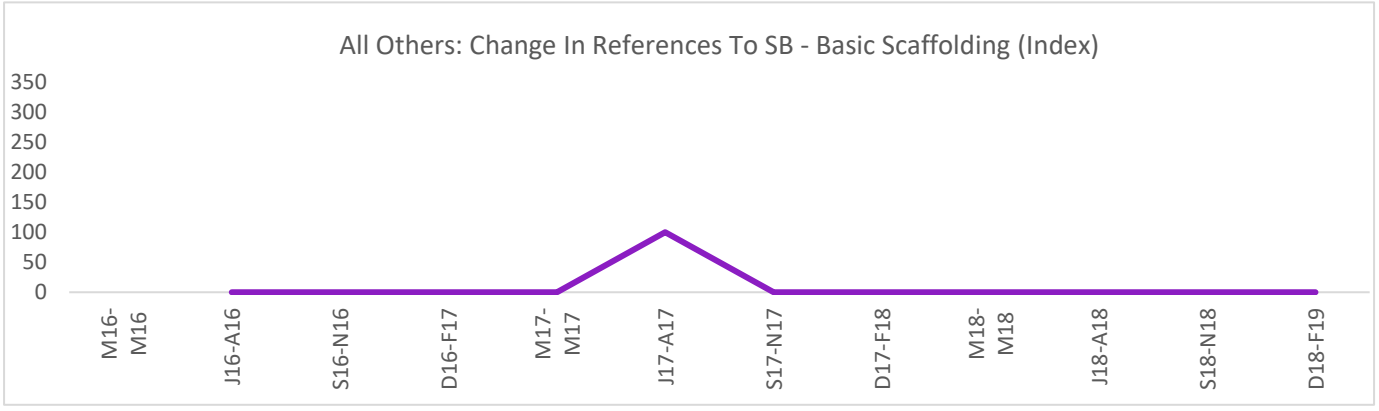


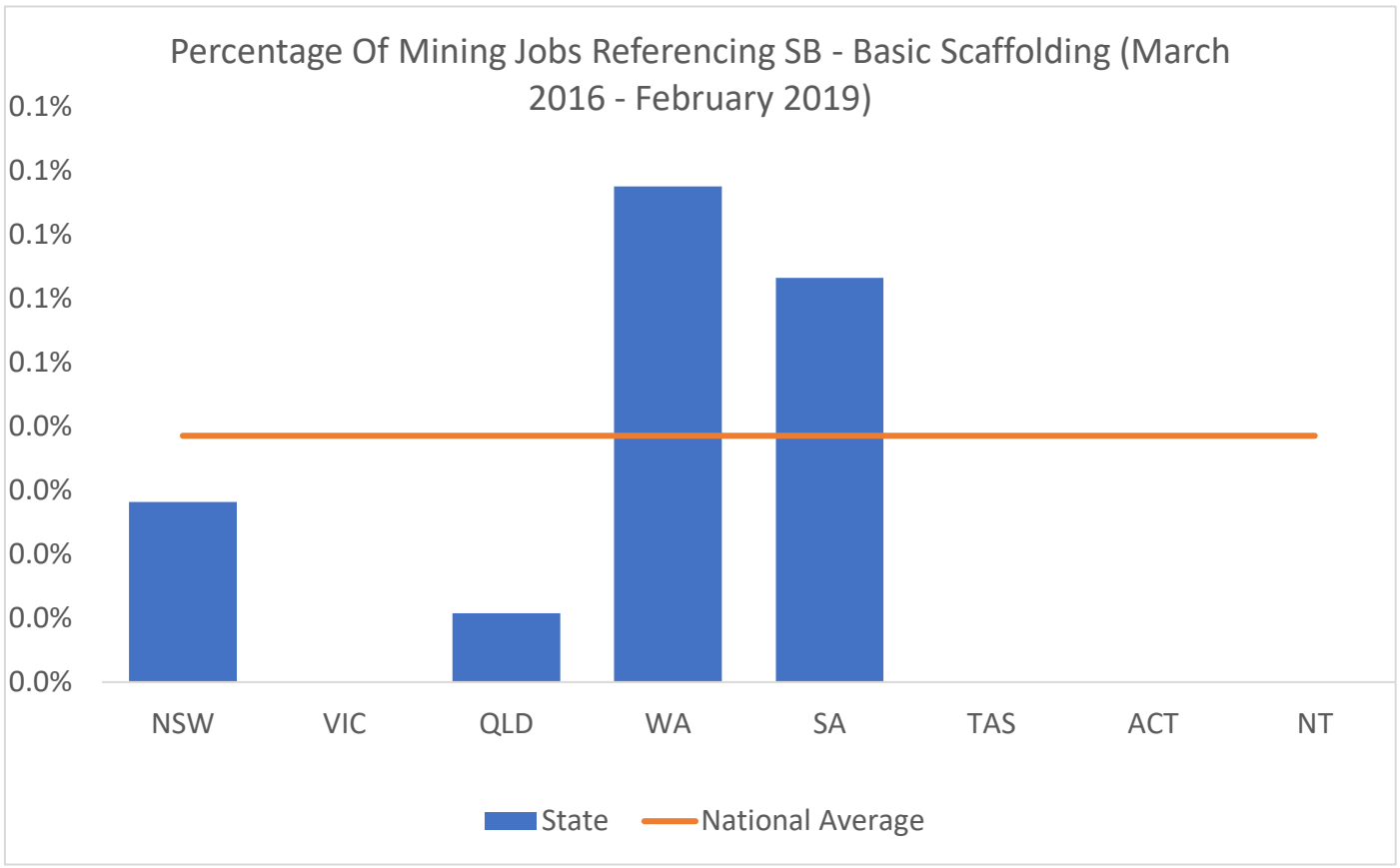
*Index: March - May 2016 = 100

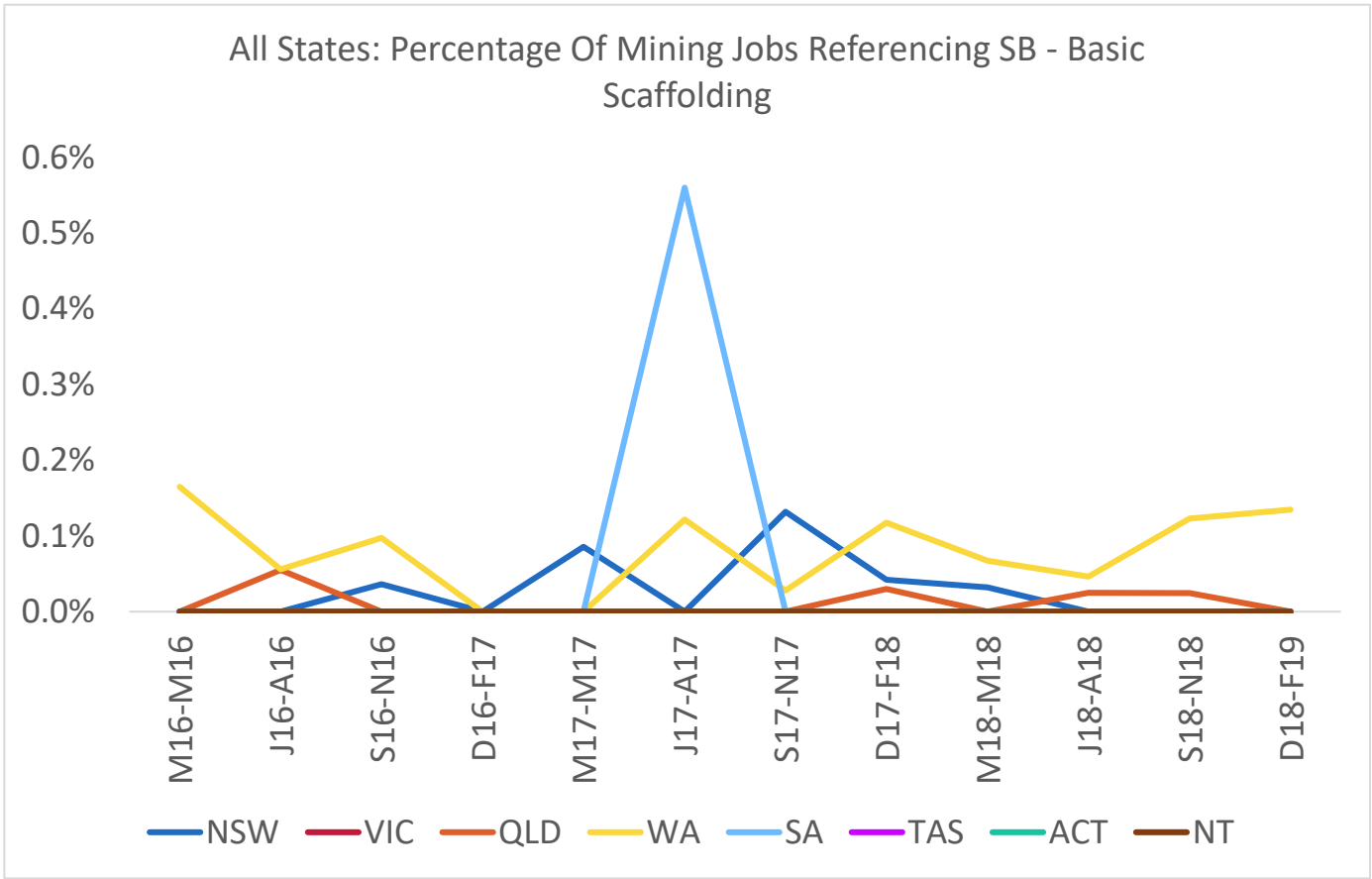

WA: Change In References To SB - Basic Scaffolding (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

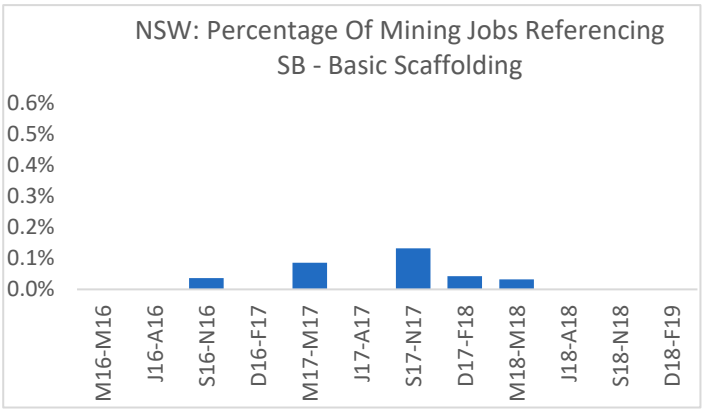

QLD: Change In References To SB - Basic Scaffolding (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

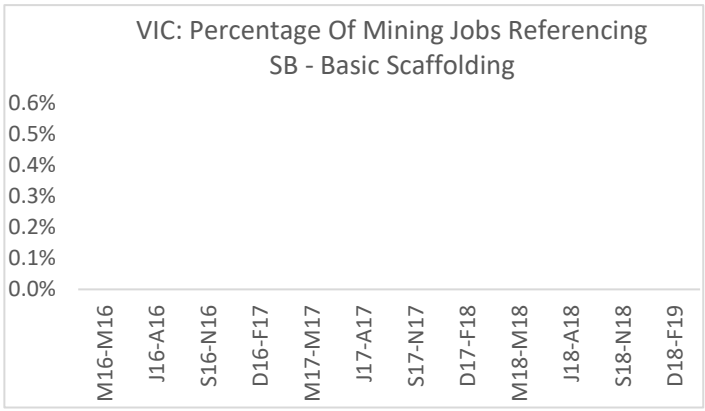

NSW: Change In References To SB - Basic Scaffolding (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

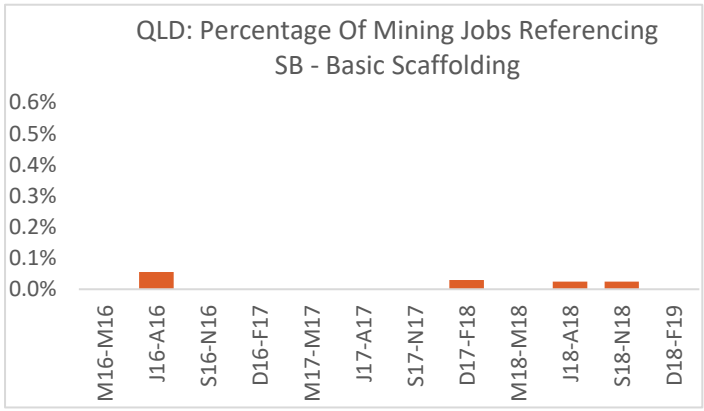

All Others: Change In References To SB - Basic Scaffolding (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

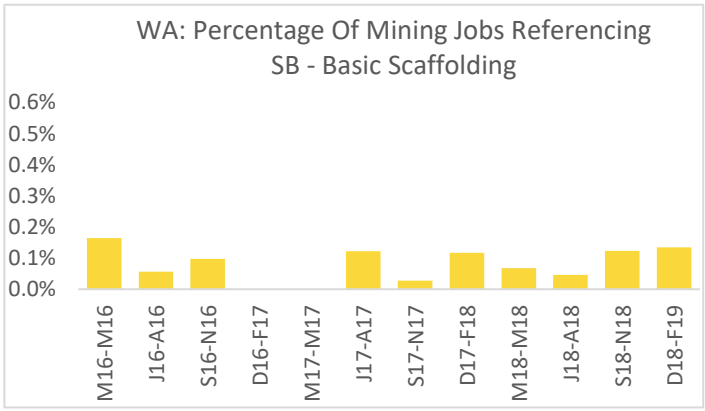

Percentage Of Mining Jobs Referencing SB - Basic Scaffolding (March 2016 - February 2019)
0.1%
0.1%
0.1%
0.1%
0.1%
0.0%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

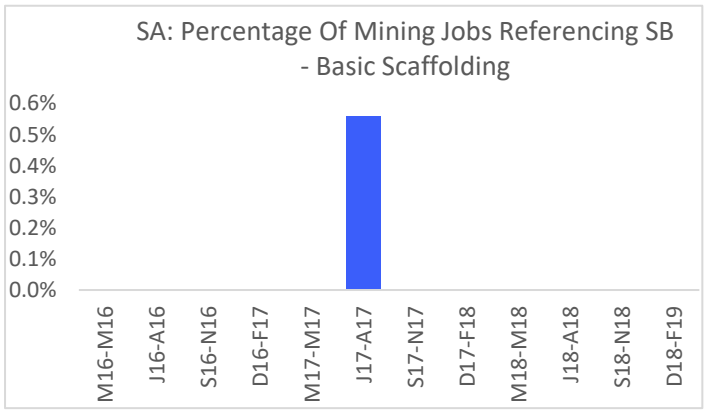

All States: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

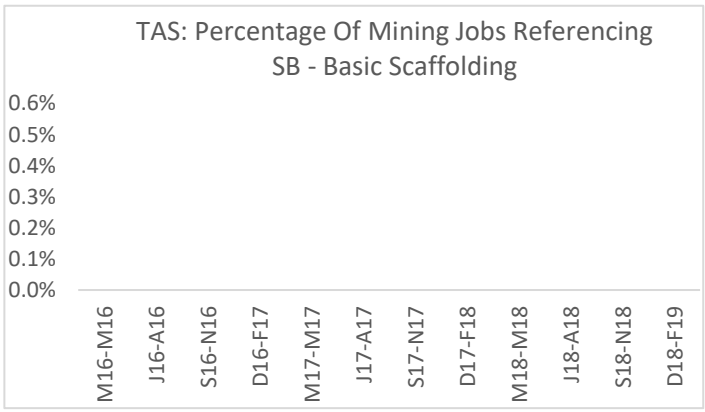

NSW: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

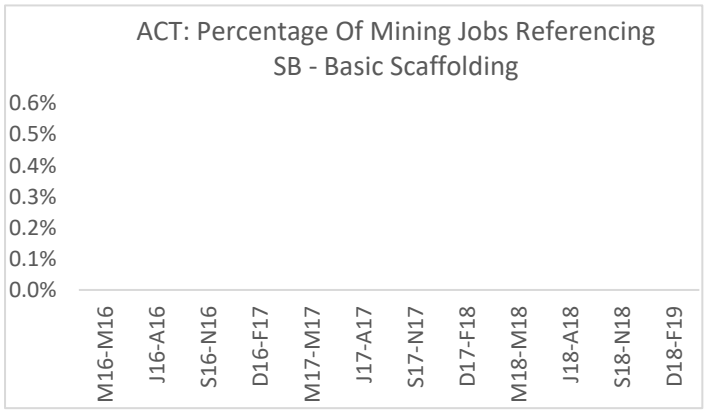

VIC: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

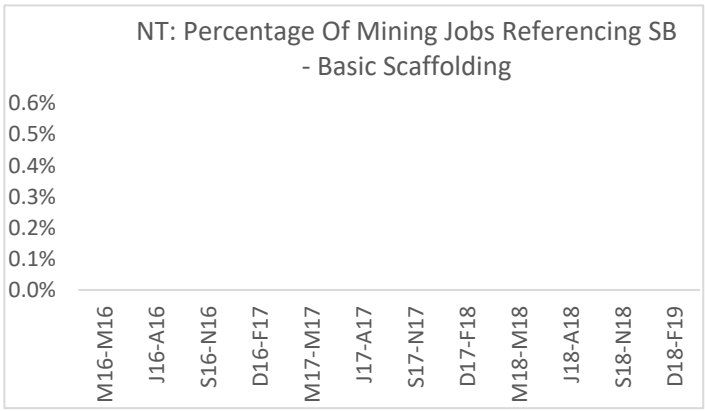

QLD: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

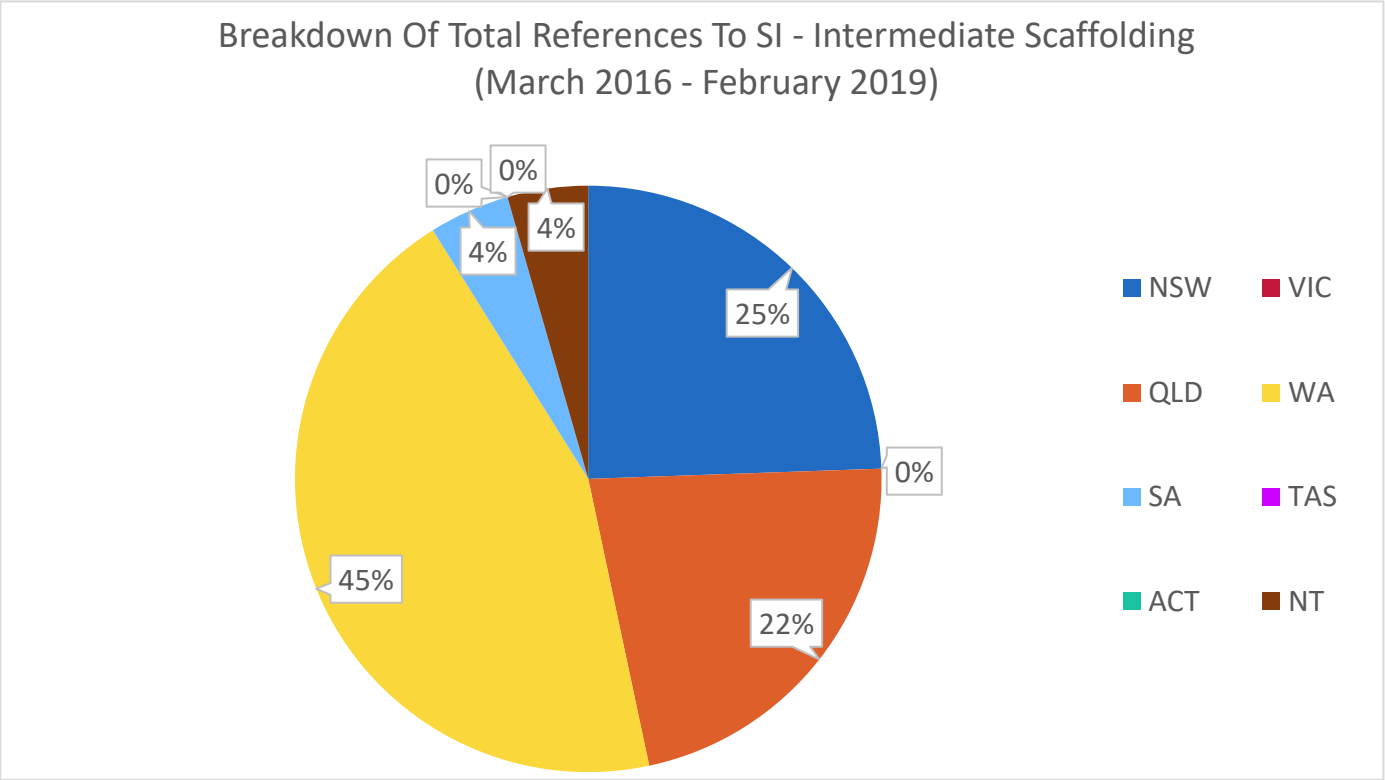

TAS: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

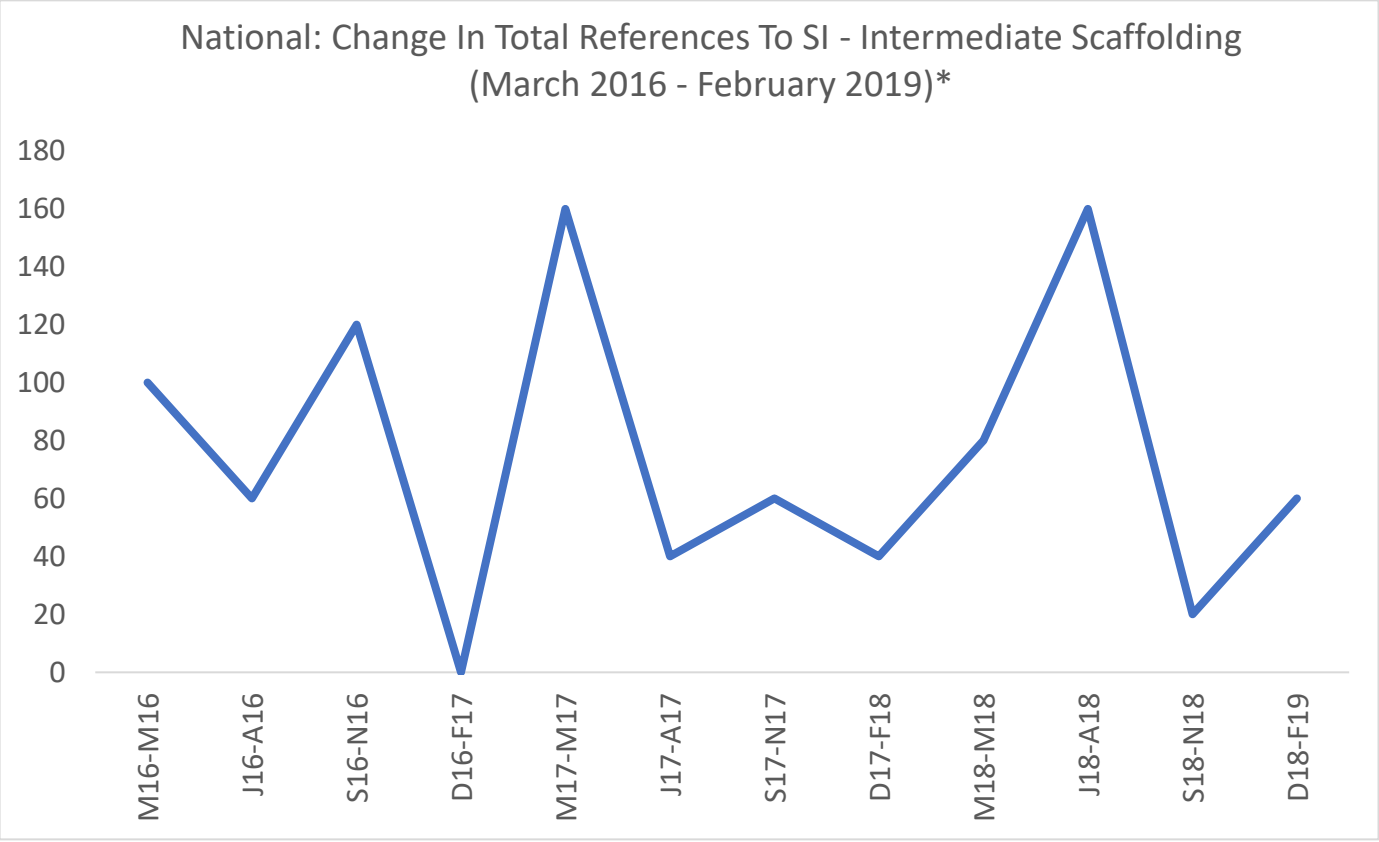

ACT: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing SB - Basic Scaffolding
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

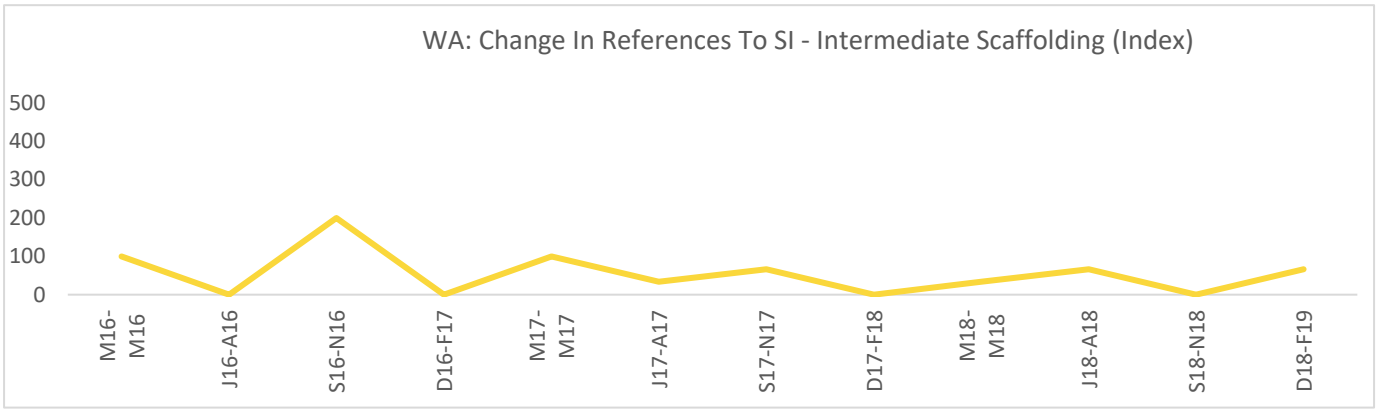
SI - Intermediate Scaffolding

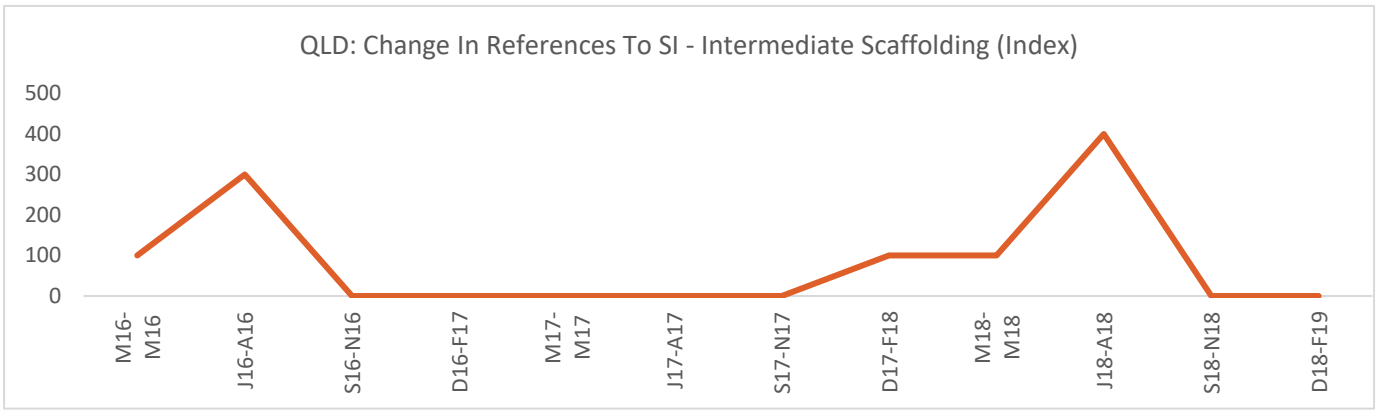
Total References: 45

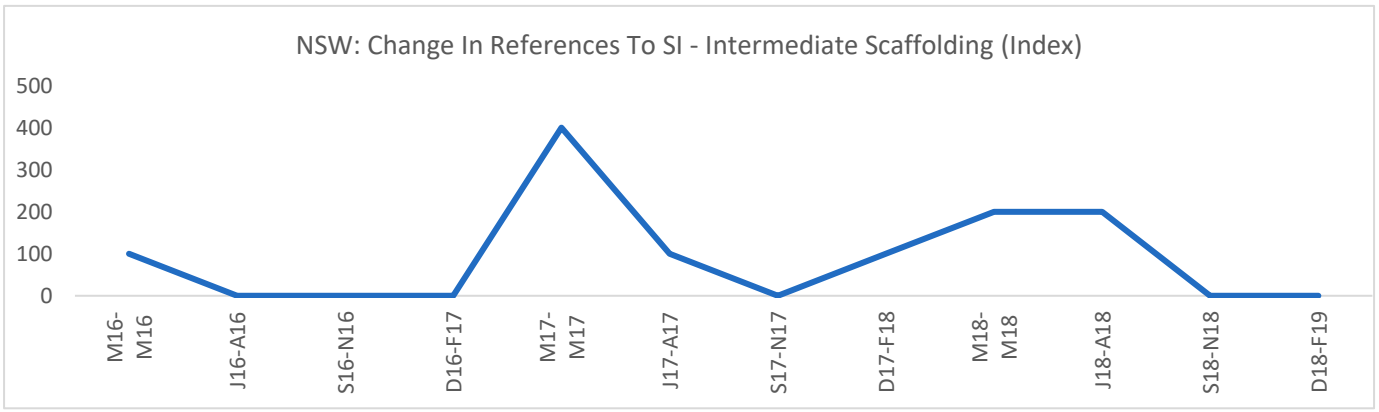


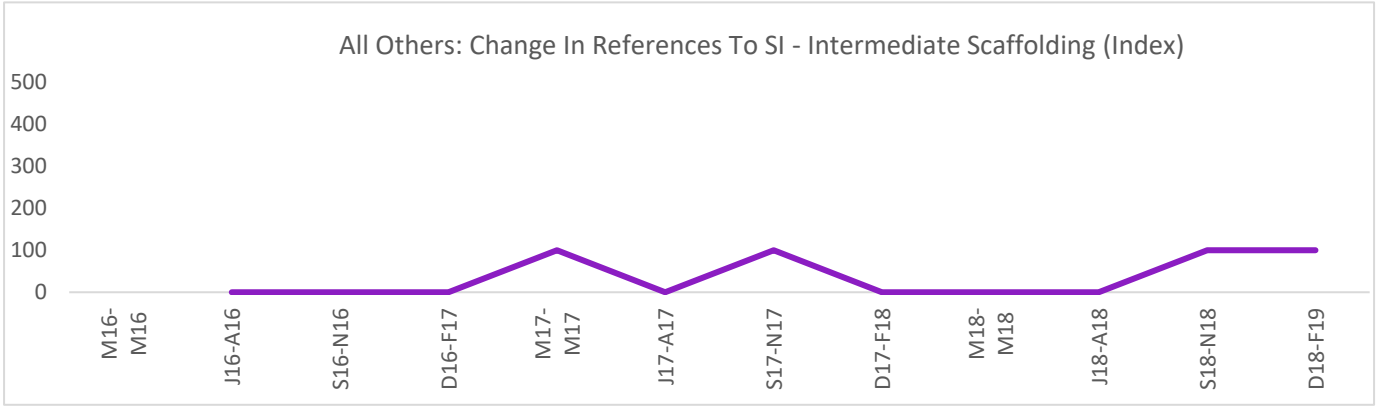


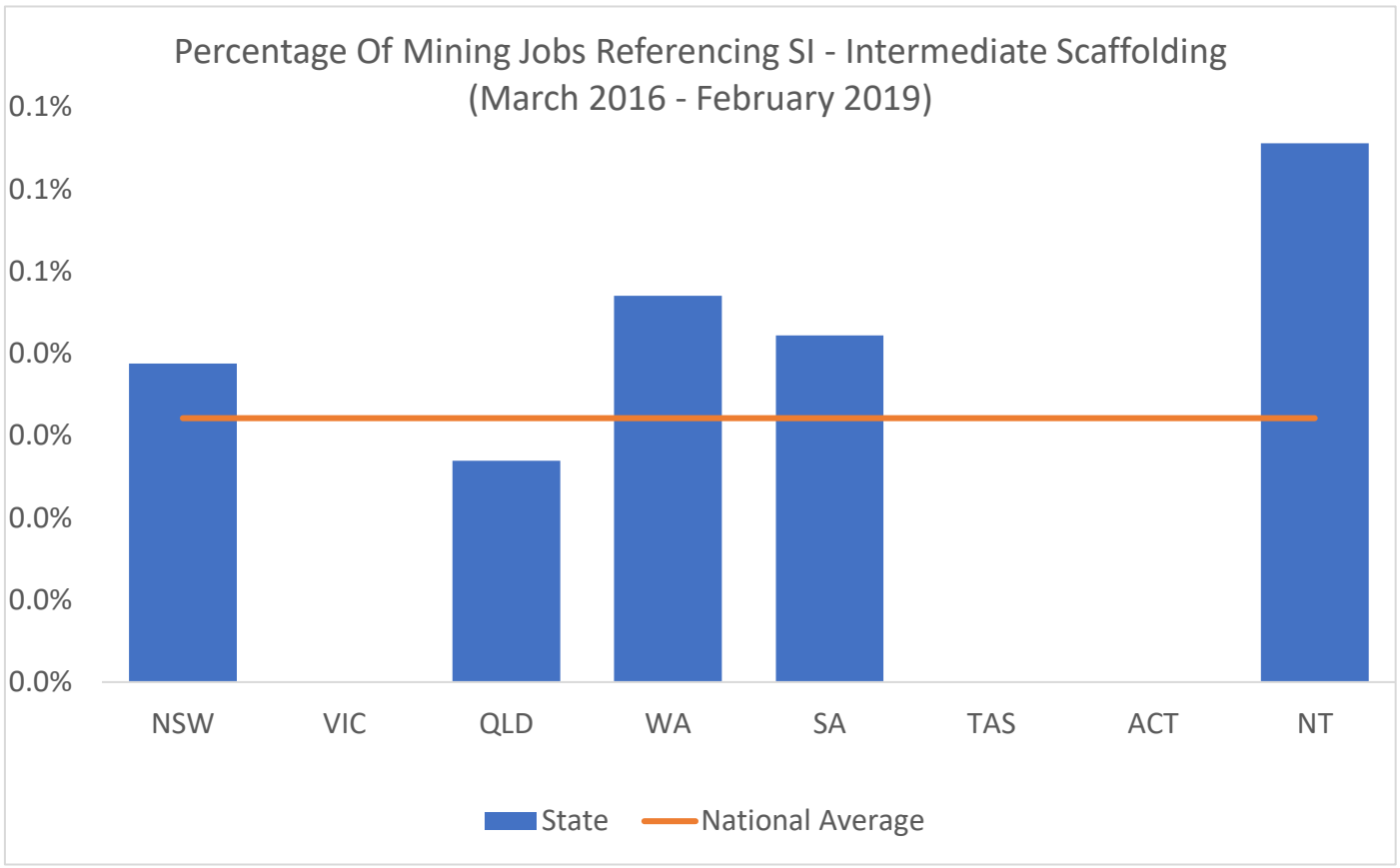
*Index: March - May 2016 = 100

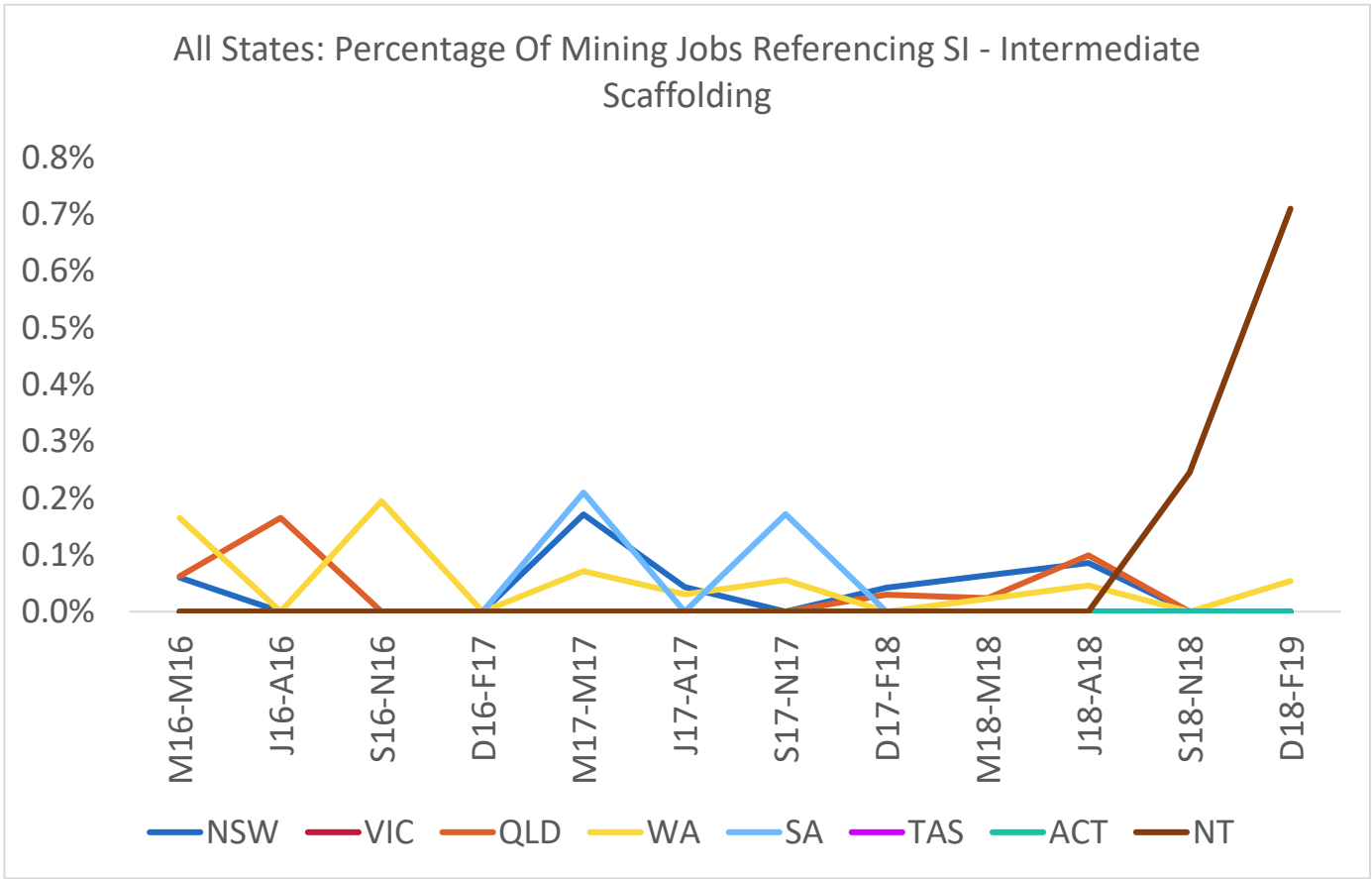

WA: Change In References To SI - Intermediate Scaffolding (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

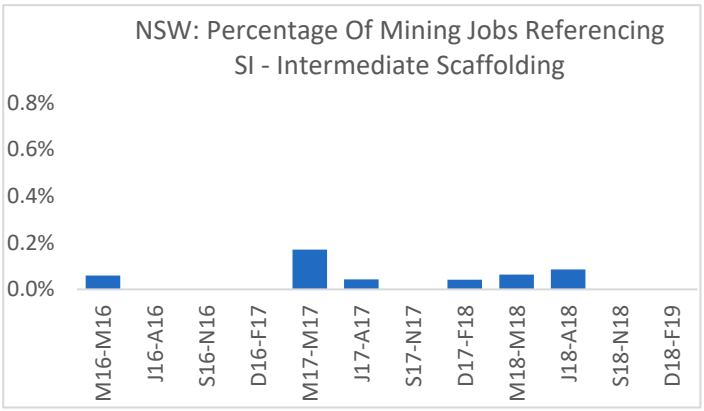

QLD: Change In References To SI - Intermediate Scaffolding (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

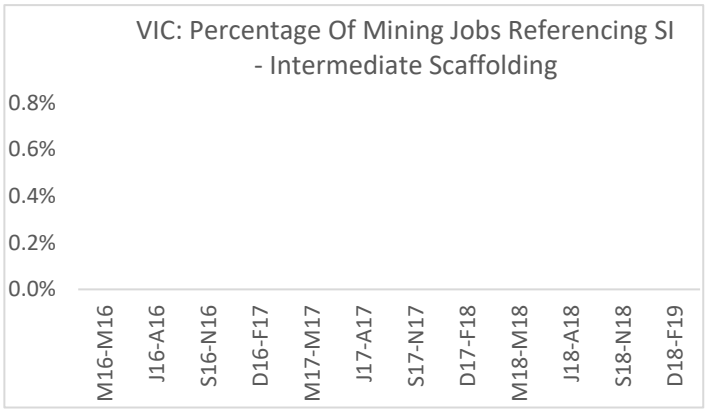

NSW: Change In References To SI - Intermediate Scaffolding (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

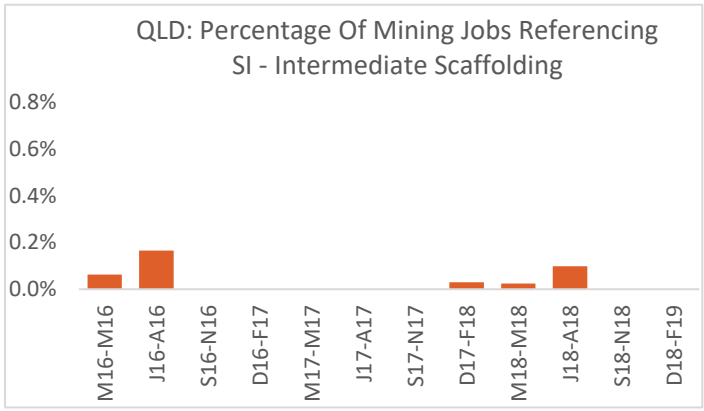

All Others: Change In References To SI - Intermediate Scaffolding (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

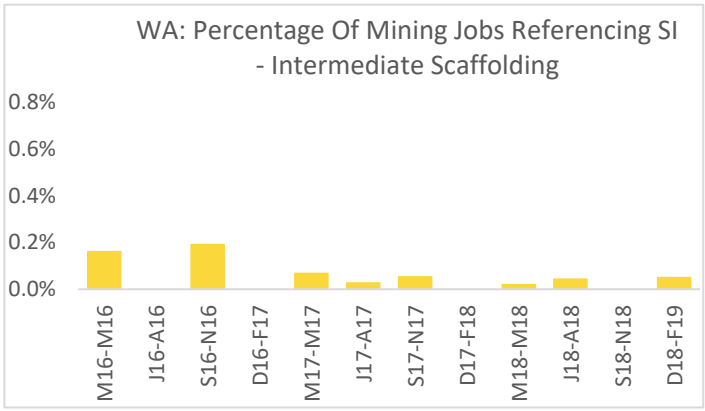

Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
(March 2016 - February 2019)
0.1%
0.1%
0.1%
0.0%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

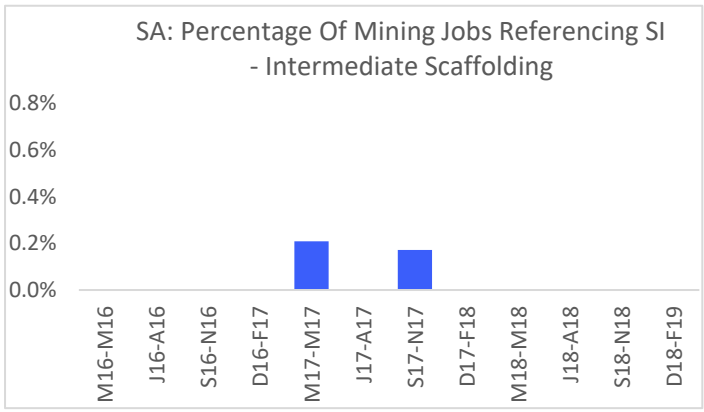

All States: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.7%
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

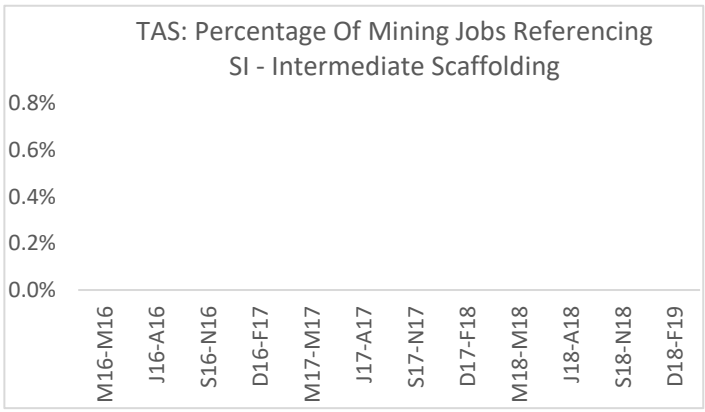

NSW: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

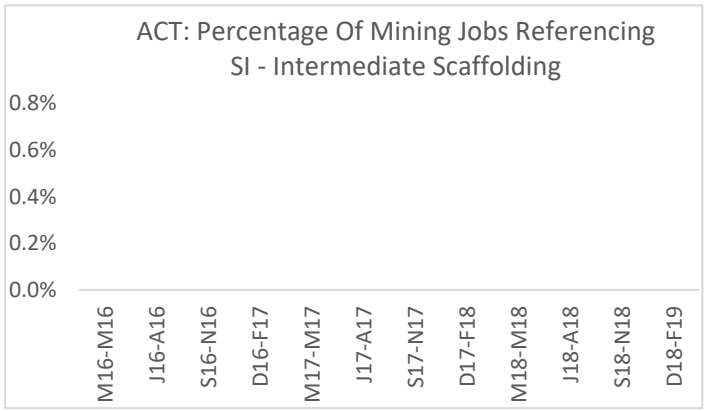

VIC: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

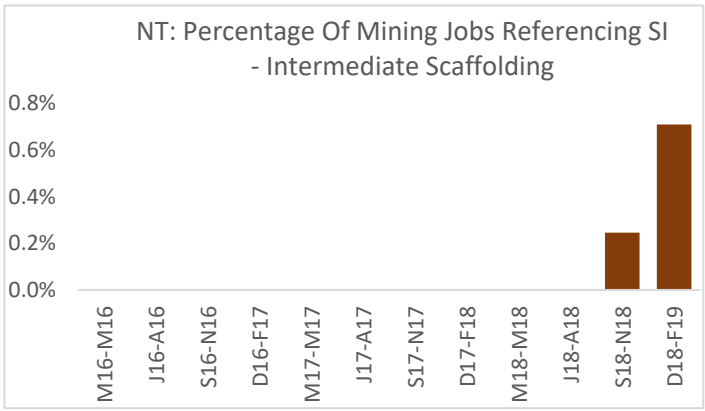

QLD: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

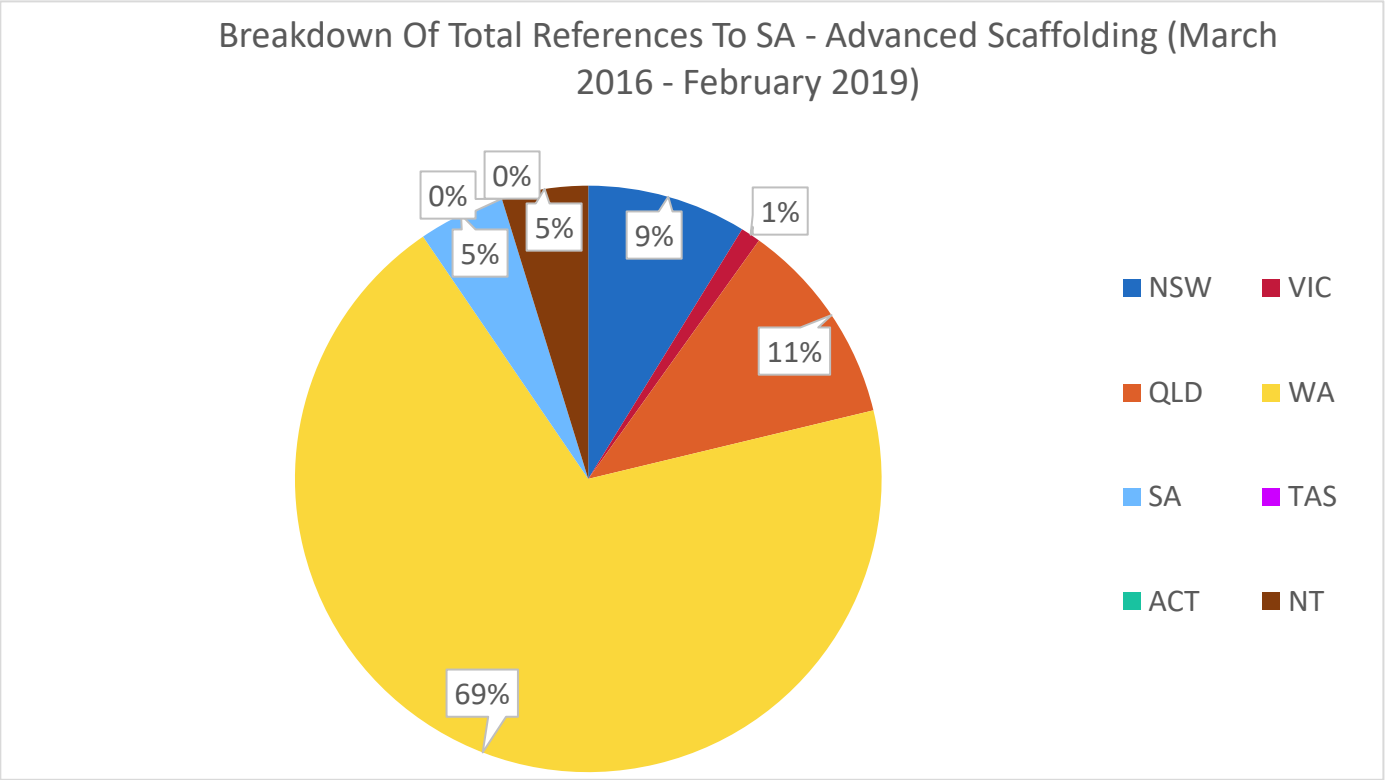

TAS: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

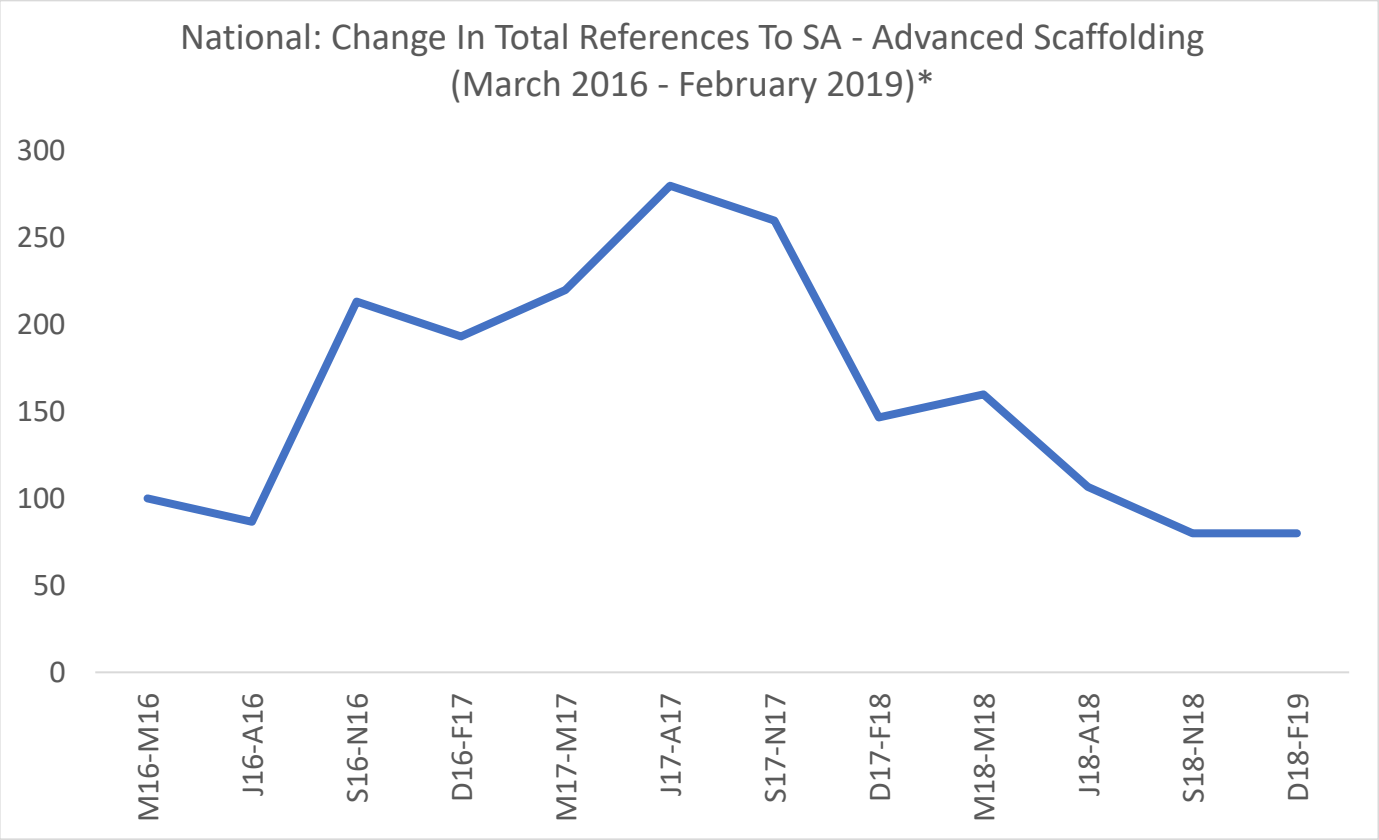

ACT: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing SI - Intermediate Scaffolding
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

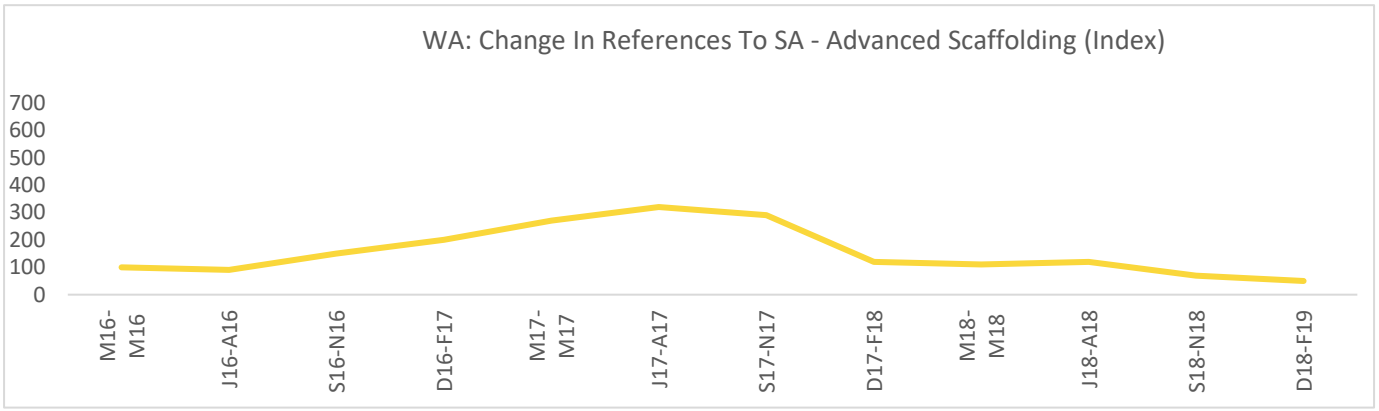
SA - Advanced Scaffolding

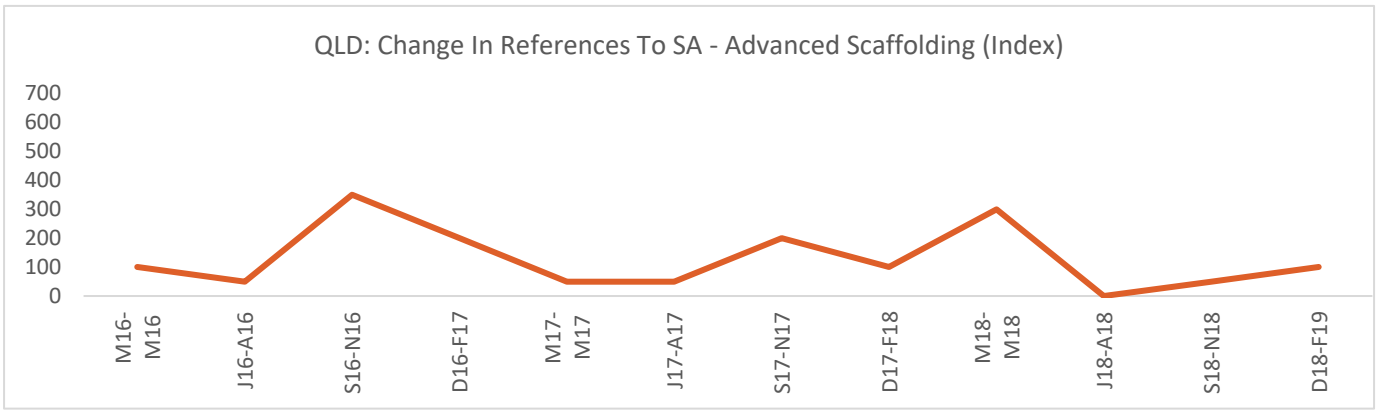
Total References: 289

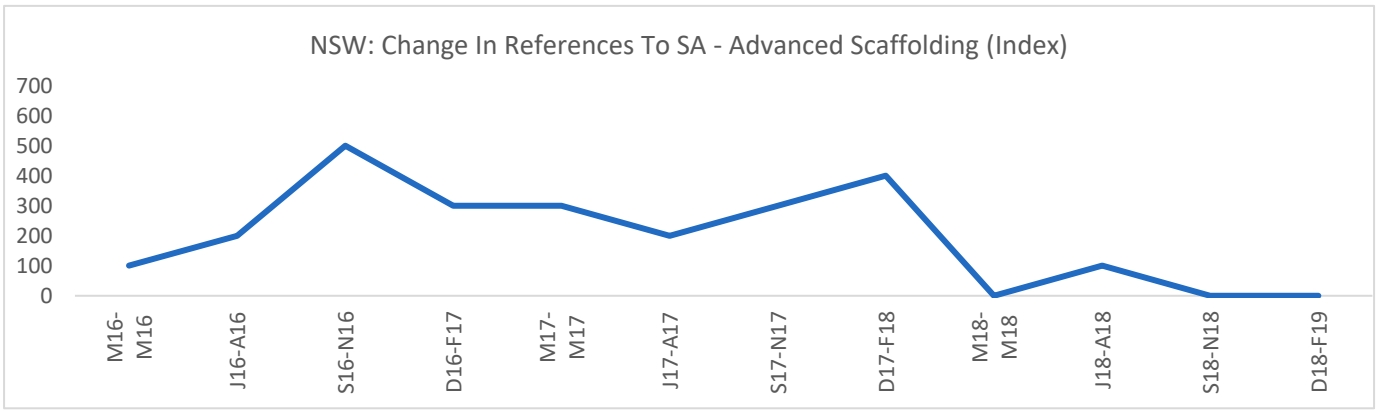


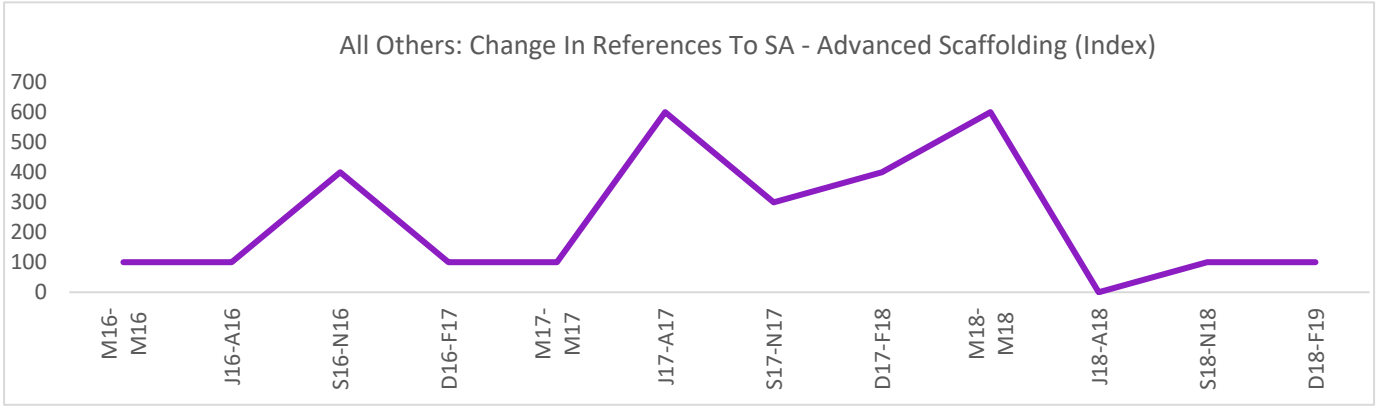


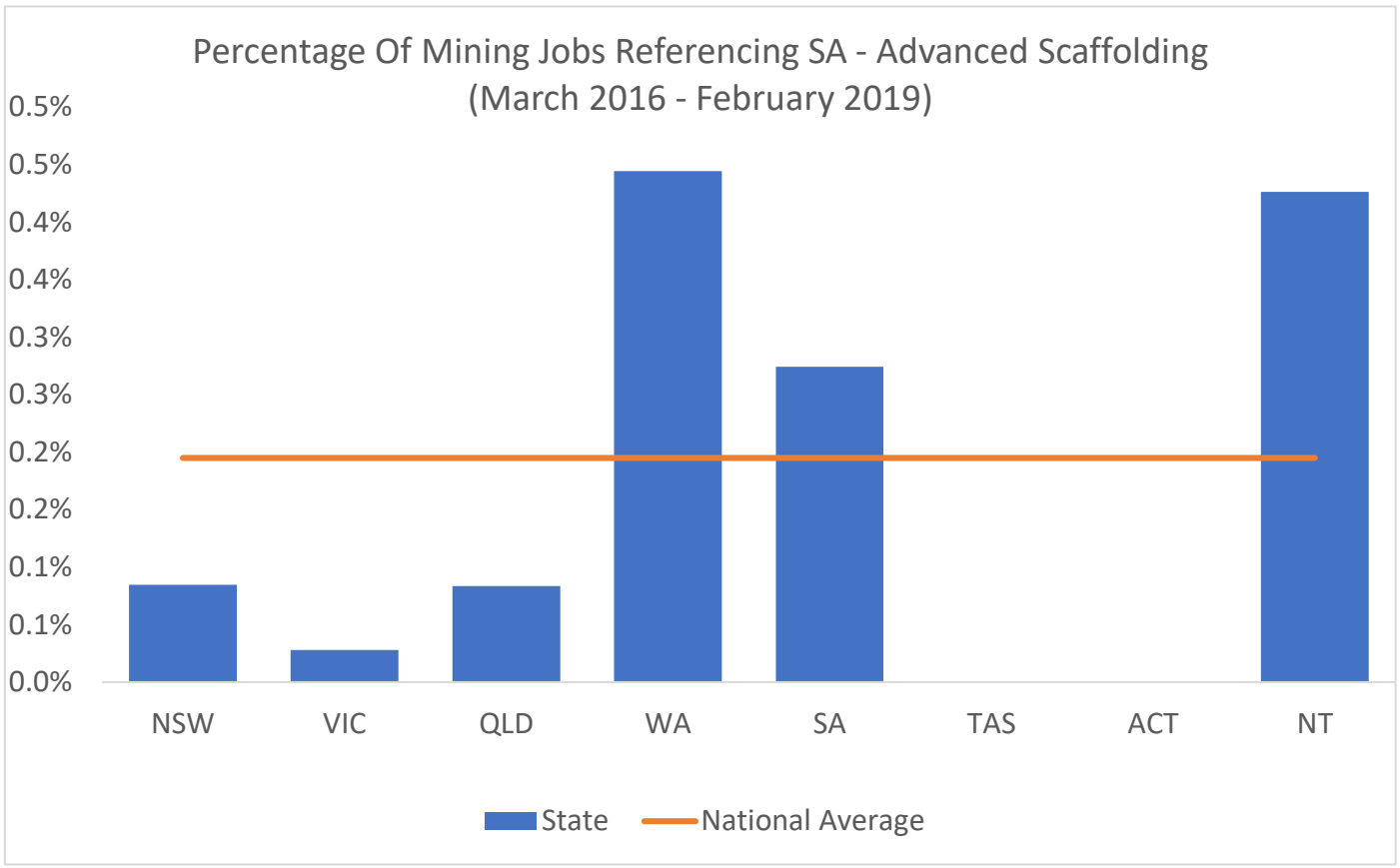
*Index: March - May 2016 = 100

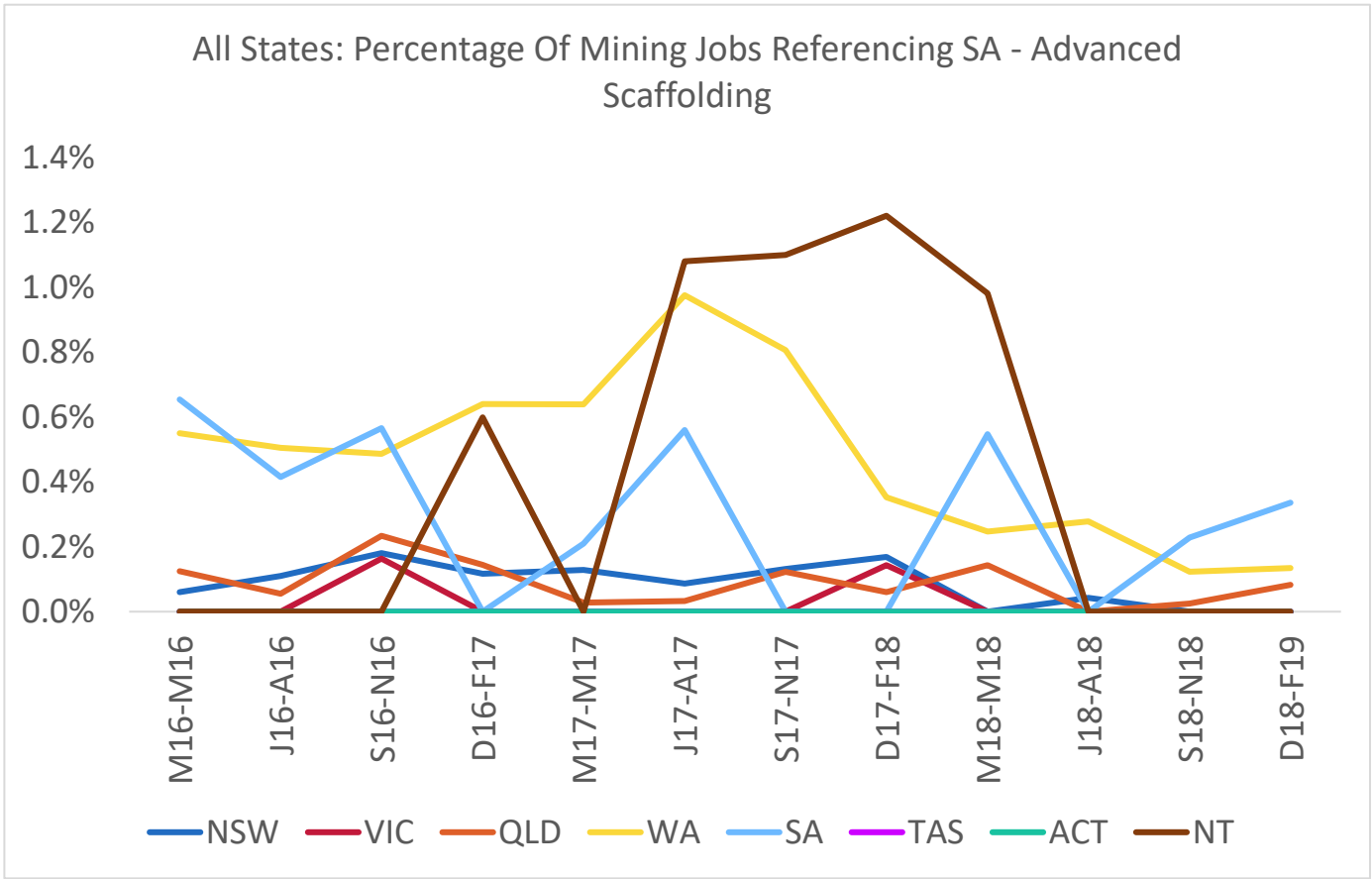

WA: Change In References To SA - Advanced Scaffolding (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

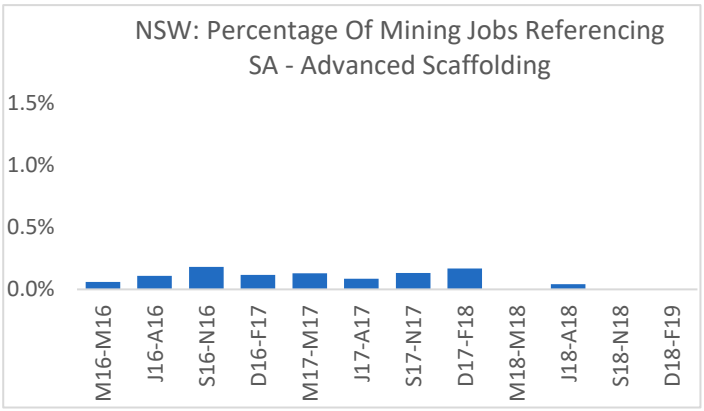

QLD: Change In References To SA - Advanced Scaffolding (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

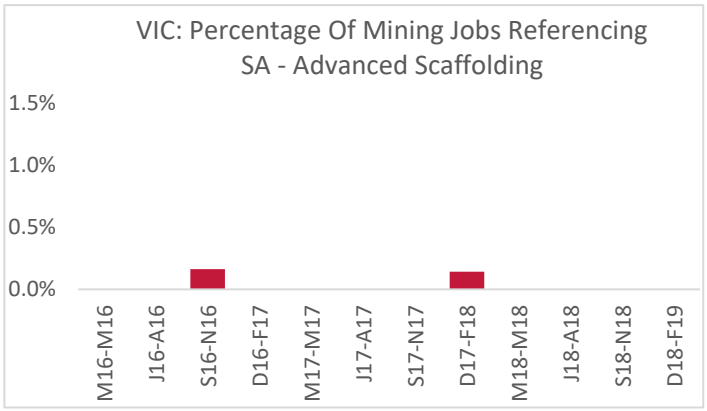

NSW: Change In References To SA - Advanced Scaffolding (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

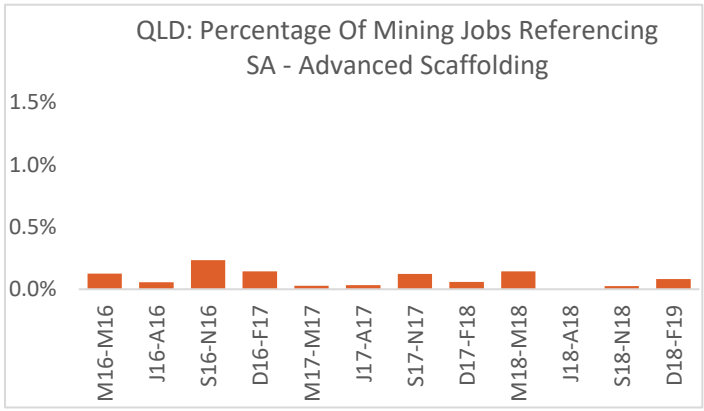

All Others: Change In References To SA - Advanced Scaffolding (Index)
700
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

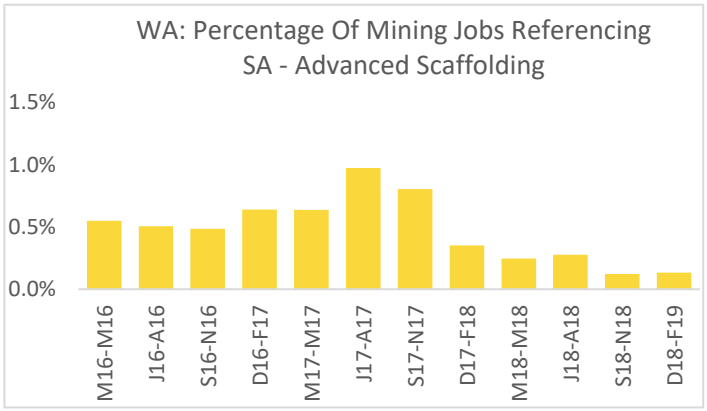

Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
(March 2016 - February 2019)
0.5%
0.5%
0.4%
0.4%
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

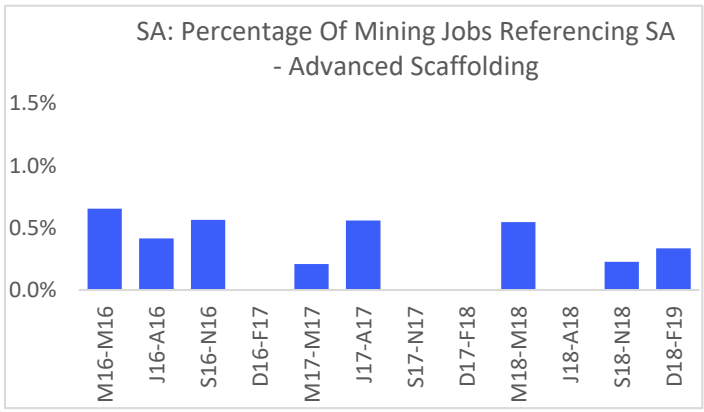

All States: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.4%
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

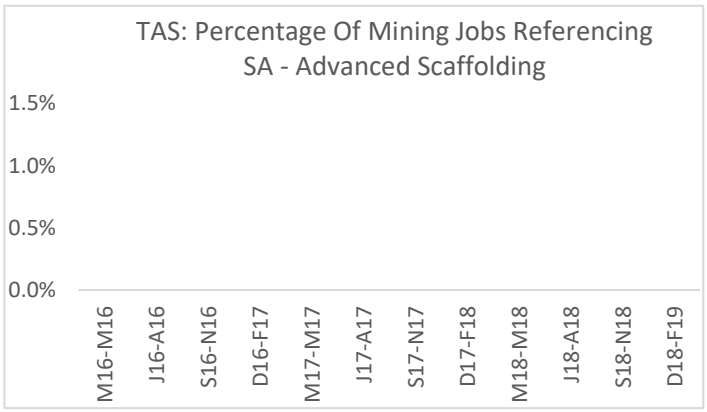

NSW: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

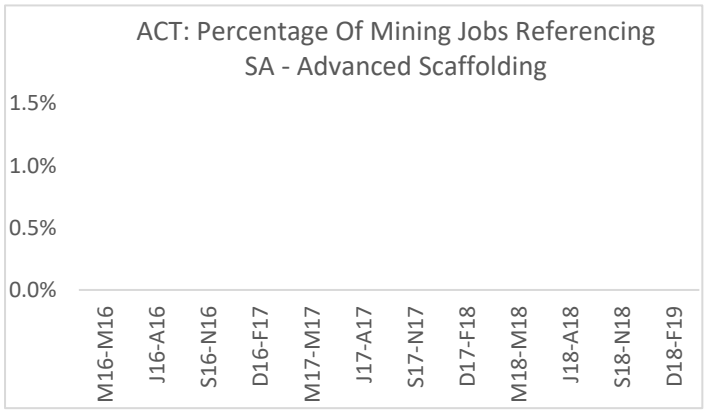

VIC: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

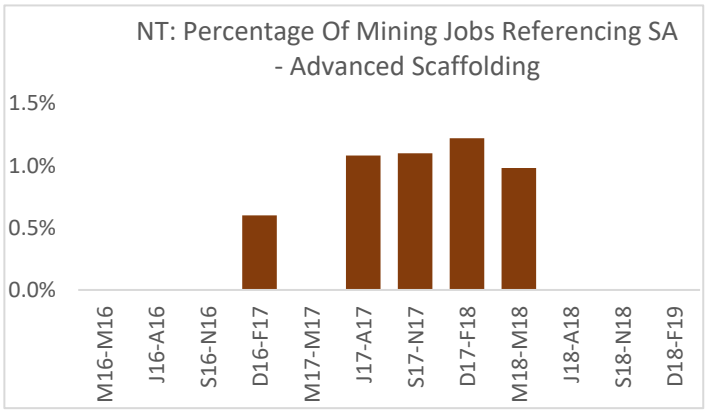

QLD: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

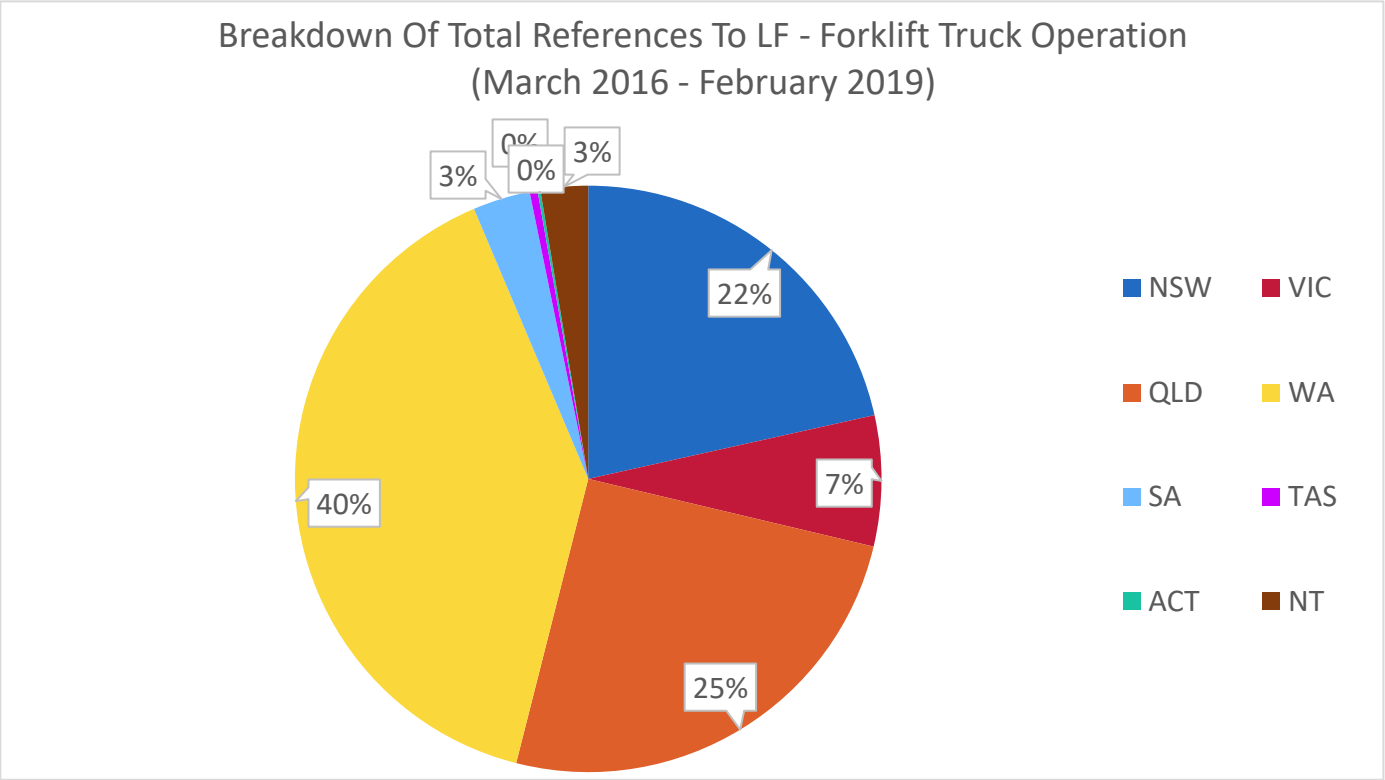

TAS: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

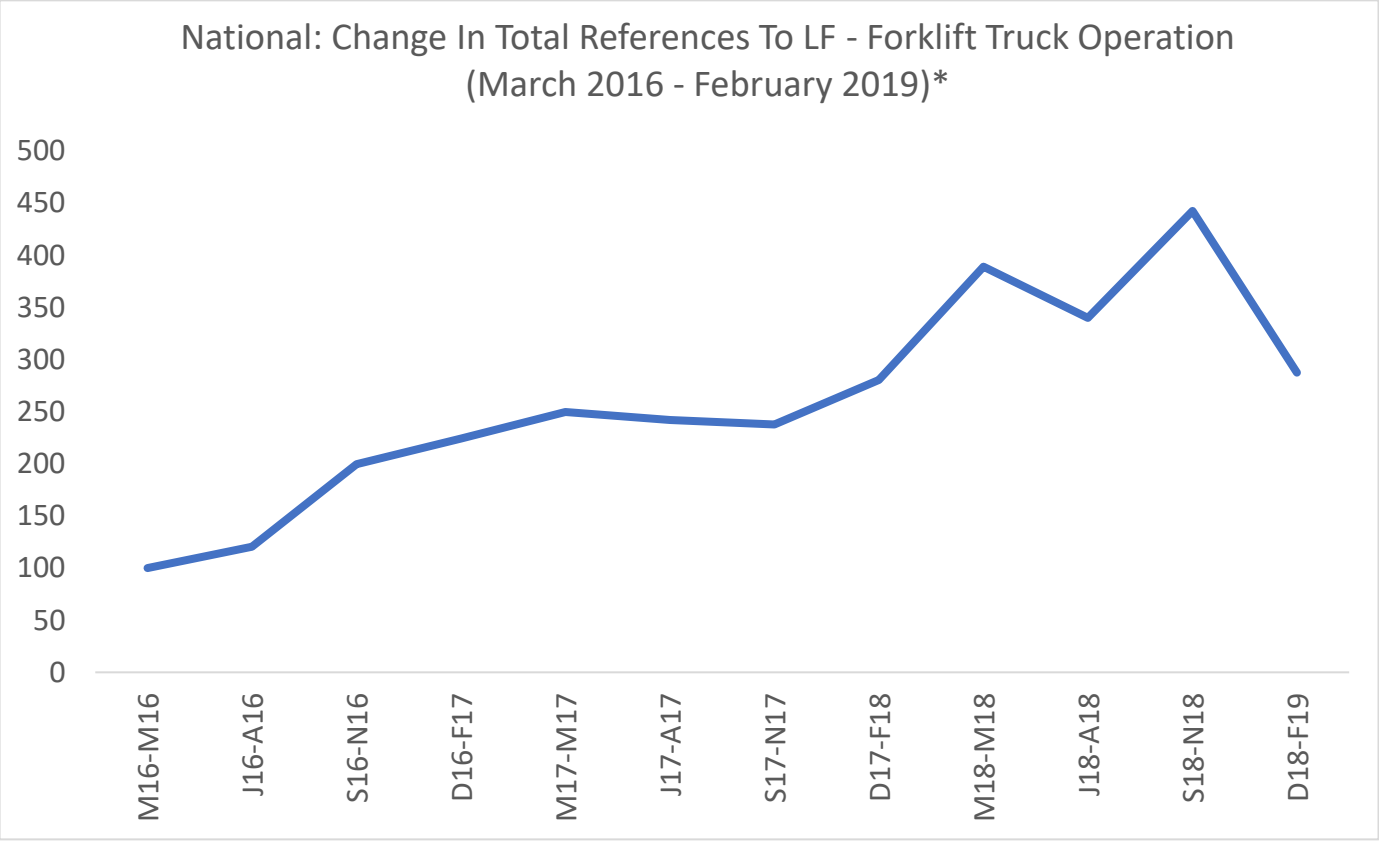

ACT: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing SA - Advanced Scaffolding
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

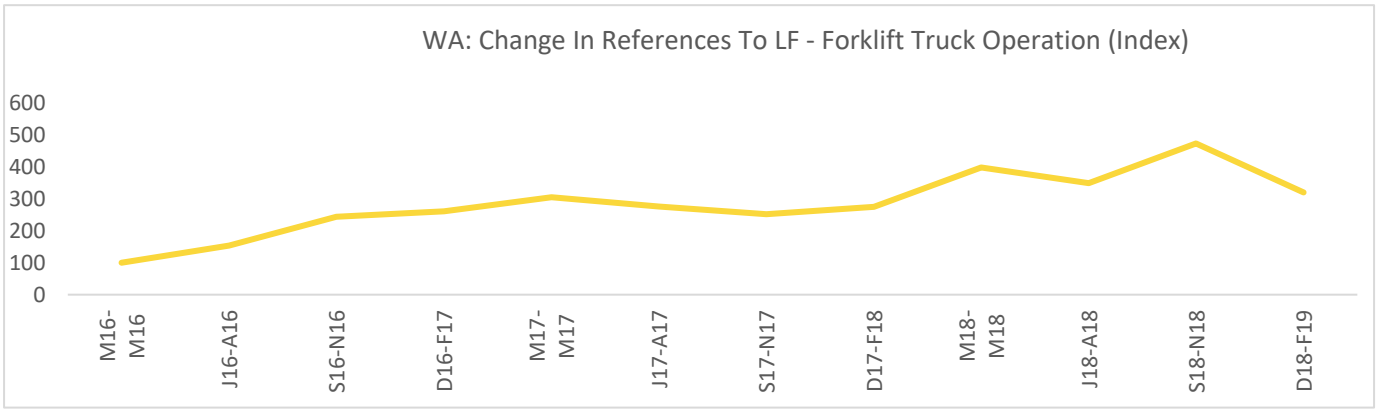
LF - Forklift Truck Operation

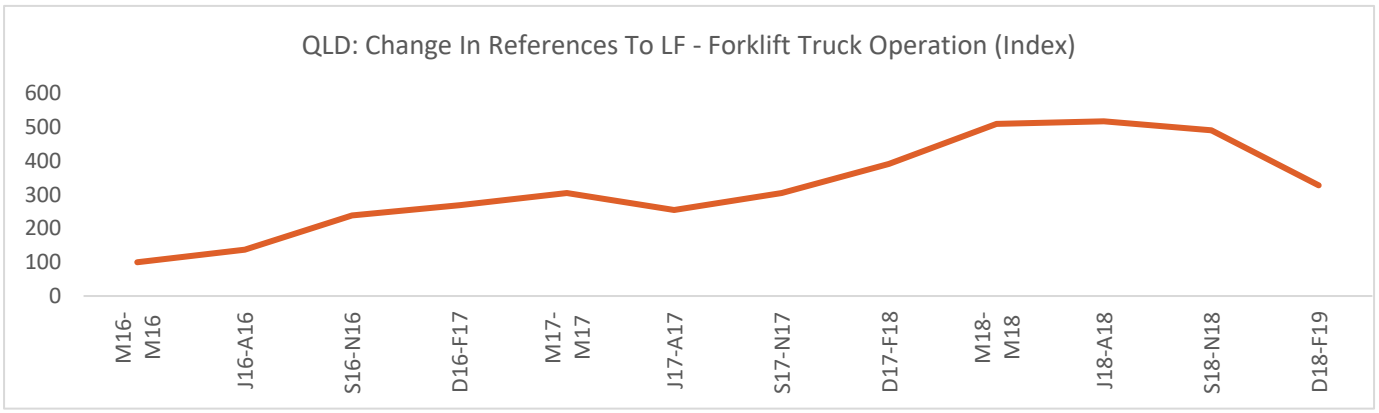
Total References: 13259

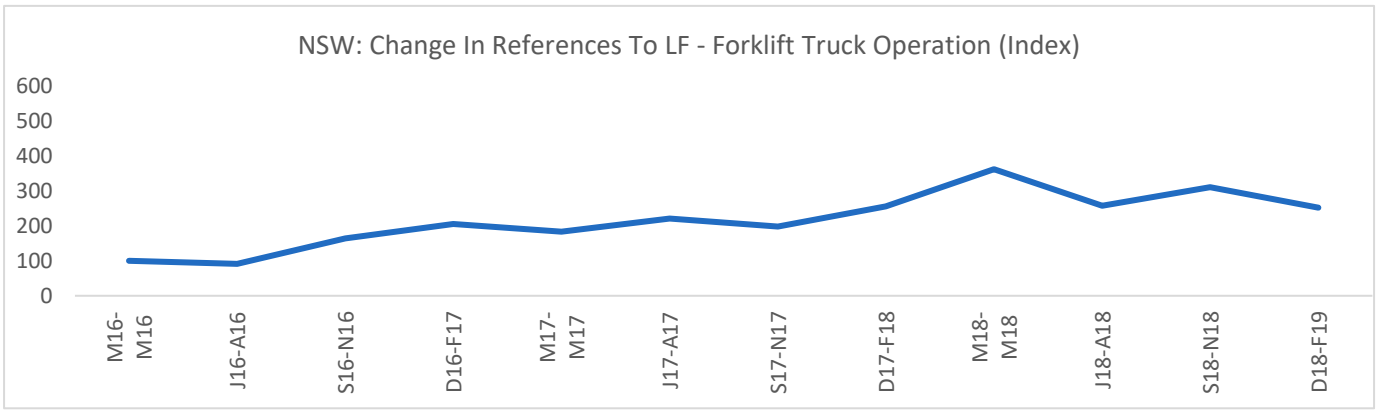


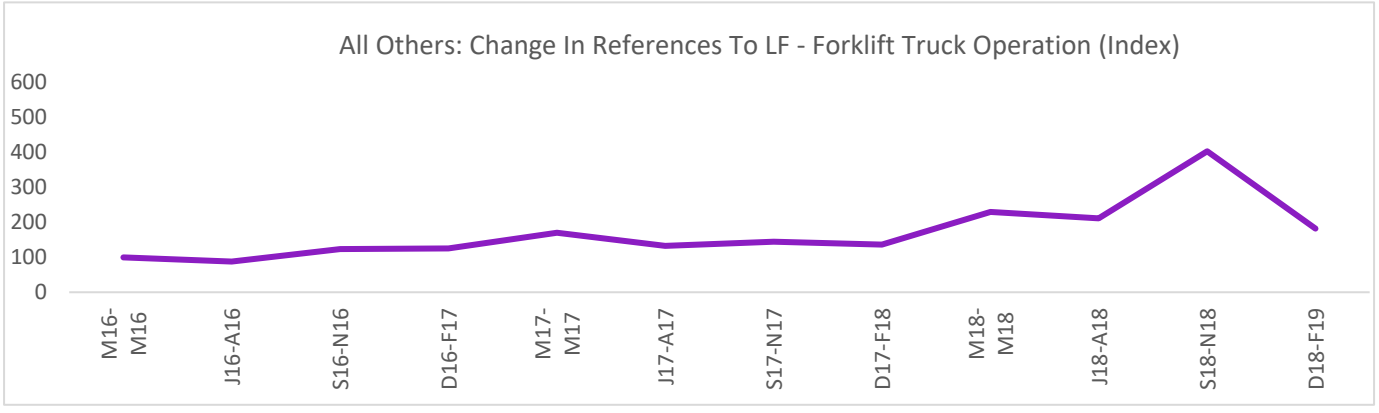


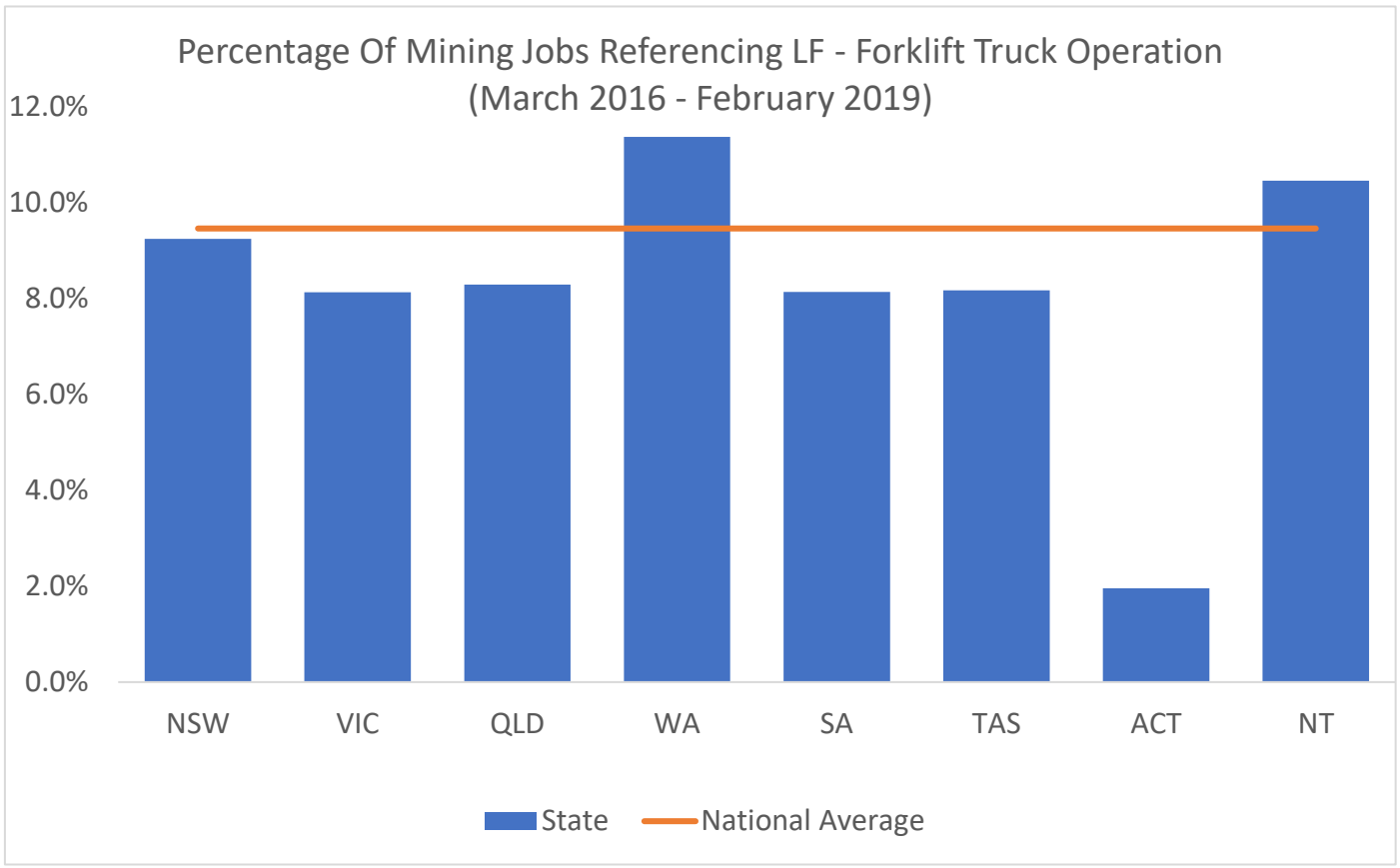
*Index: March - May 2016 = 100

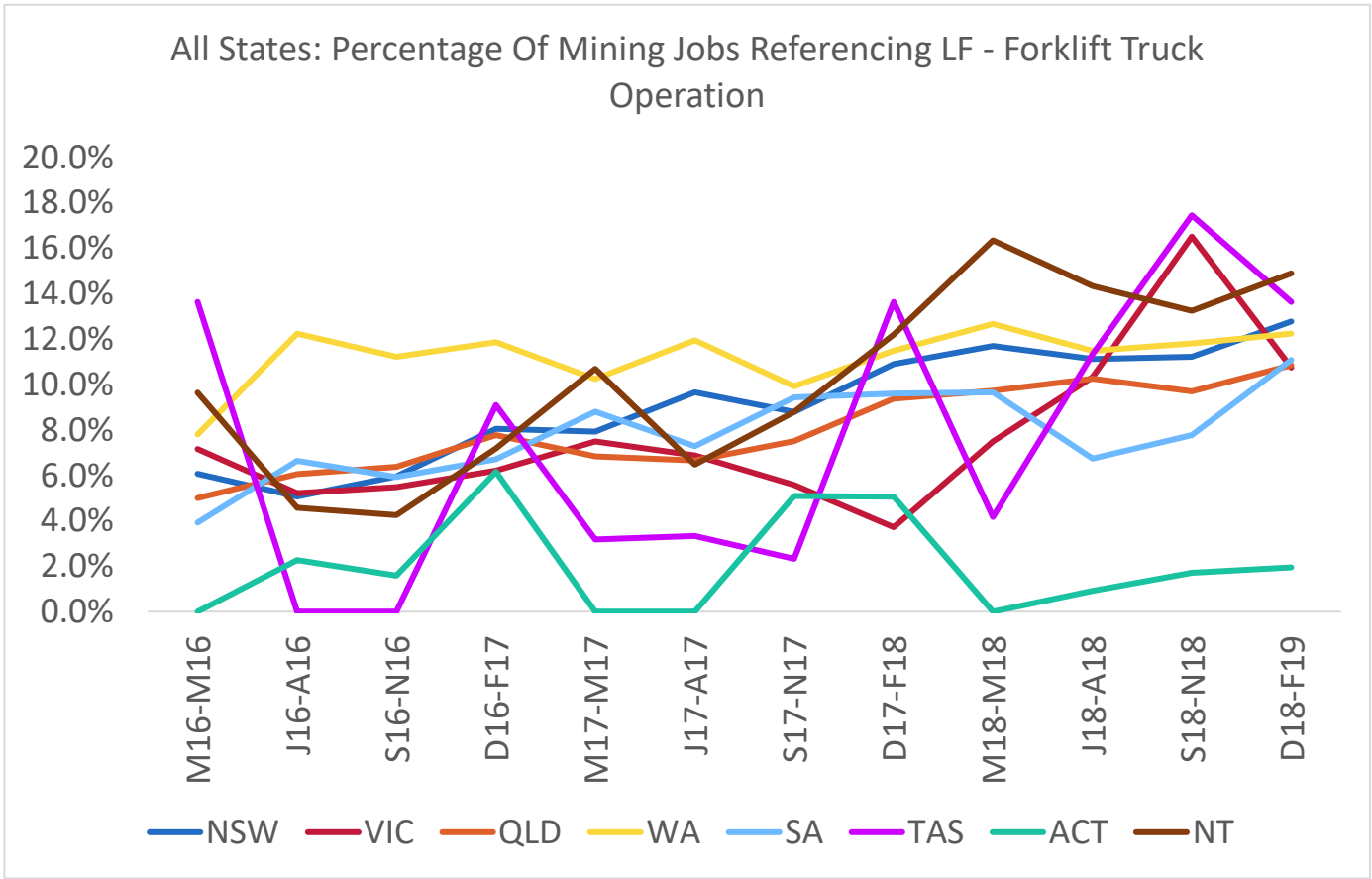

WA: Change In References To LF - Forklift Truck Operation (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

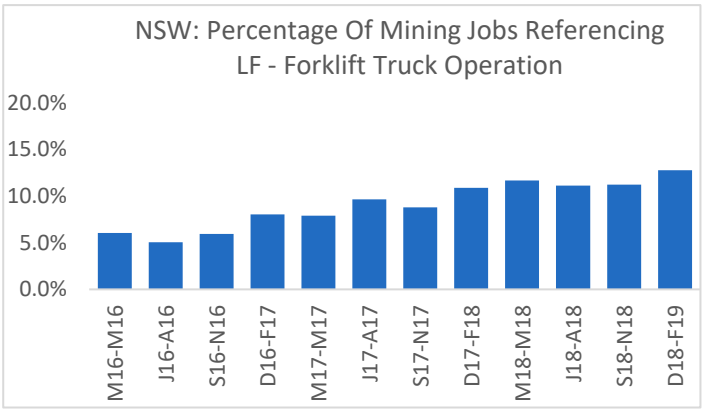

QLD: Change In References To LF - Forklift Truck Operation (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

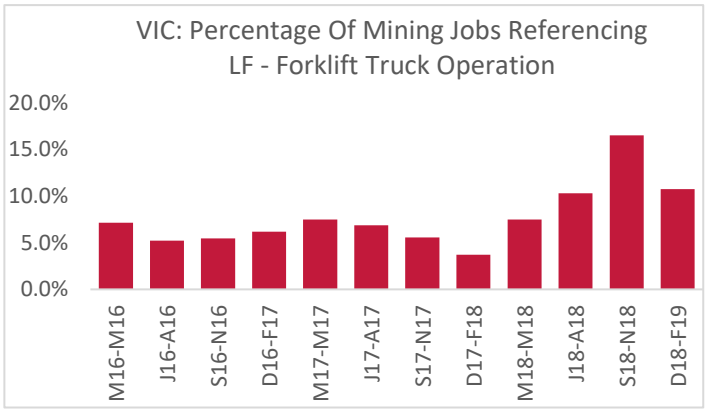

NSW: Change In References To LF - Forklift Truck Operation (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

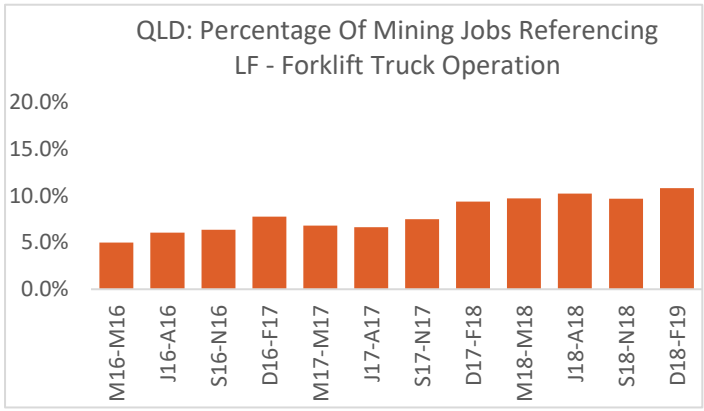

All Others: Change In References To LF - Forklift Truck Operation (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

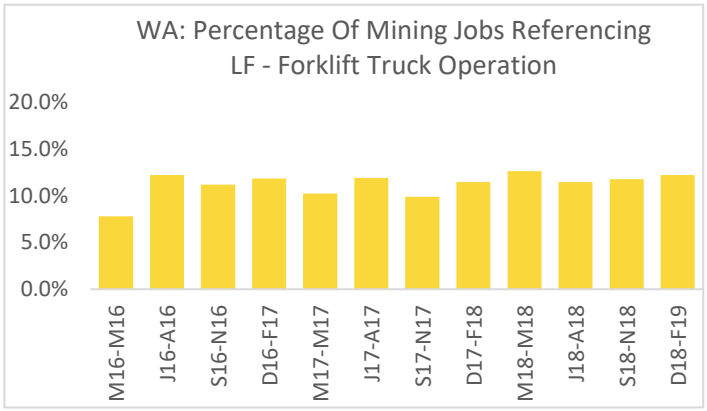

Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
(March 2016 - February 2019)
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

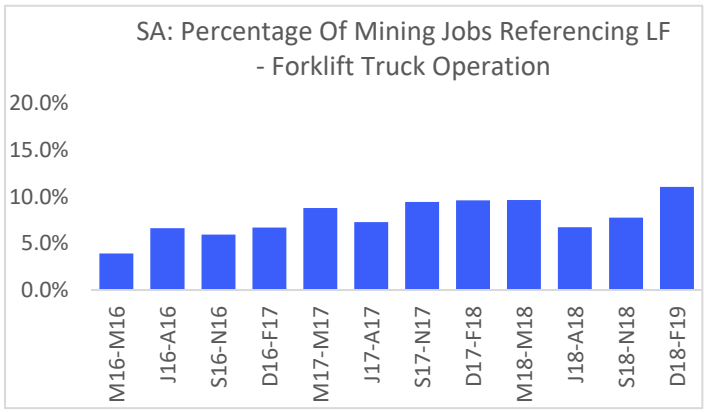

All States: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
18.0%
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

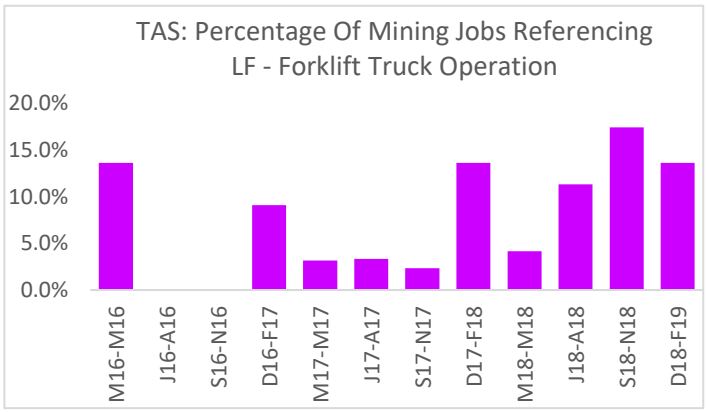

NSW: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

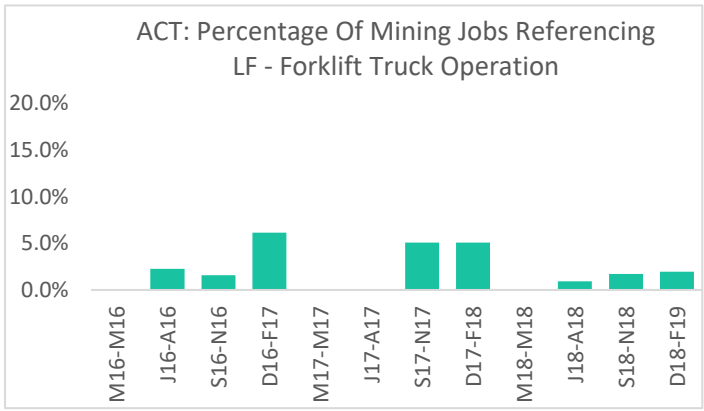

VIC: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

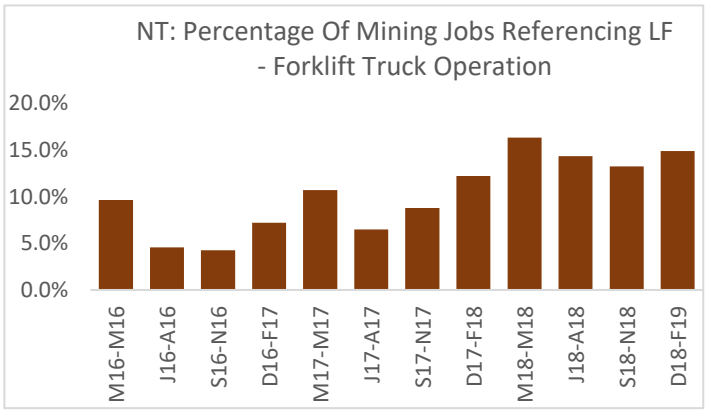

QLD: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

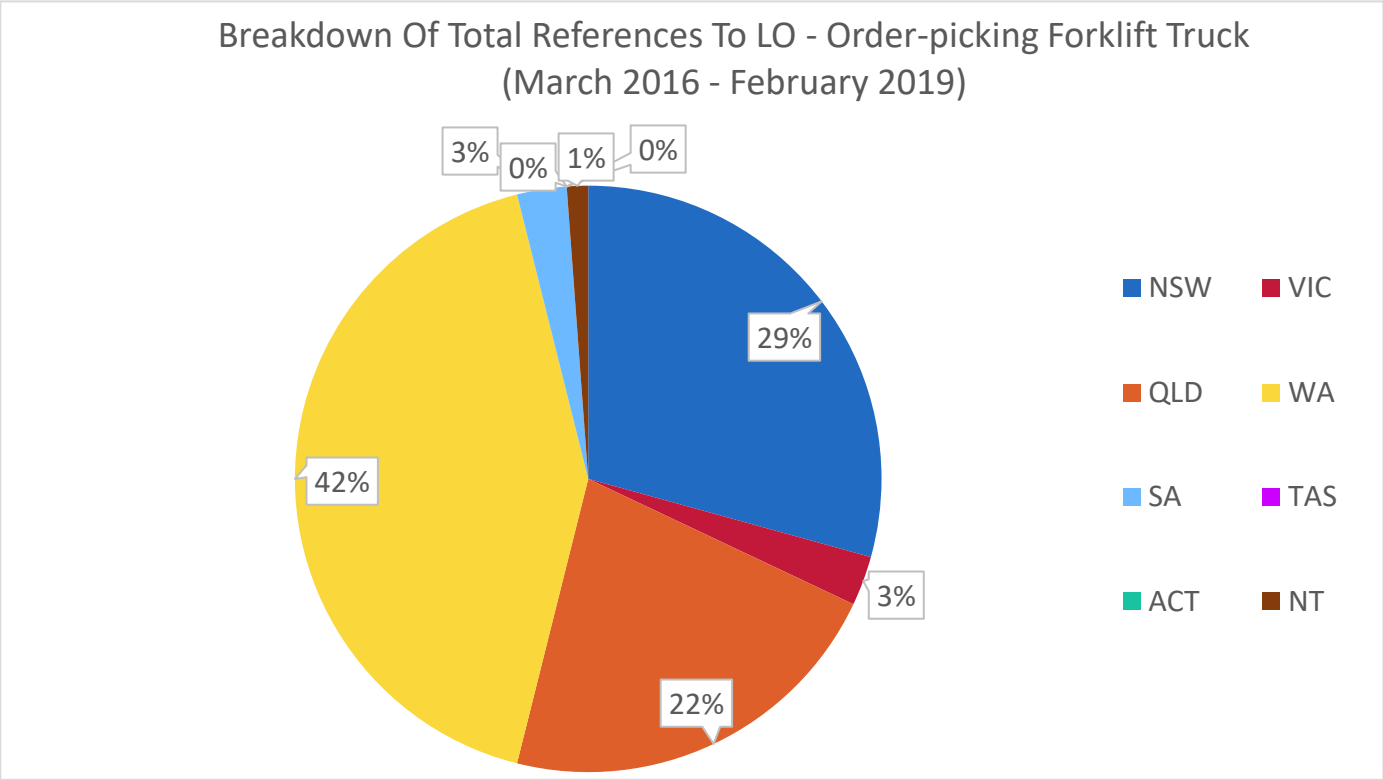

TAS: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

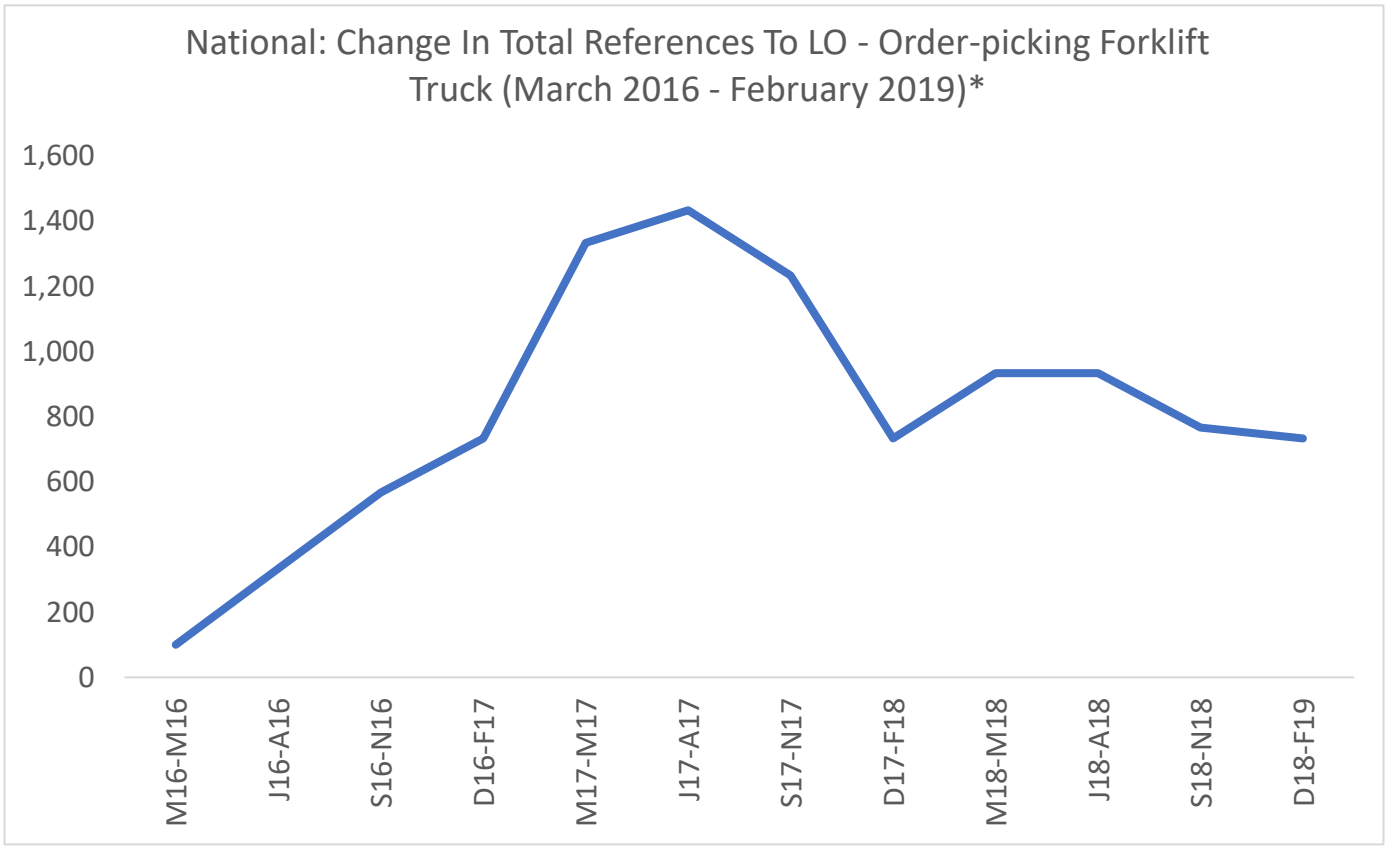

ACT: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing LF - Forklift Truck Operation
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

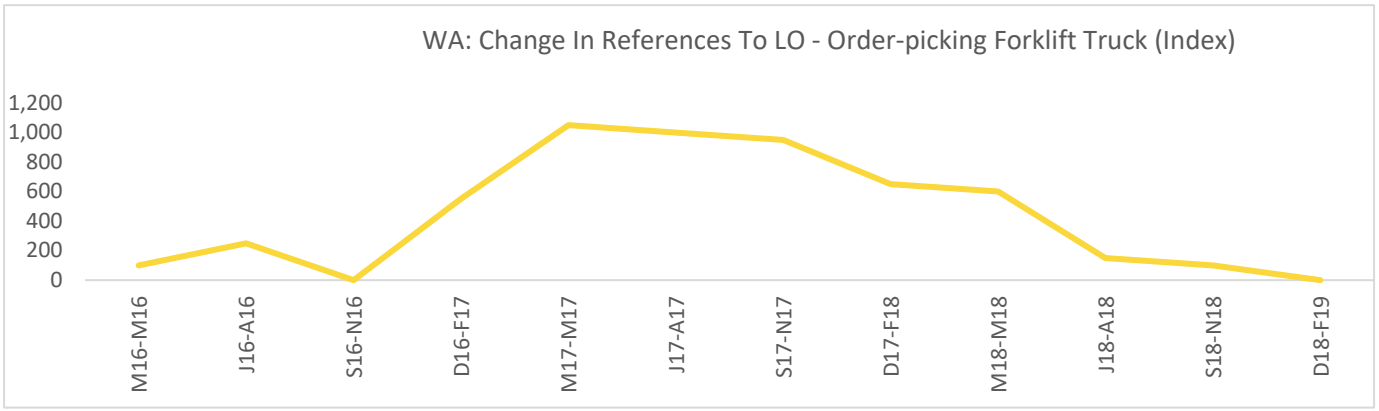
LO - Order-picking Forklift Truck

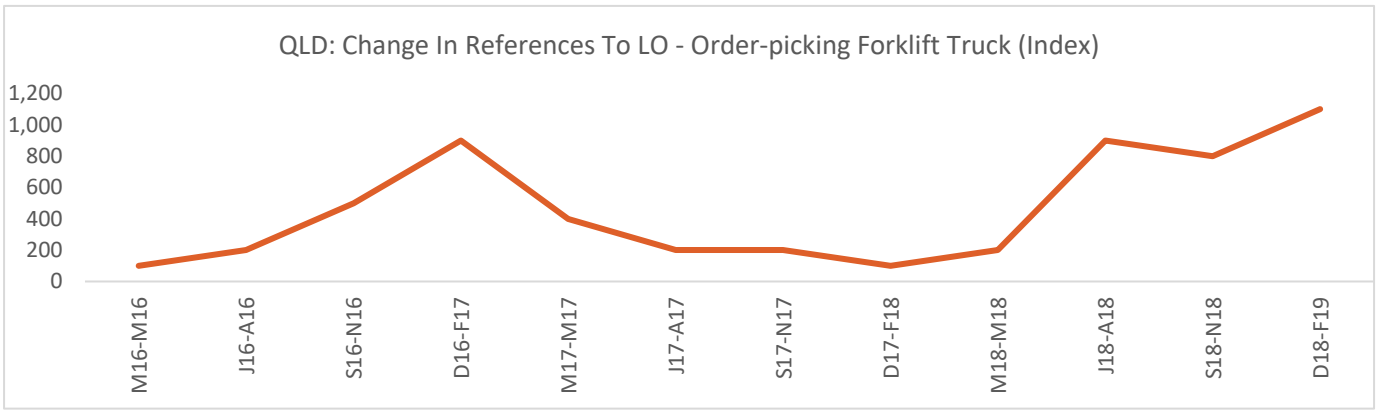
Total References: 295

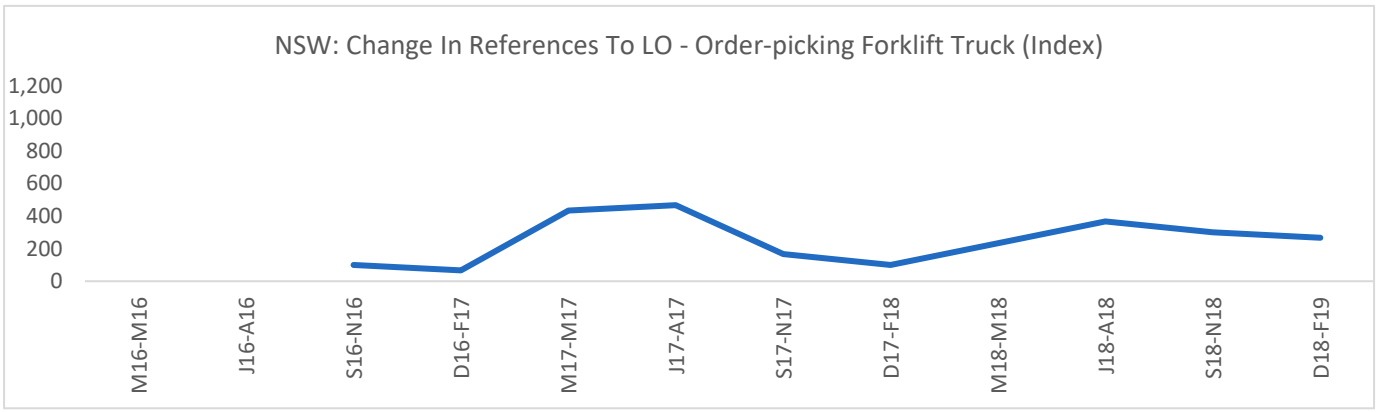


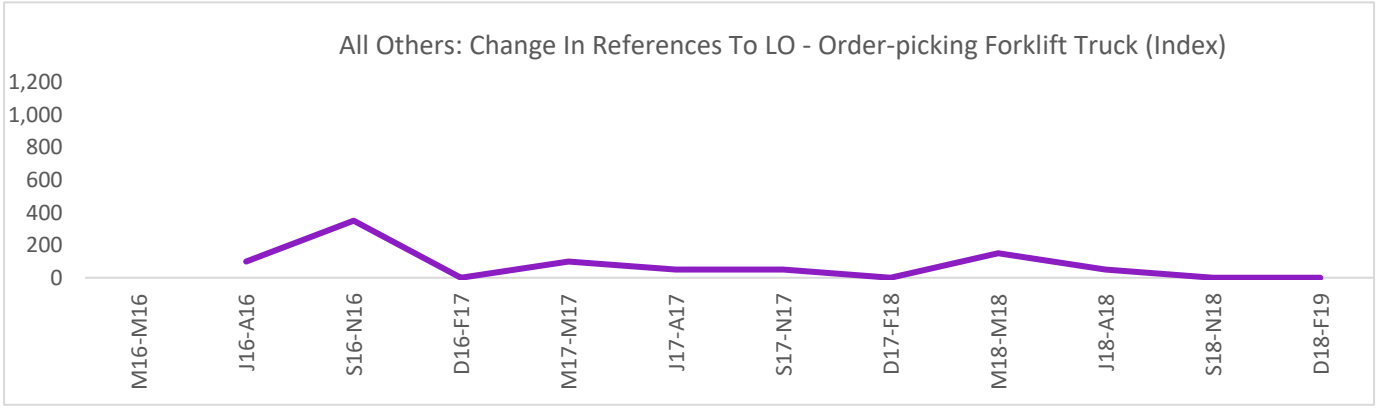


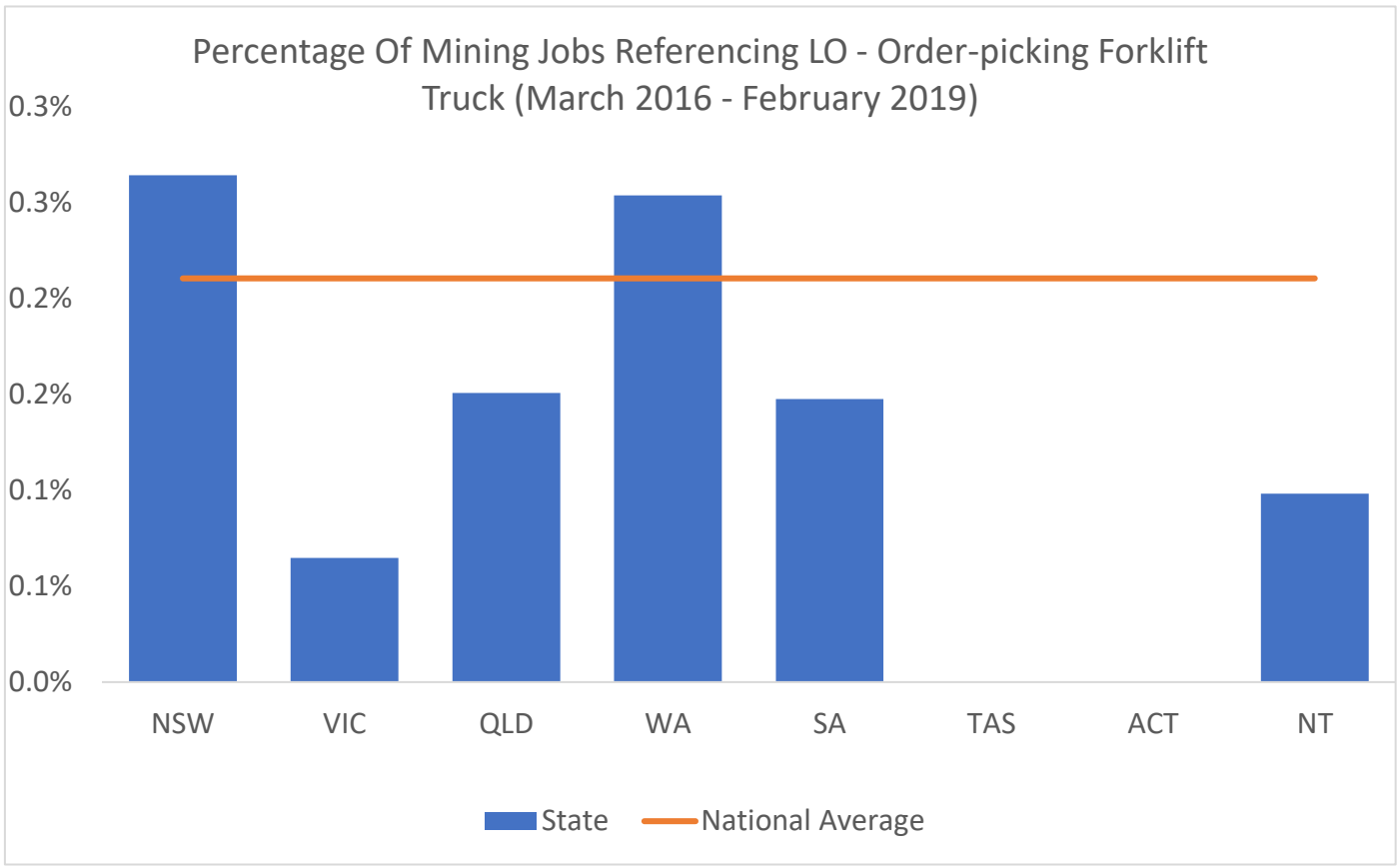
*Index: March - May 2016 = 100

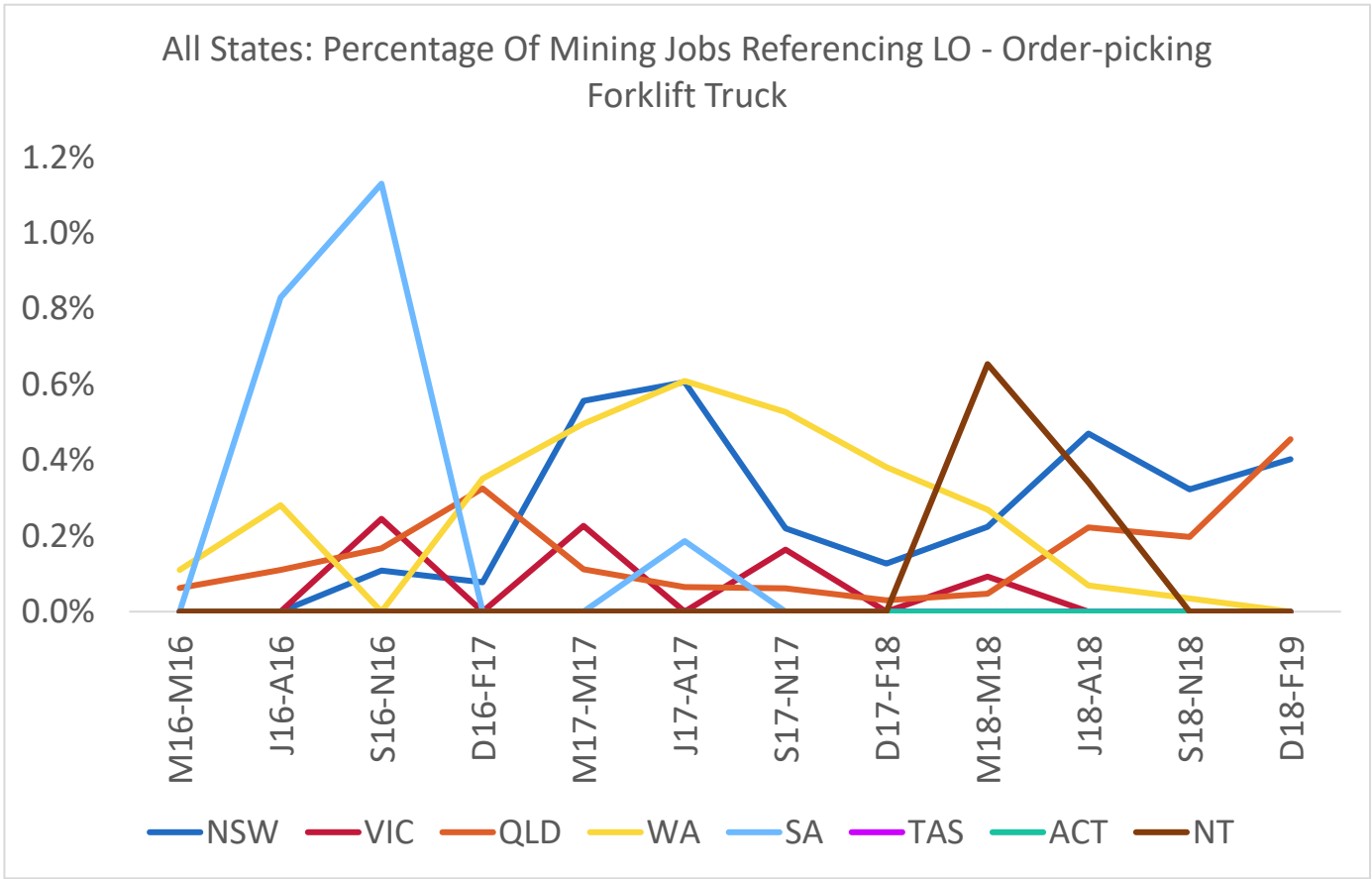

WA: Change In References To LO - Order-picking Forklift Truck (Index)
1,200
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

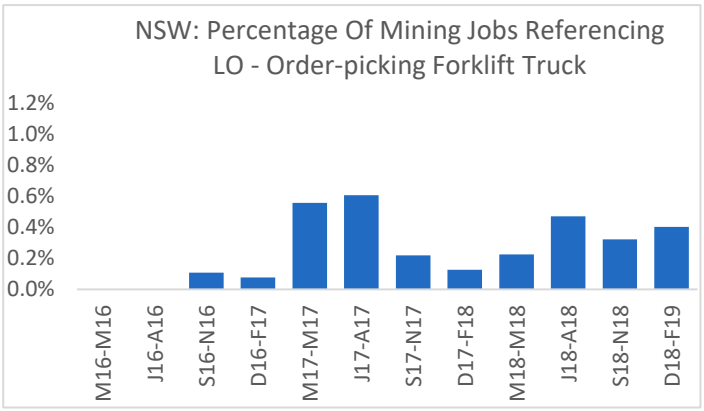

QLD: Change In References To LO - Order-picking Forklift Truck (Index)
1,200
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

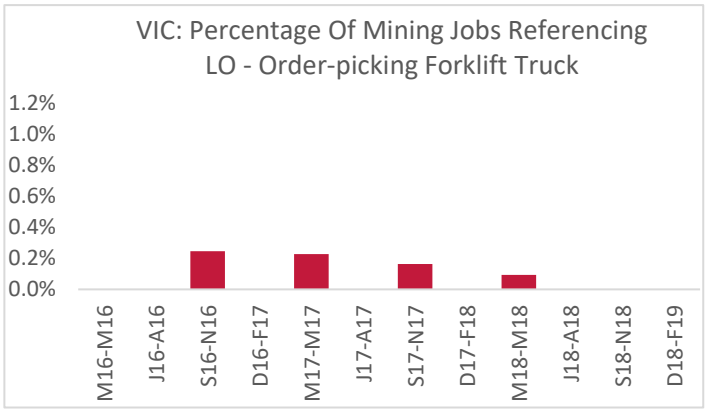

NSW: Change In References To LO - Order-picking Forklift Truck (Index)
1,200
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

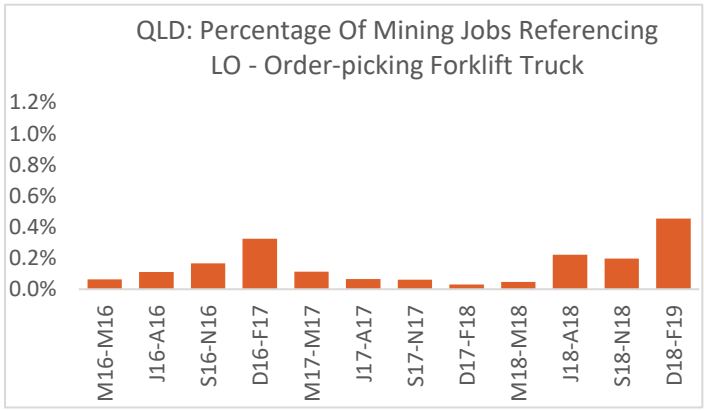

All Others: Change In References To LO - Order-picking Forklift Truck (Index)
1,200
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

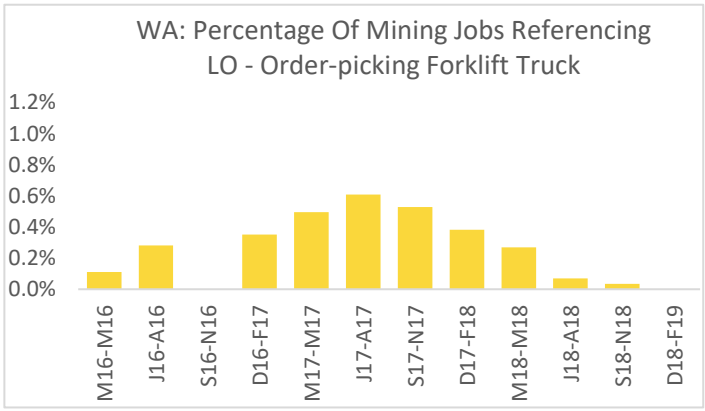

Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck (March 2016 - February 2019)
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

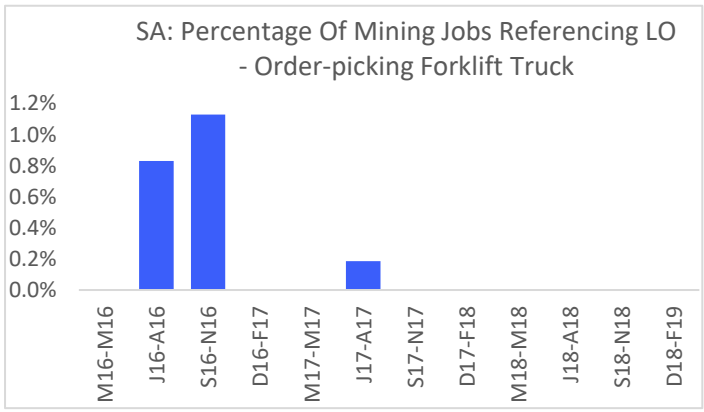

All States: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

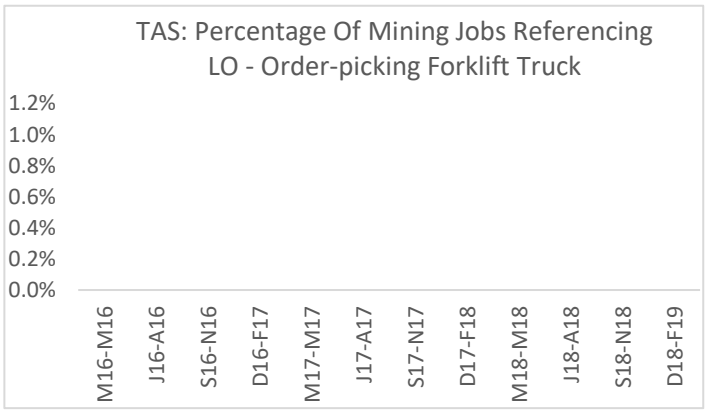

NSW: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

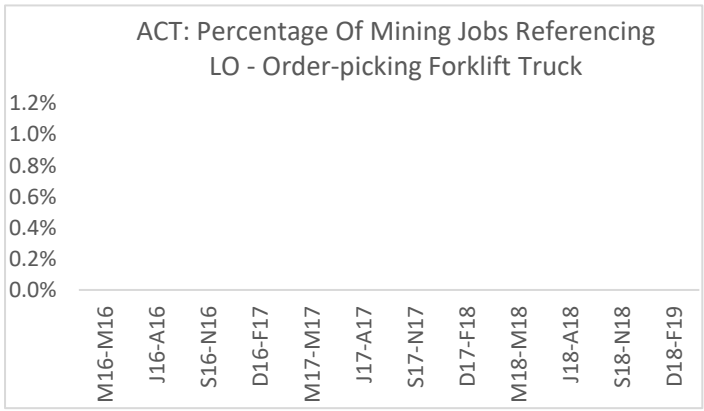

VIC: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

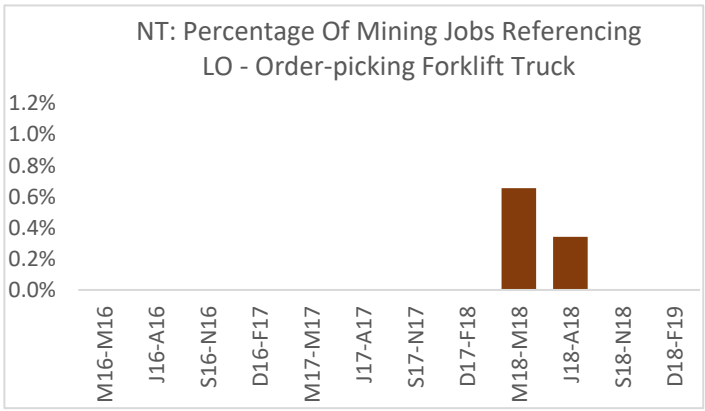

QLD: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

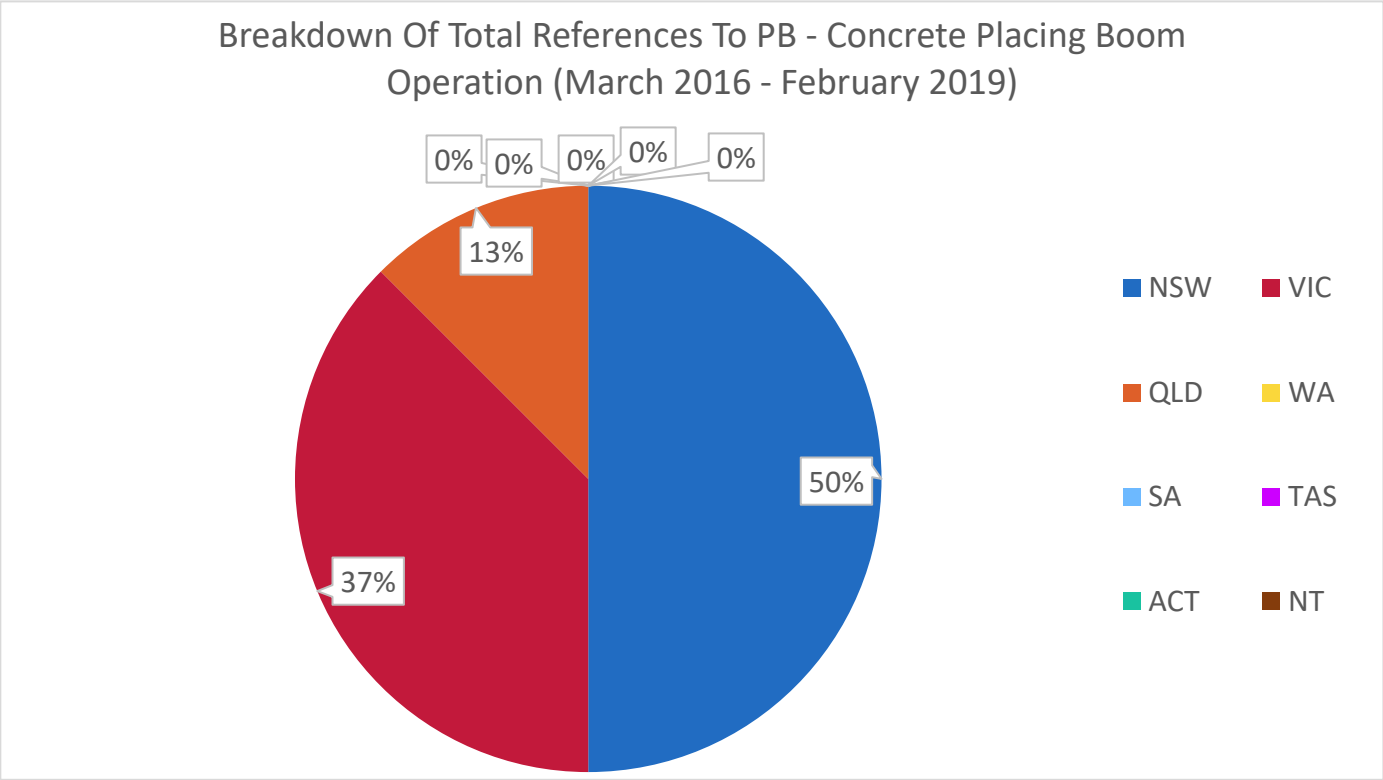

TAS: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

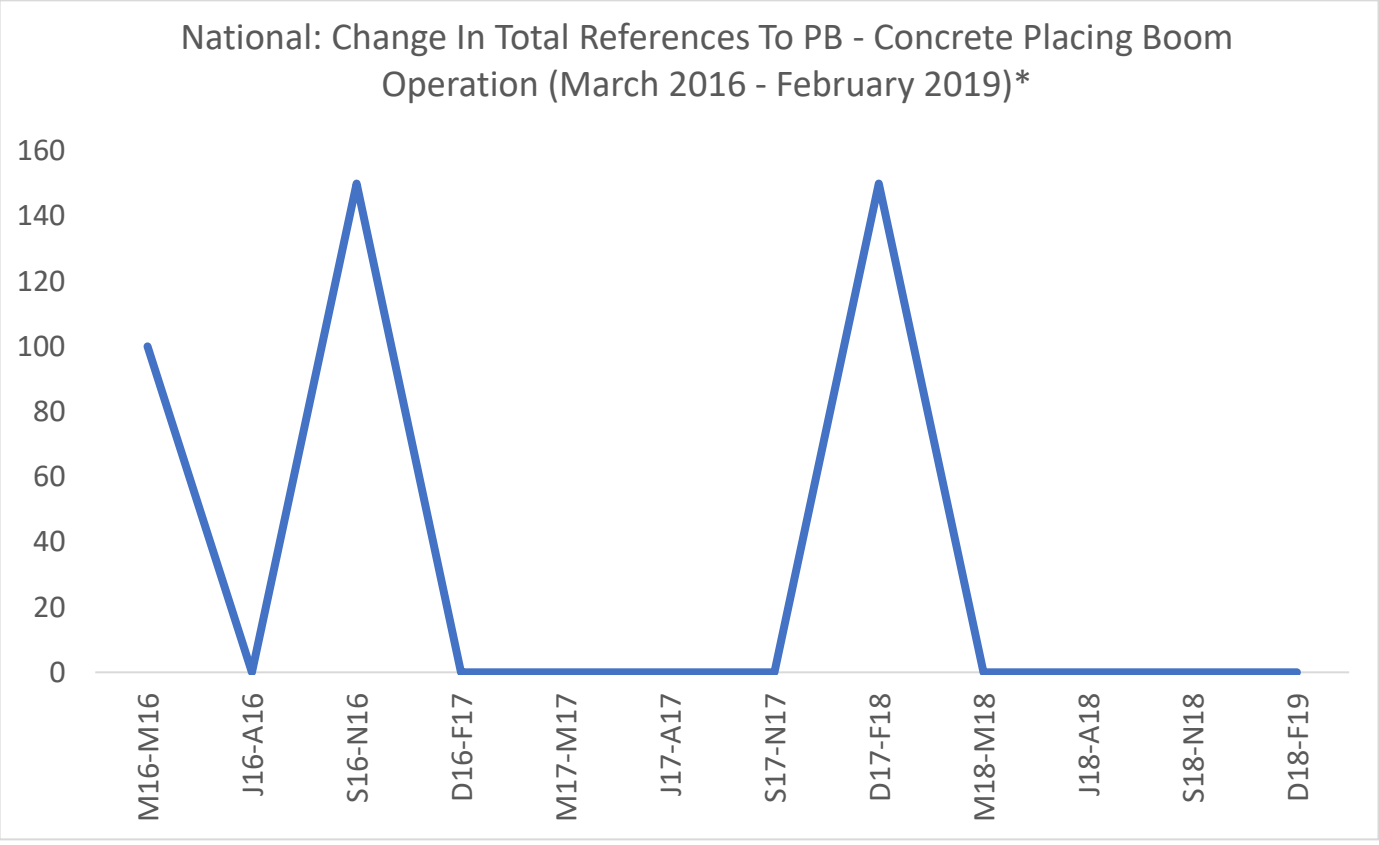

ACT: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing LO - Order-picking Forklift Truck
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

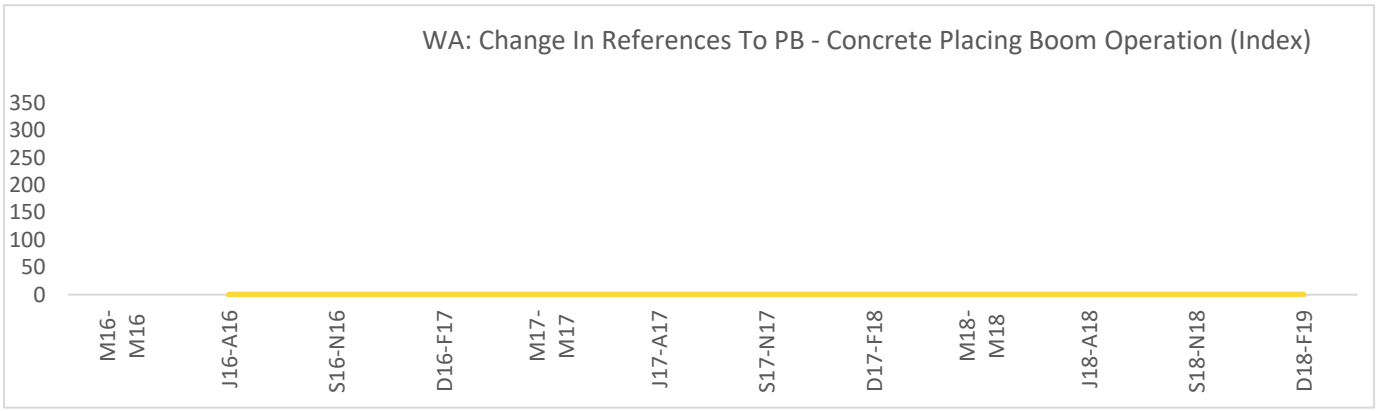
PB - Concrete Placing Boom Operation

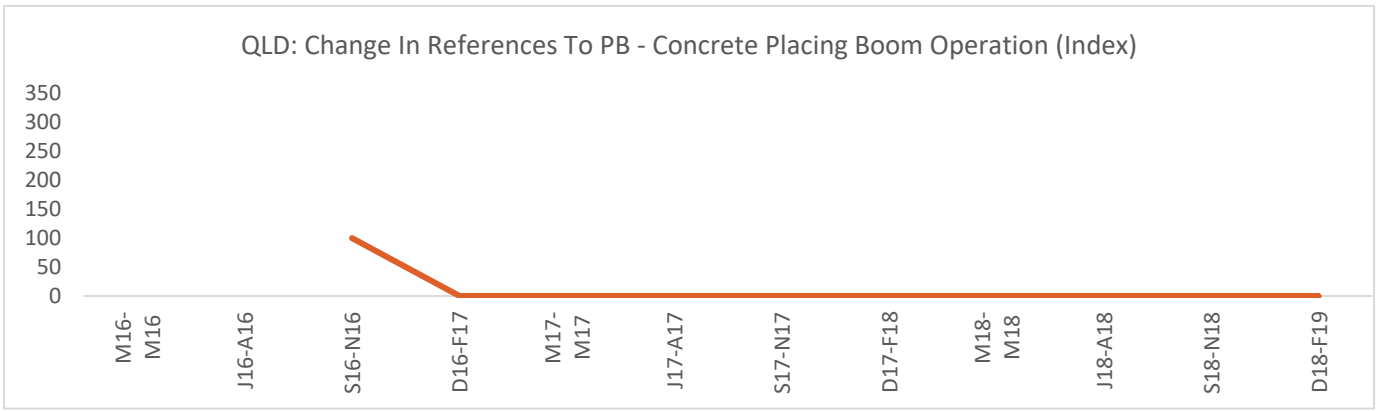
Total References: 8

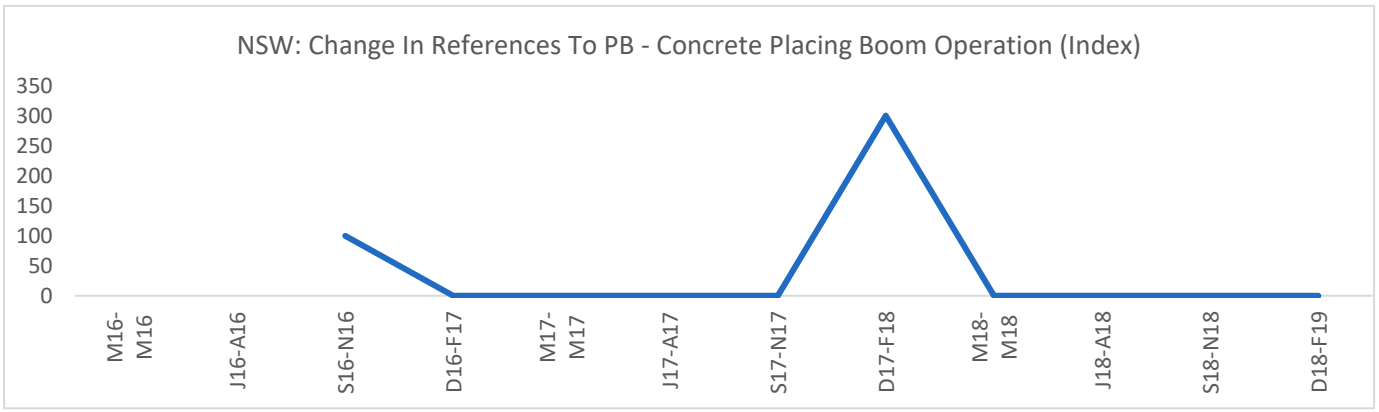


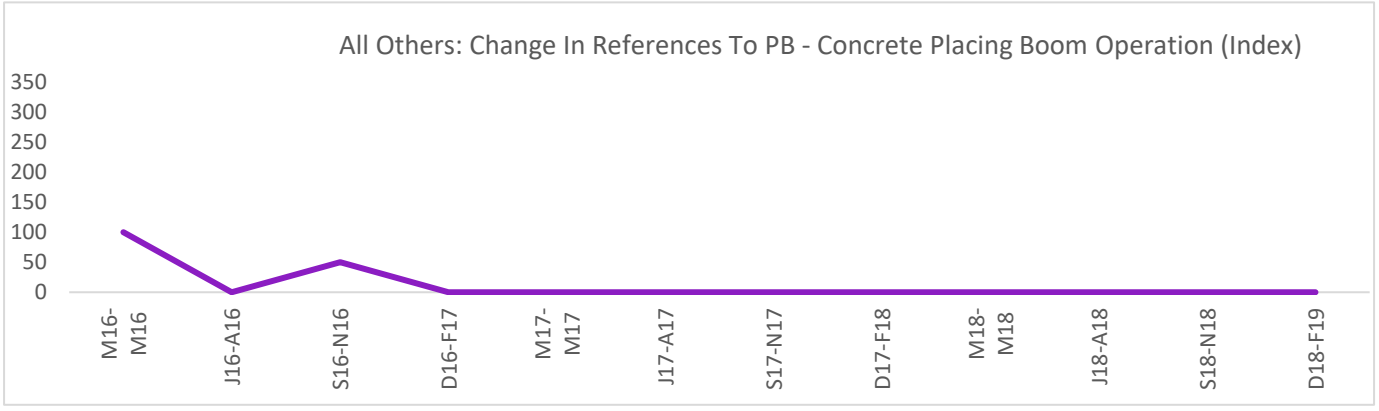


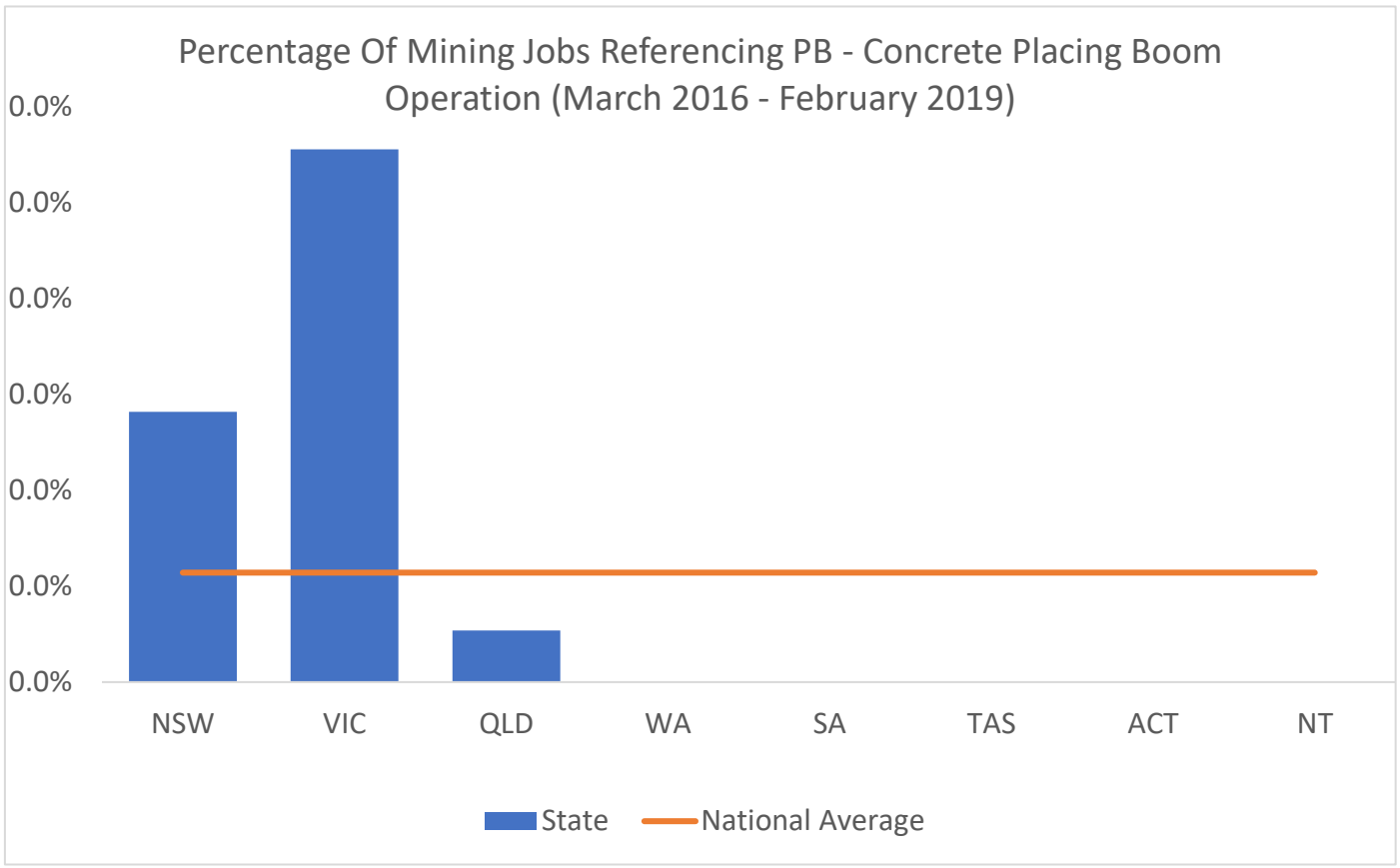
*Index: March - May 2016 = 100

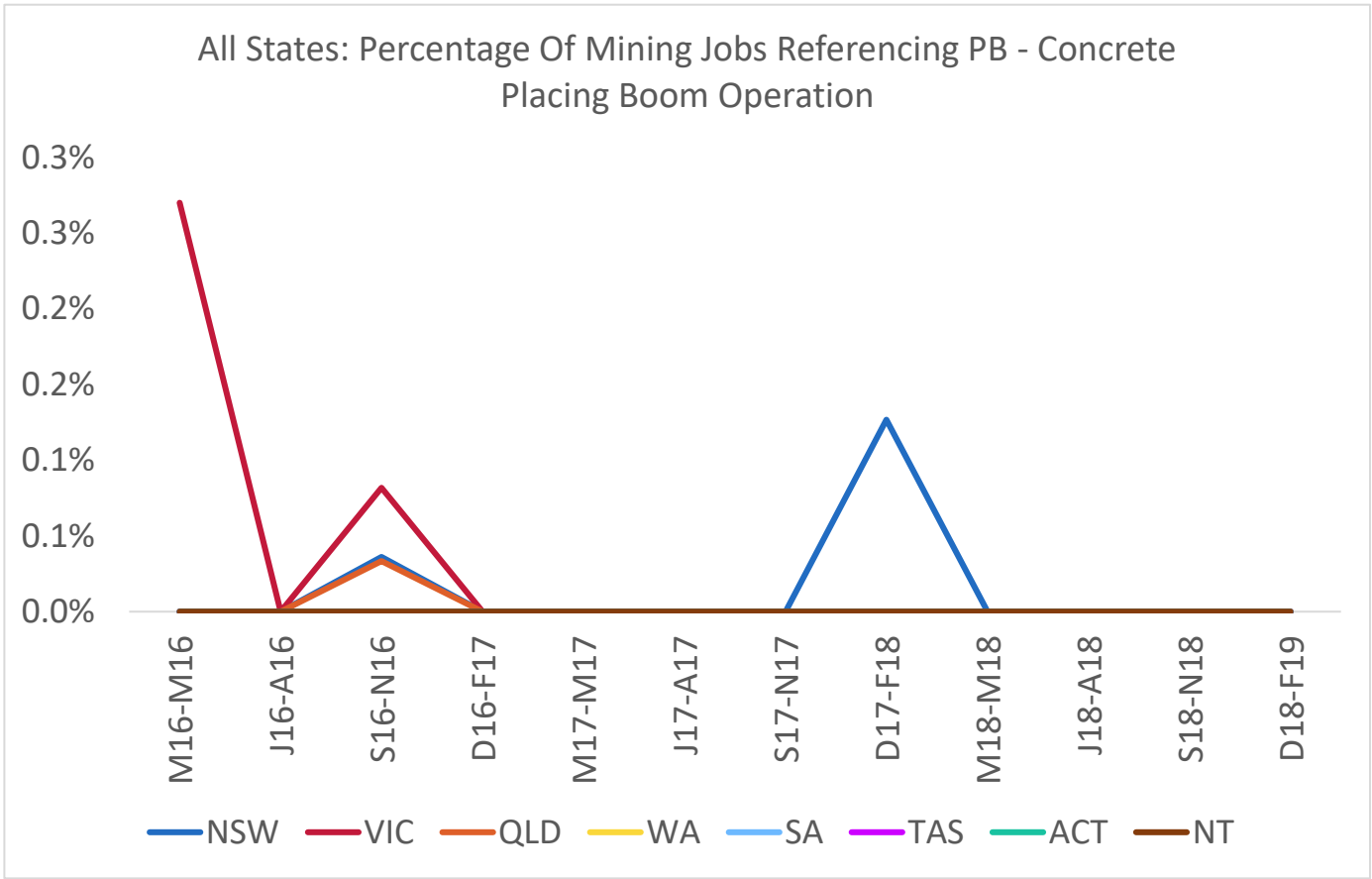

WA: Change In References To PB - Concrete Placing Boom Operation (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

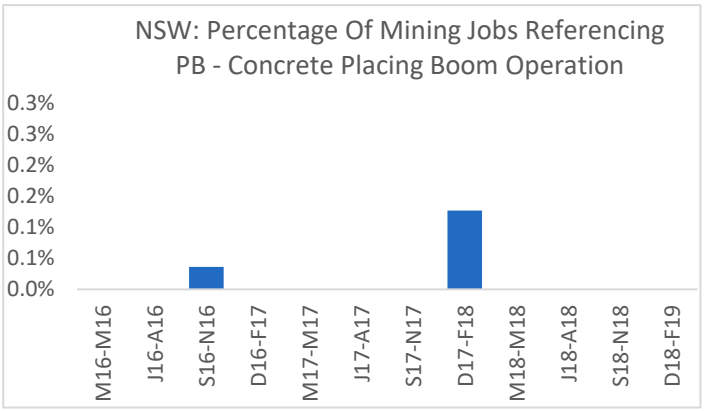

QLD: Change In References To PB - Concrete Placing Boom Operation (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

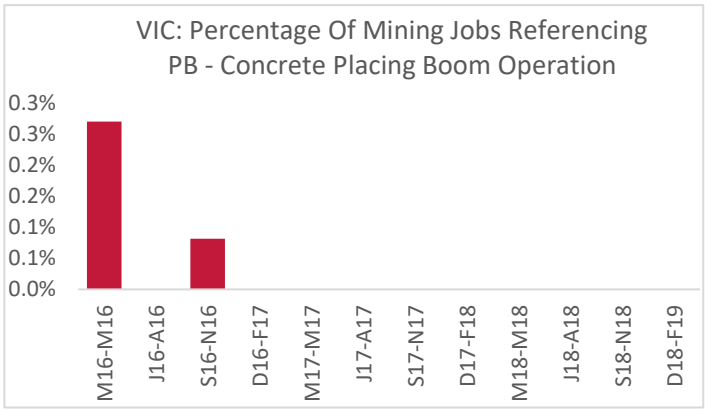

NSW: Change In References To PB - Concrete Placing Boom Operation (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

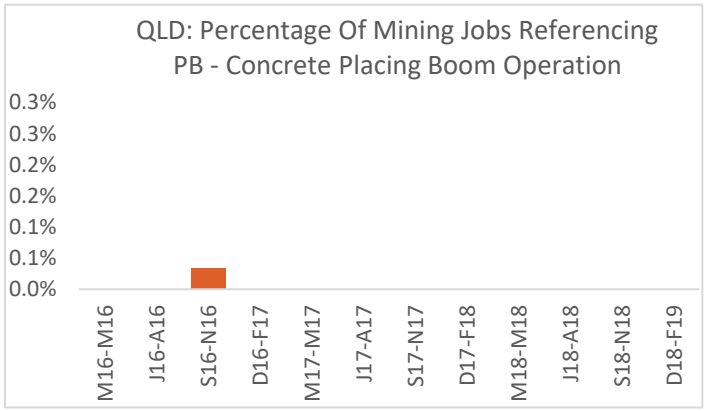

All Others: Change In References To PB - Concrete Placing Boom Operation (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

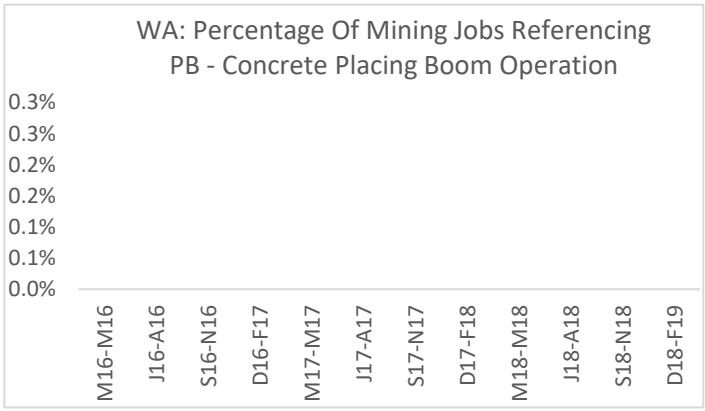

Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation (March 2016 - February 2019)
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

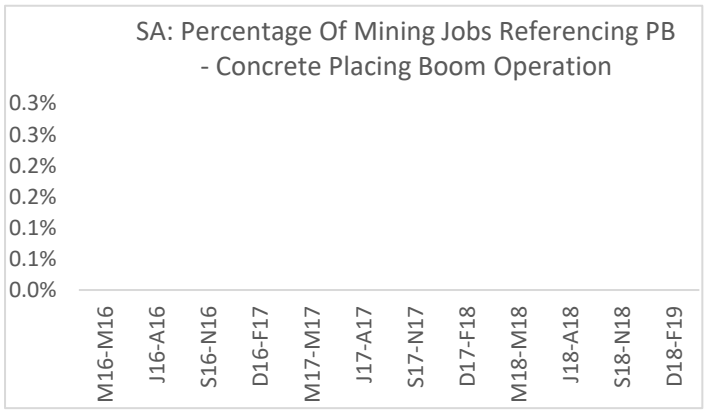

All States: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

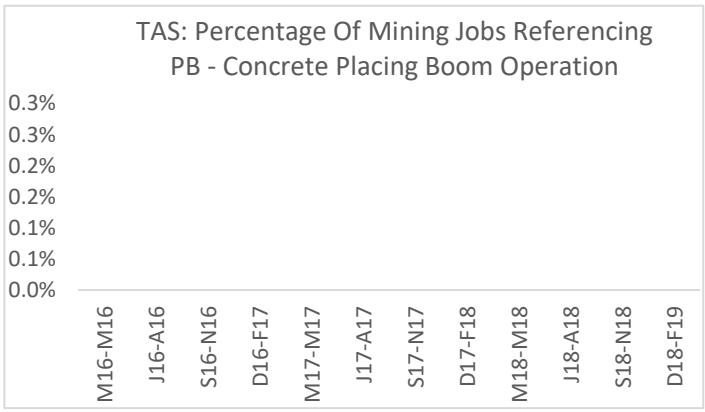

NSW: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

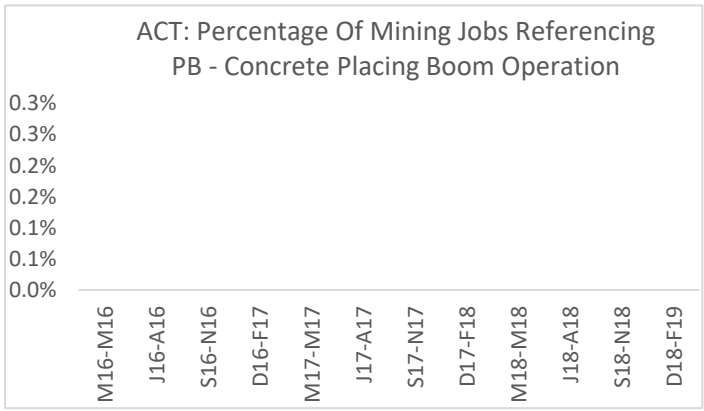

VIC: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

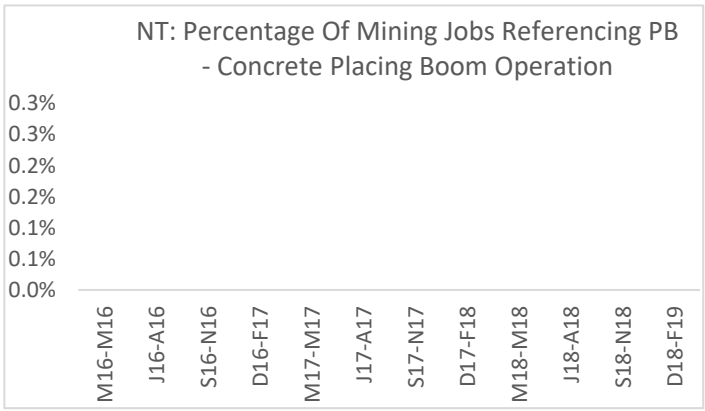

QLD: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

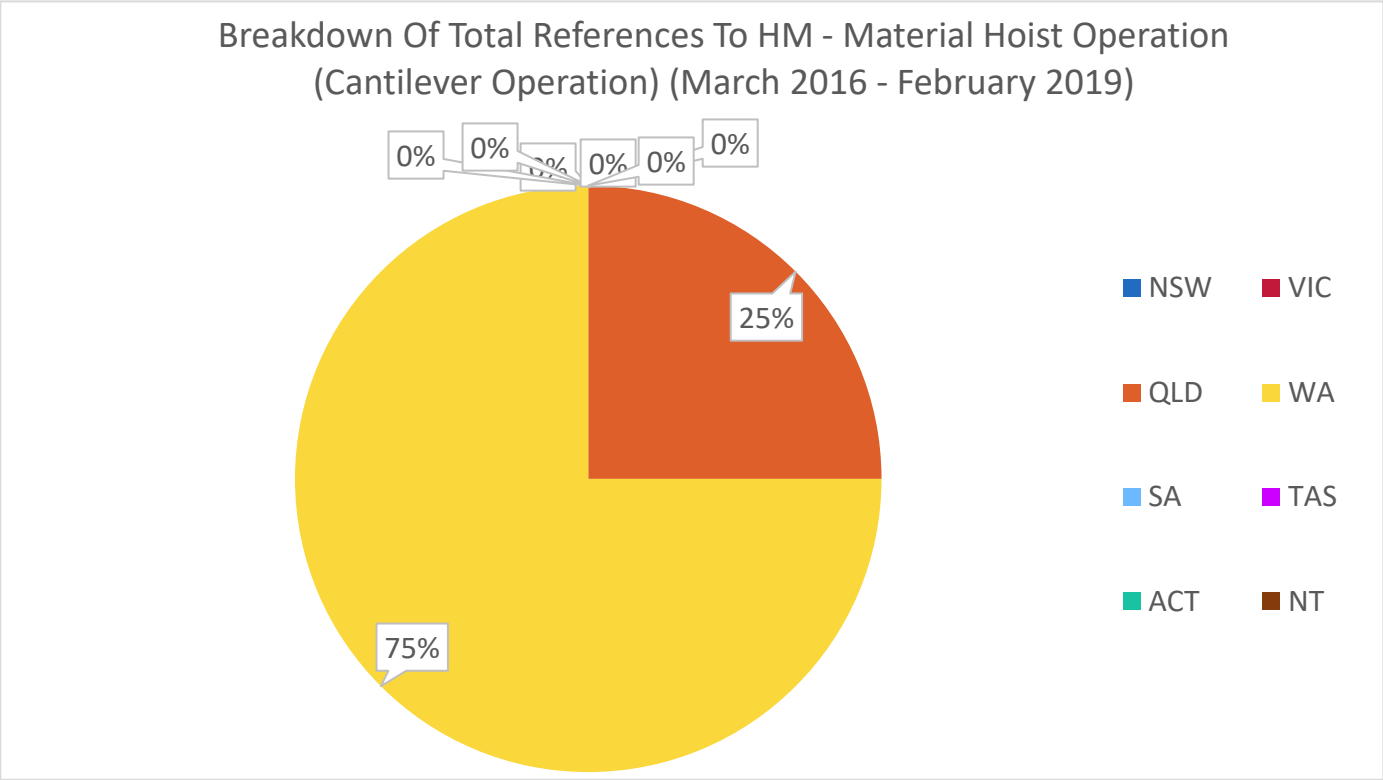

TAS: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

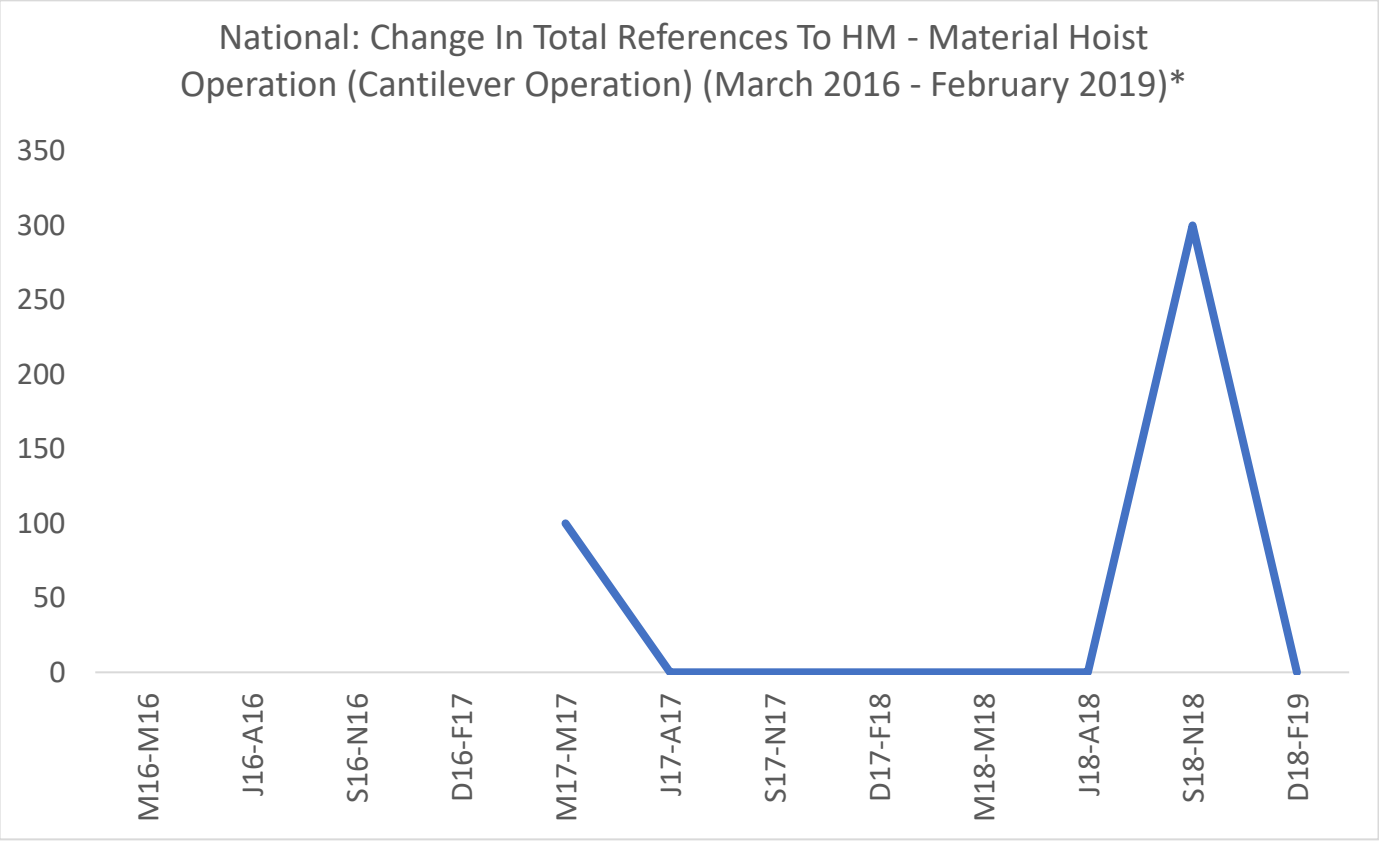

ACT: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing PB - Concrete Placing Boom Operation
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

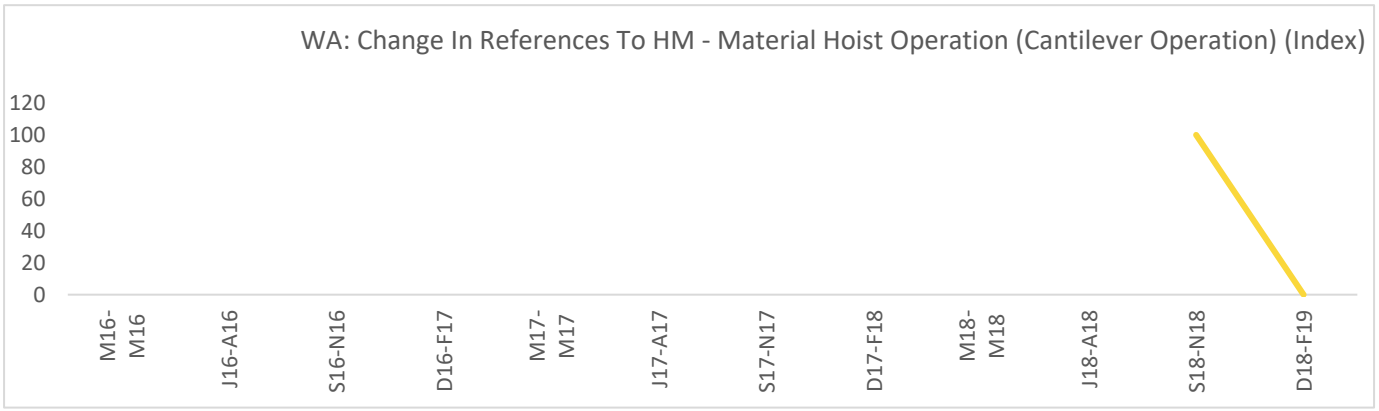
HM - Material Hoist Operation (Cantilever Operation)

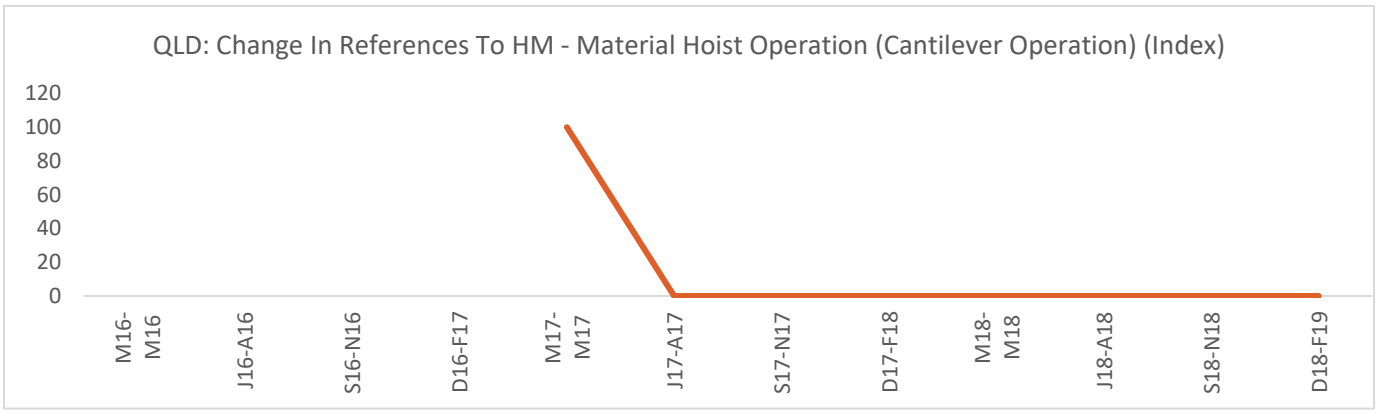
Total References: 4

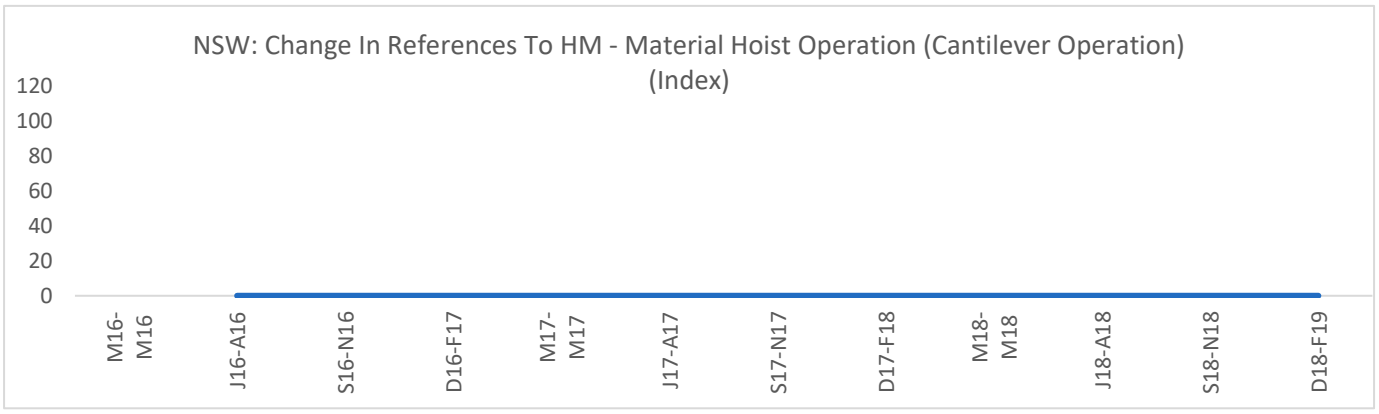


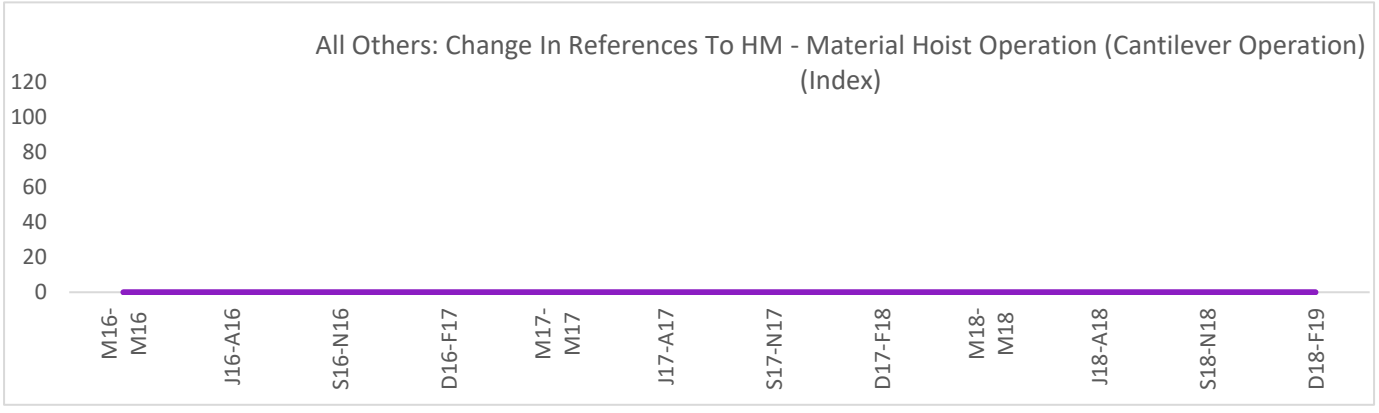


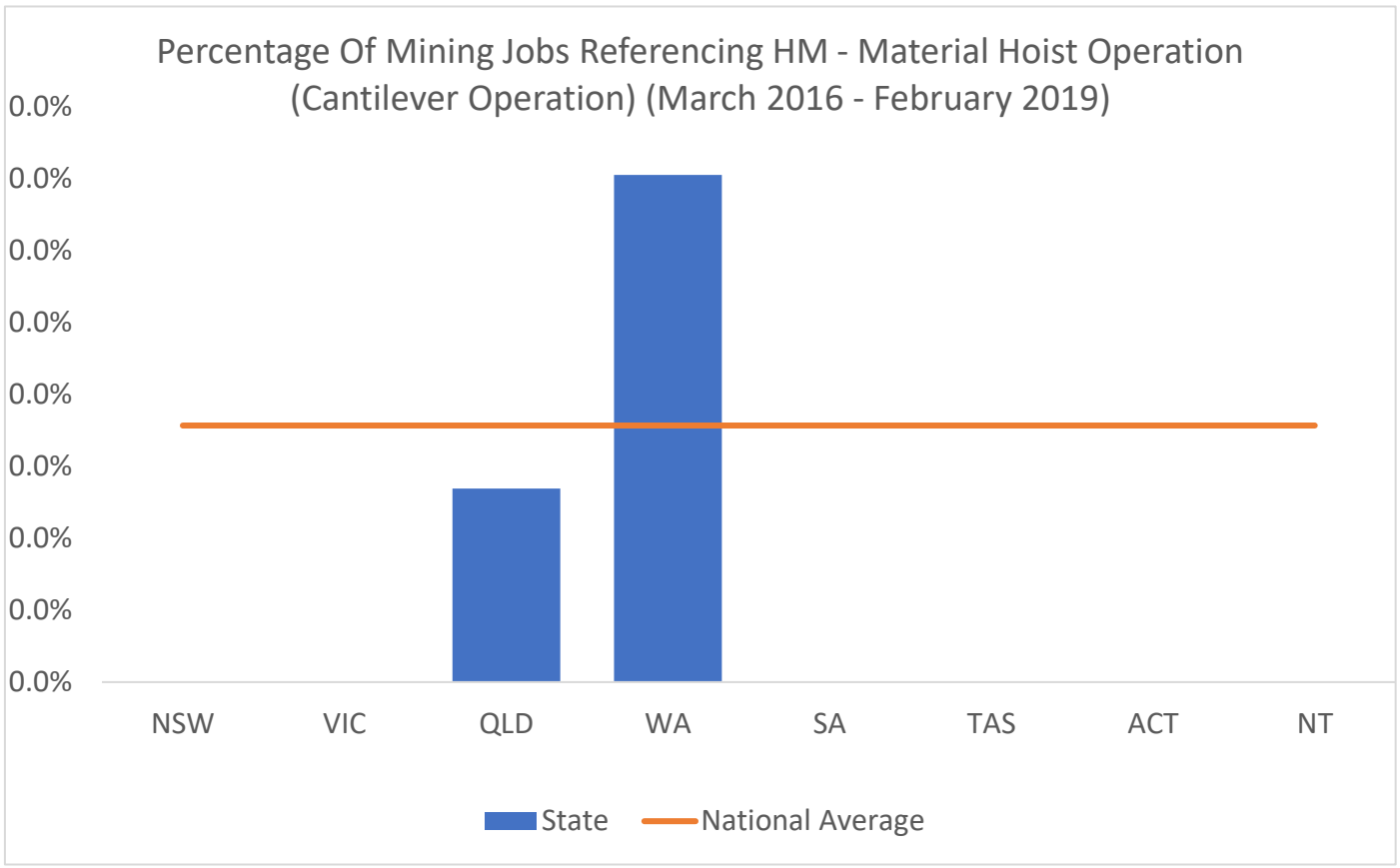
*Index: March - May 2016 = 100

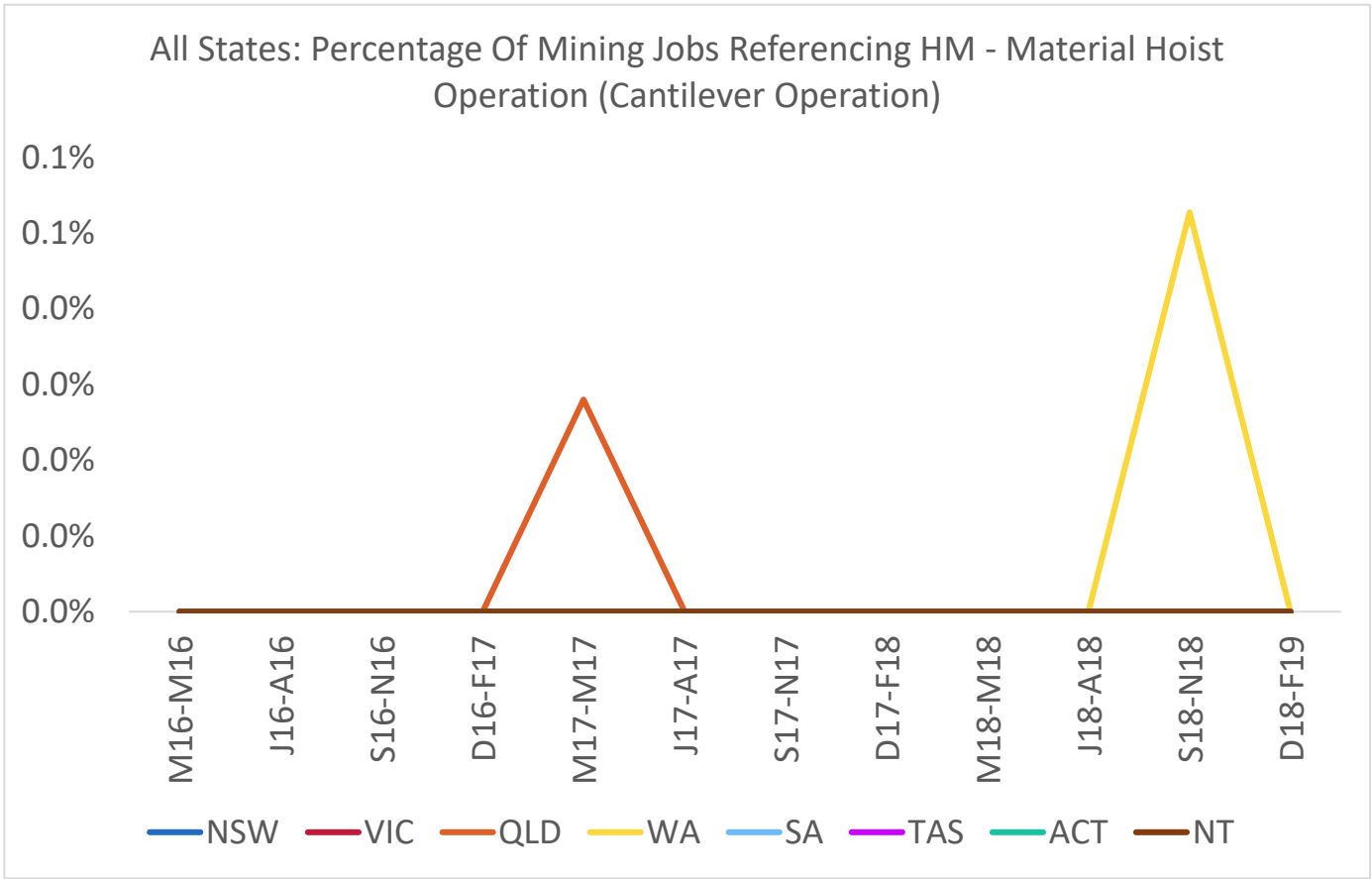

WA: Change In References To HM - Material Hoist Operation (Cantilever Operation) (Index)
120
100
80
60
40
20
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

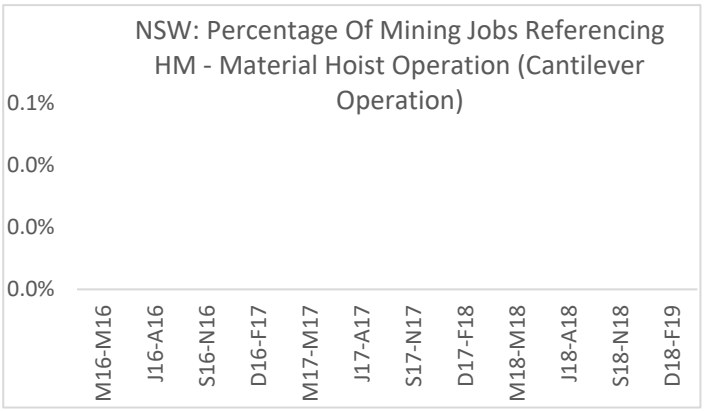

QLD: Change In References To HM - Material Hoist Operation (Cantilever Operation) (Index)
120
100
80
60
40
20
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

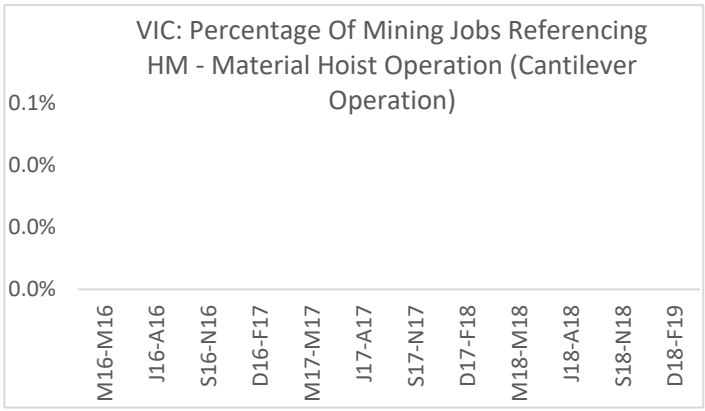

NSW: Change In References To HM - Material Hoist Operation (Cantilever Operation) (Index)
120
100
80
60
40
20
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

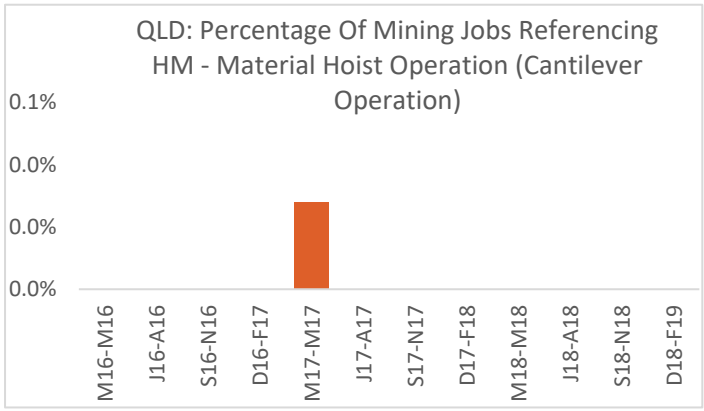

All Others: Change In References To HM - Material Hoist Operation (Cantilever Operation) (Index)
120
100
80
60
40
20
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

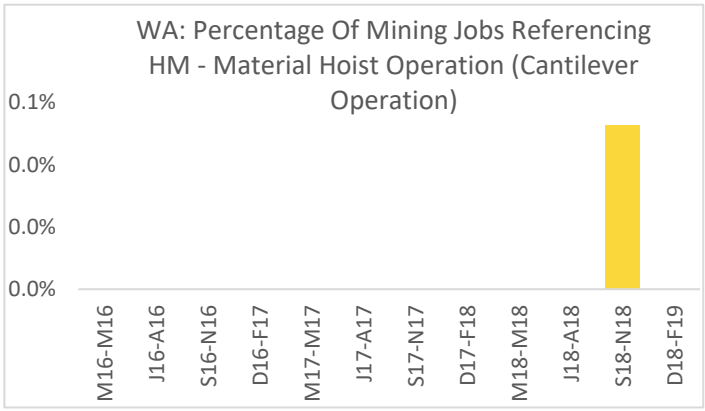

Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation) (March 2016 - February 2019)
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

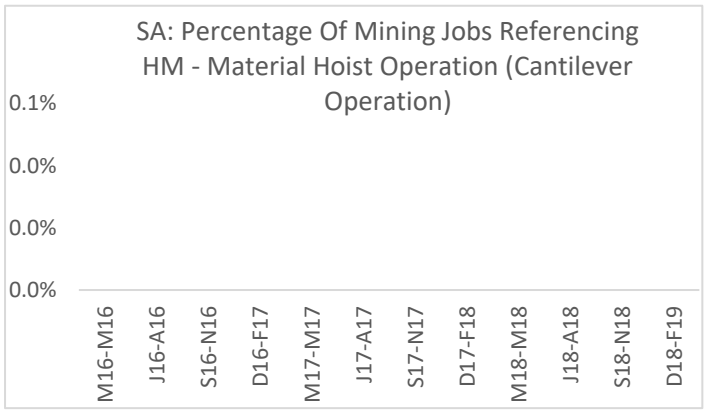

All States: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.1%
0.0%
0.0%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

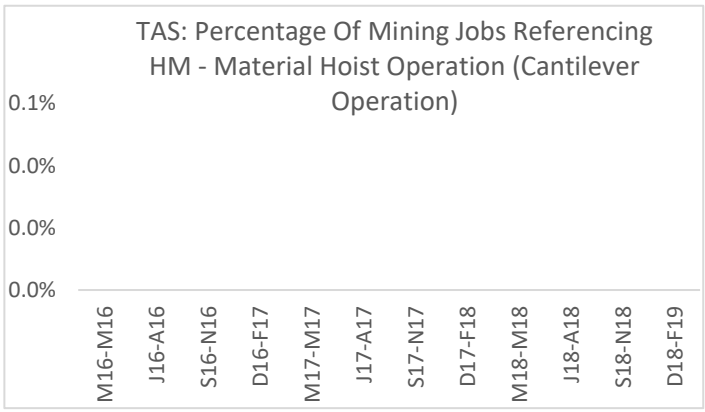

NSW: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

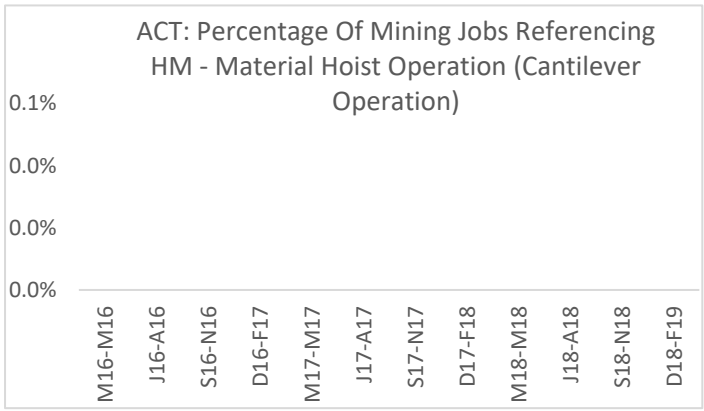

VIC: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

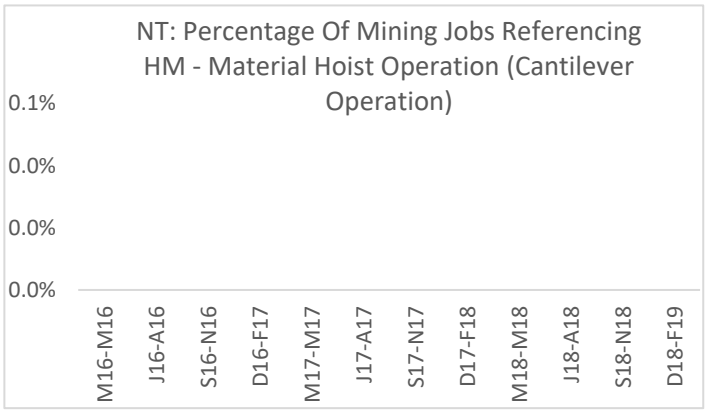

QLD: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

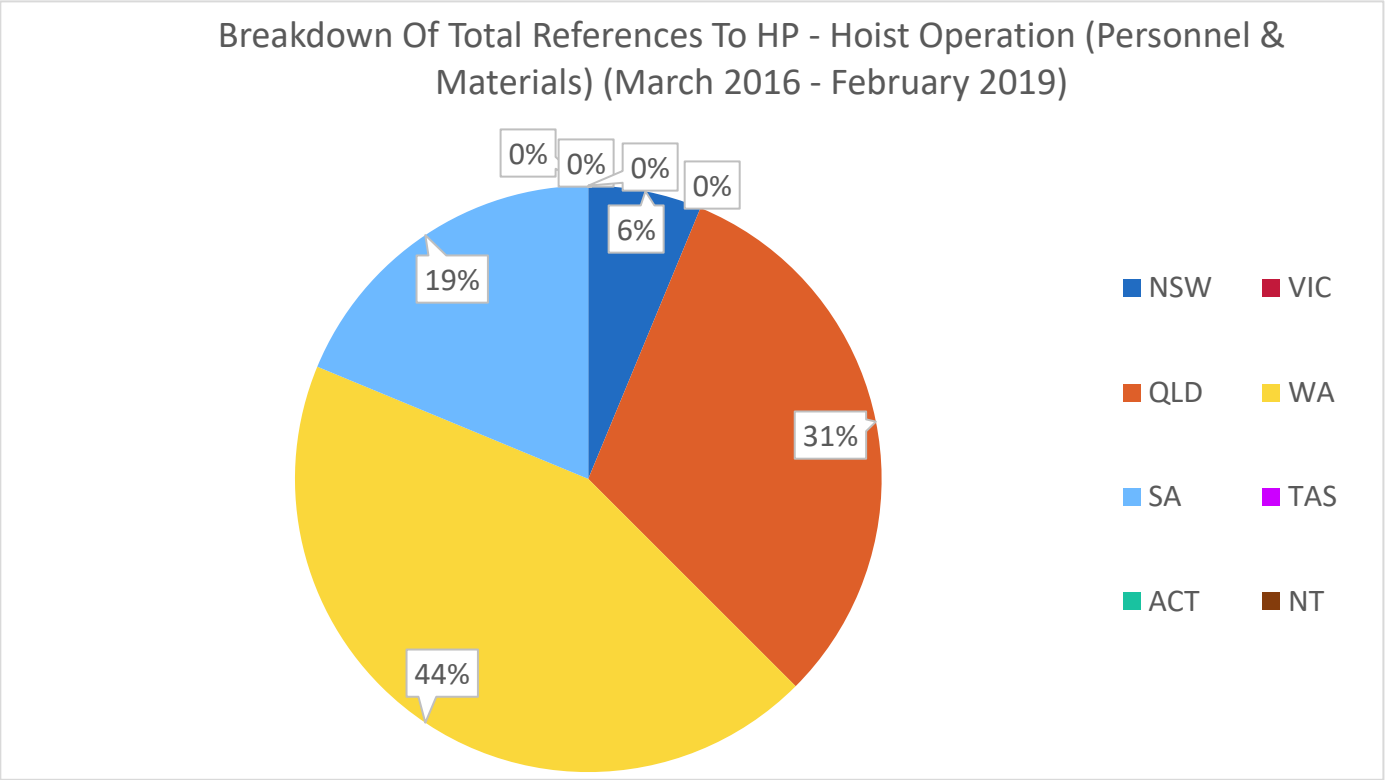

TAS: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

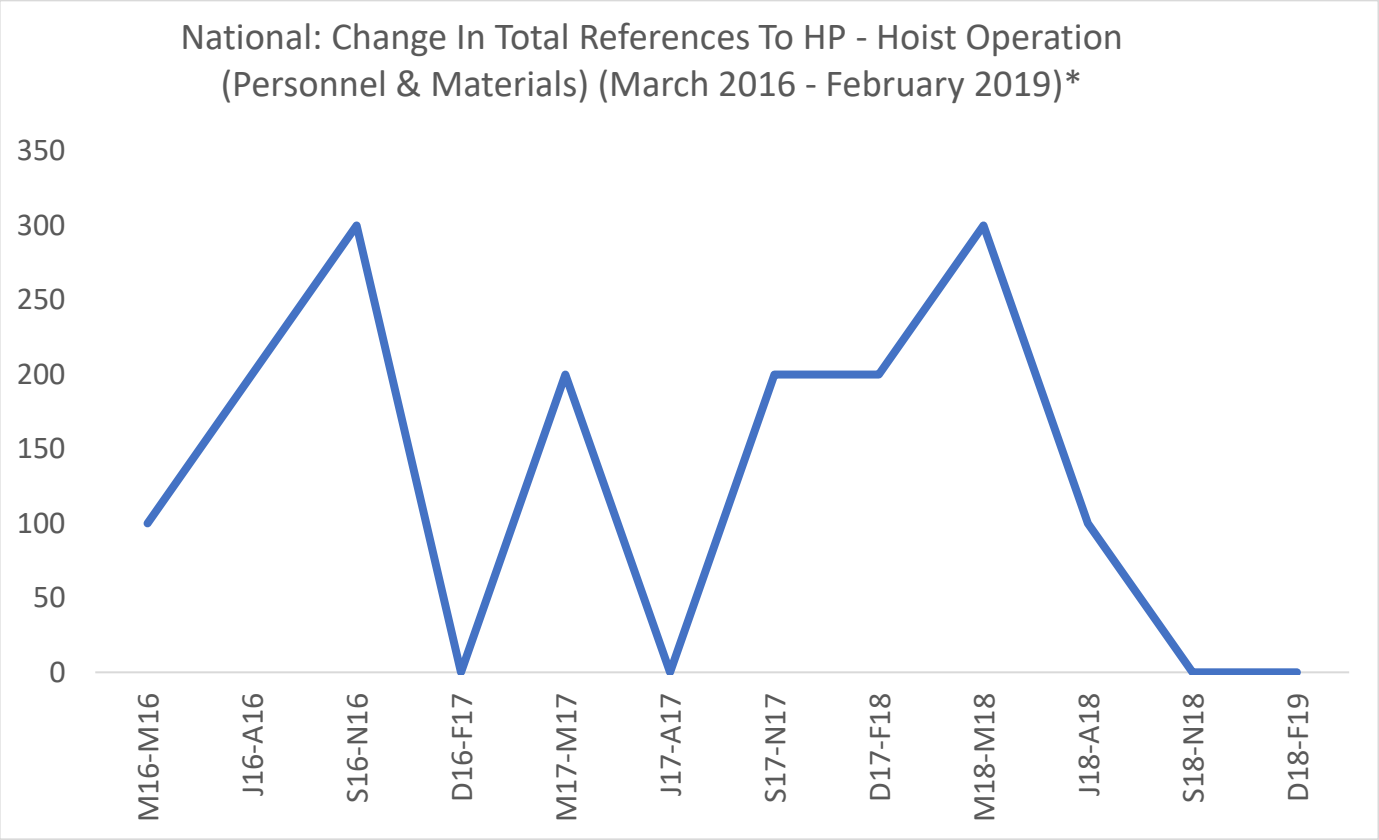

ACT: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing HM - Material Hoist Operation (Cantilever Operation)
0.1%
0.0%
0.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

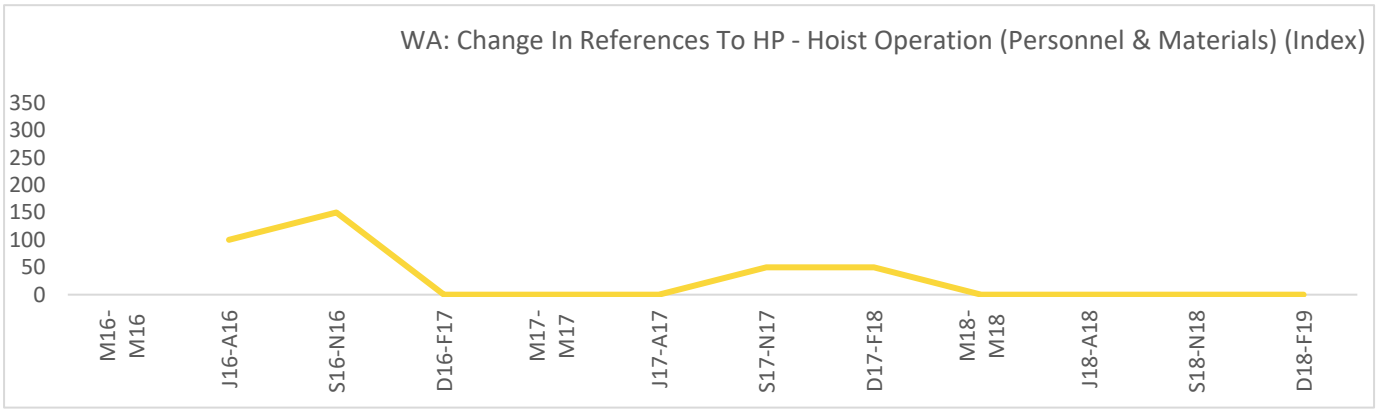
HP - Hoist Operation (Personnel & Materials)

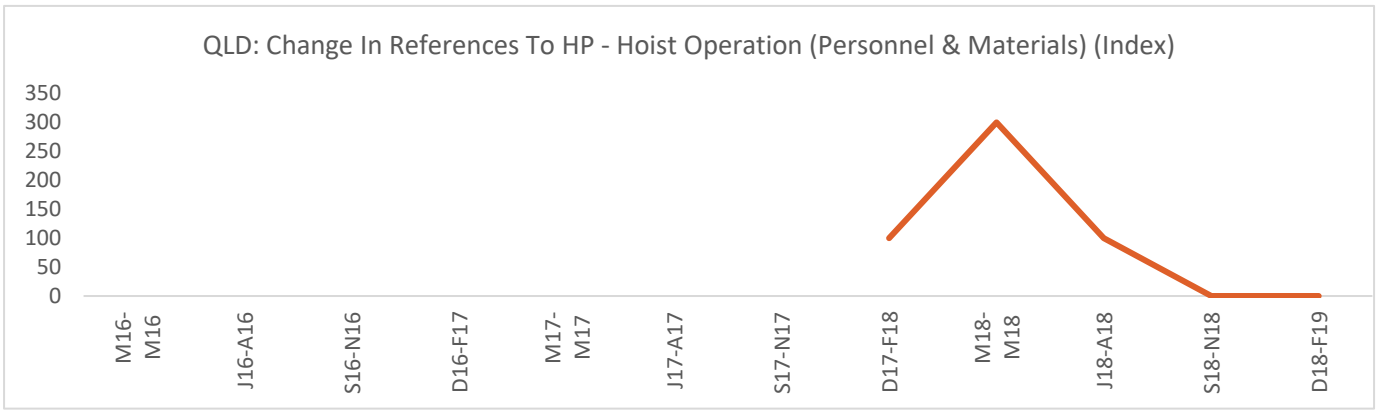
Total References: 16

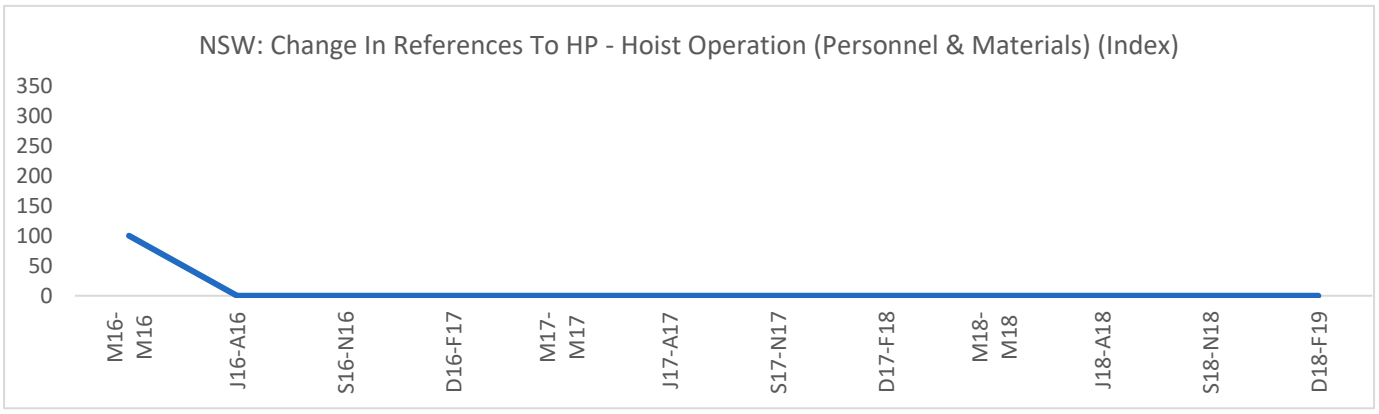


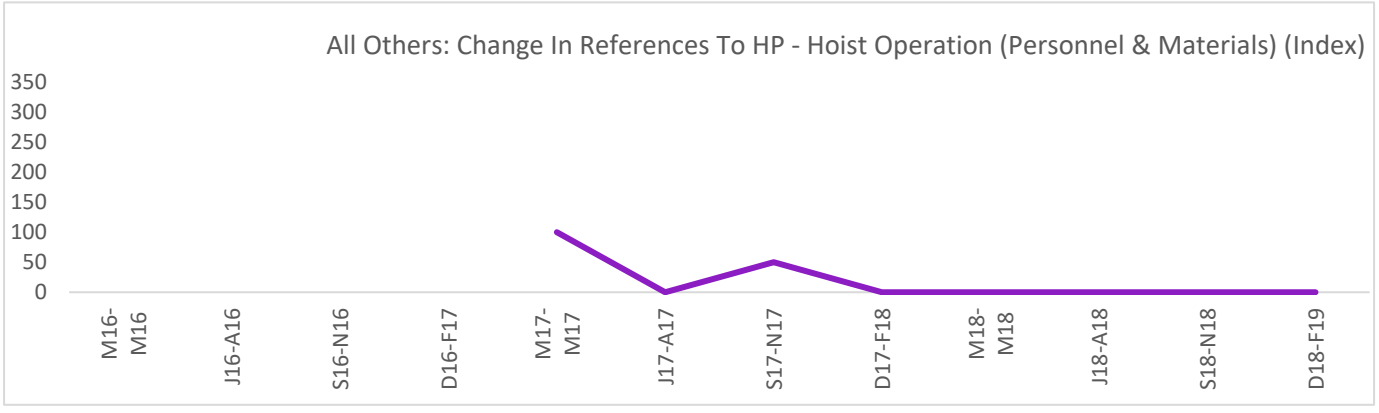


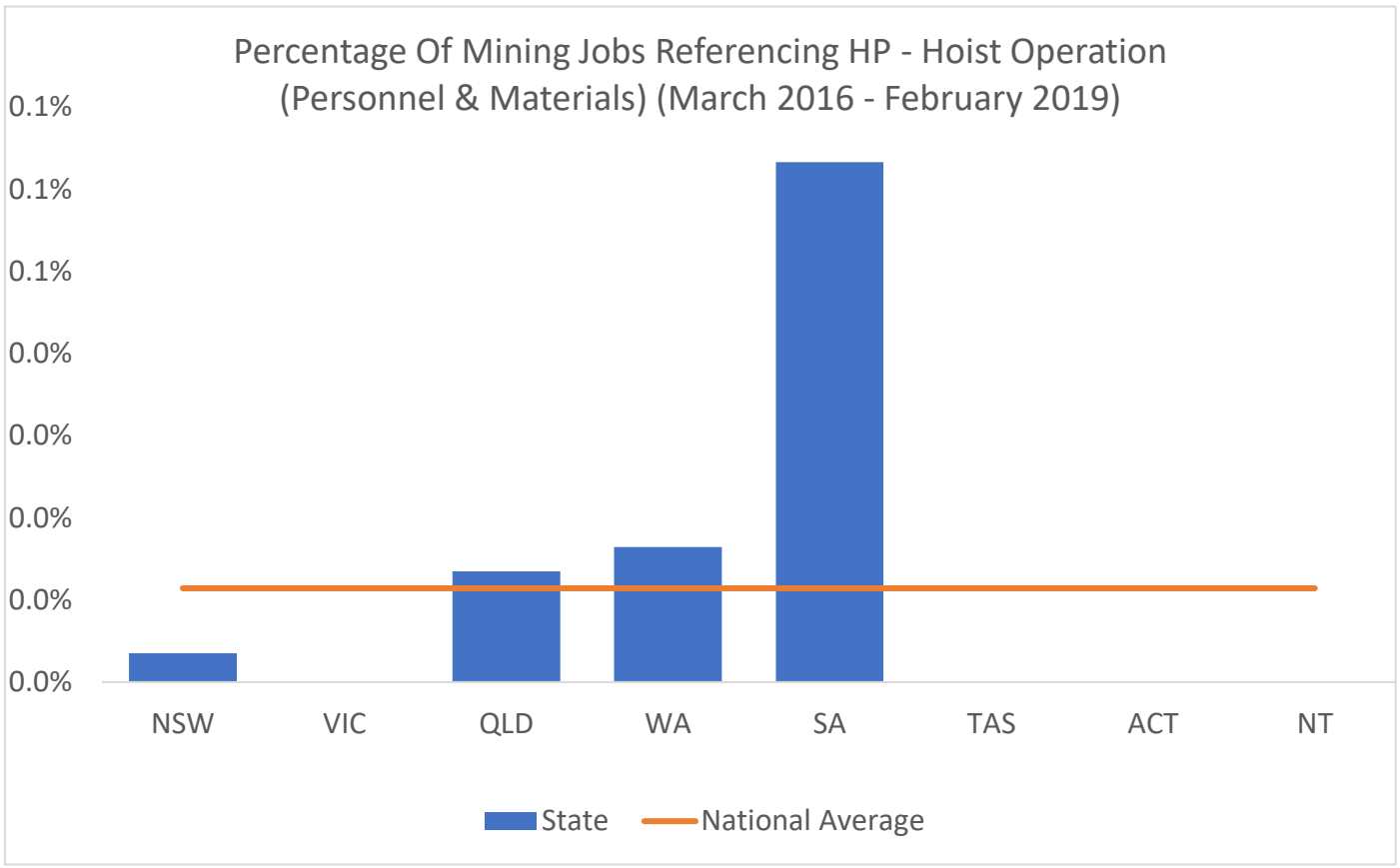
*Index: March - May 2016 = 100

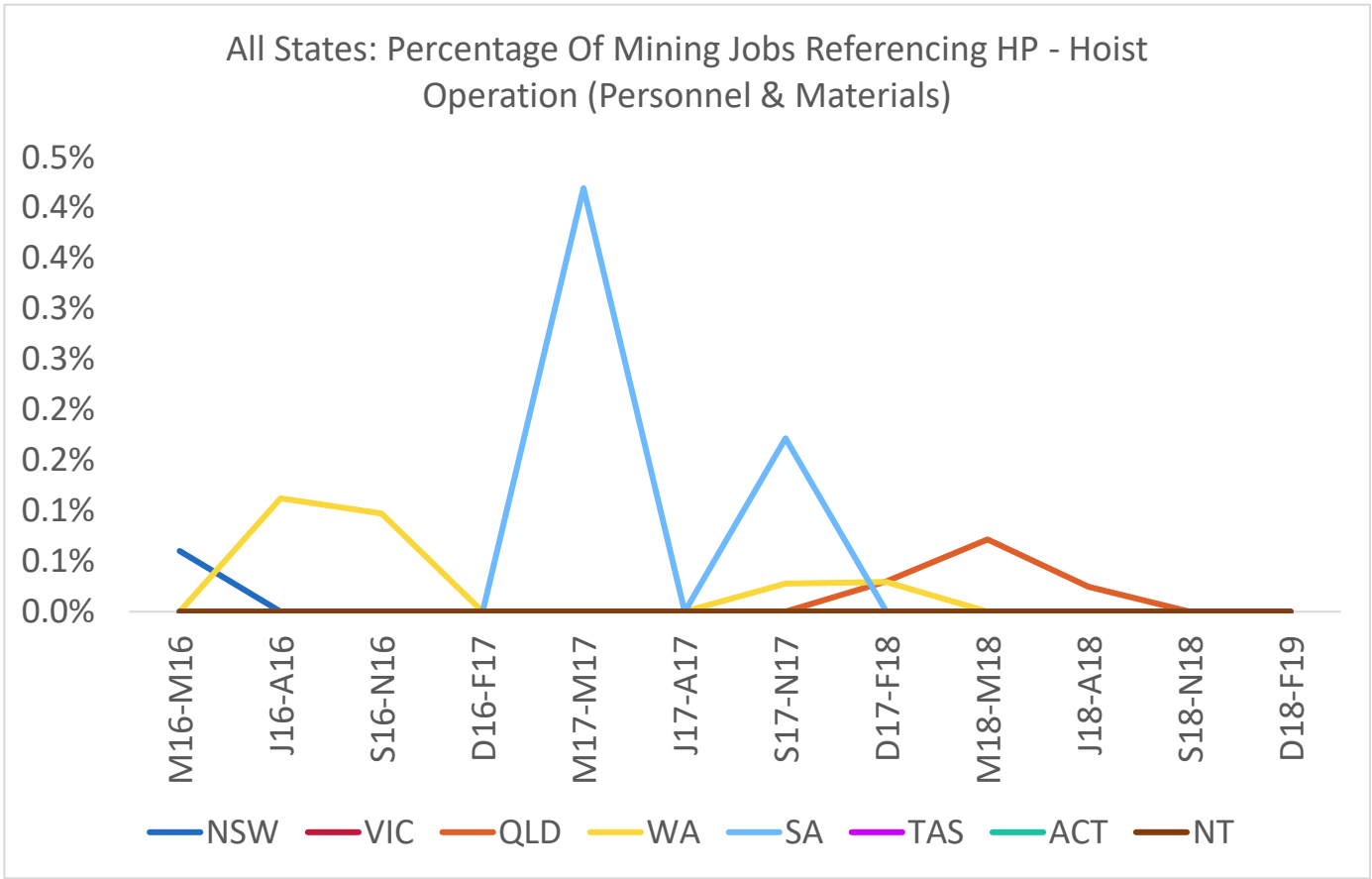

WA: Change In References To HP - Hoist Operation (Personnel & Materials) (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

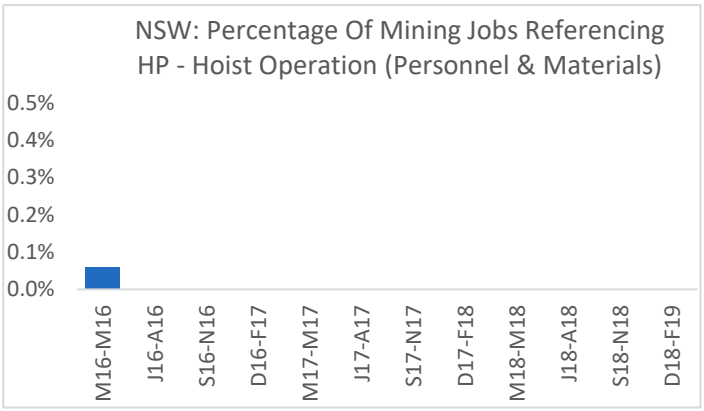

QLD: Change In References To HP - Hoist Operation (Personnel & Materials) (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

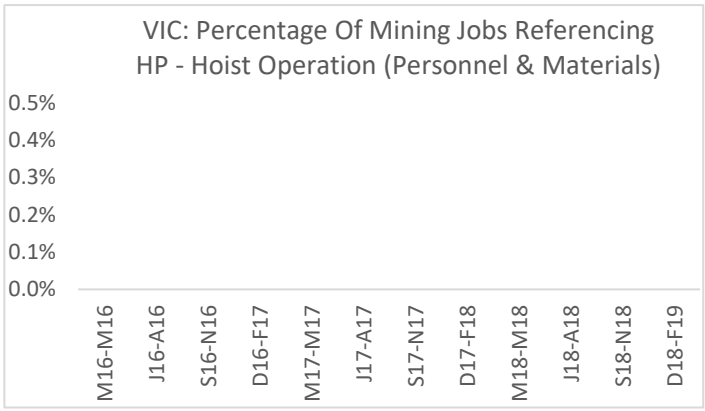

NSW: Change In References To HP - Hoist Operation (Personnel & Materials) (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

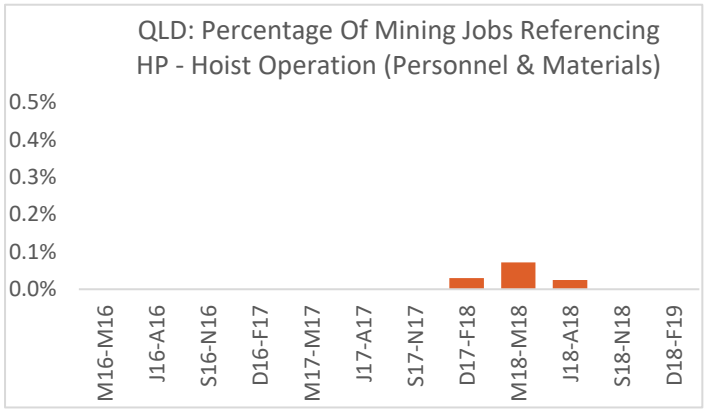

All Others: Change In References To HP - Hoist Operation (Personnel & Materials) (Index)
350
300
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

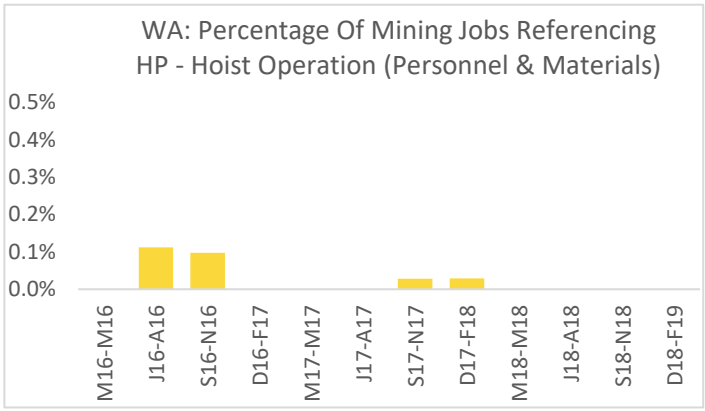

Percentage Of Mining Jobs Referencing HP - Hoist Operation (Personnel & Materials) (March 2016 - February 2019)
0.1%
0.1%
0.1%
0.0%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

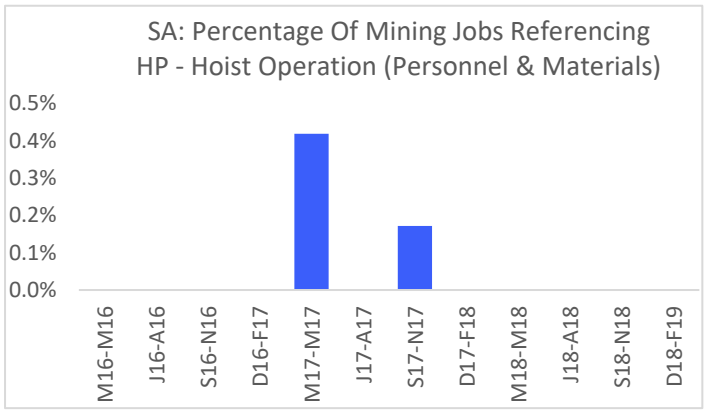

All States: Percentage Of Mining Jobs Referencing HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.4%
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

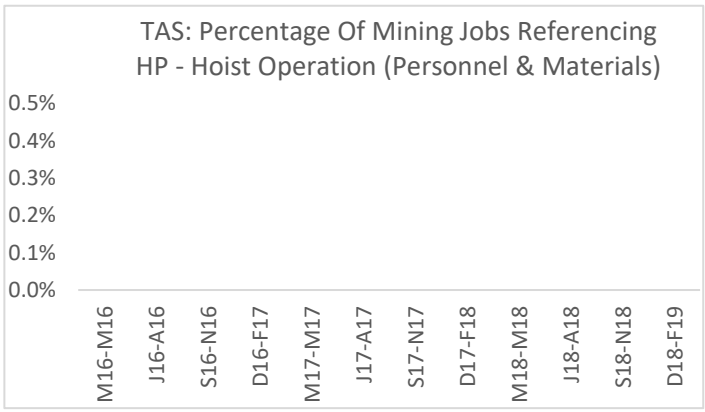

NSW: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

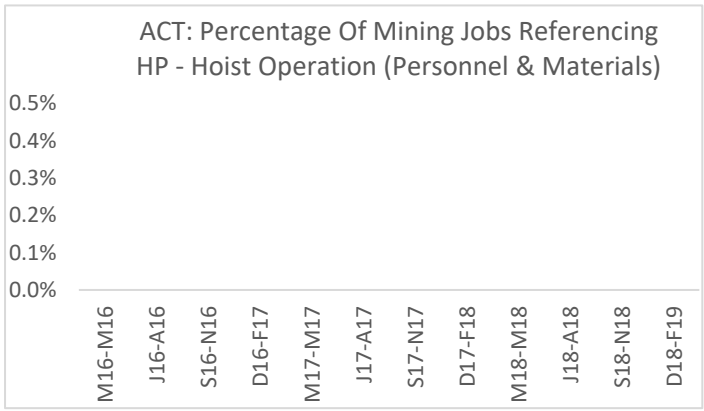

VIC: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

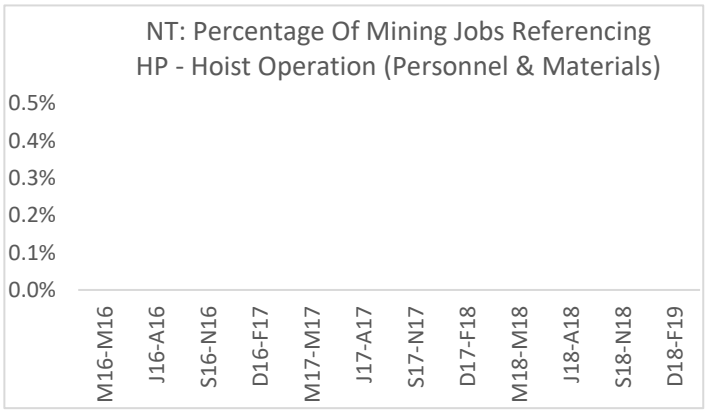

QLD: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

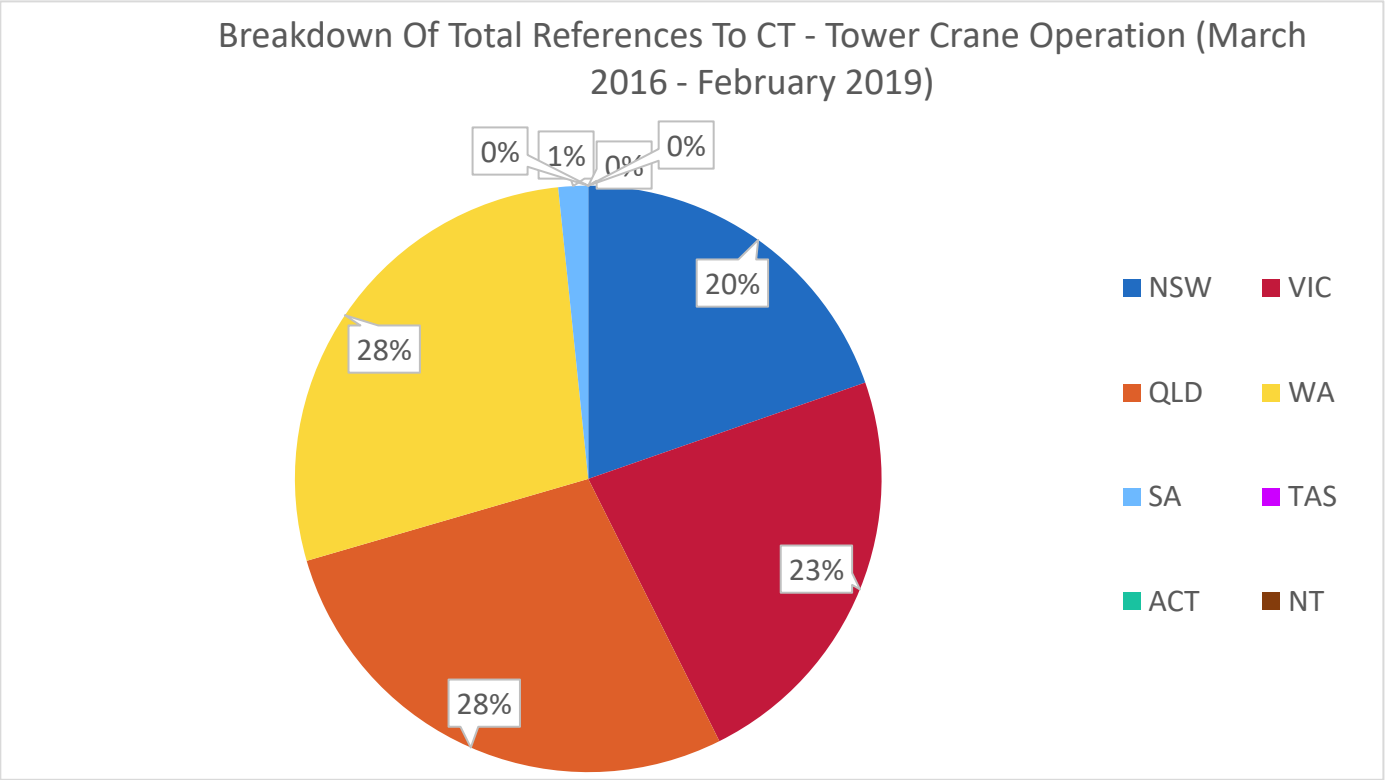

TAS: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

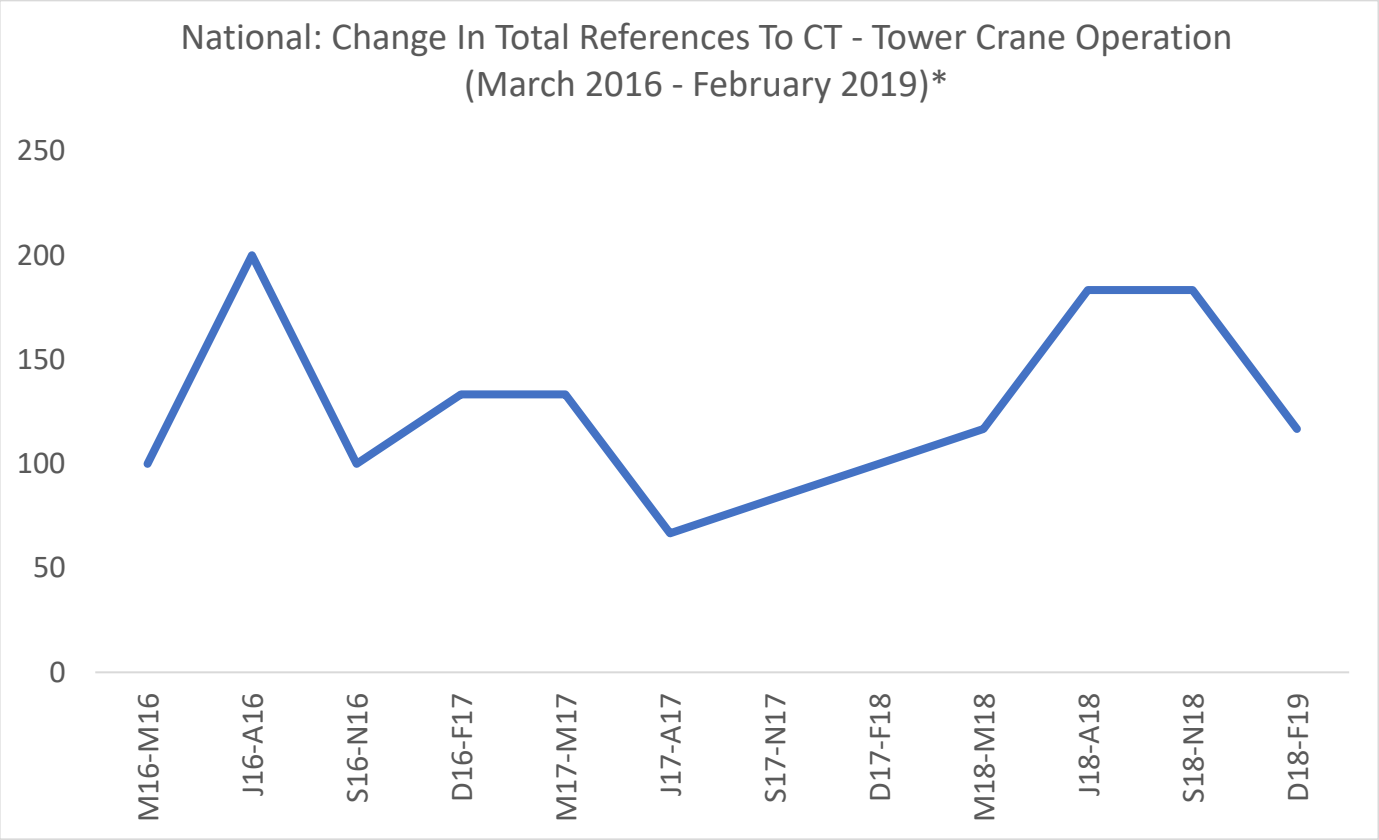

ACT: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing
HP - Hoist Operation (Personnel & Materials)
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

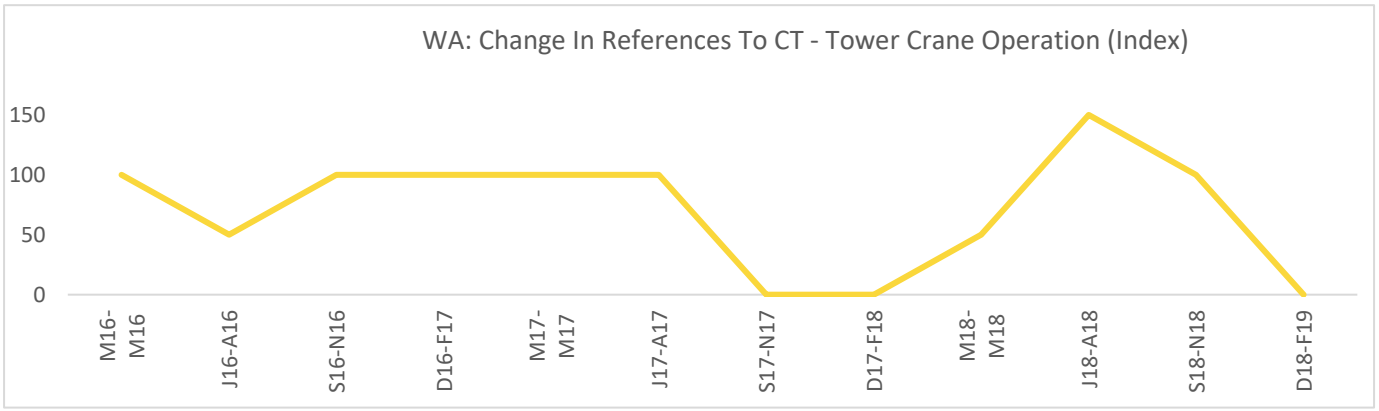
CT - Tower Crane Operation

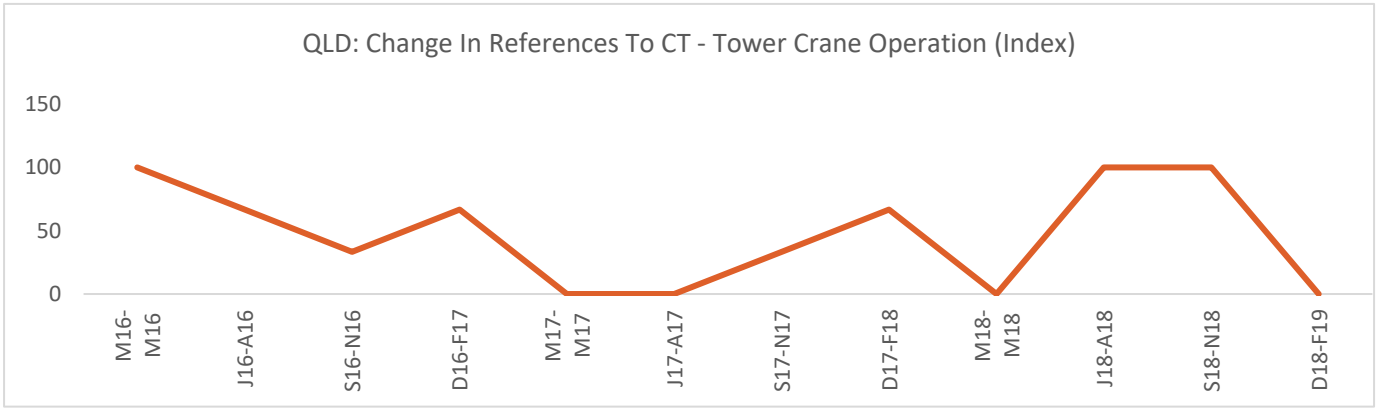
Total References: 91

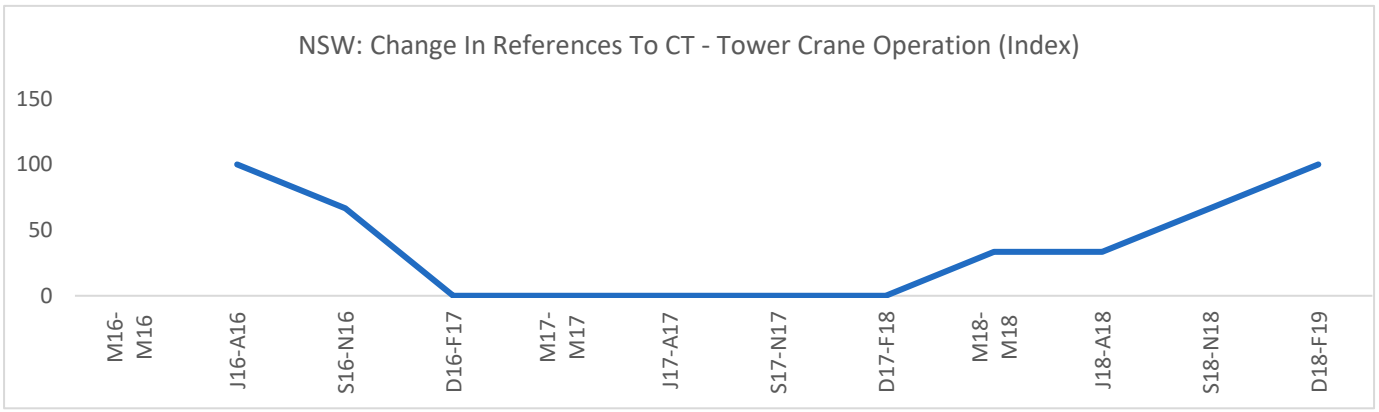


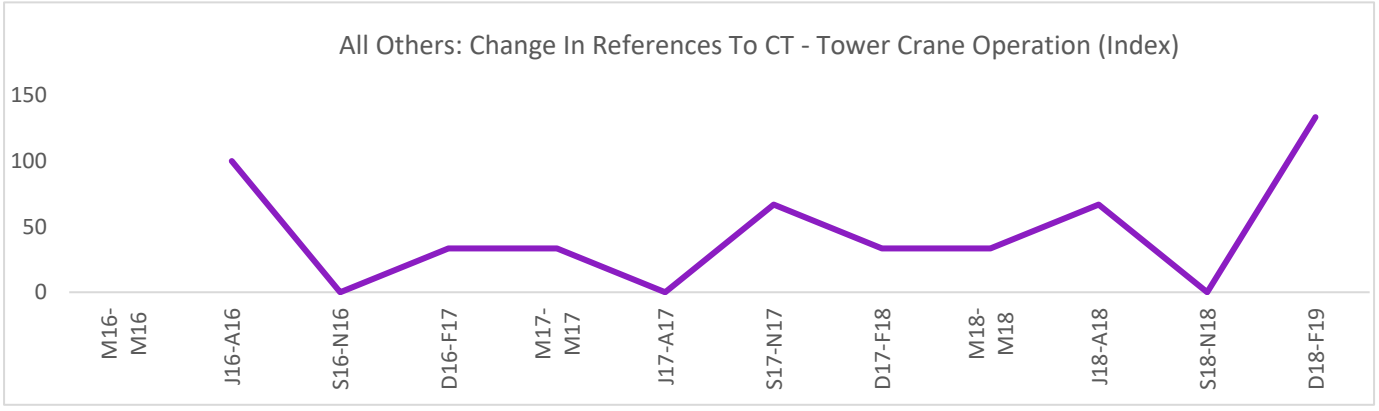


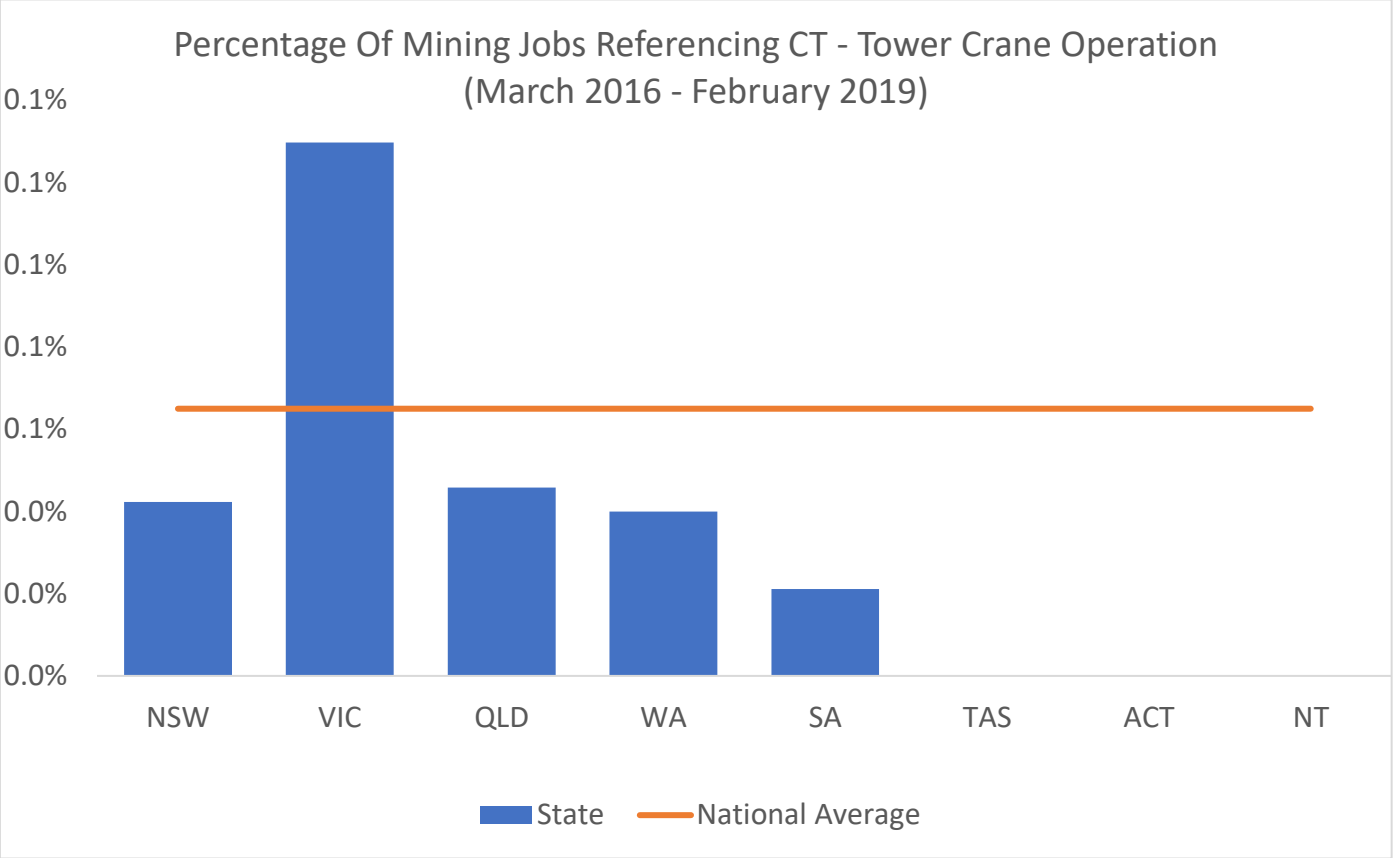
*Index: March - May 2016 = 100

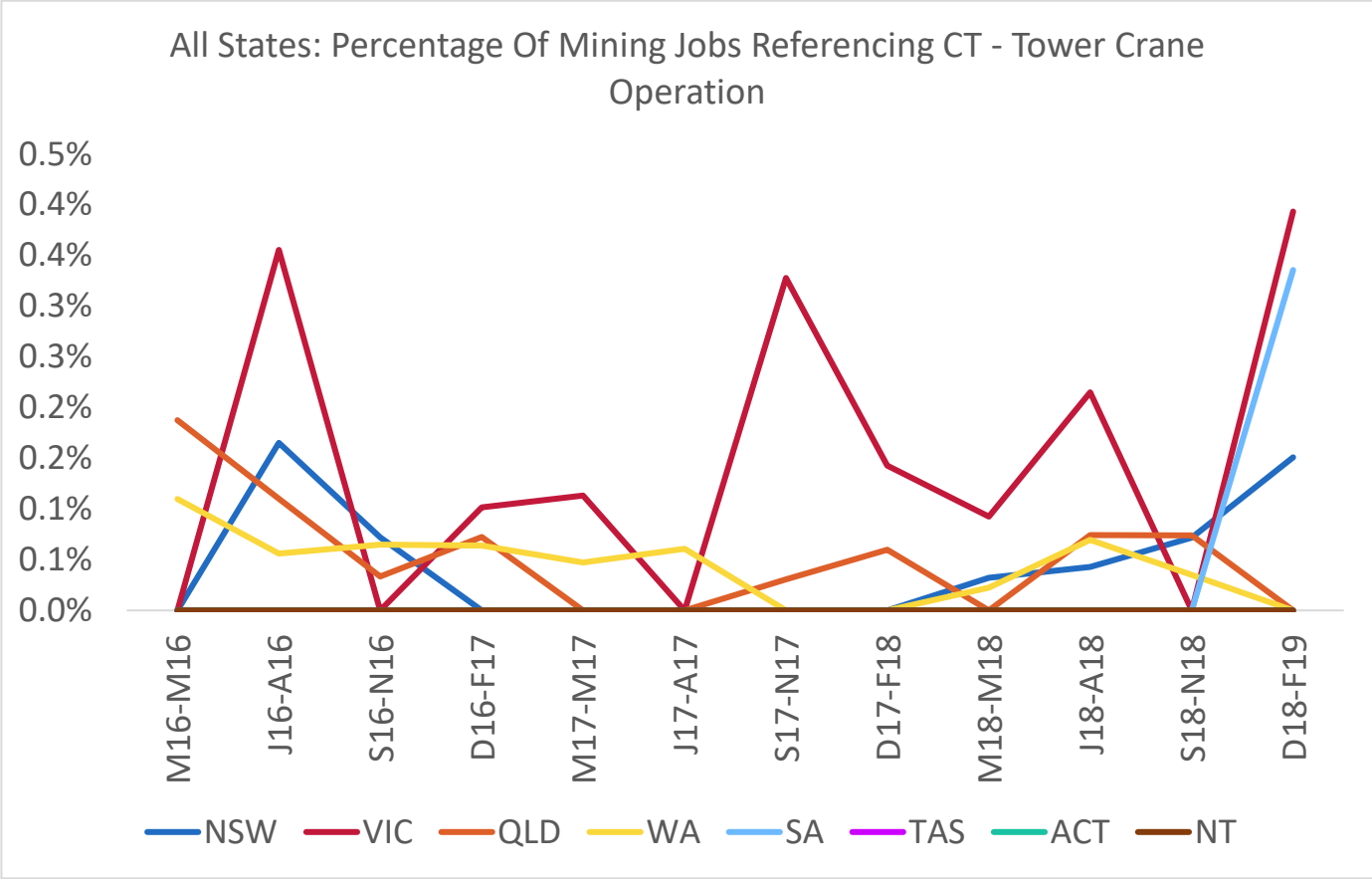

WA: Change In References To CT - Tower Crane Operation (Index)
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

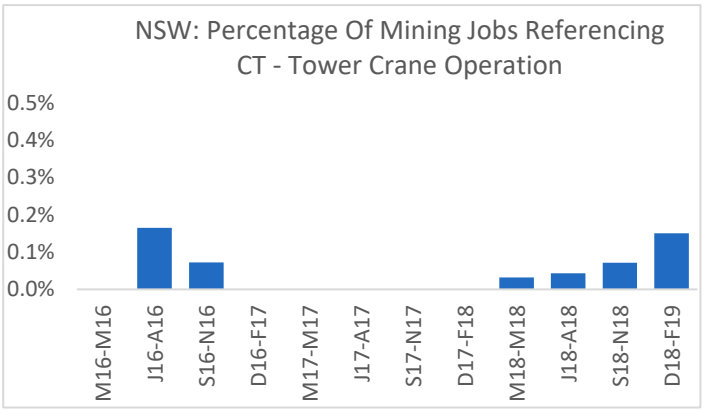

QLD: Change In References To CT - Tower Crane Operation (Index)
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

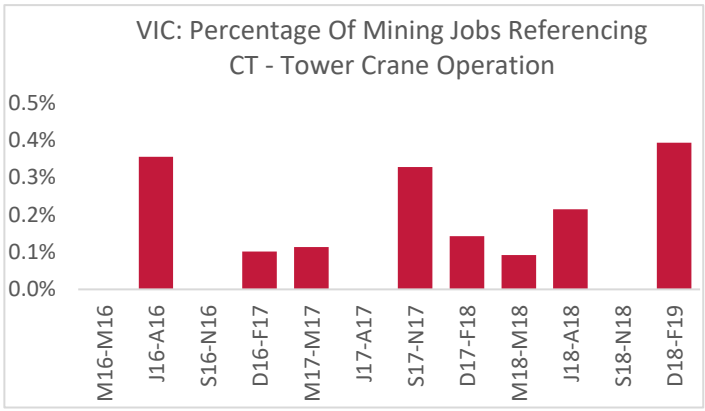

NSW: Change In References To CT - Tower Crane Operation (Index)
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

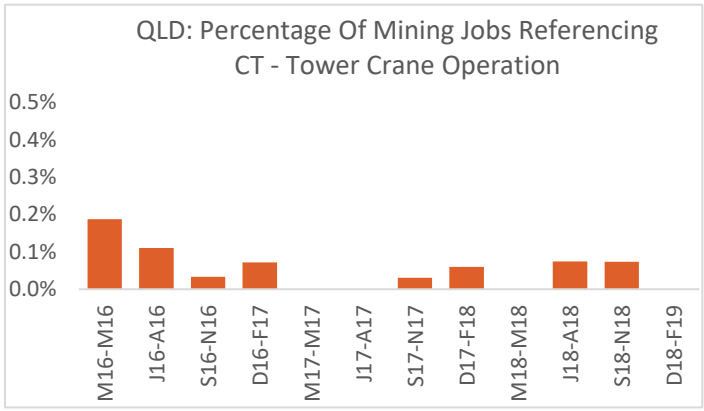

All Others: Change In References To CT - Tower Crane Operation (Index)
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

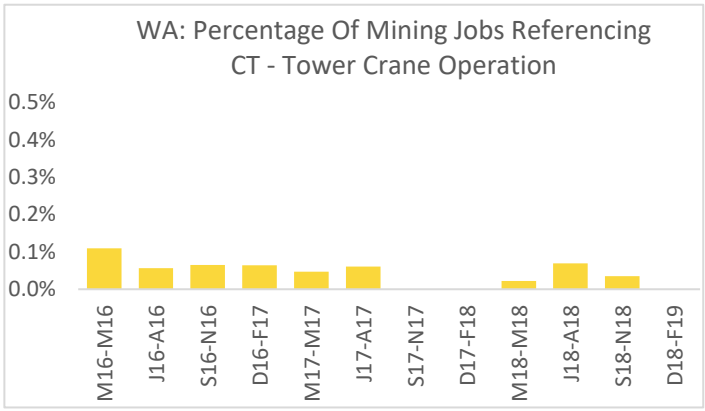

Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
(March 2016 - February 2019)
0.1%
0.1%
0.1%
0.1%
0.1%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

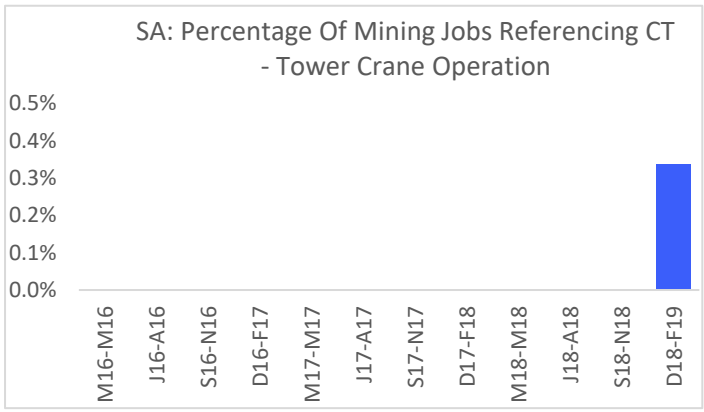

All States: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.4%
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

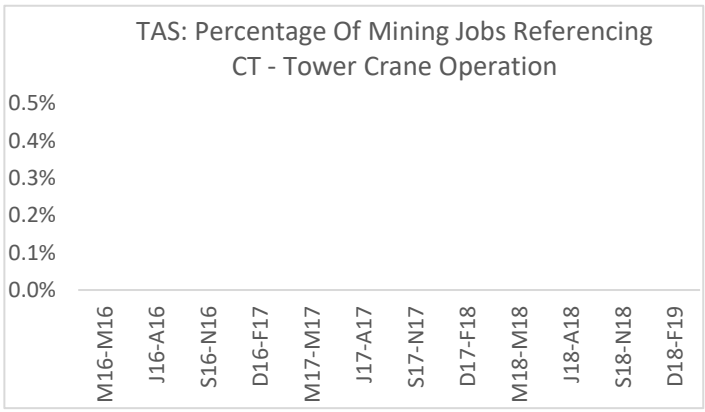

NSW: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

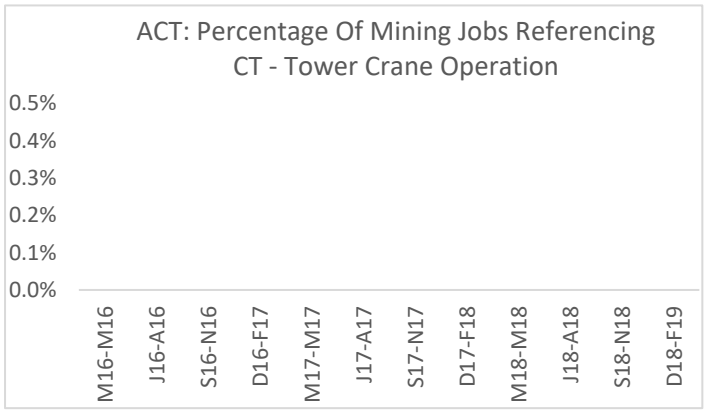

VIC: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

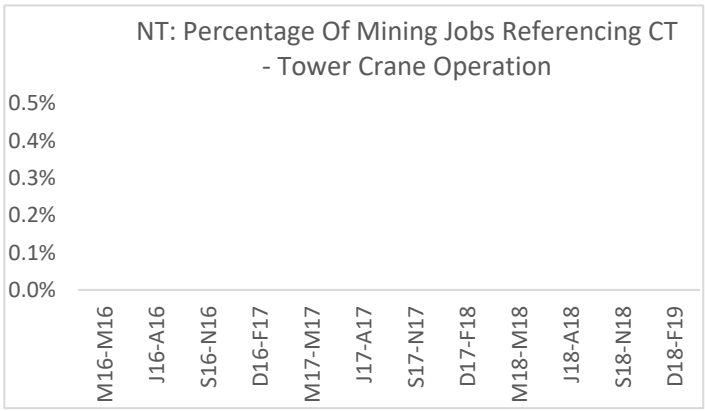

QLD: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

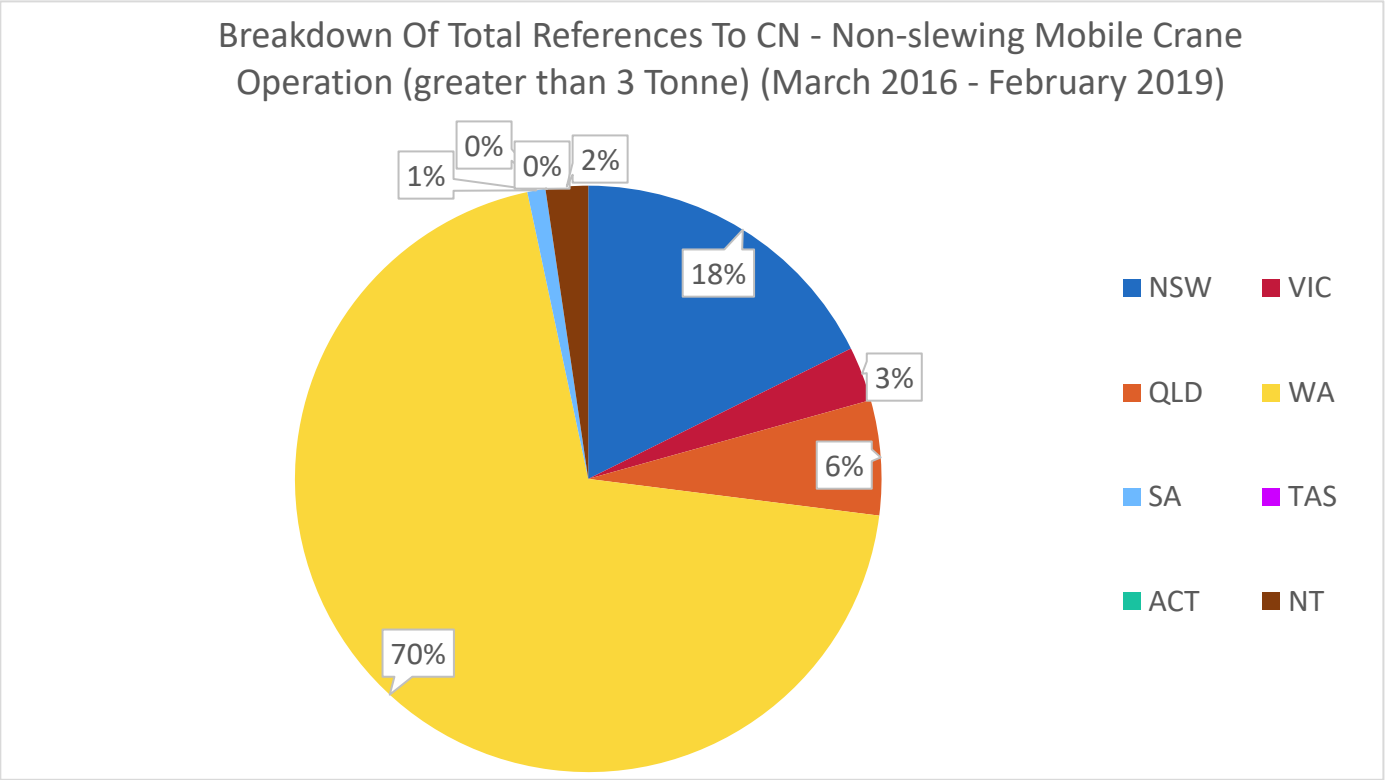

TAS: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

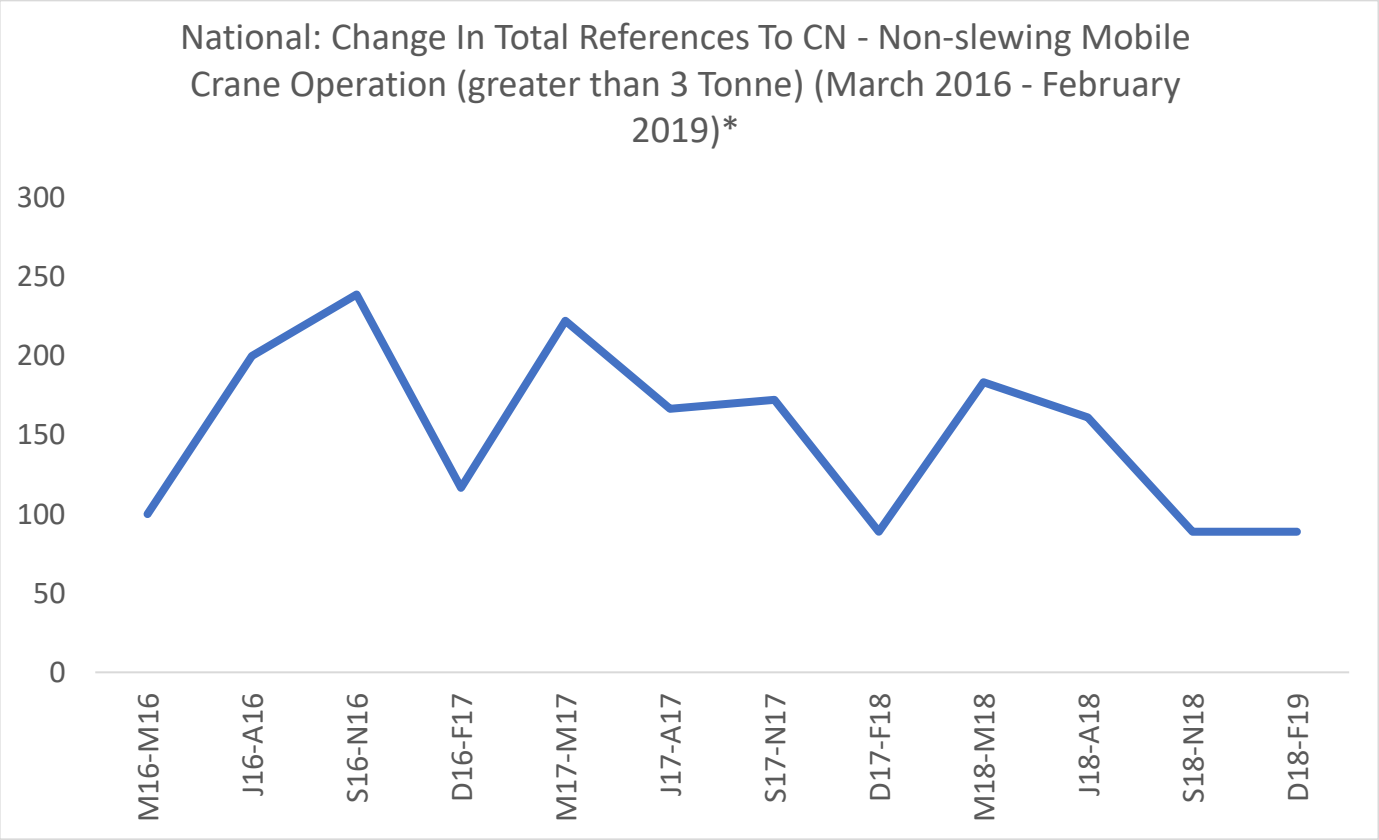

ACT: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing CT - Tower Crane Operation
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

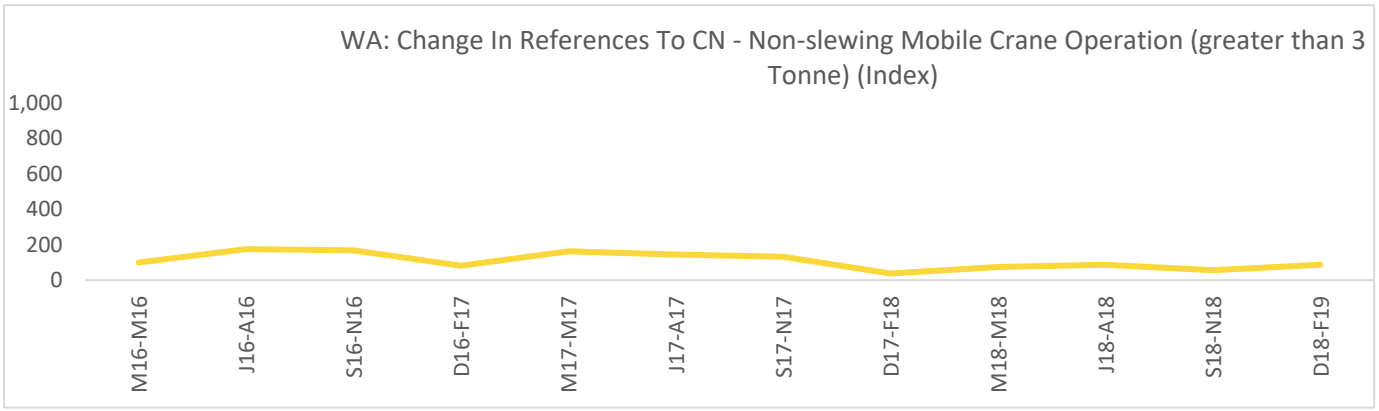
CN - Non-slewing Mobile Crane Operation (greater than 3 Tonne)

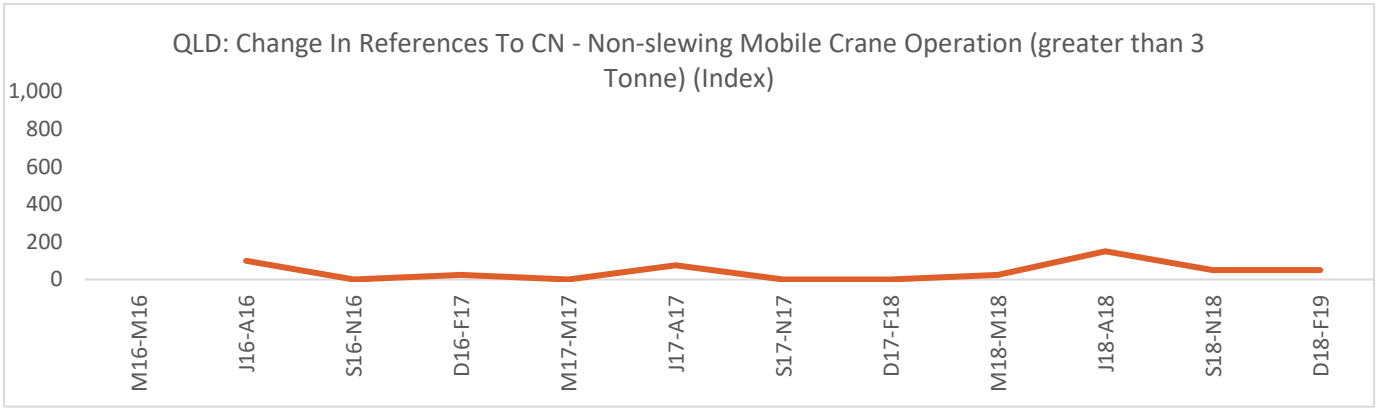
Total References: 329

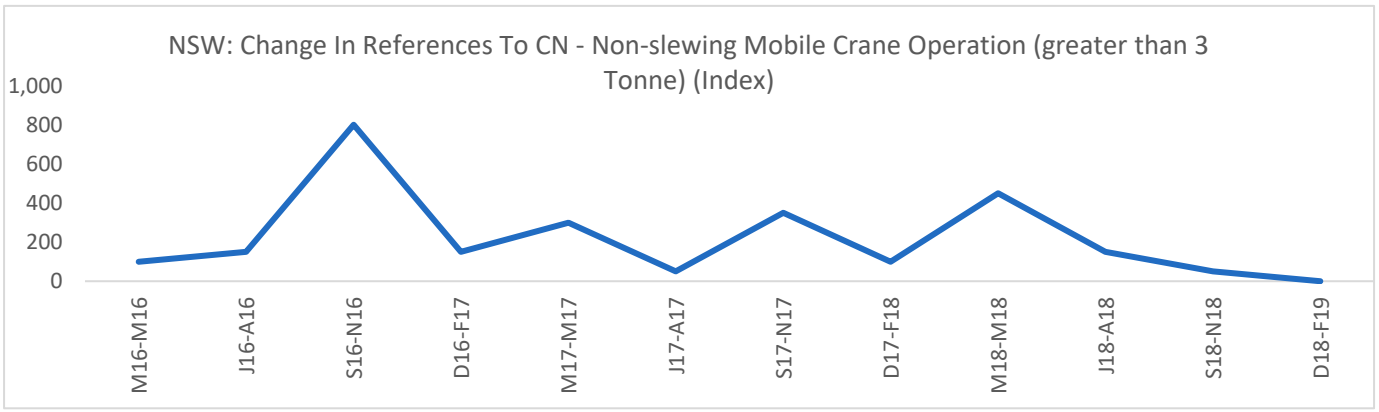


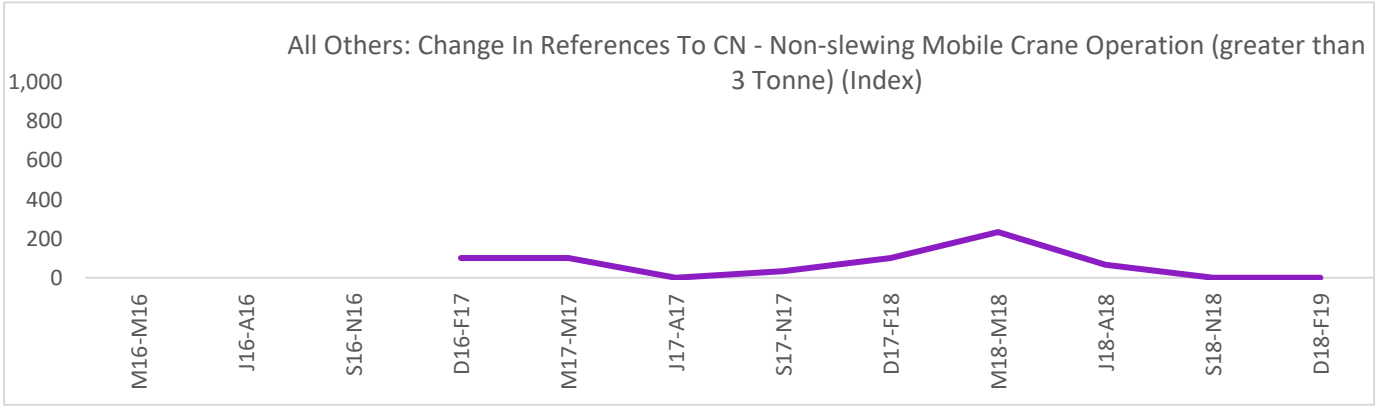


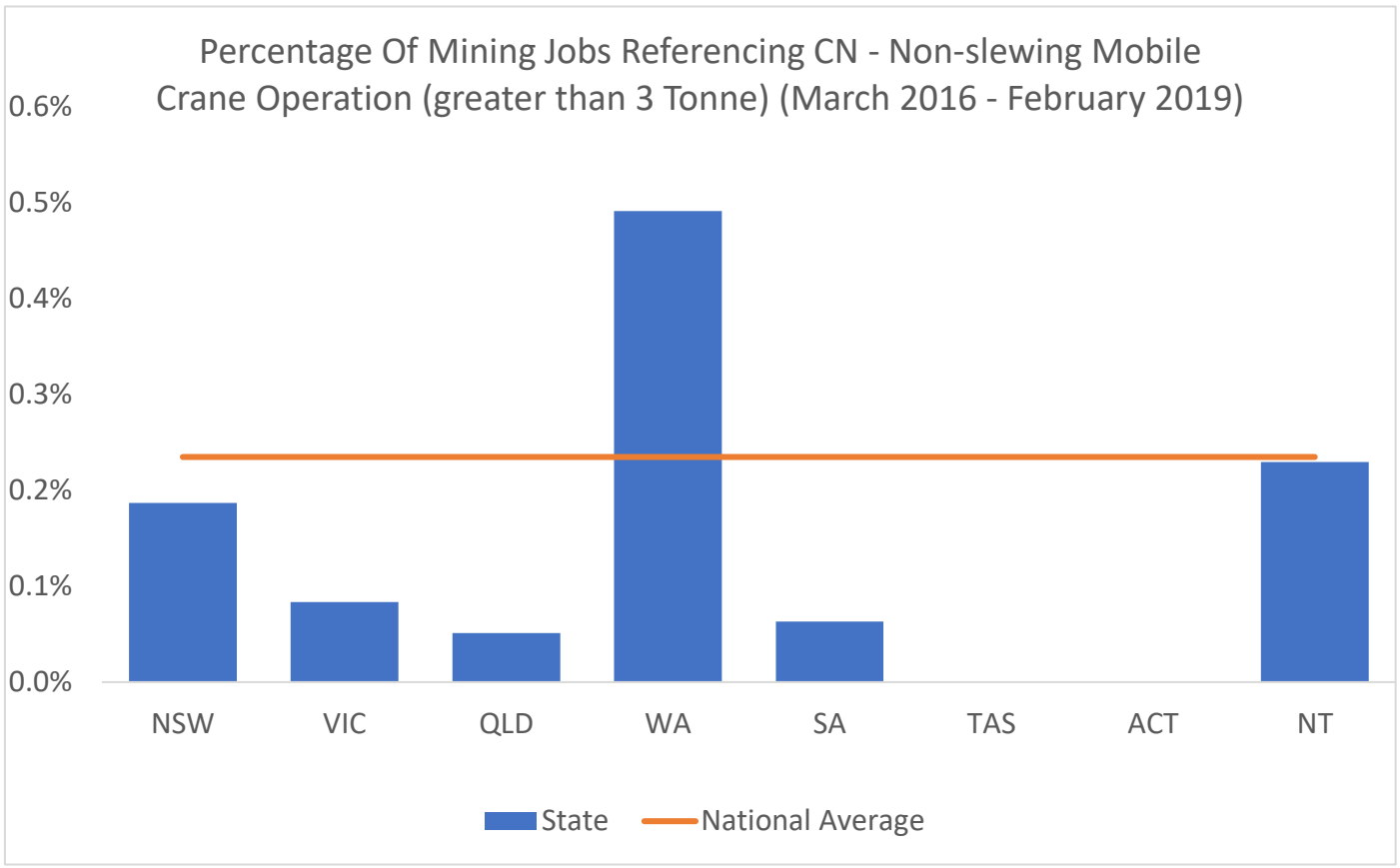
*Index: March - May 2016 = 100

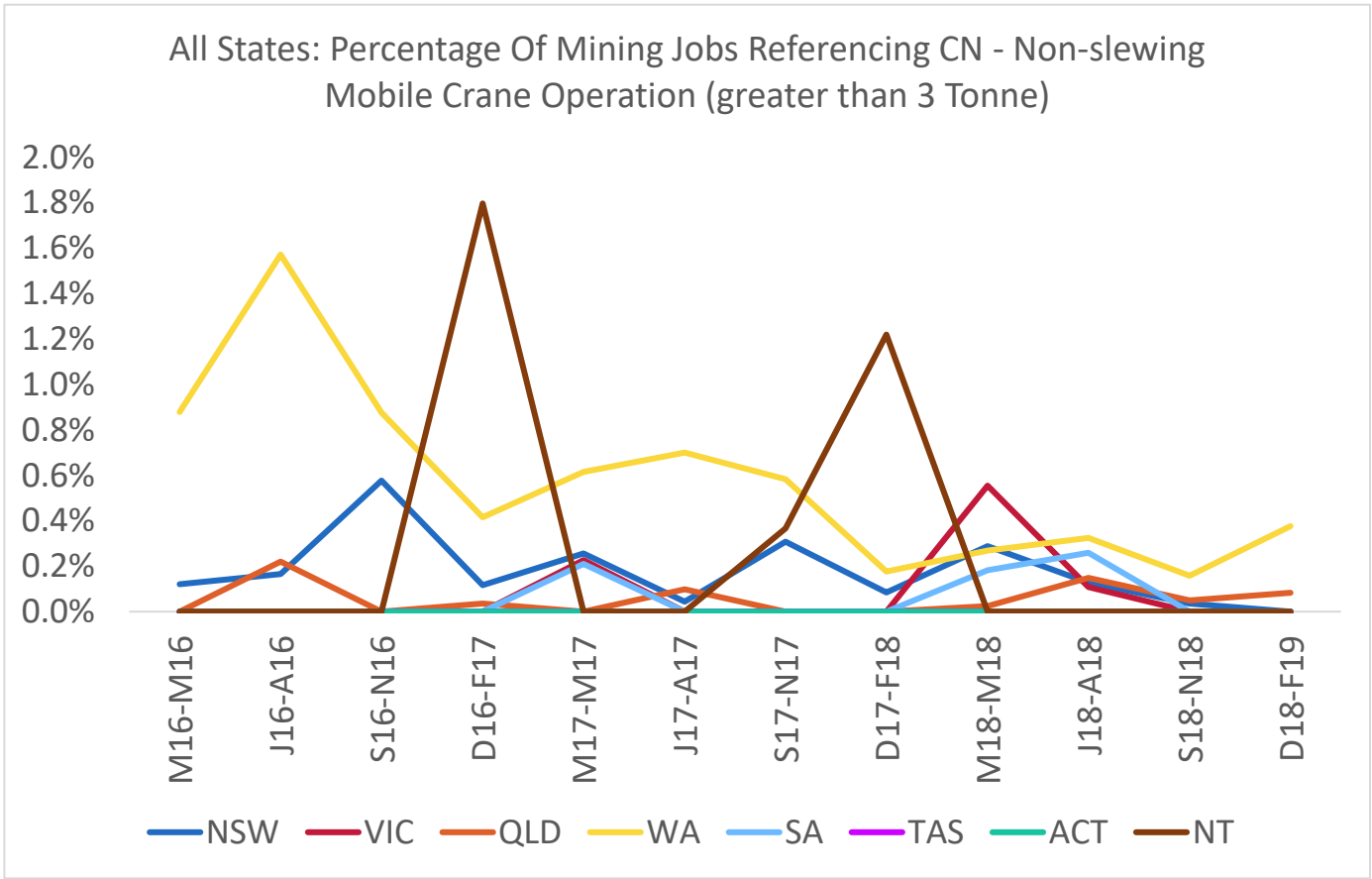

WA: Change In References To CN - Non-slewing Mobile Crane Operation (greater than 3 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

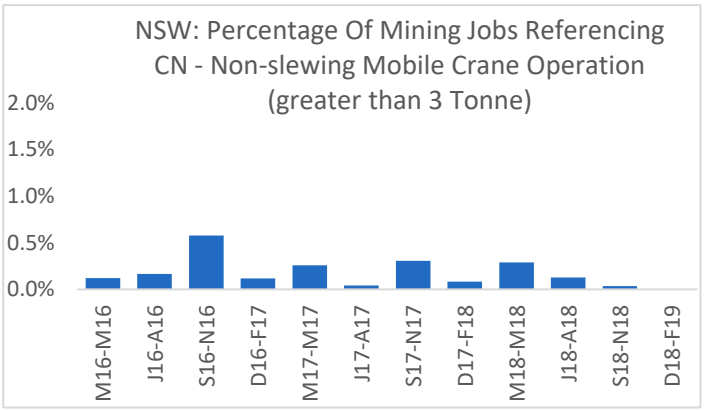

QLD: Change In References To CN - Non-slewing Mobile Crane Operation (greater than 3 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

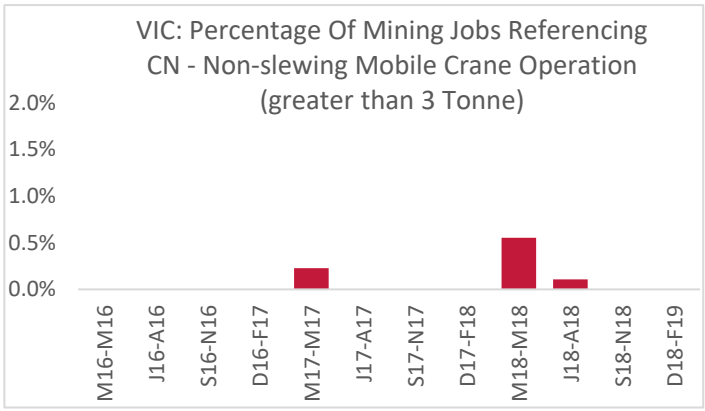

NSW: Change In References To CN - Non-slewing Mobile Crane Operation (greater than 3 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

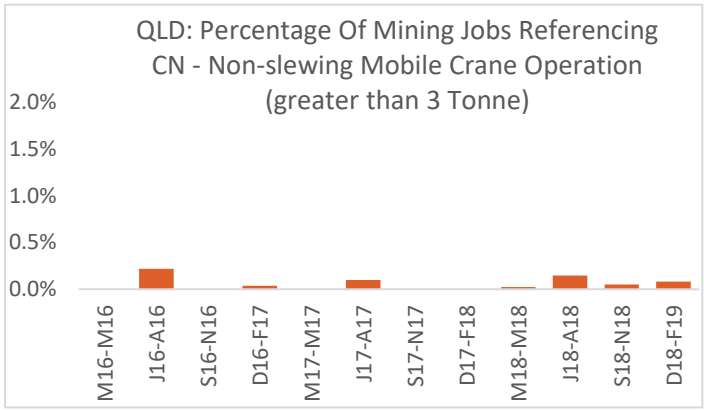

All Others: Change In References To CN - Non-slewing Mobile Crane Operation (greater than 3 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

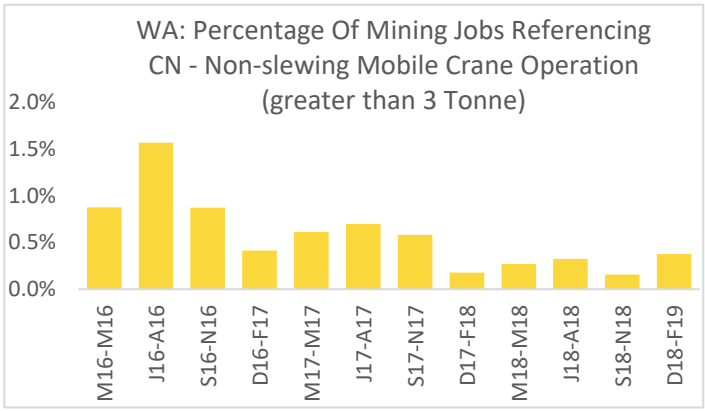

Percentage Of Mining Jobs Referencing CN - Non-slewing Mobile Crane Operation (greater than 3 Tonne) (March 2016 - February 2019)
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

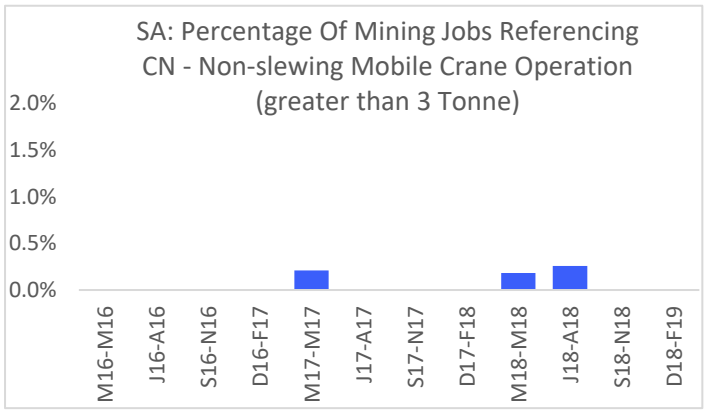

All States: Percentage Of Mining Jobs Referencing CN - Non-slewing Mobile Crane Operation (greater than 3 Tonne)
2.0%
1.8%
1.6%
1.4%
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

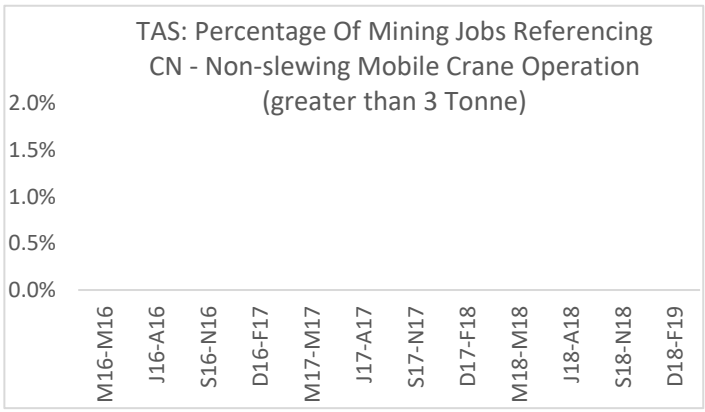

NSW: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

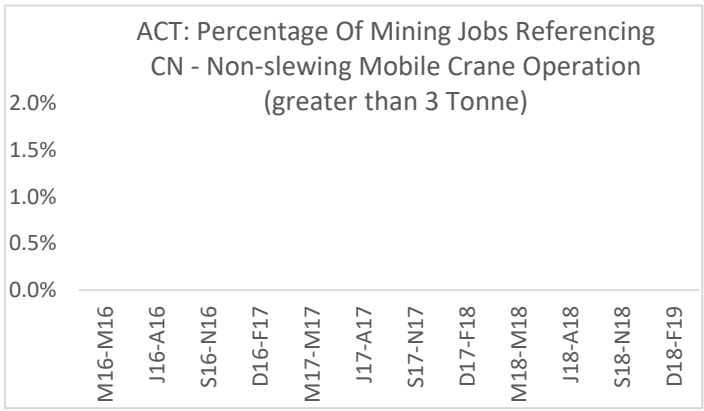

VIC: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

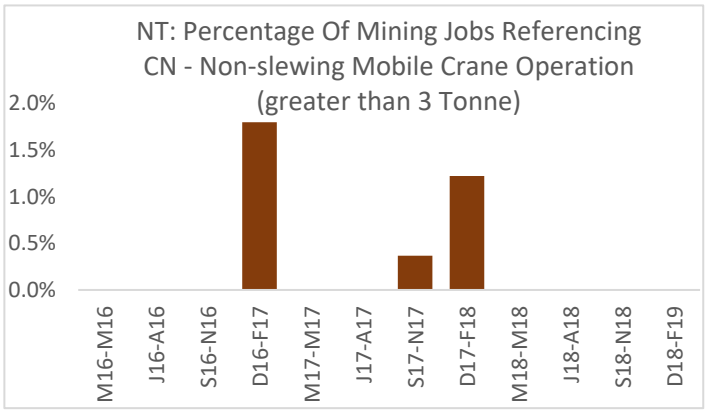

QLD: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

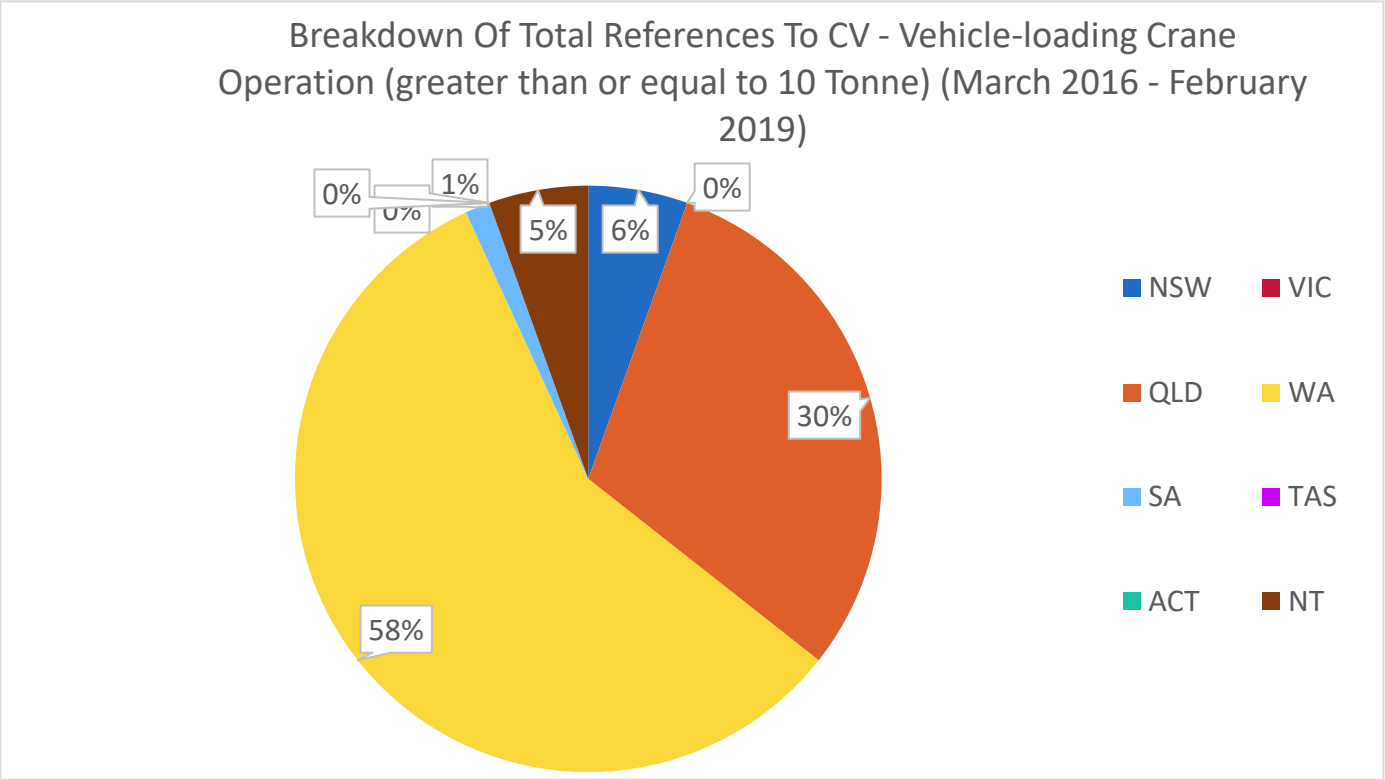

TAS: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

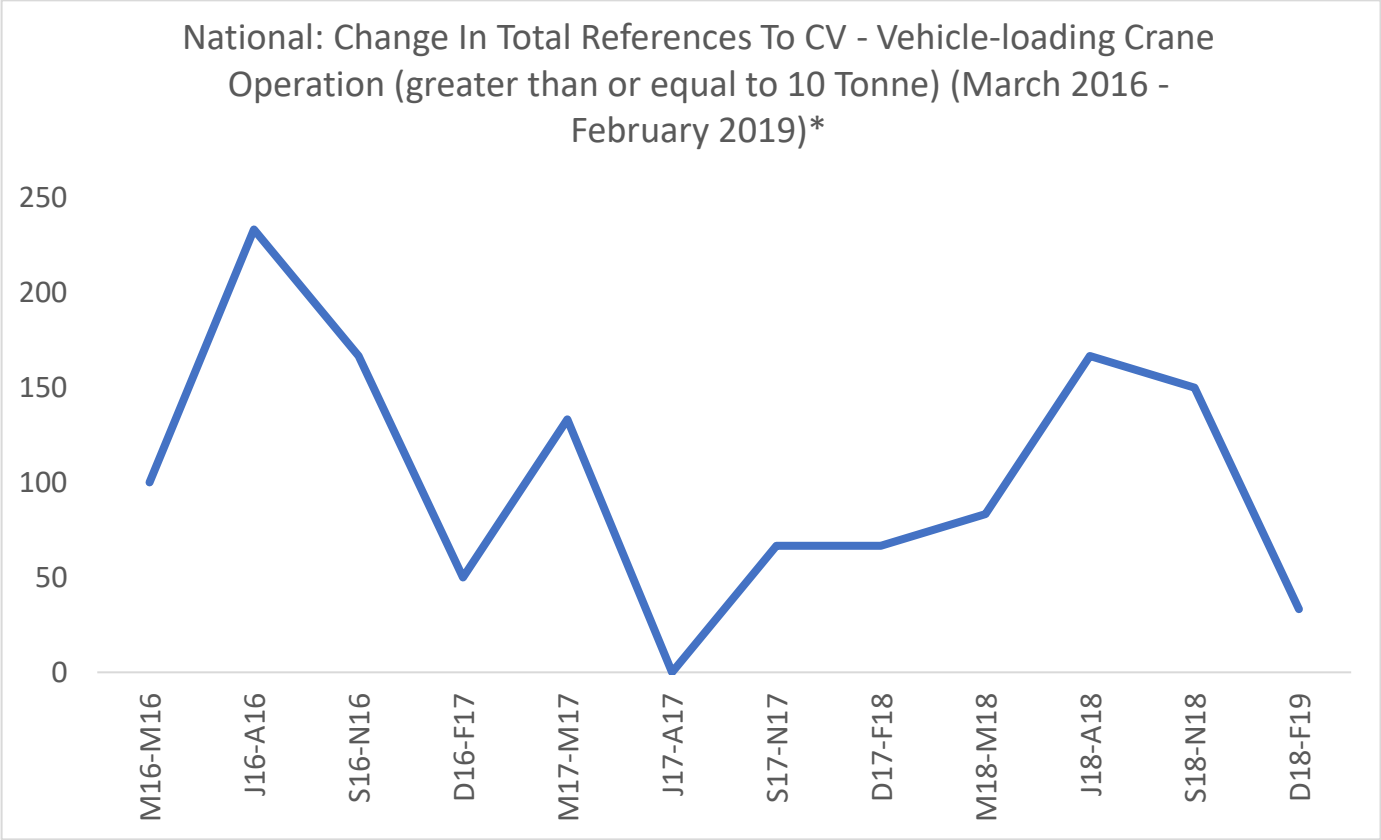

ACT: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing
CN - Non-slewing Mobile Crane Operation
(greater than 3 Tonne)
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

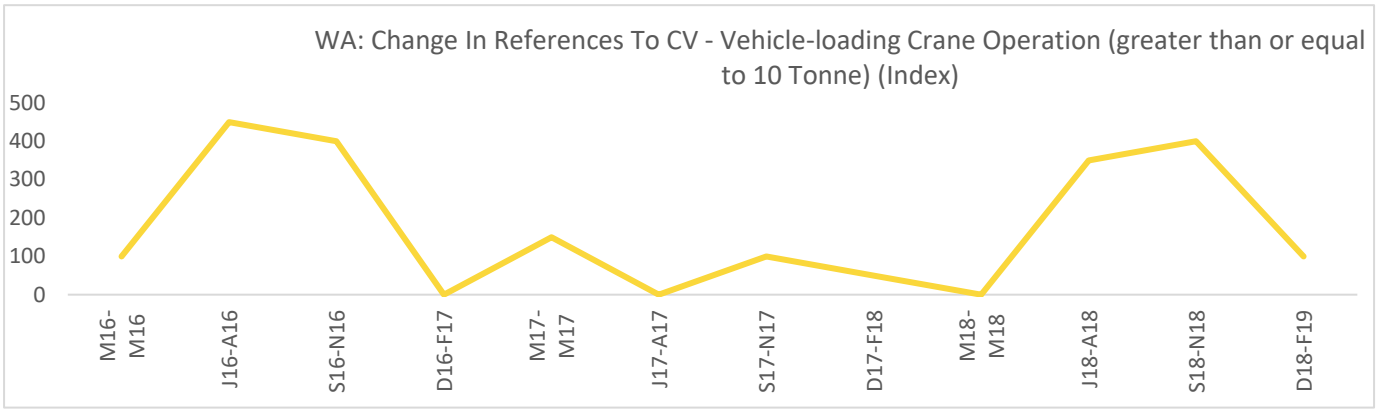
CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)

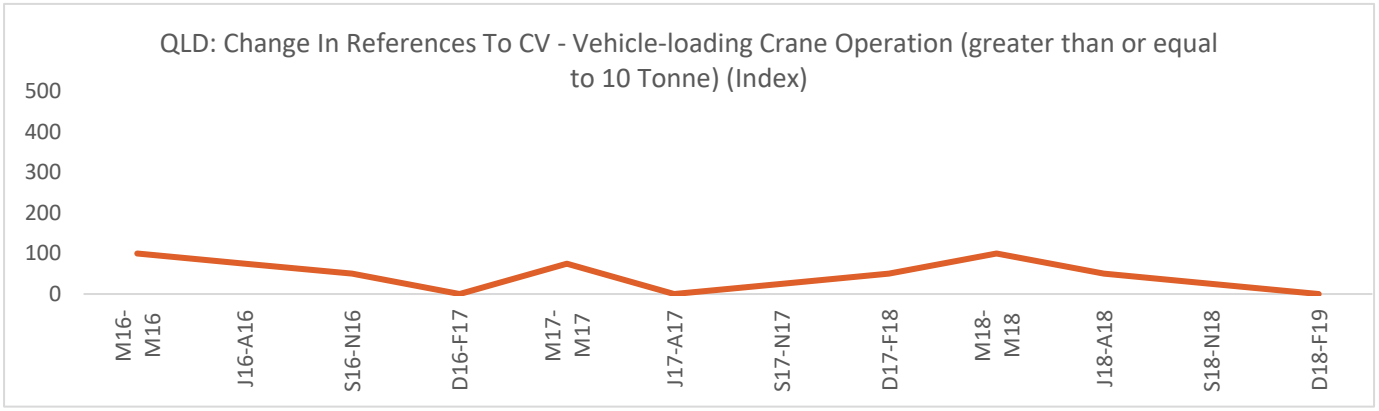
Total References: 75

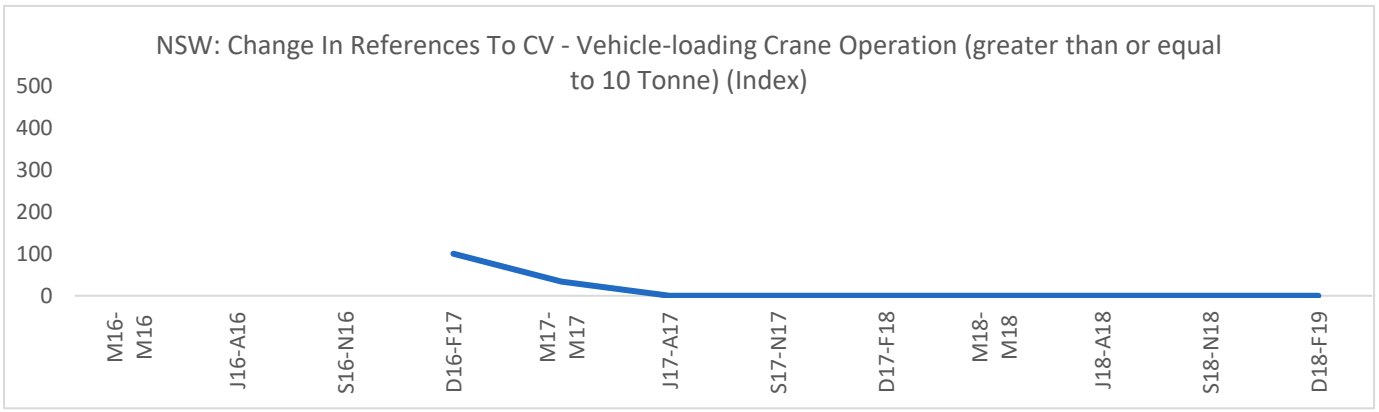


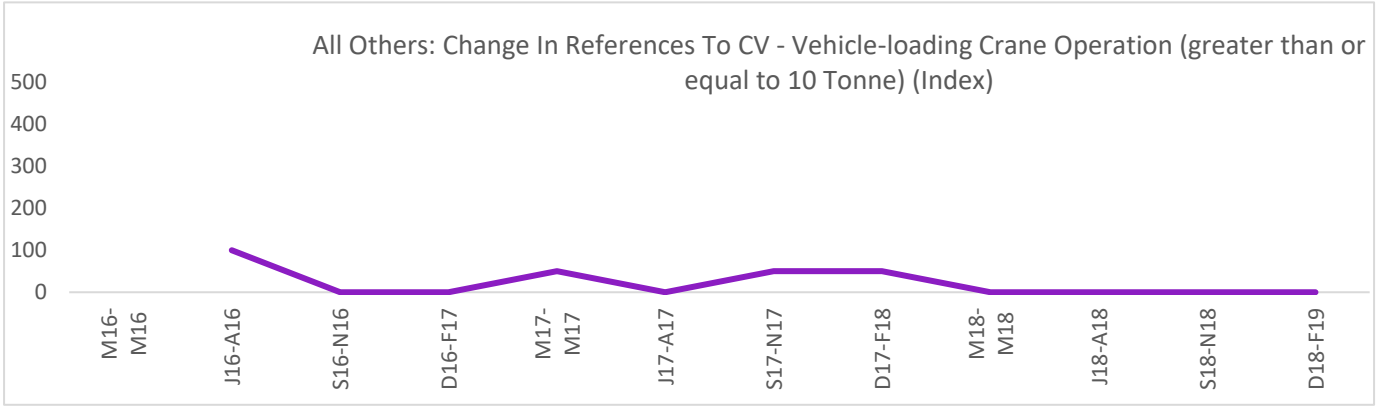


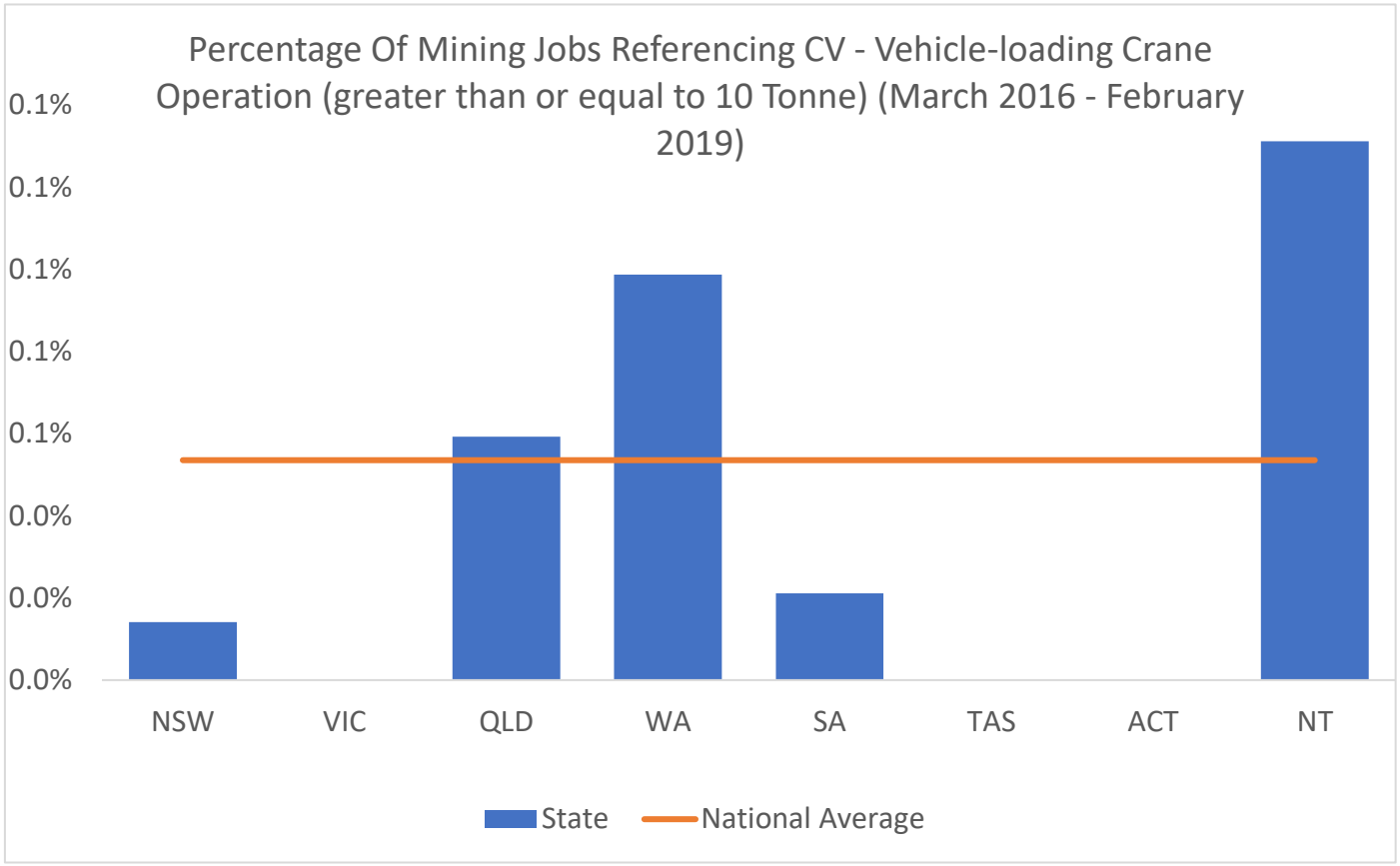
*Index: March - May 2016 = 100

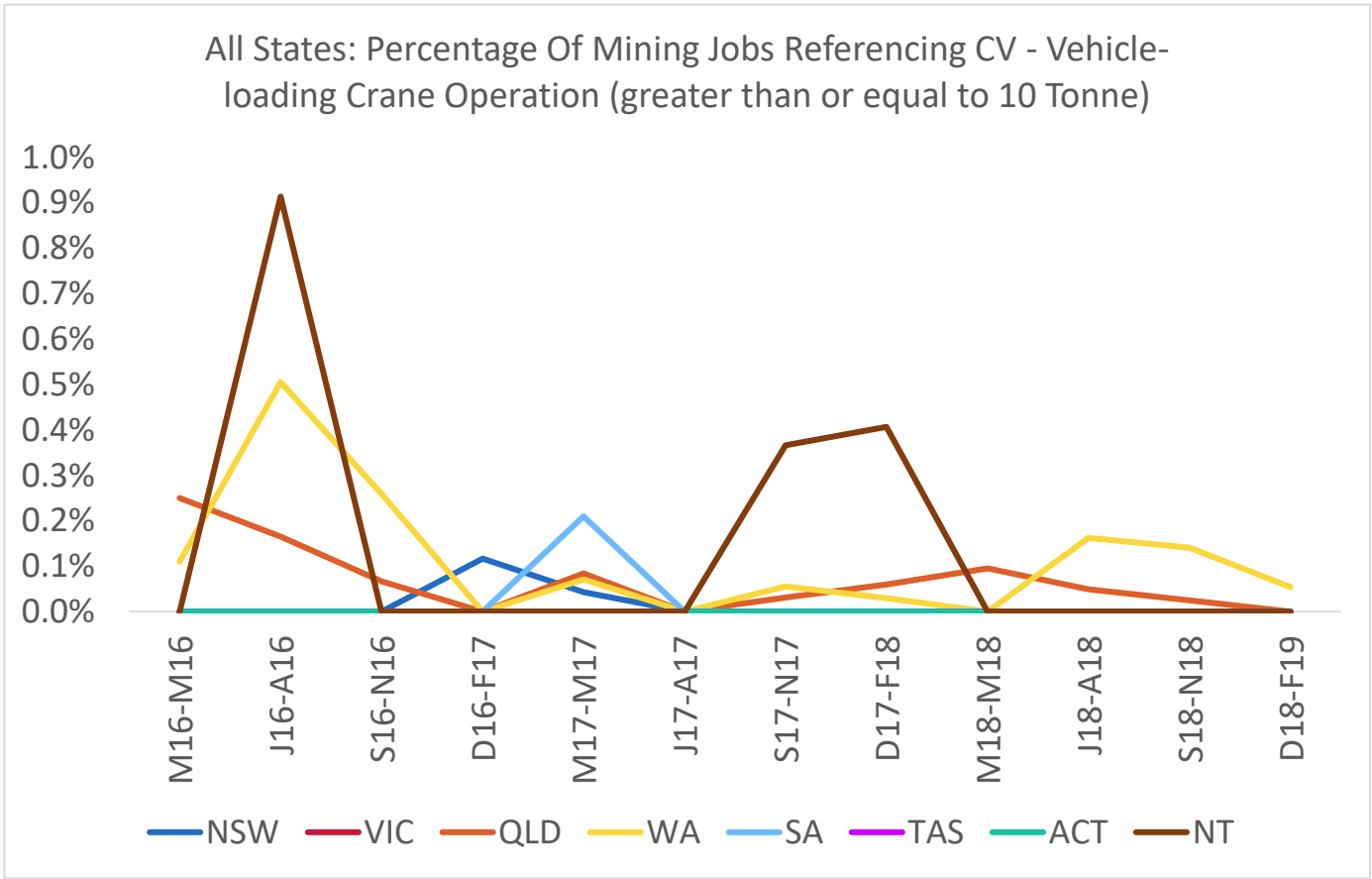

WA: Change In References To CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne) (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

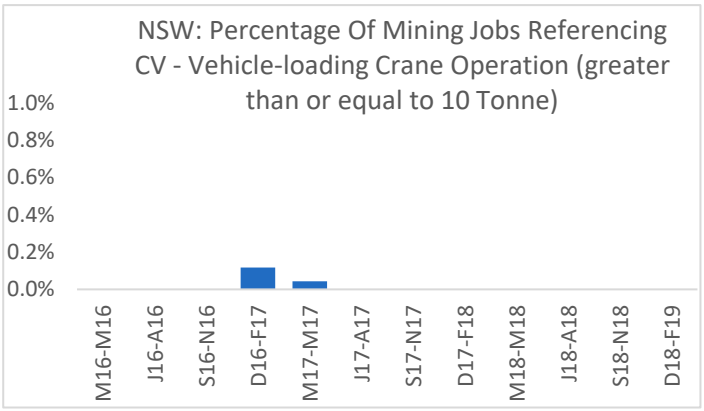

QLD: Change In References To CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne) (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

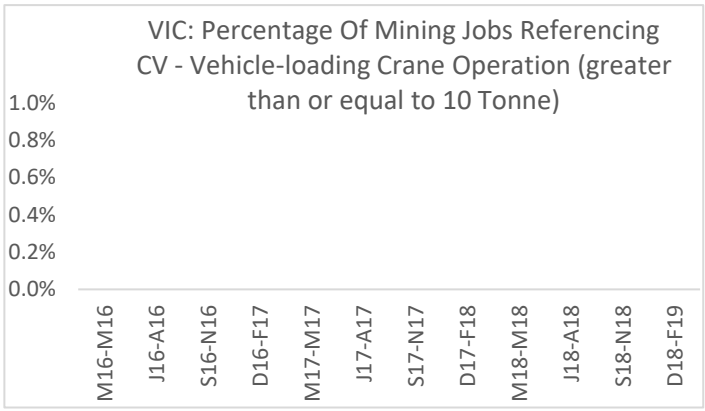

NSW: Change In References To CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne) (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

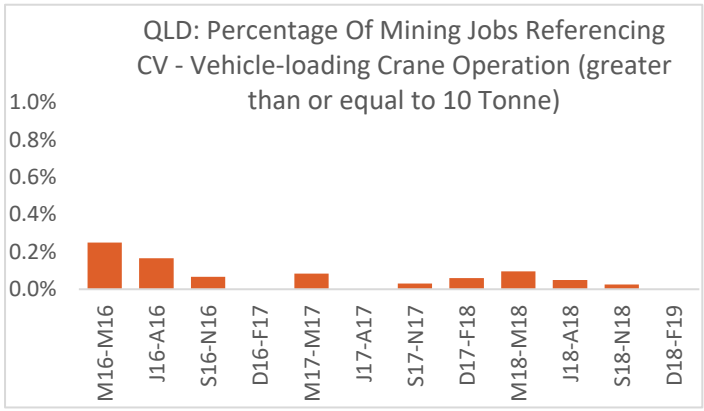

All Others: Change In References To CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne) (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

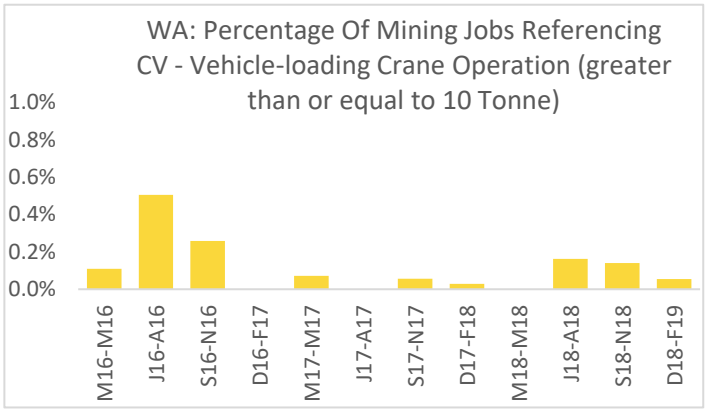

Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne) (March 2016 - February 2019)
0.1%
0.1%
0.1%
0.1%
0.1%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

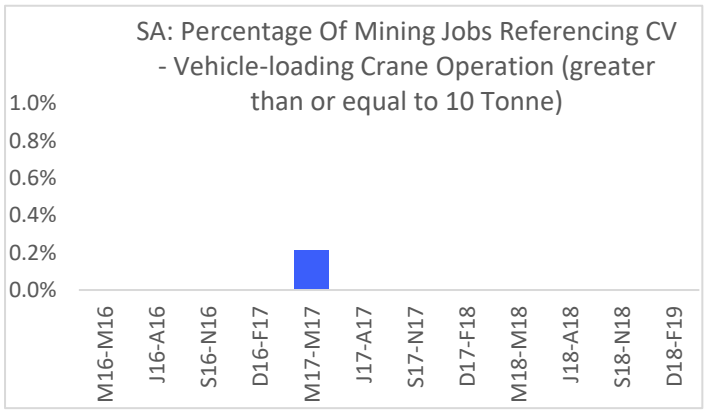

All States: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.9%
0.8%
0.7%
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

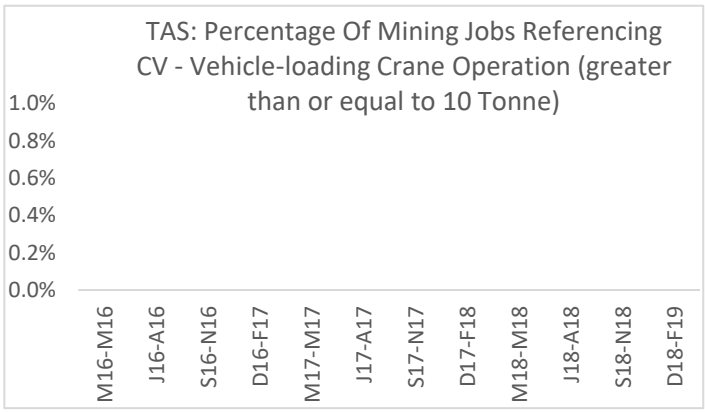

NSW: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

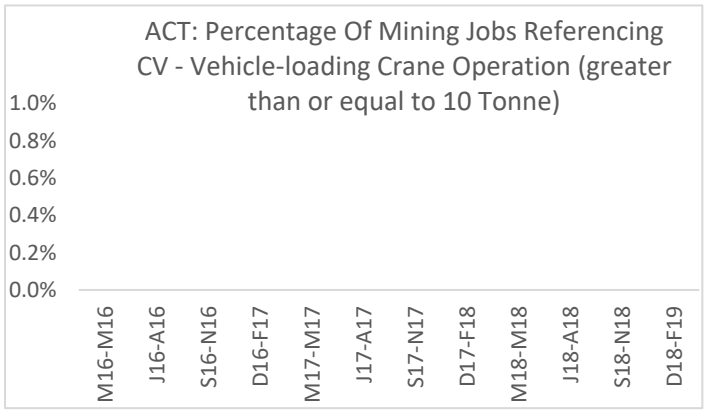

VIC: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

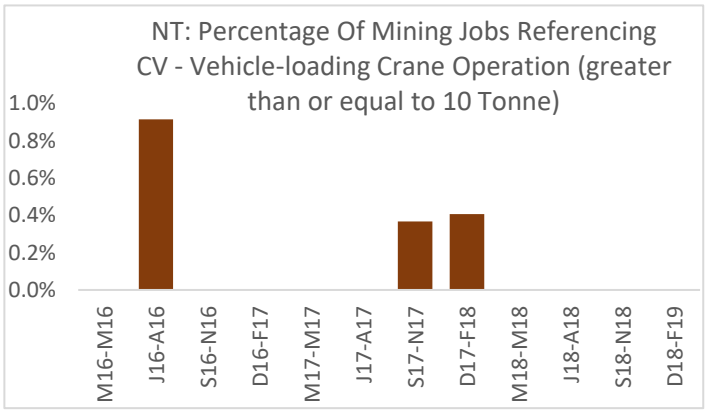

QLD: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

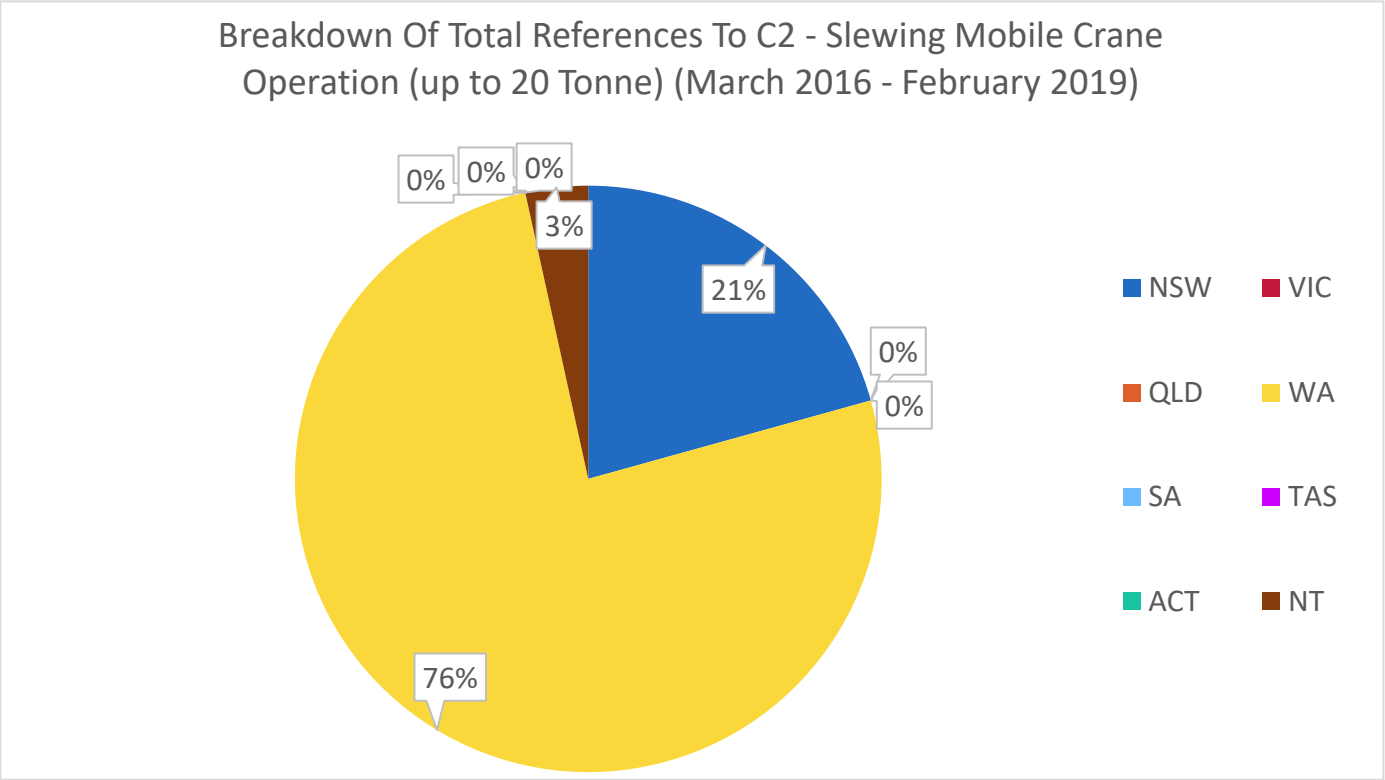

TAS: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

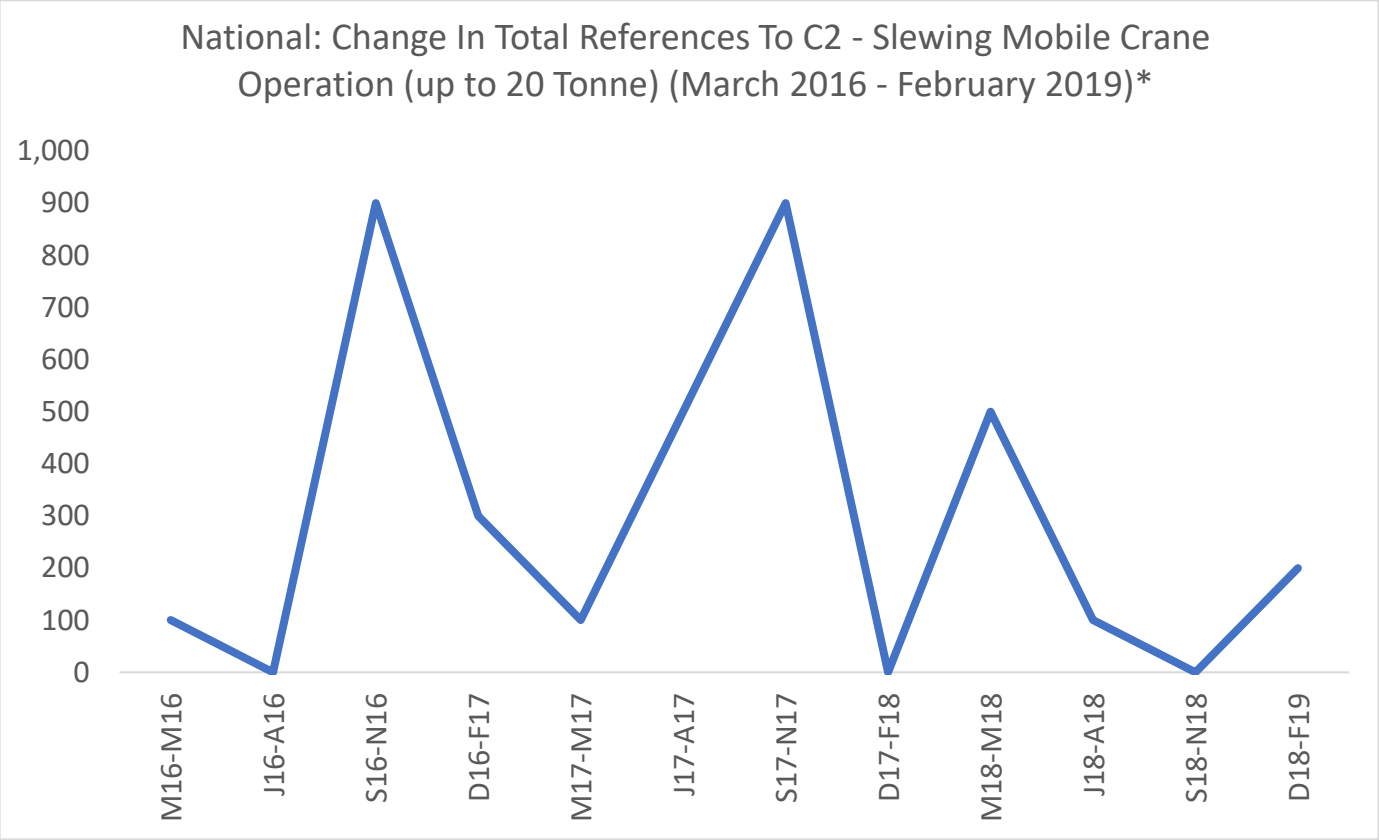

ACT: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing CV - Vehicle-loading Crane Operation (greater than or equal to 10 Tonne)
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

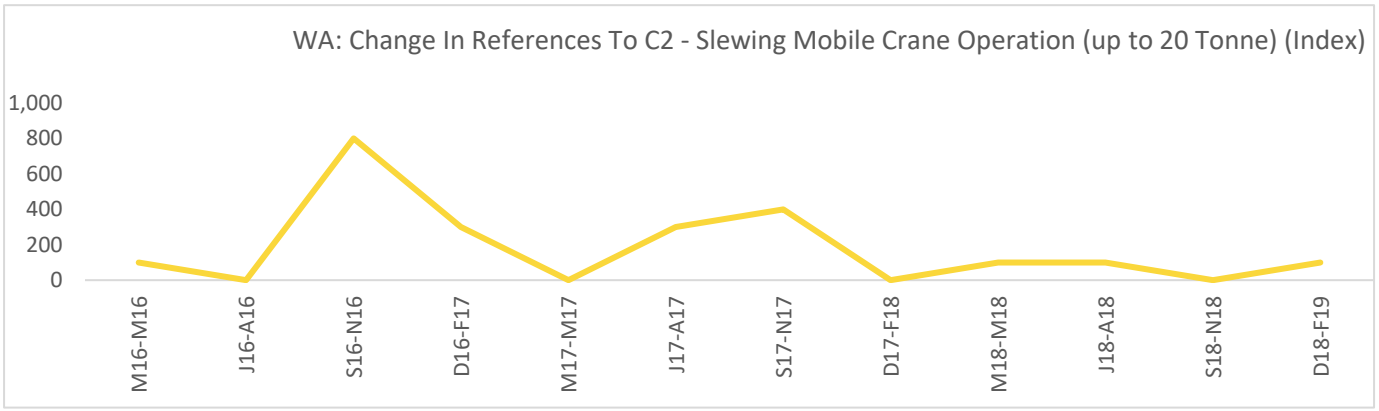
C2 - Slewing Mobile Crane Operation (up to 20 Tonne)

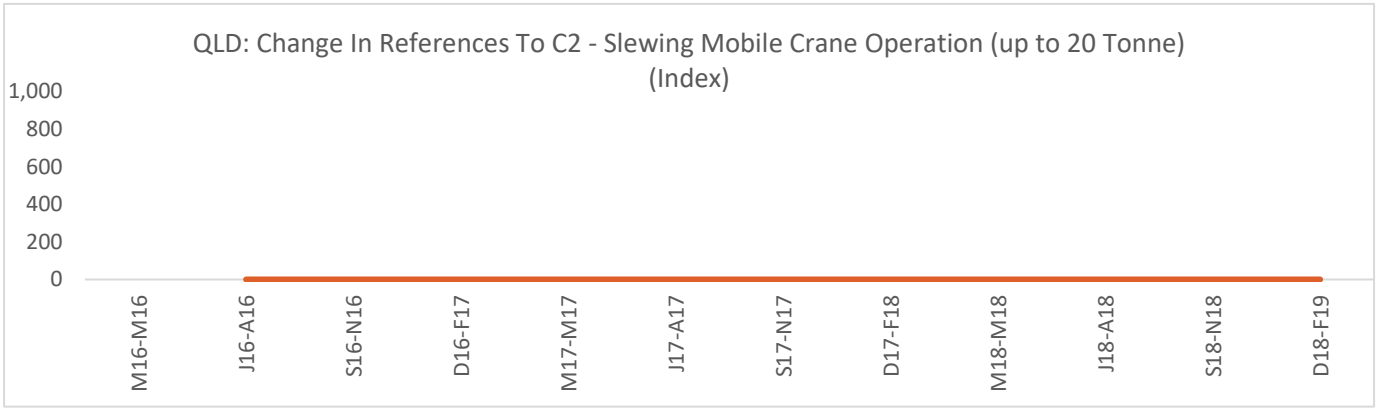
Total References: 36

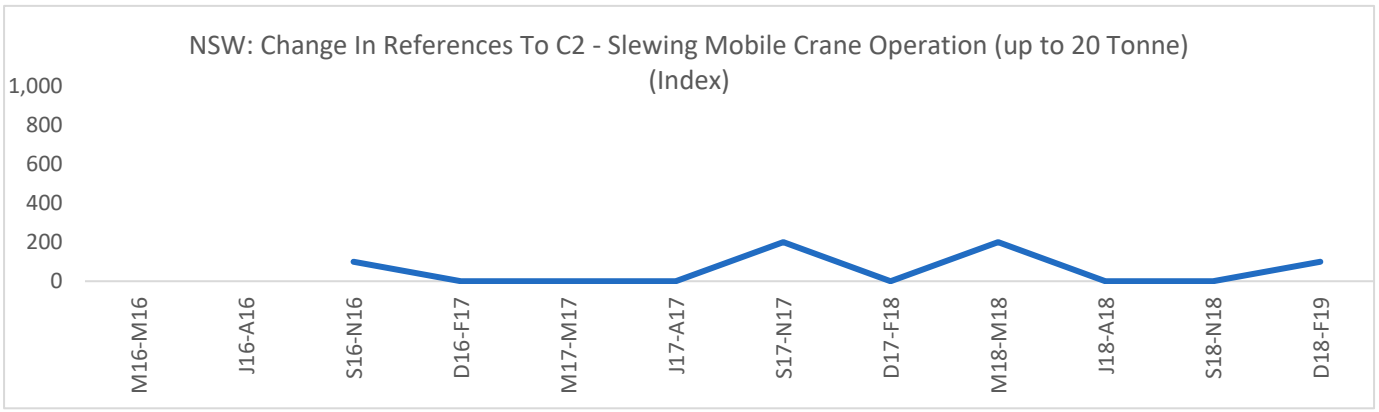


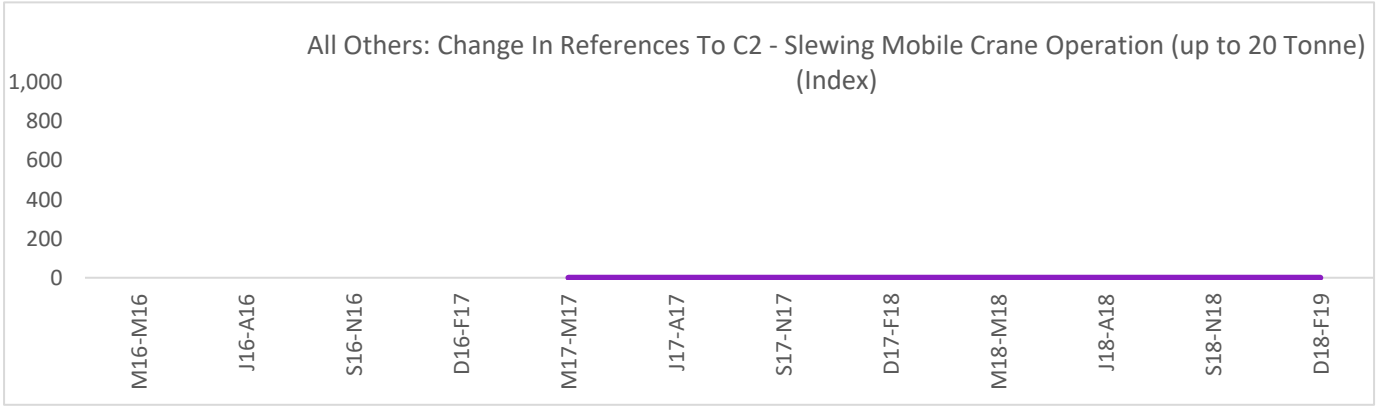


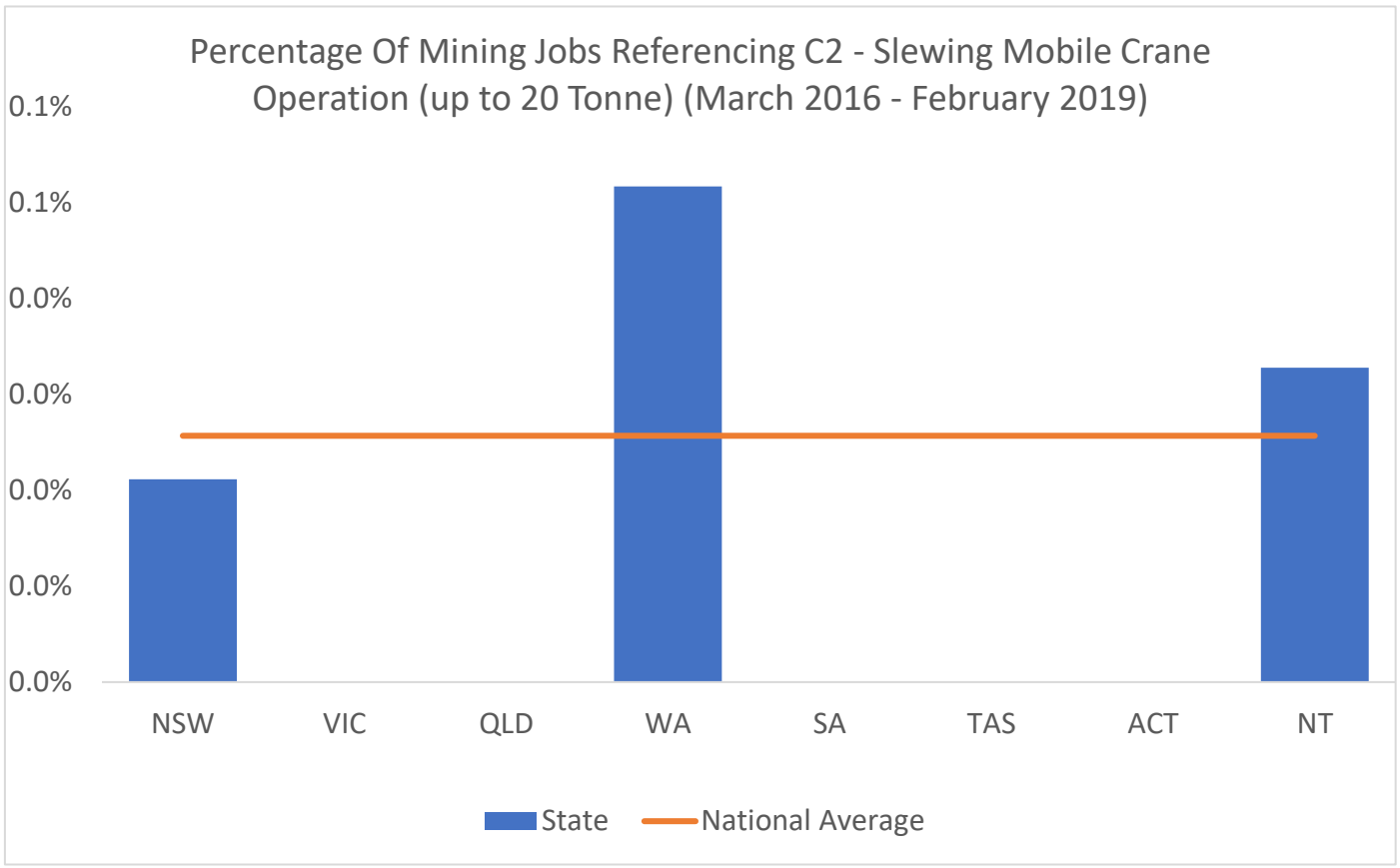
*Index: March - May 2016 = 100

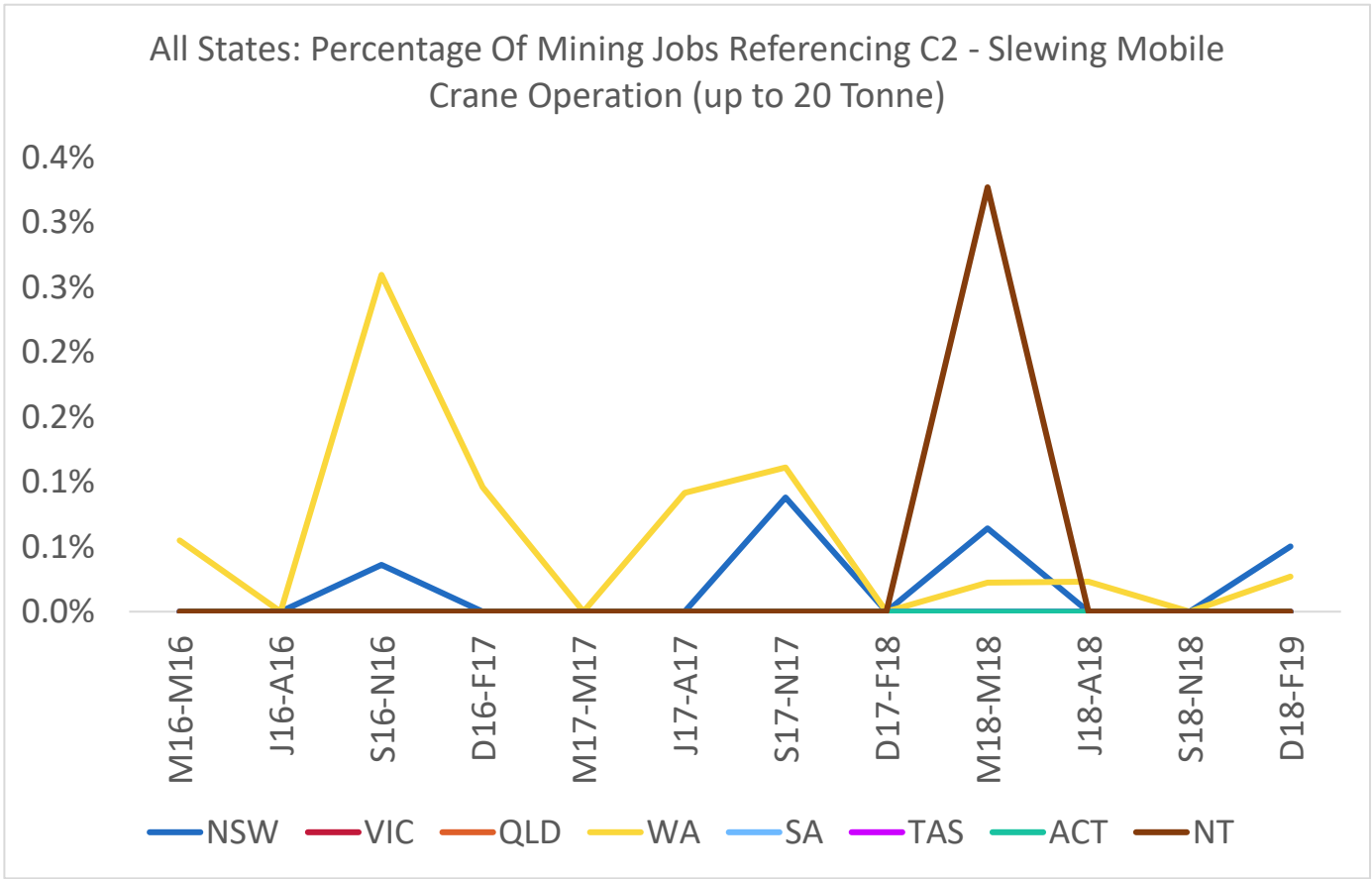

WA: Change In References To C2 - Slewing Mobile Crane Operation (up to 20 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

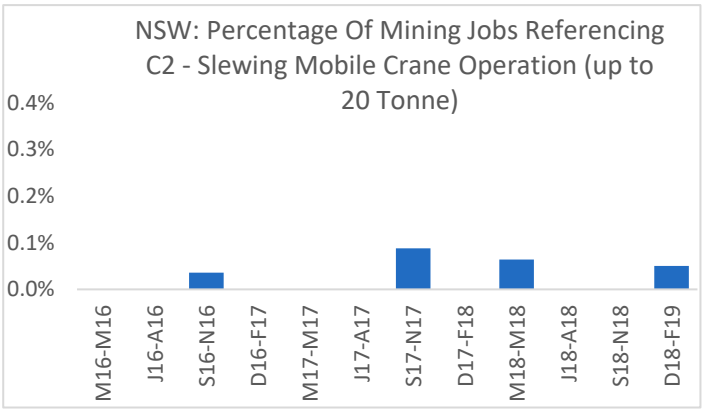

QLD: Change In References To C2 - Slewing Mobile Crane Operation (up to 20 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

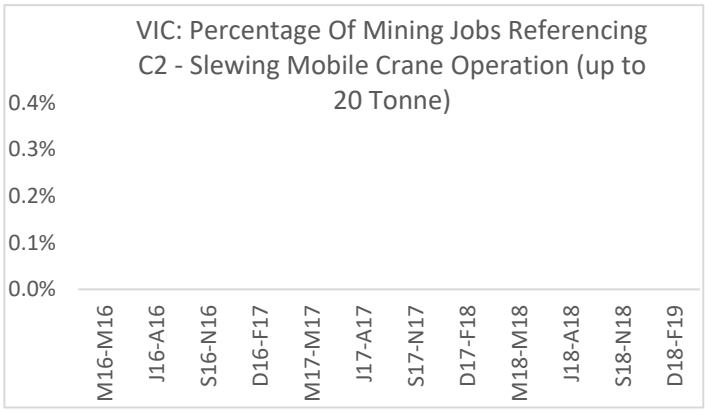

NSW: Change In References To C2 - Slewing Mobile Crane Operation (up to 20 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

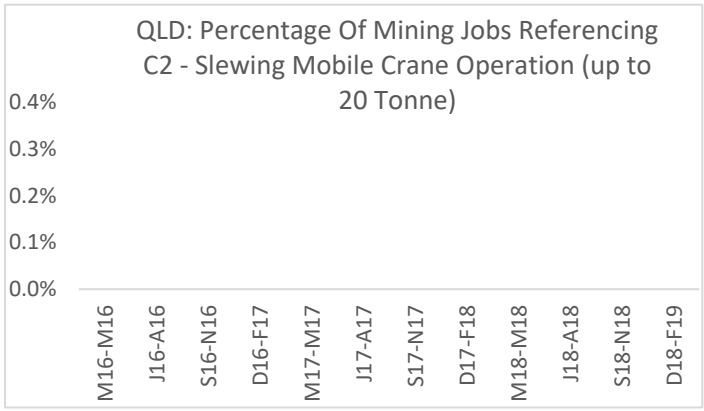

All Others: Change In References To C2 - Slewing Mobile Crane Operation (up to 20 Tonne) (Index)
1,000
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

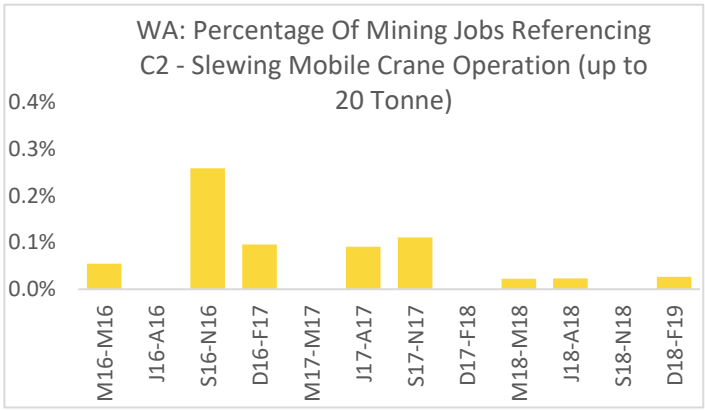

Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne) (March 2016 - February 2019)
0.1%
0.1%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

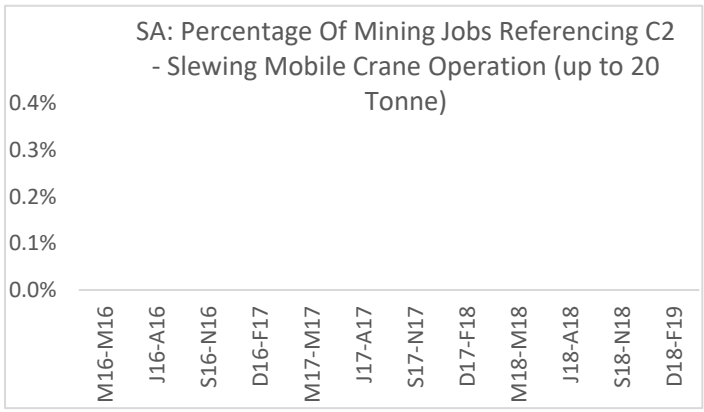

All States: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

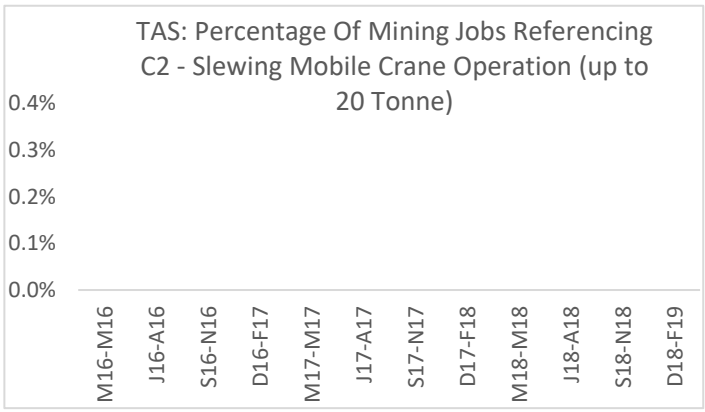

NSW: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

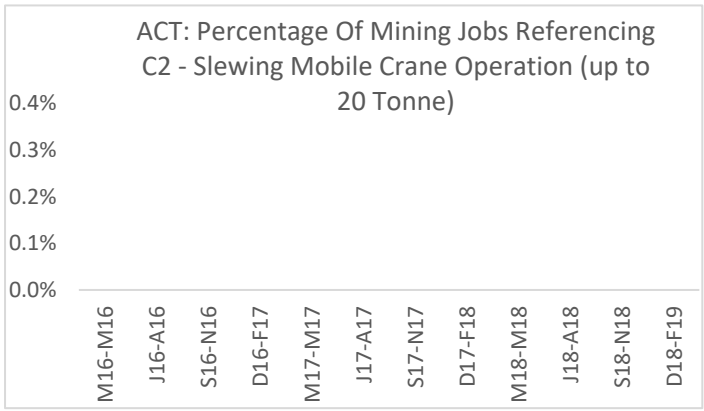

VIC: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

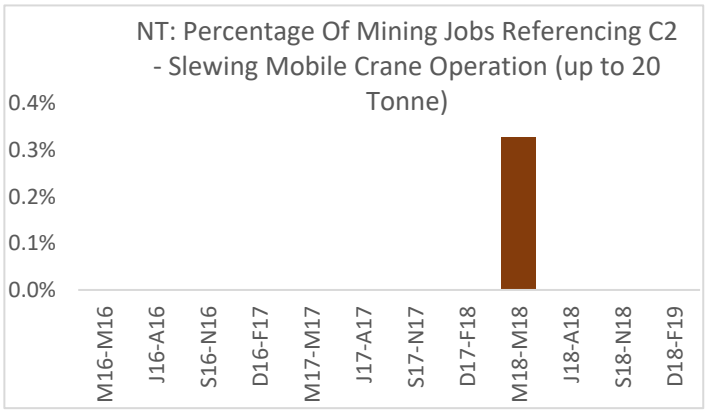

QLD: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

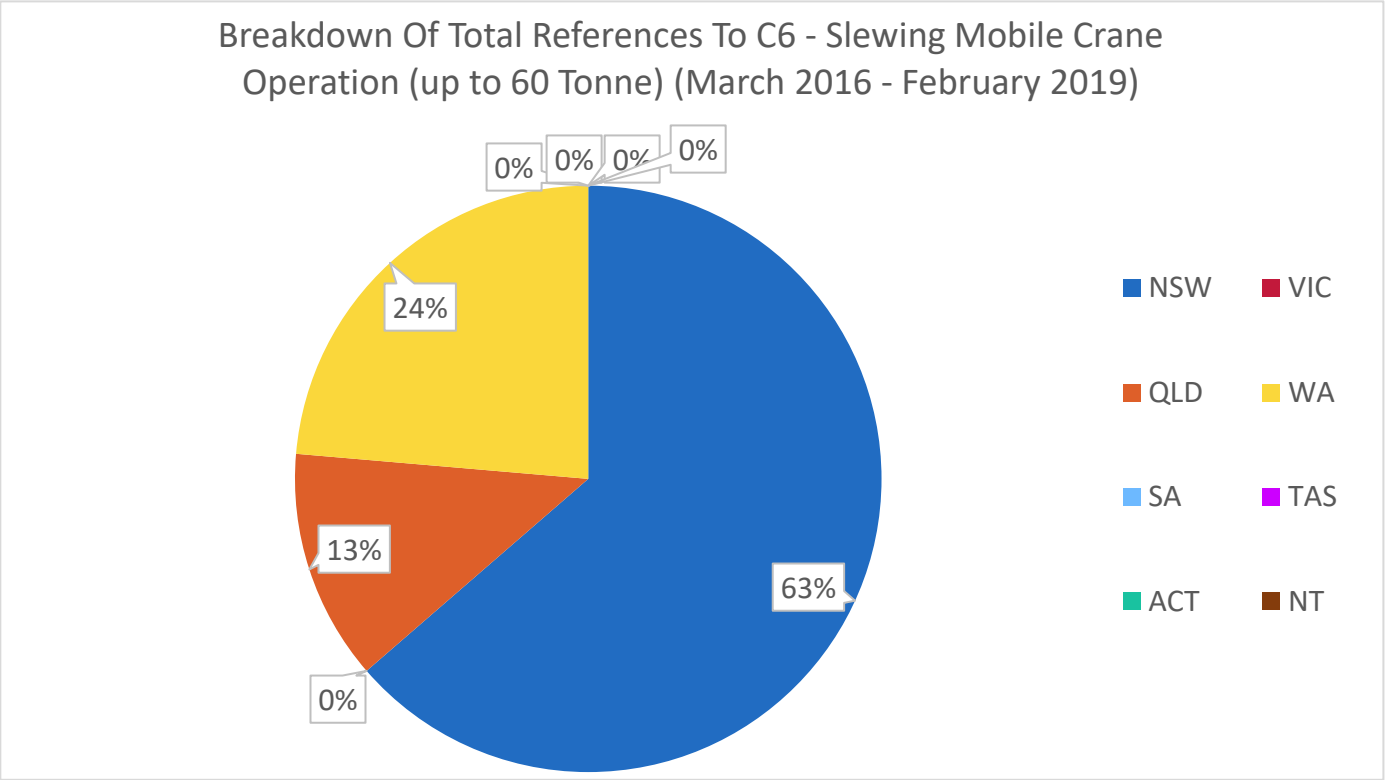

TAS: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

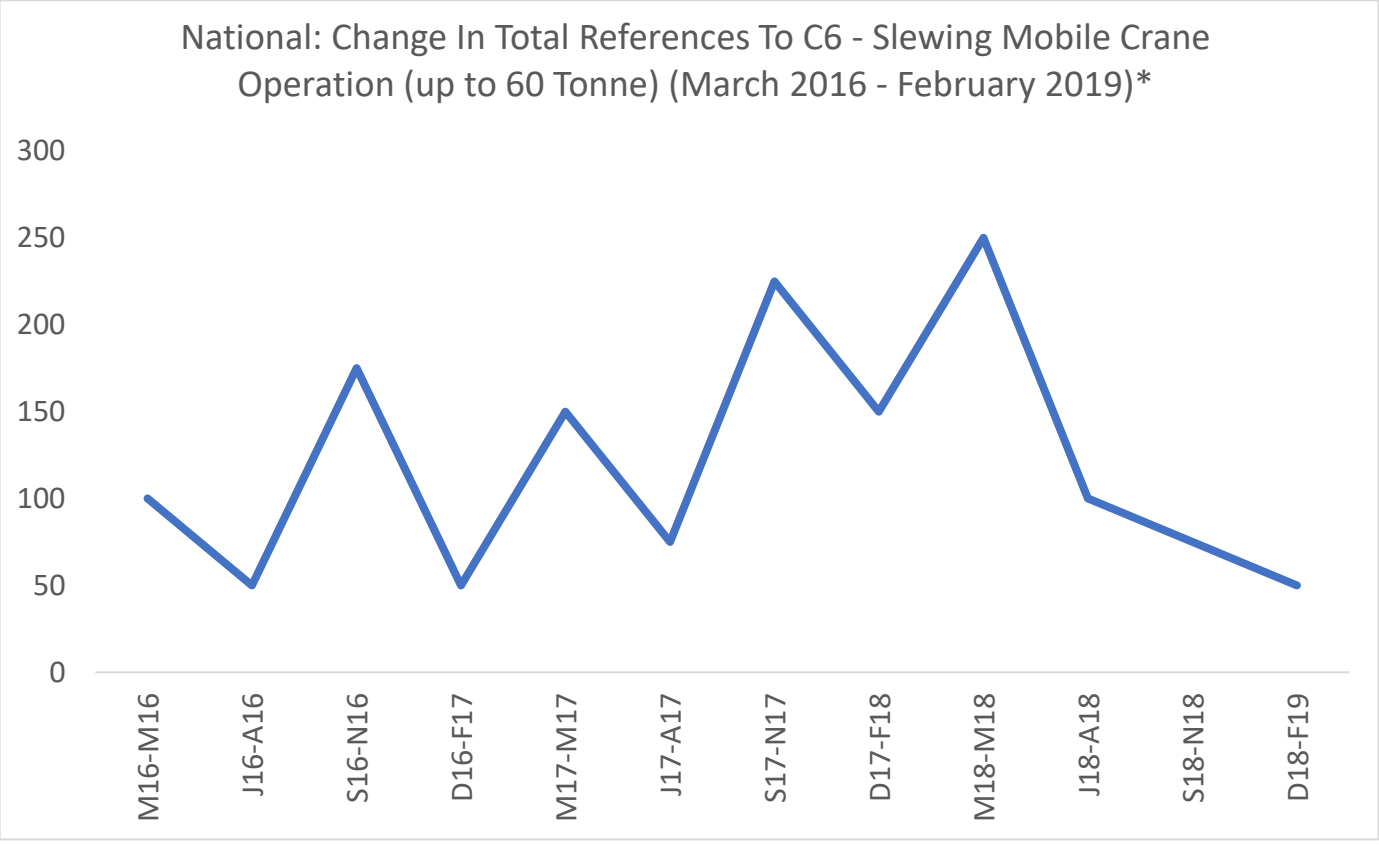

ACT: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing C2 - Slewing Mobile Crane Operation (up to 20 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

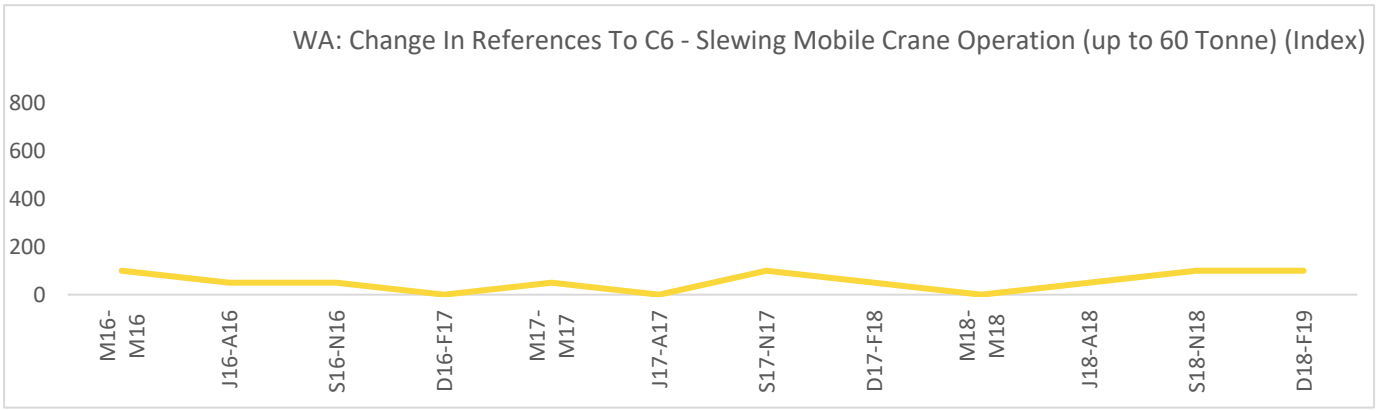
C6 - Slewing Mobile Crane Operation (up to 60 Tonne)

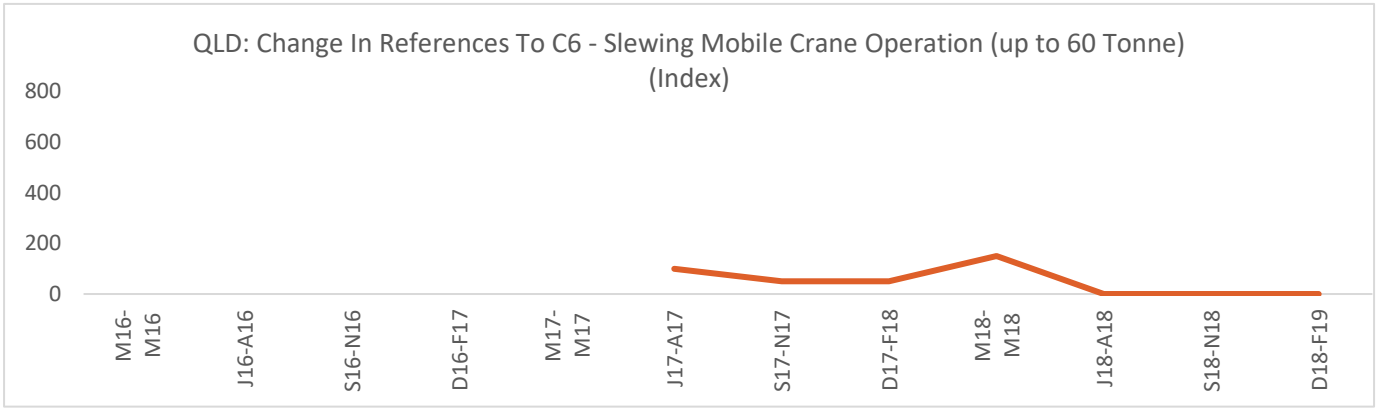
Total References: 58

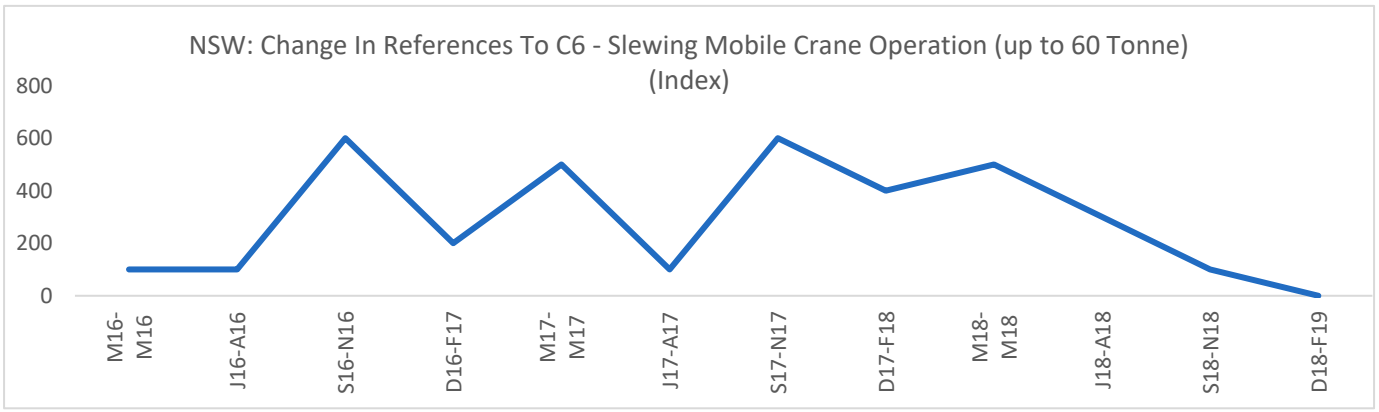


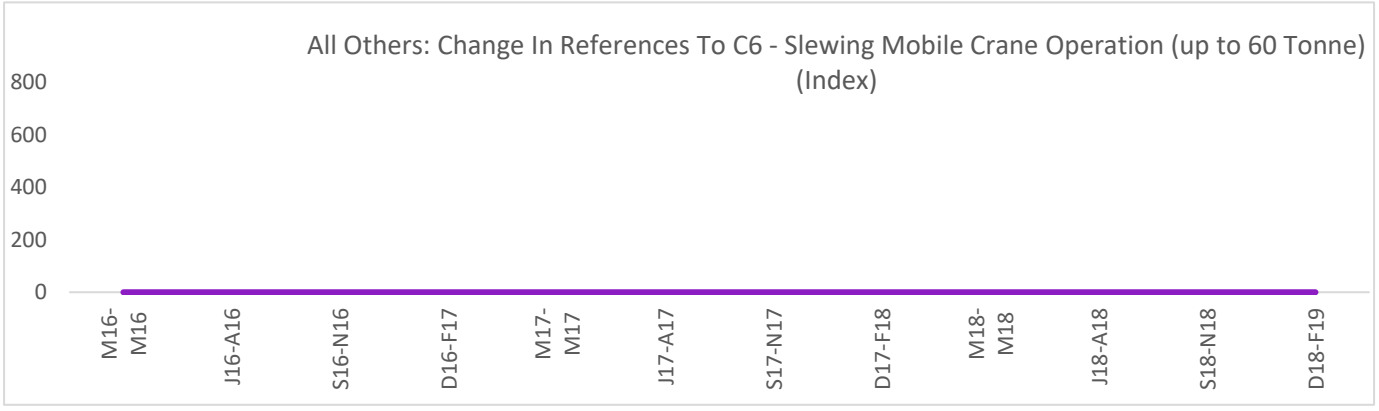


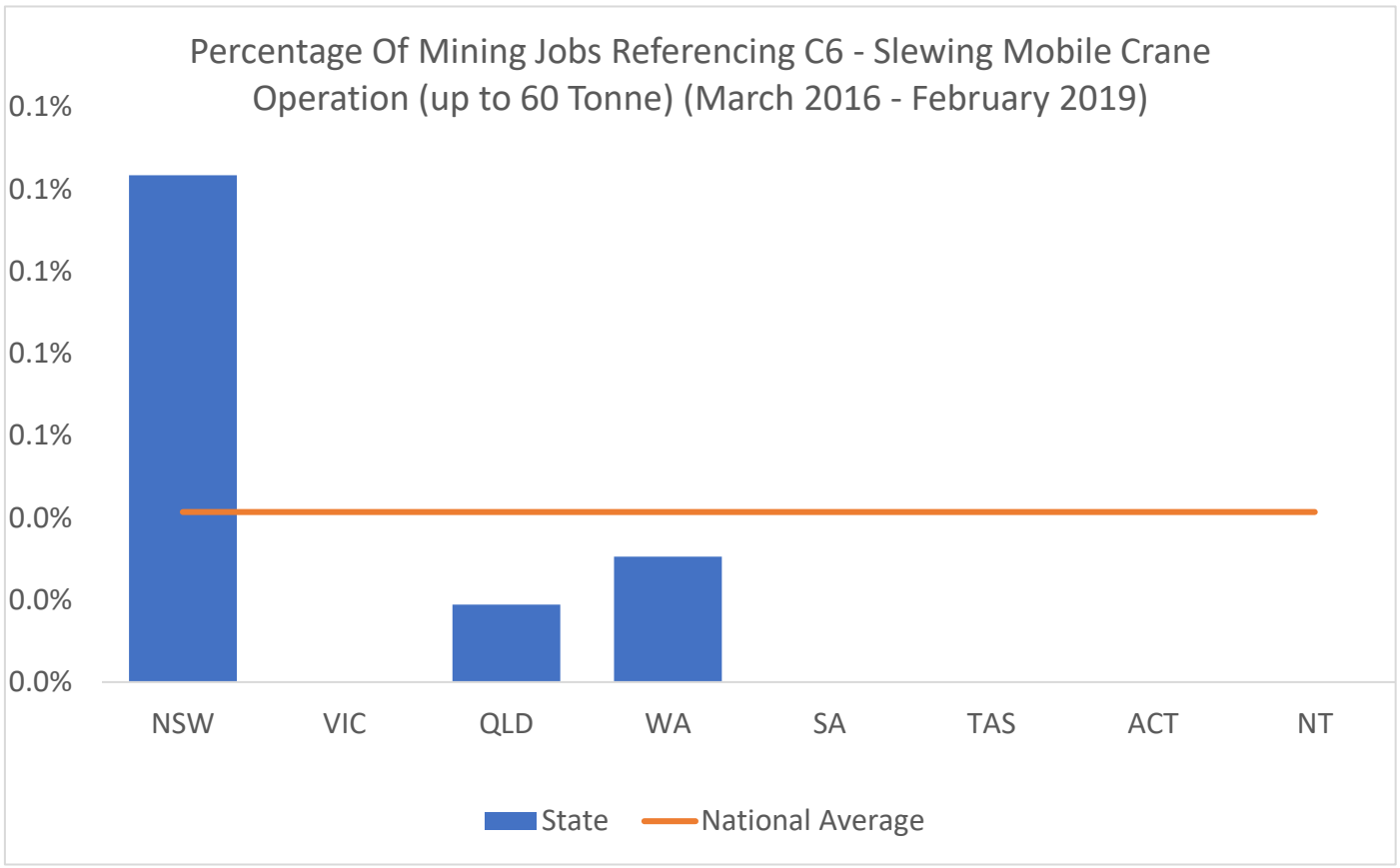
*Index: March - May 2016 = 100

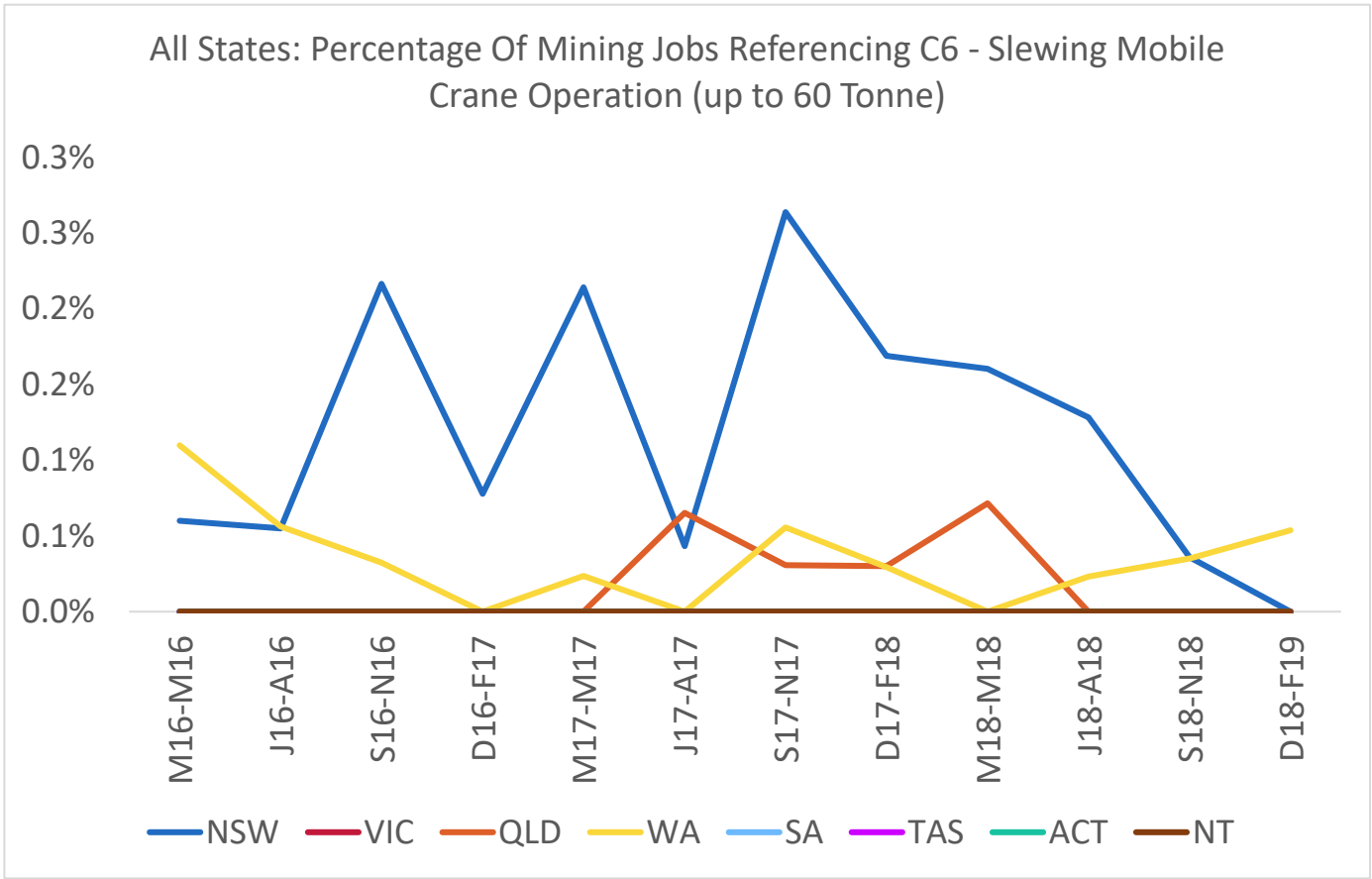

WA: Change In References To C6 - Slewing Mobile Crane Operation (up to 60 Tonne) (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

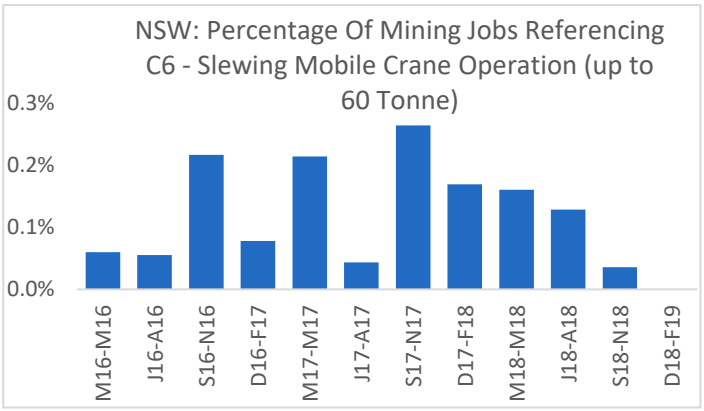

QLD: Change In References To C6 - Slewing Mobile Crane Operation (up to 60 Tonne) (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

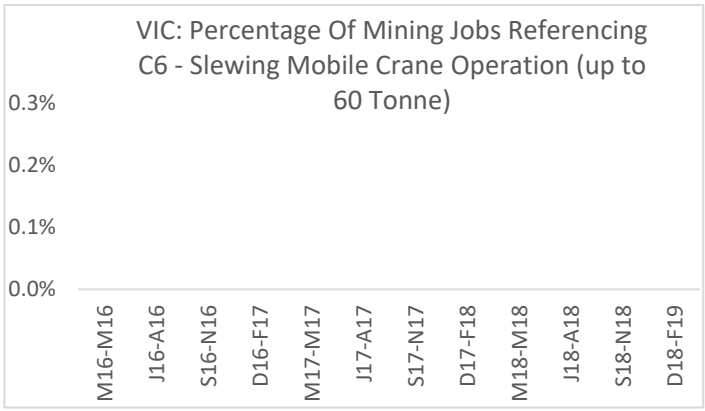

NSW: Change In References To C6 - Slewing Mobile Crane Operation (up to 60 Tonne) (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

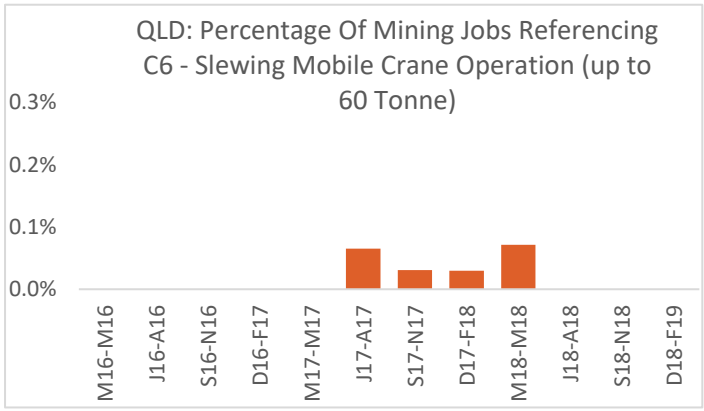

All Others: Change In References To C6 - Slewing Mobile Crane Operation (up to 60 Tonne) (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

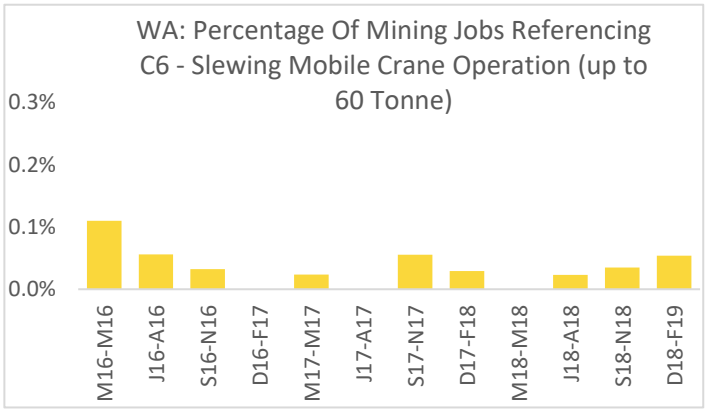

Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne) (March 2016 - February 2019)
0.1%
0.1%
0.1%
0.1%
0.1%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

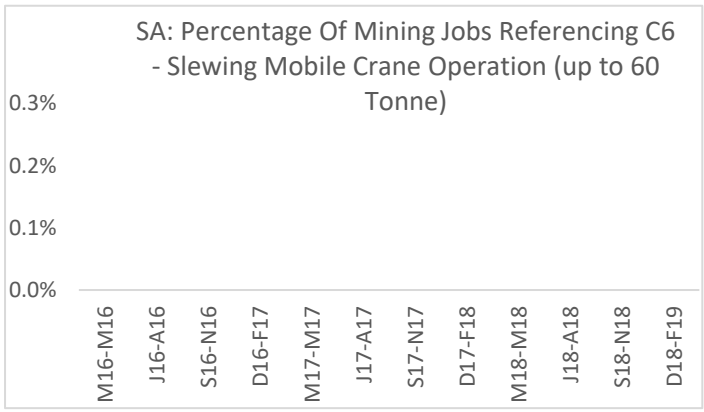

All States: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

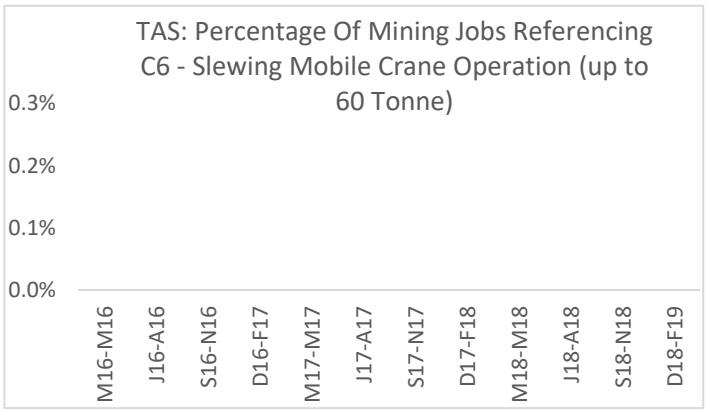

NSW: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

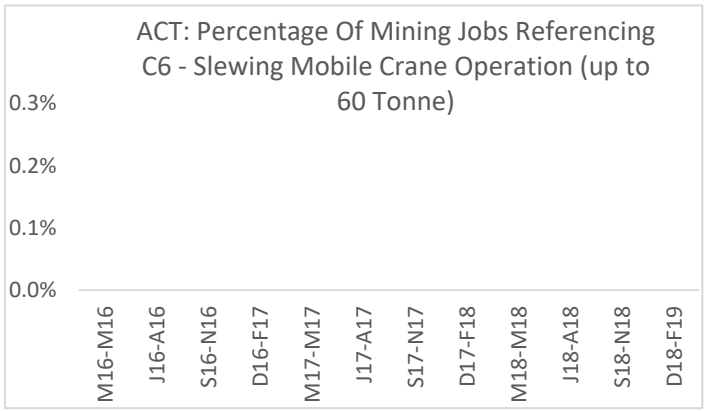

VIC: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

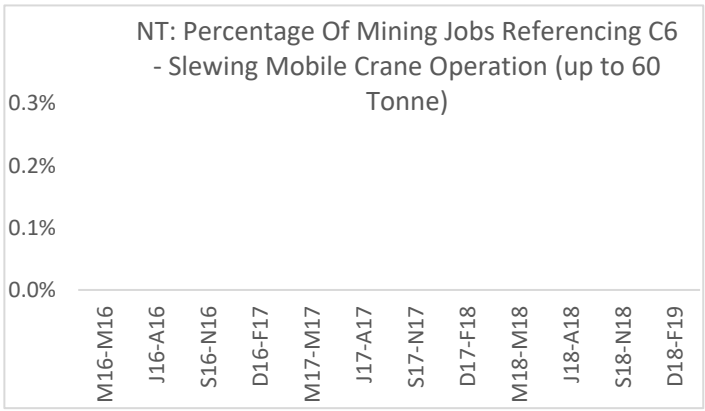

QLD: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

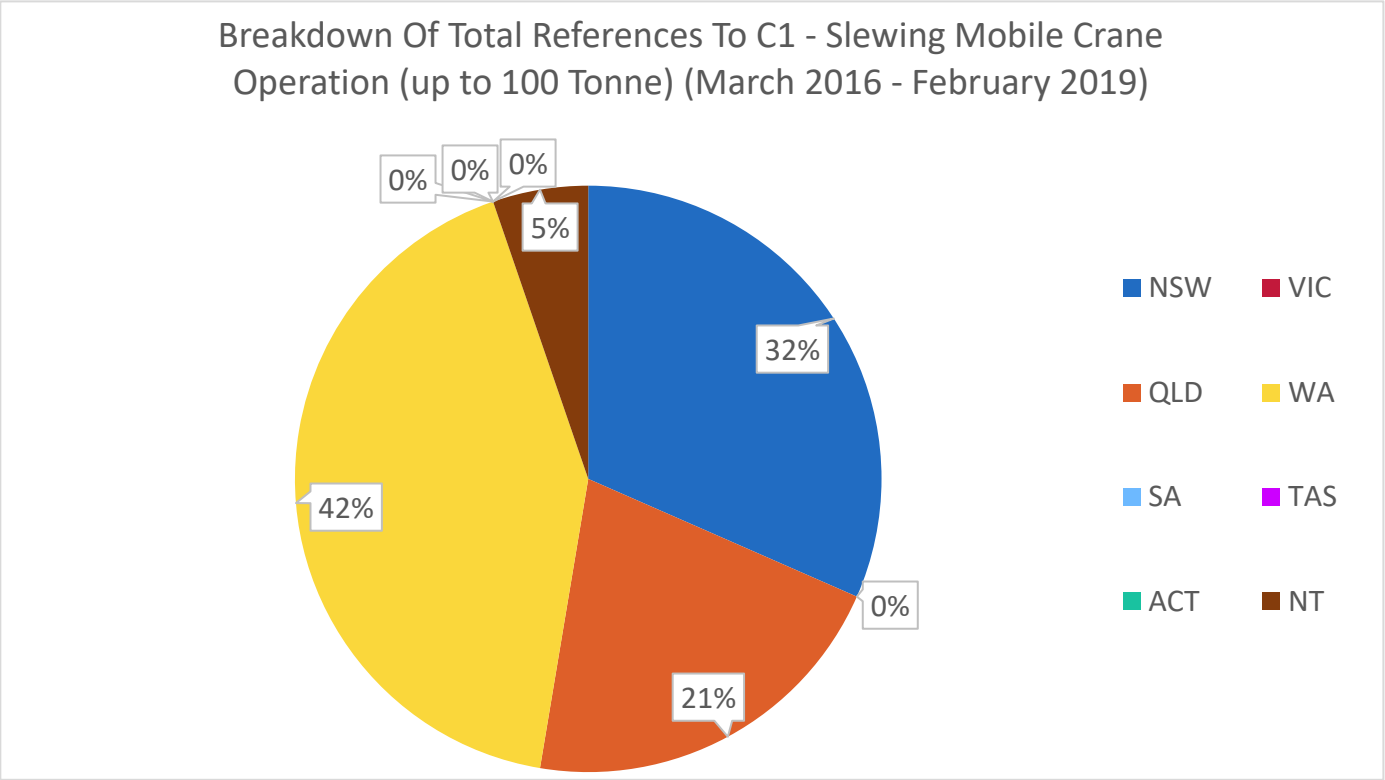

TAS: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

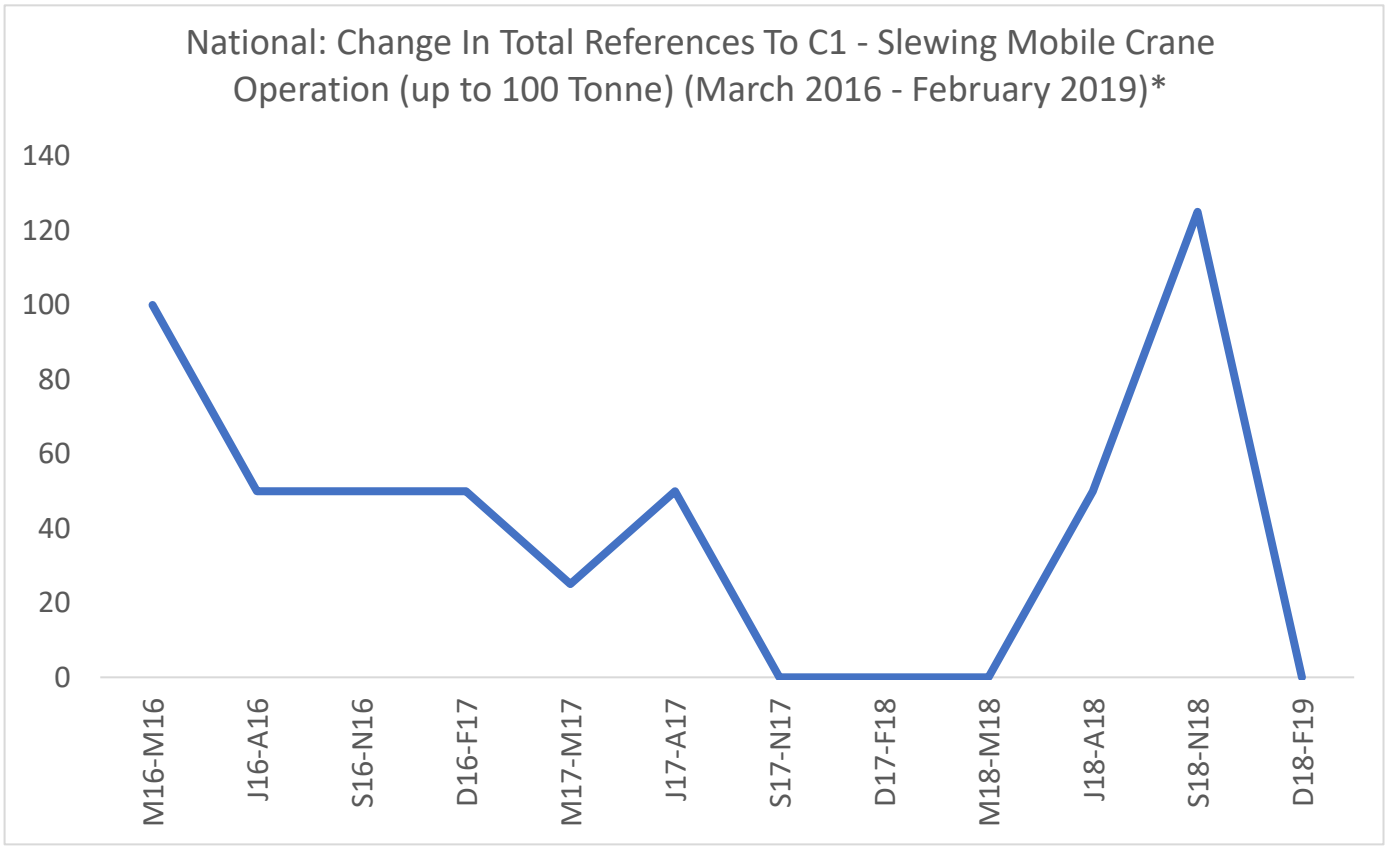

ACT: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing C6 - Slewing Mobile Crane Operation (up to 60 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

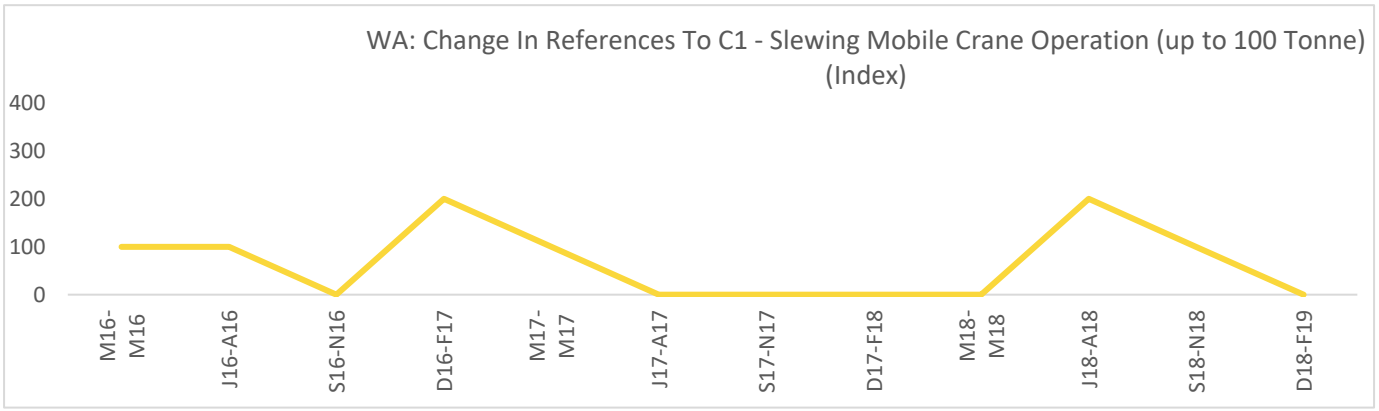
C1 - Slewing Mobile Crane Operation (up to 100 Tonne)

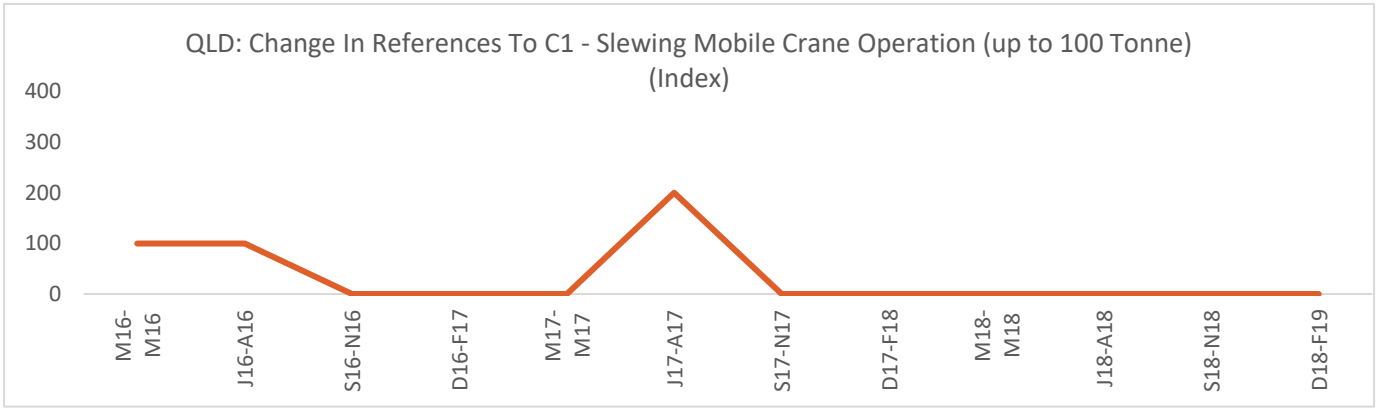
Total References: 20

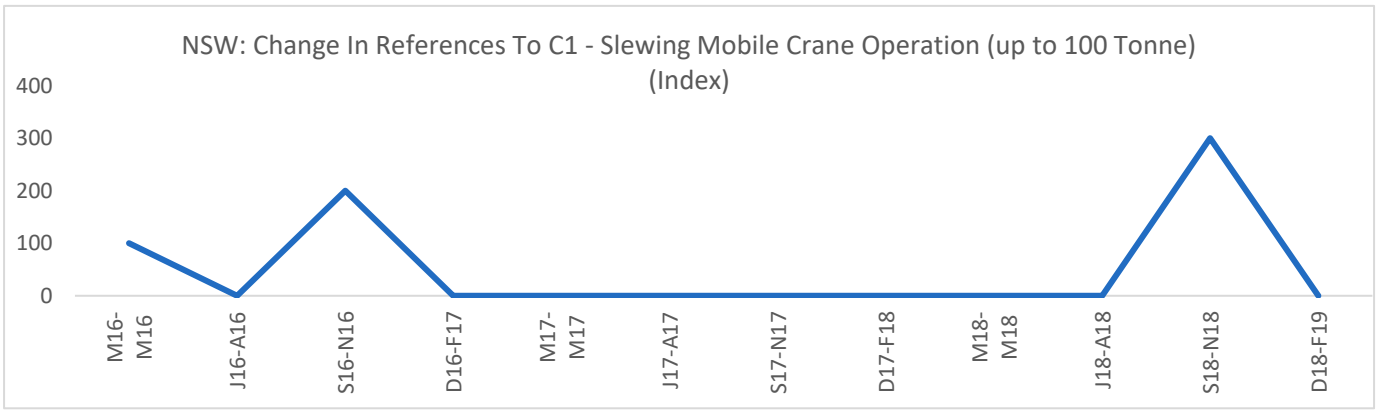


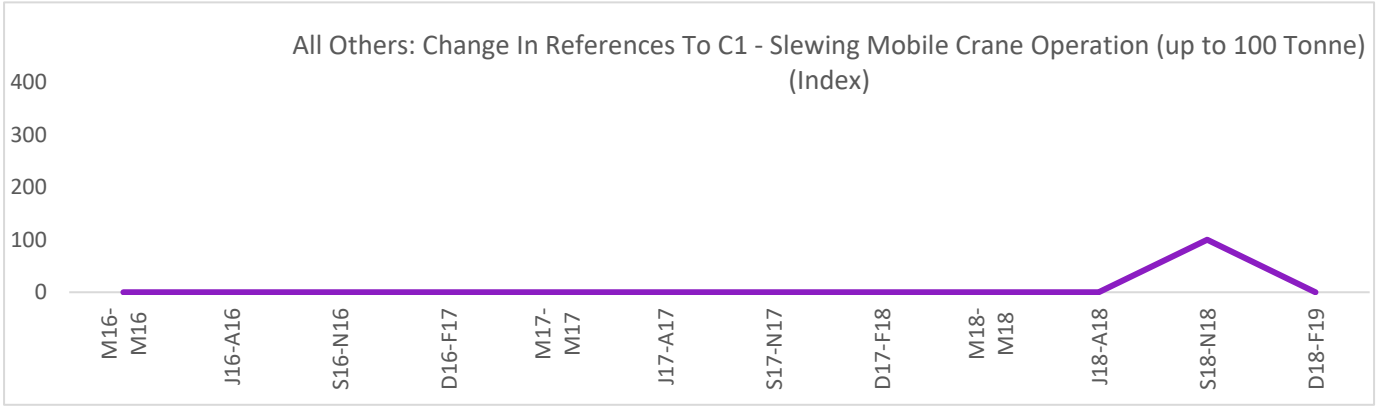


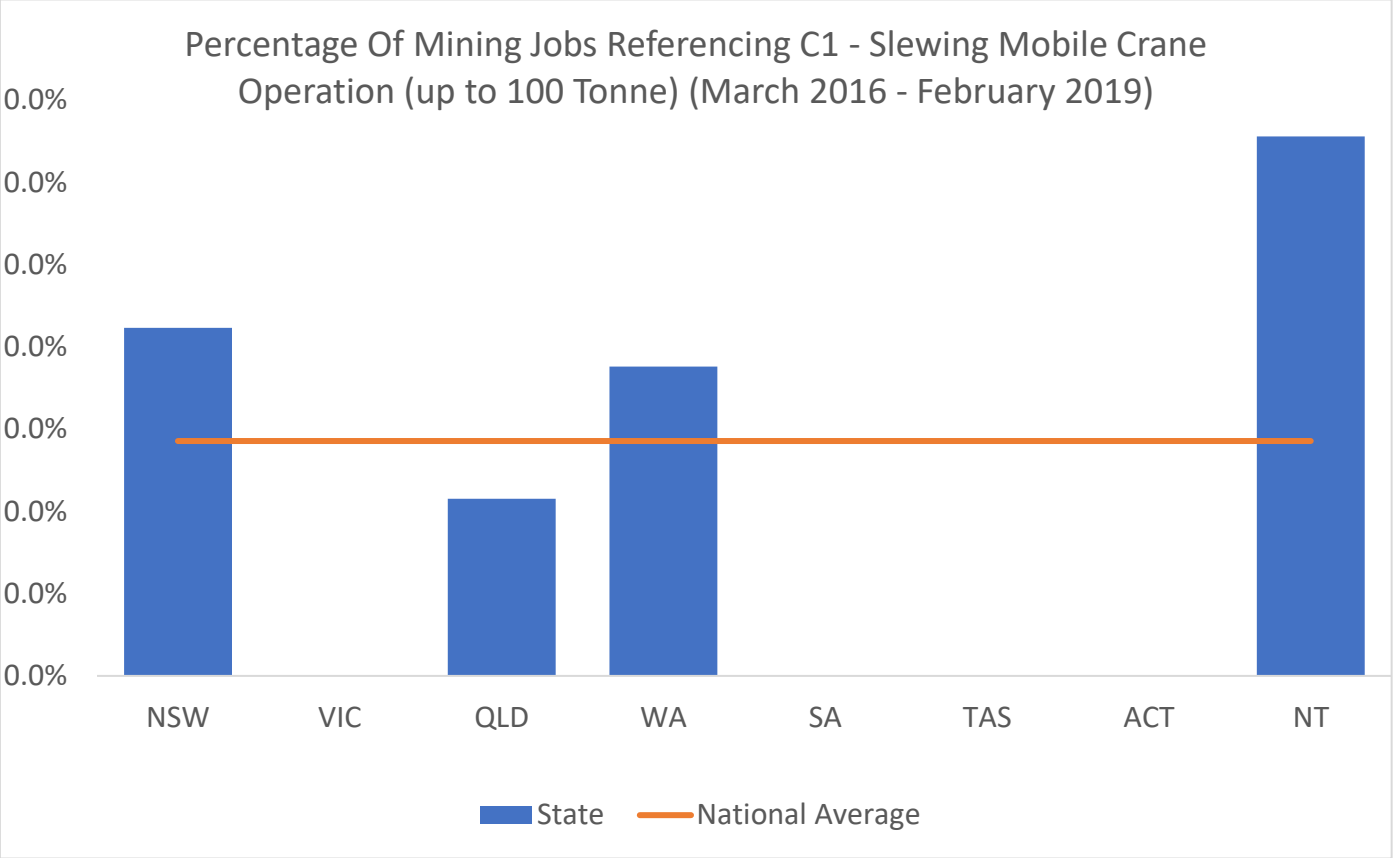
*Index: March - May 2016 = 100

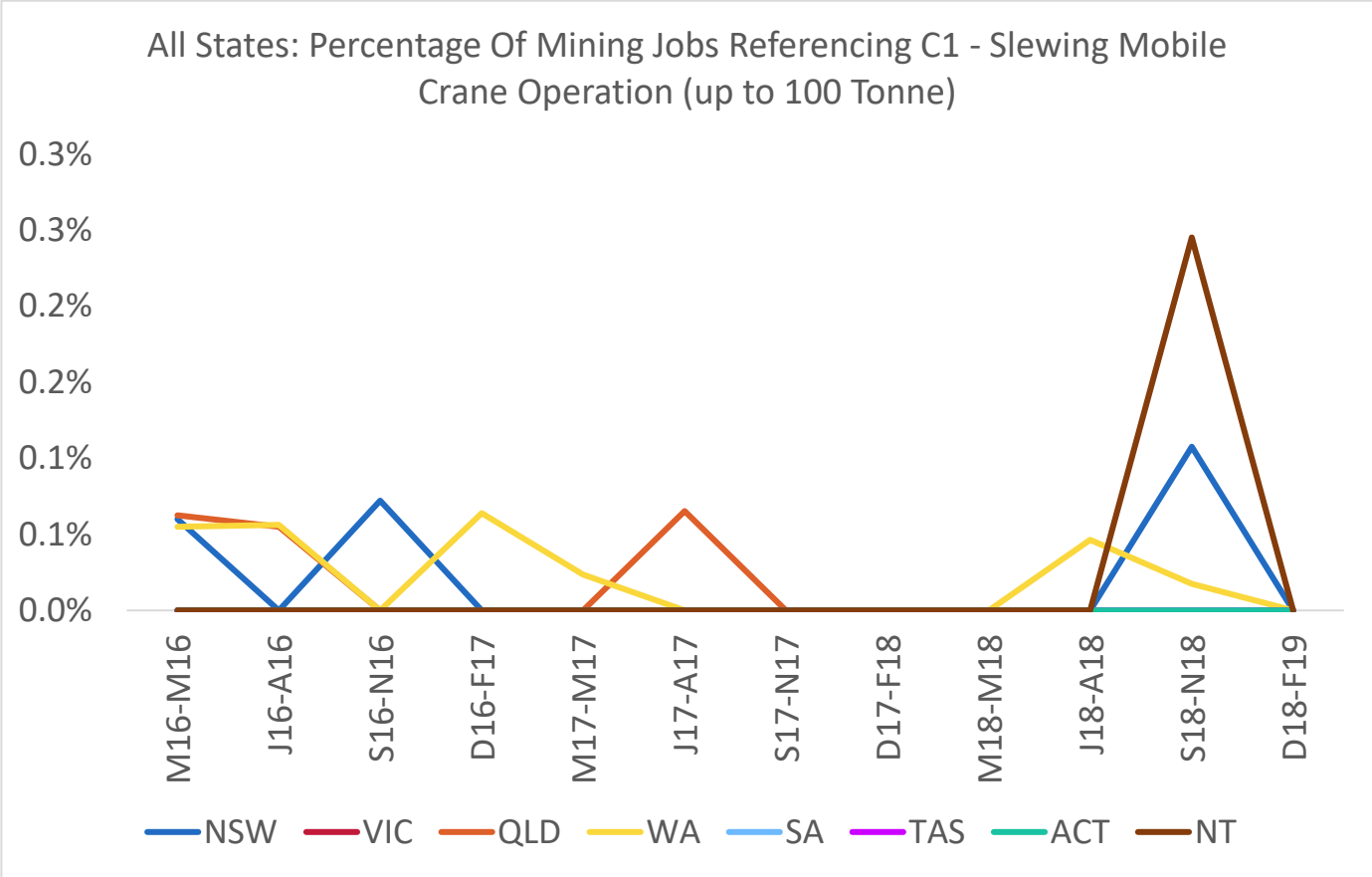

WA: Change In References To C1 - Slewing Mobile Crane Operation (up to 100 Tonne) (Index)
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

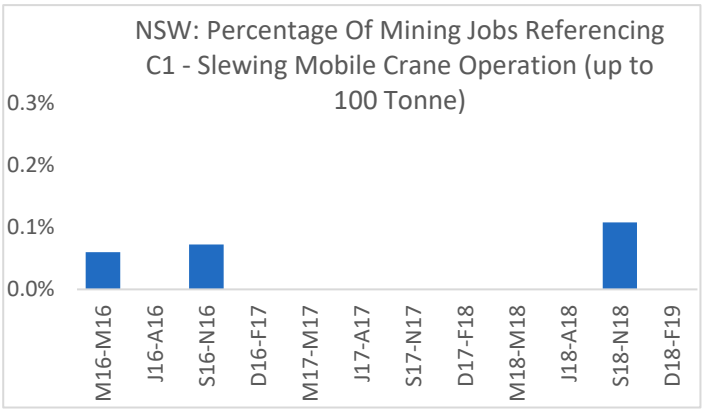

QLD: Change In References To C1 - Slewing Mobile Crane Operation (up to 100 Tonne) (Index)
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

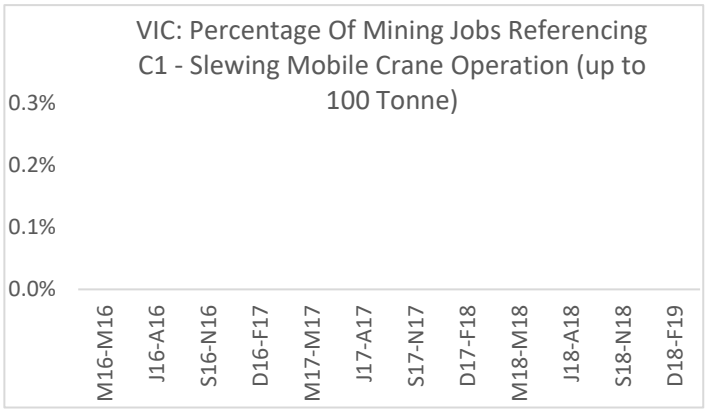

NSW: Change In References To C1 - Slewing Mobile Crane Operation (up to 100 Tonne) (Index)
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

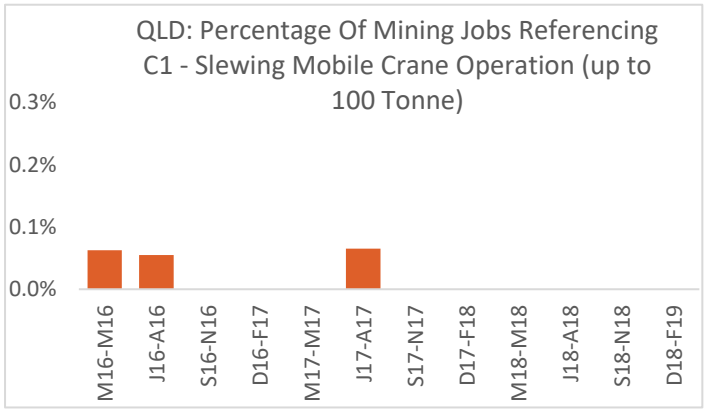

All Others: Change In References To C1 - Slewing Mobile Crane Operation (up to 100 Tonne) (Index)
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

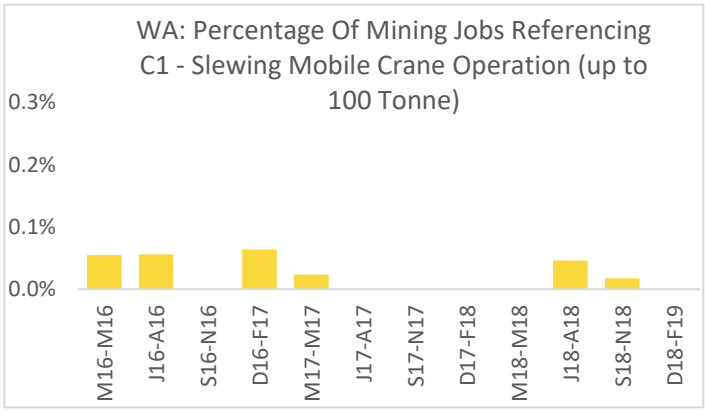

Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne) (March 2016 - February 2019)
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

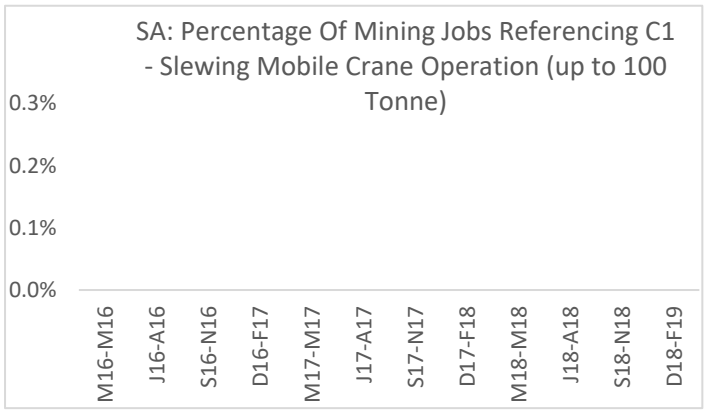

All States: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

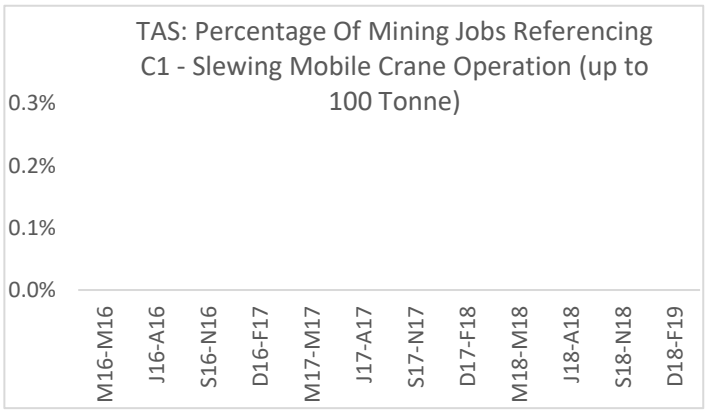

NSW: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

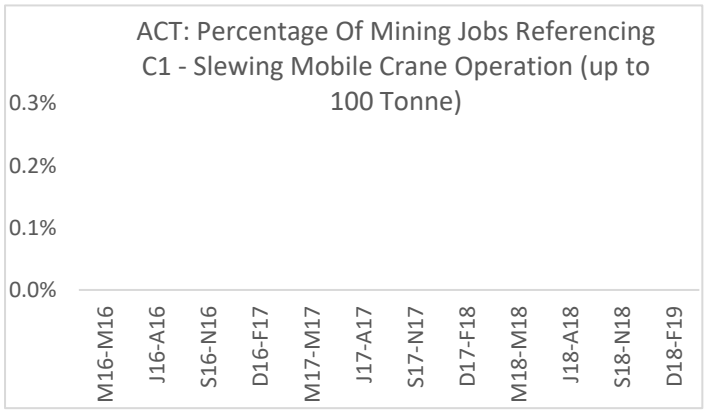

VIC: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

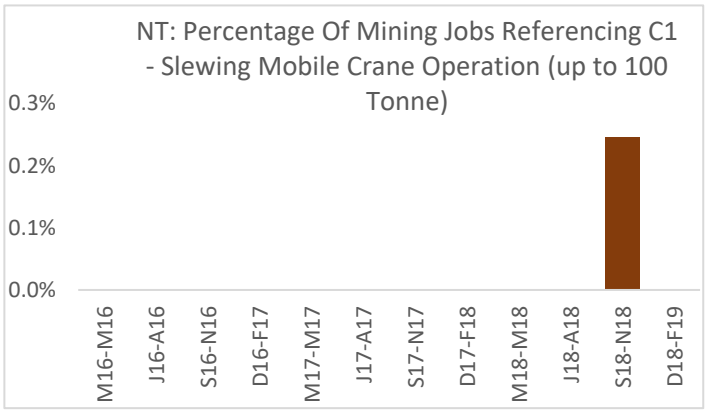

QLD: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

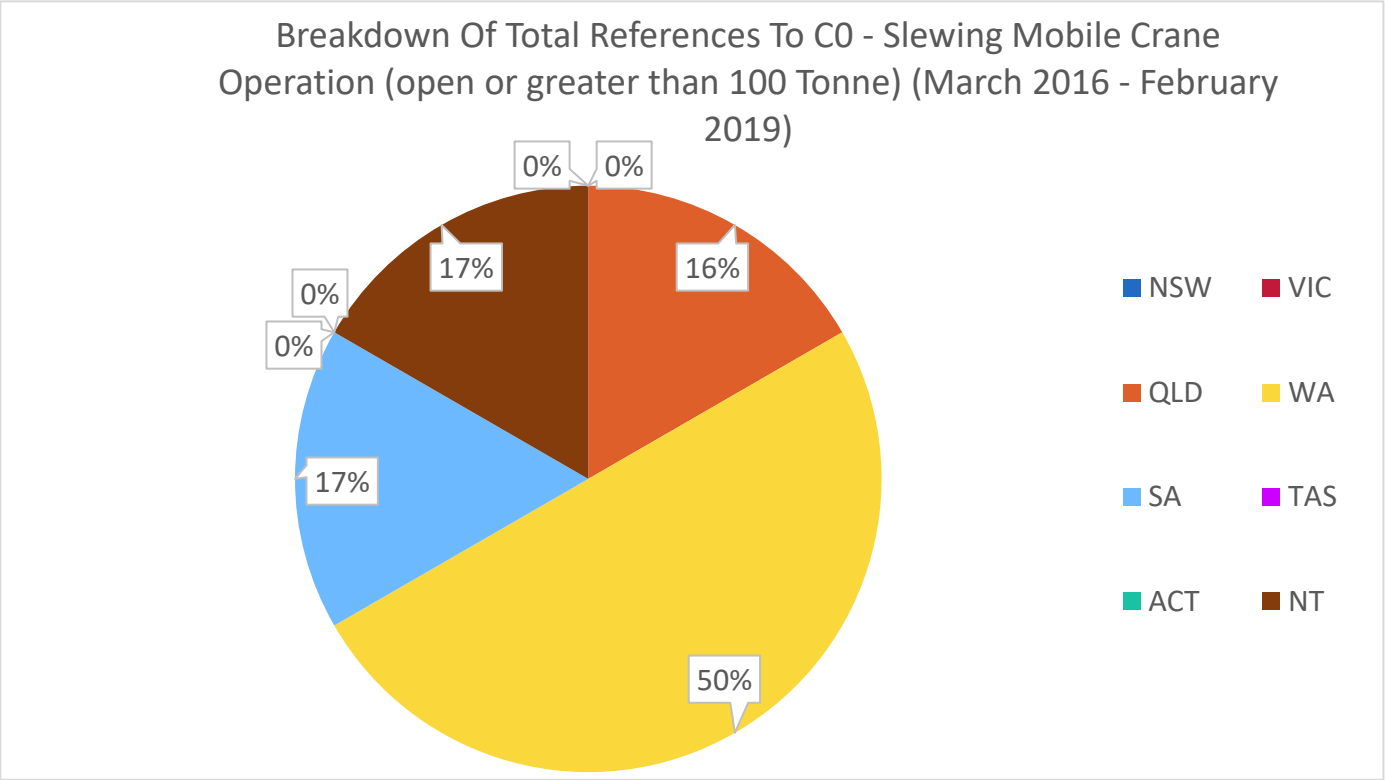

TAS: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

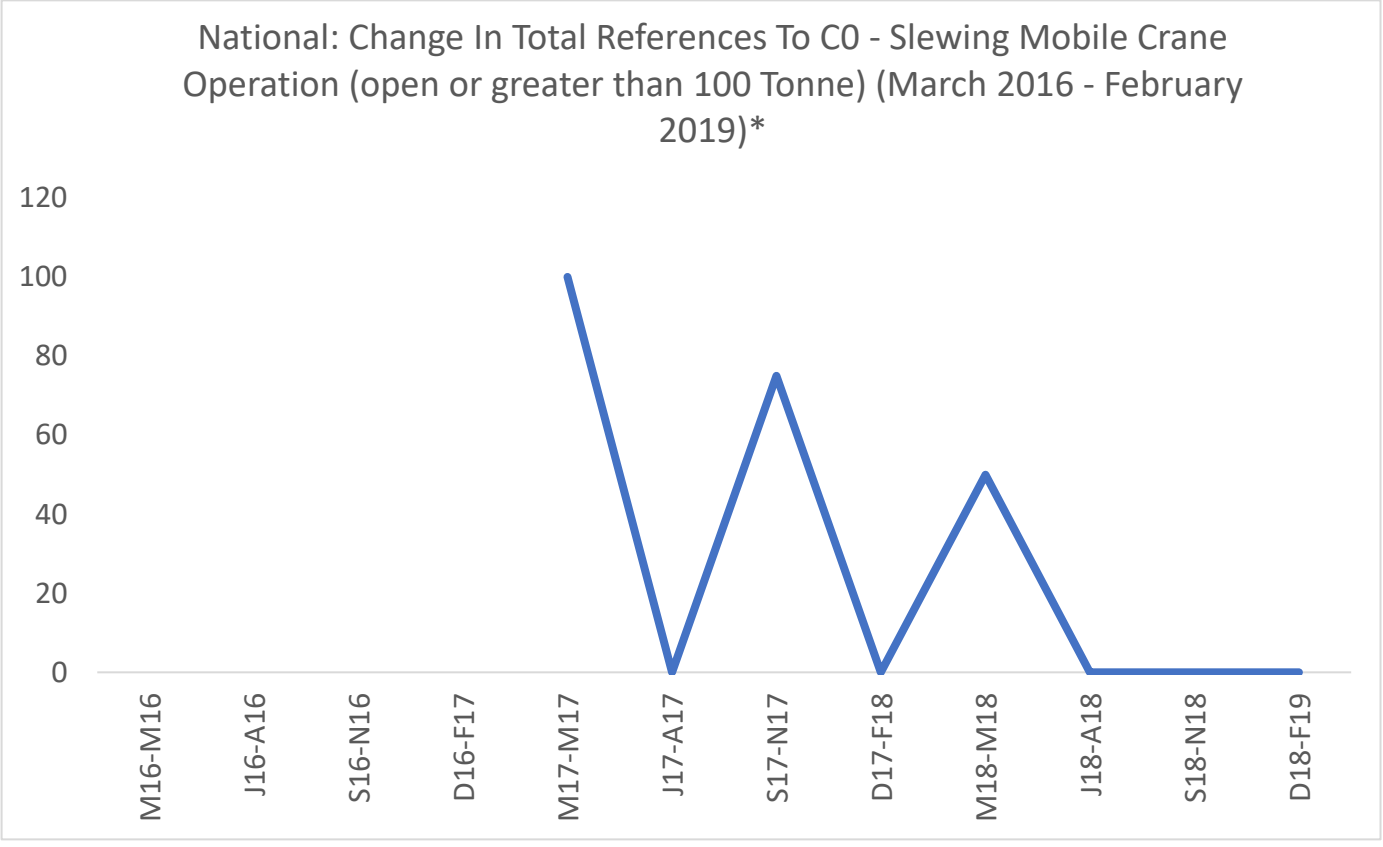

ACT: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing C1 - Slewing Mobile Crane Operation (up to 100 Tonne)
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

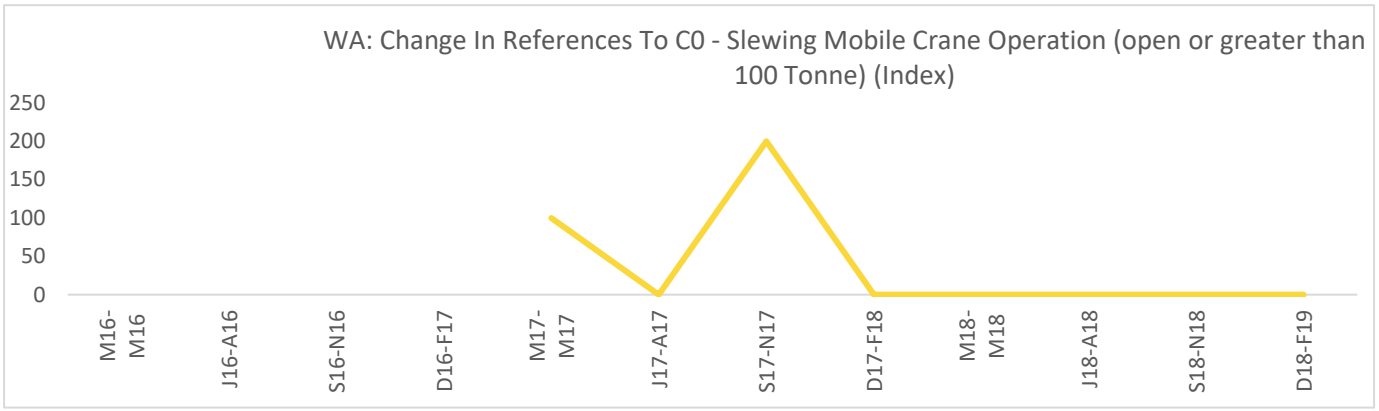
C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)

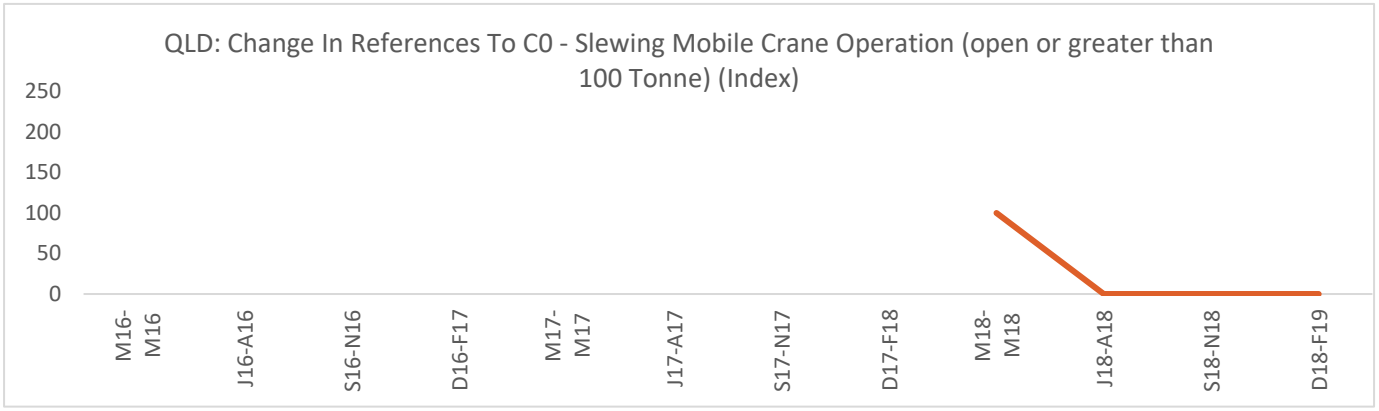
Total References: 9

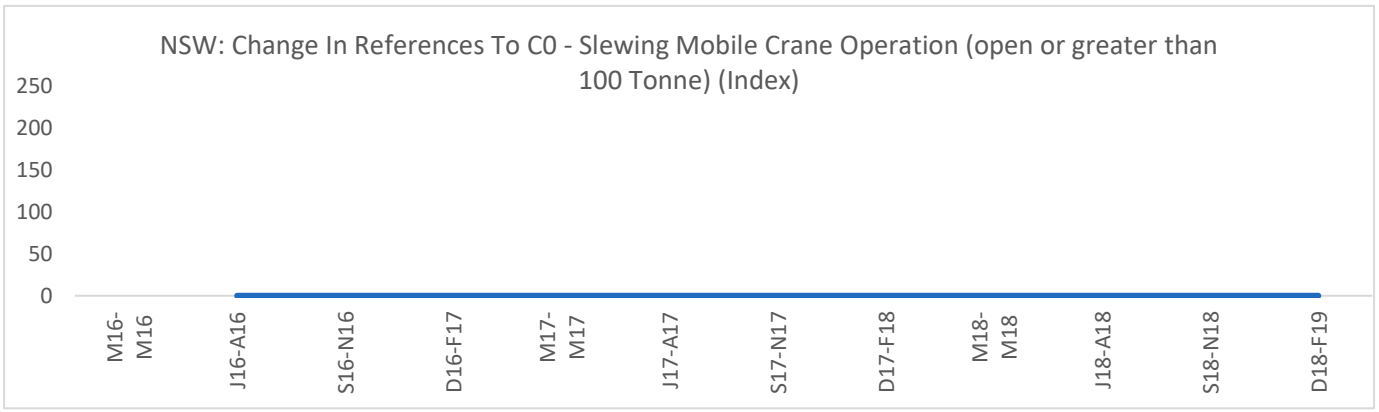


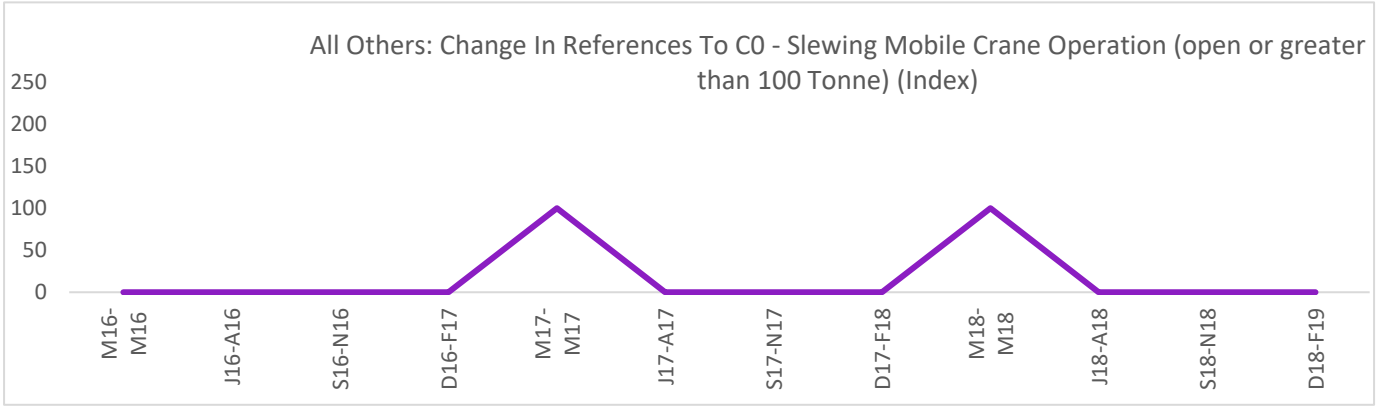


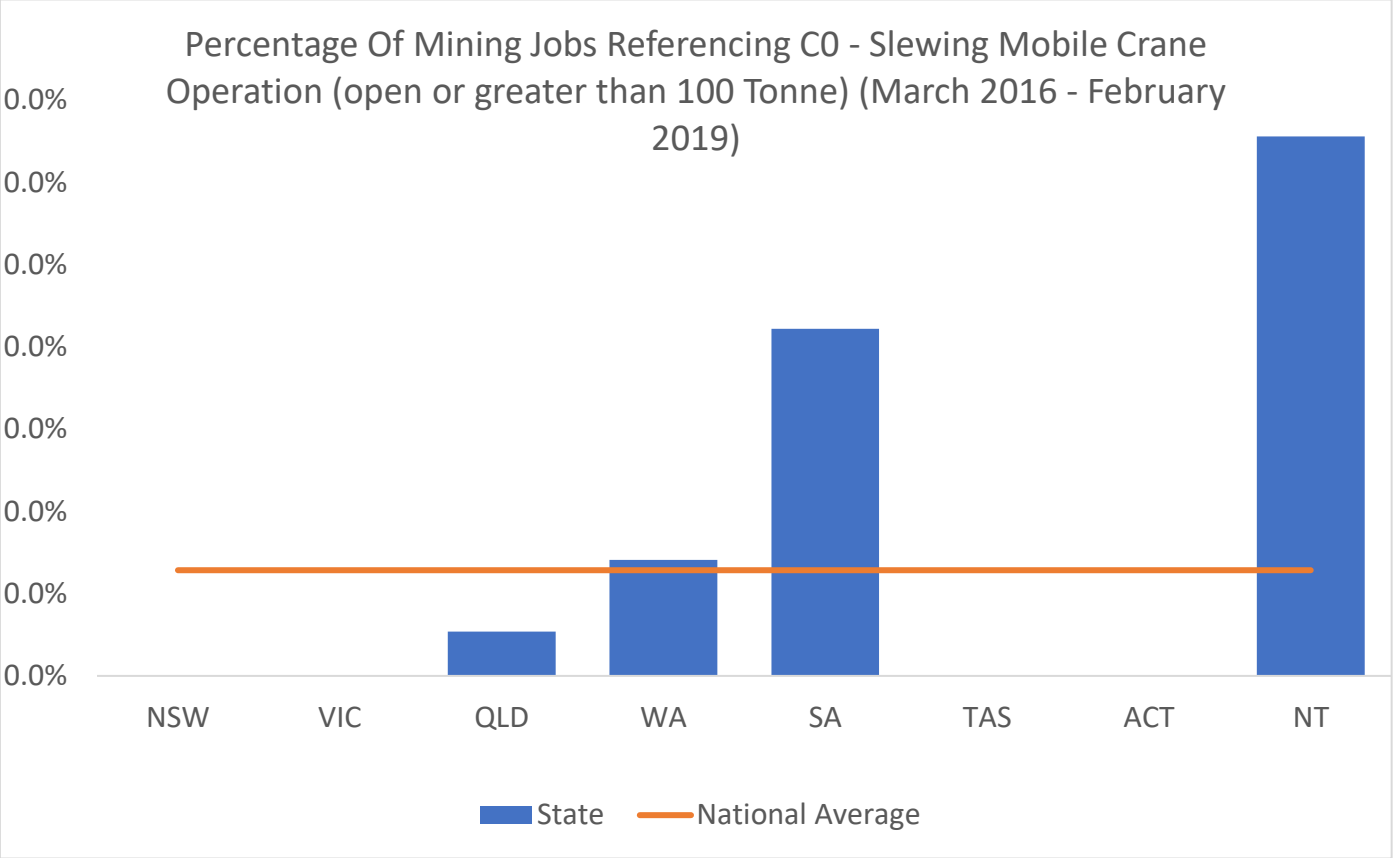
*Index: March - May 2016 = 100

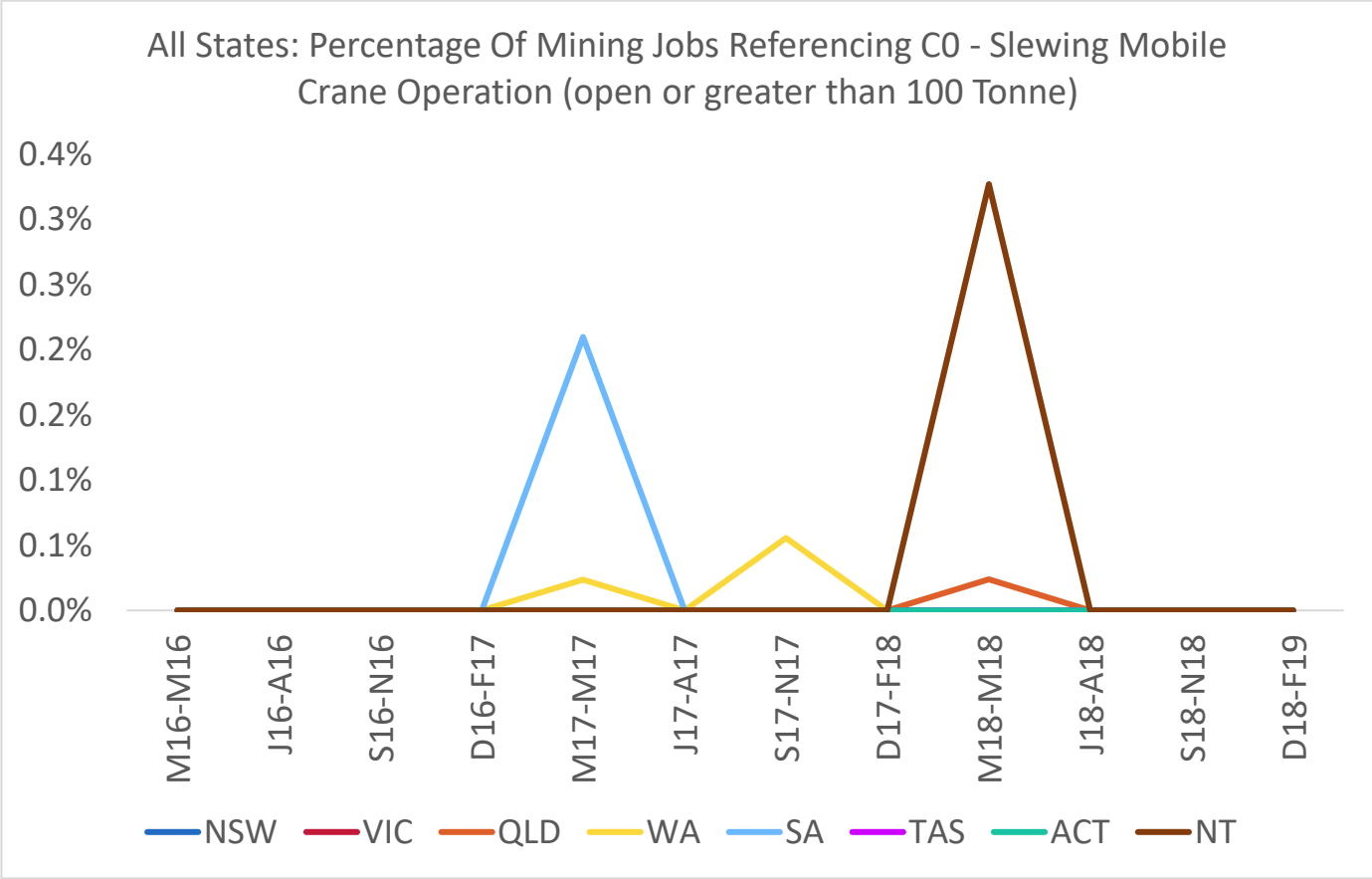

WA: Change In References To C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne) (Index)
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

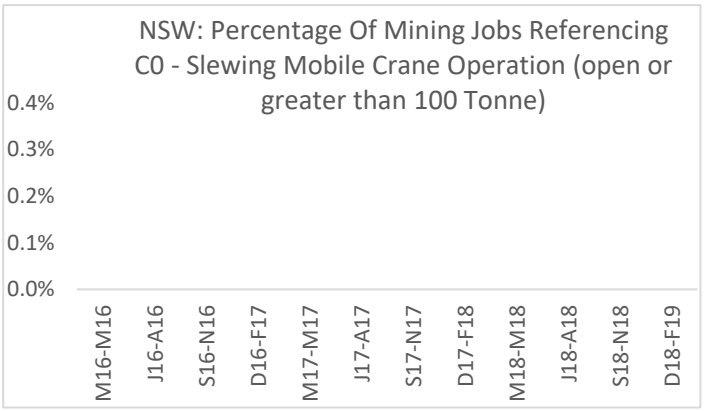

QLD: Change In References To C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne) (Index)
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

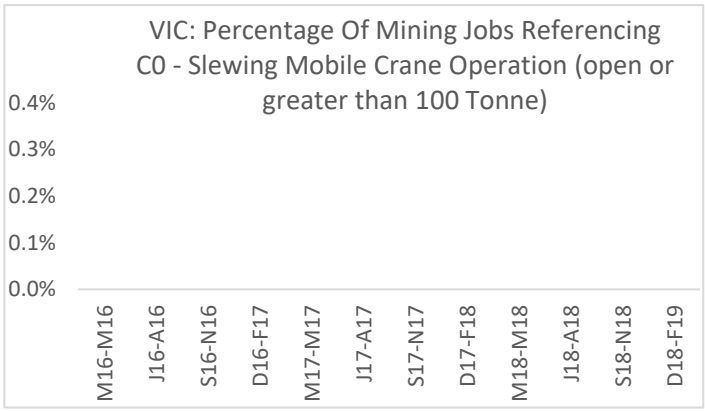

NSW: Change In References To C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne) (Index)
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

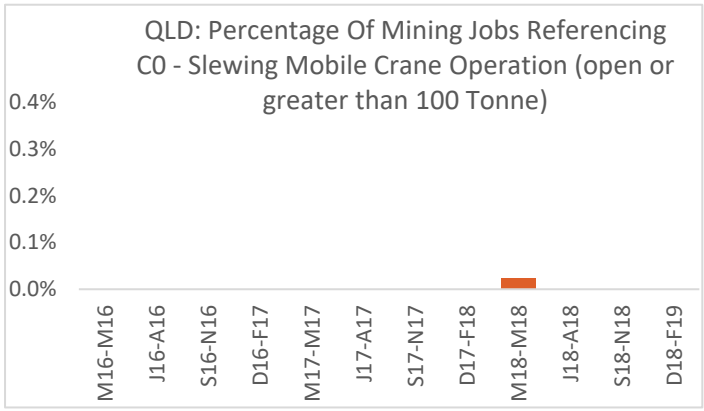

All Others: Change In References To C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne) (Index)
250
200
150
100
50
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

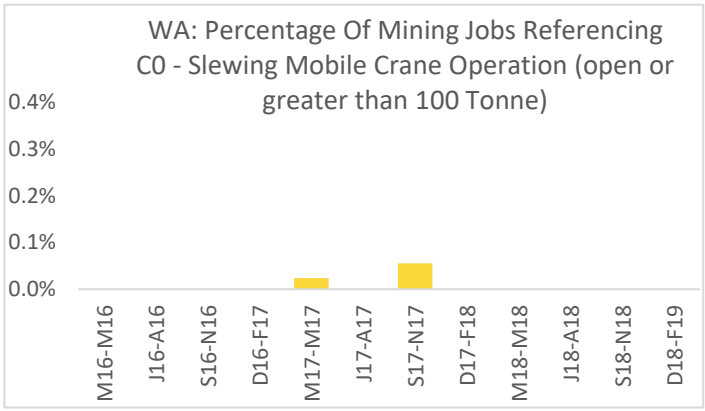

Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne) (March 2016 - February 2019)
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

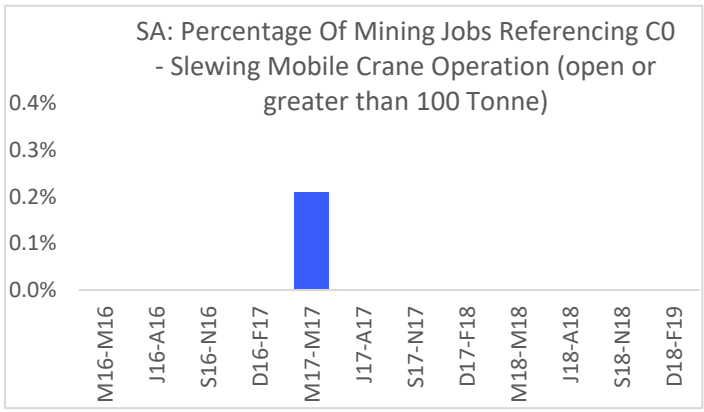

All States: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.3%
0.2%
0.2%
0.1%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

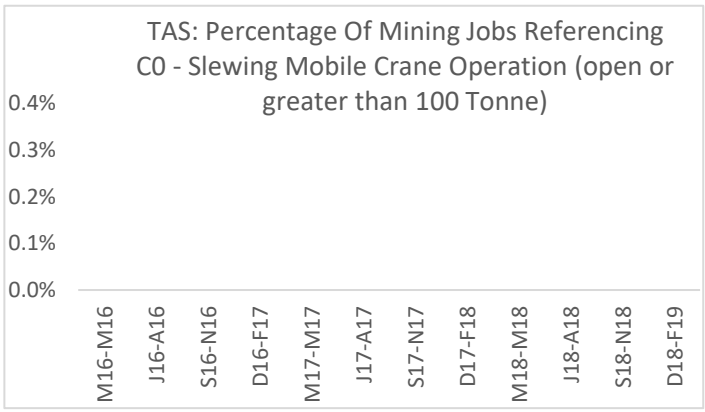

NSW: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

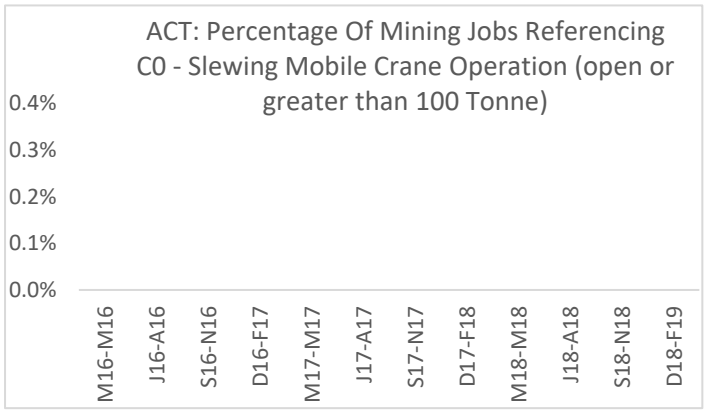

VIC: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

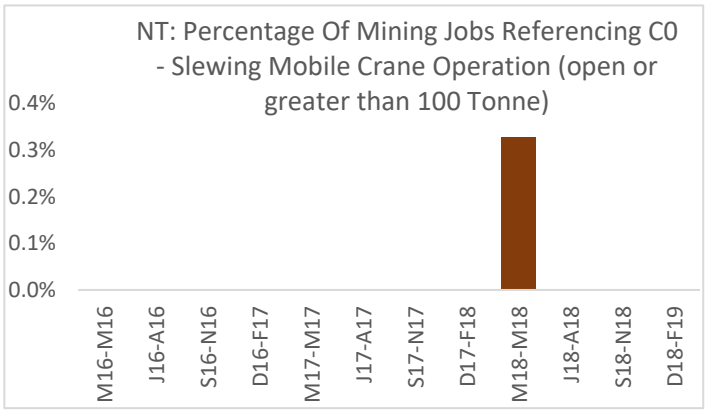

QLD: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

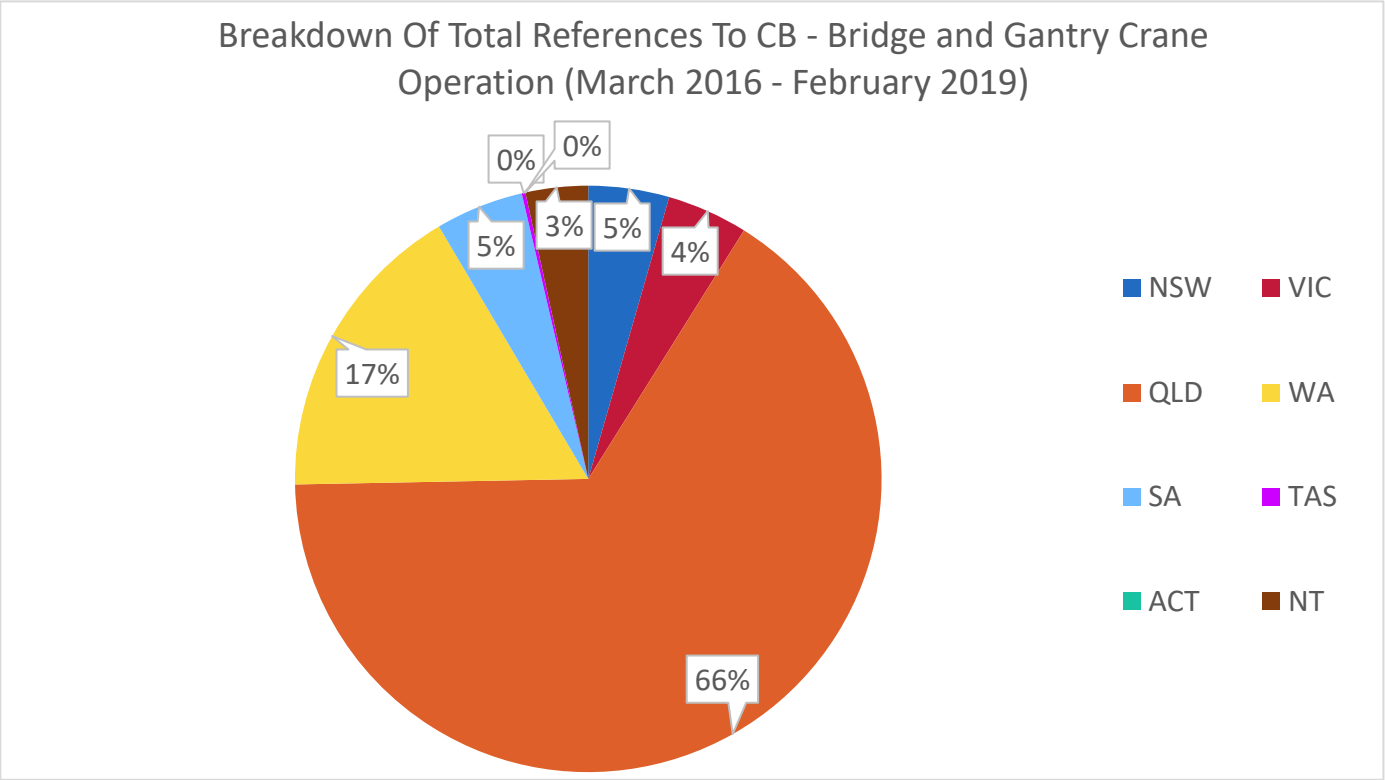

TAS: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

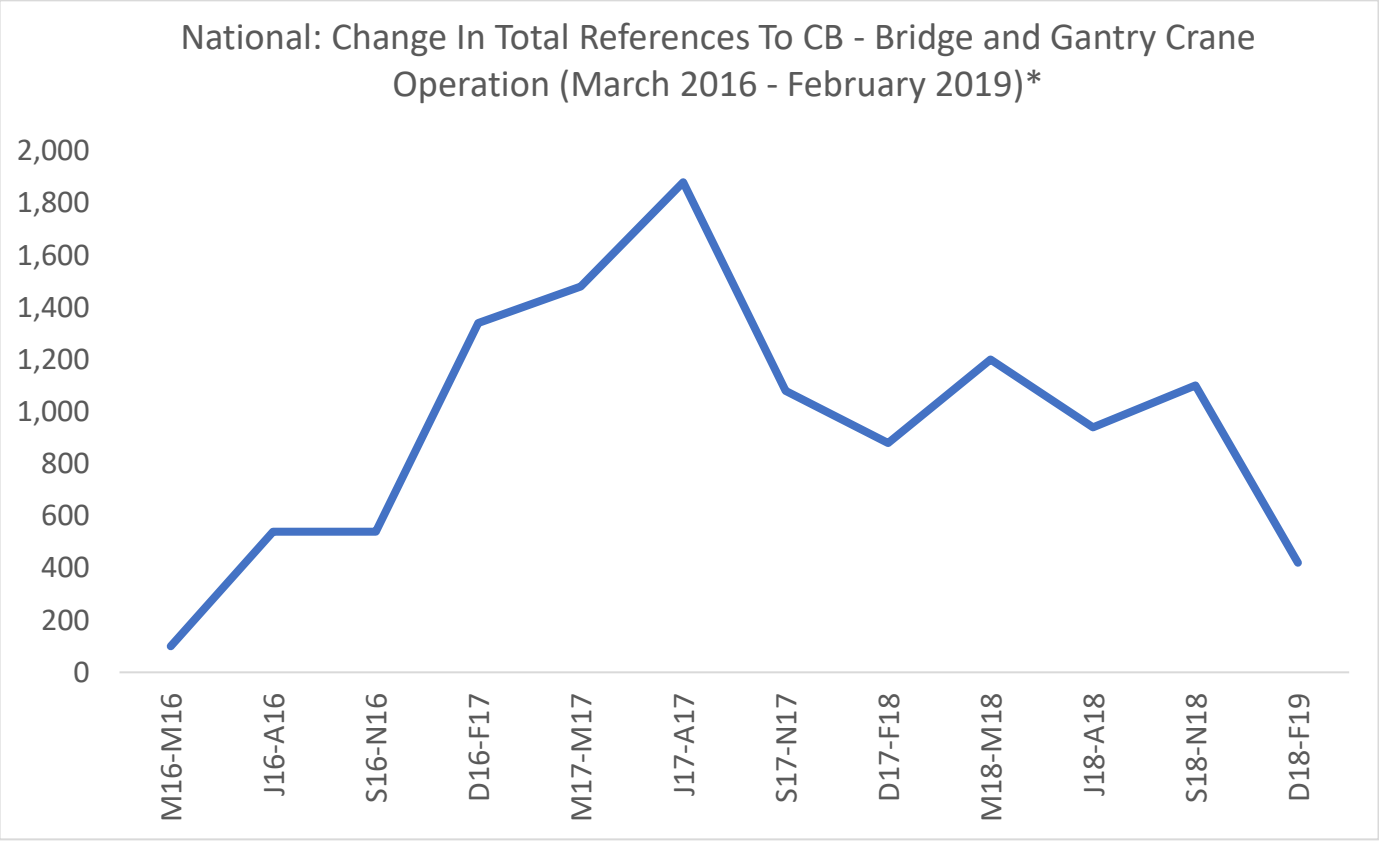

ACT: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing C0 - Slewing Mobile Crane Operation (open or greater than 100 Tonne)
0.4%
0.3%
0.2%
0.1%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

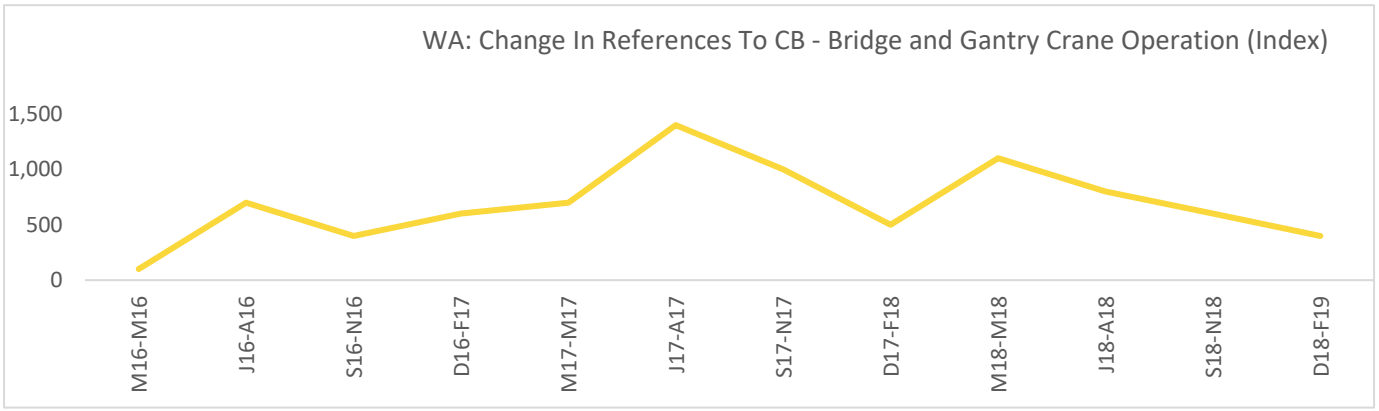
CB - Bridge and Gantry Crane Operation

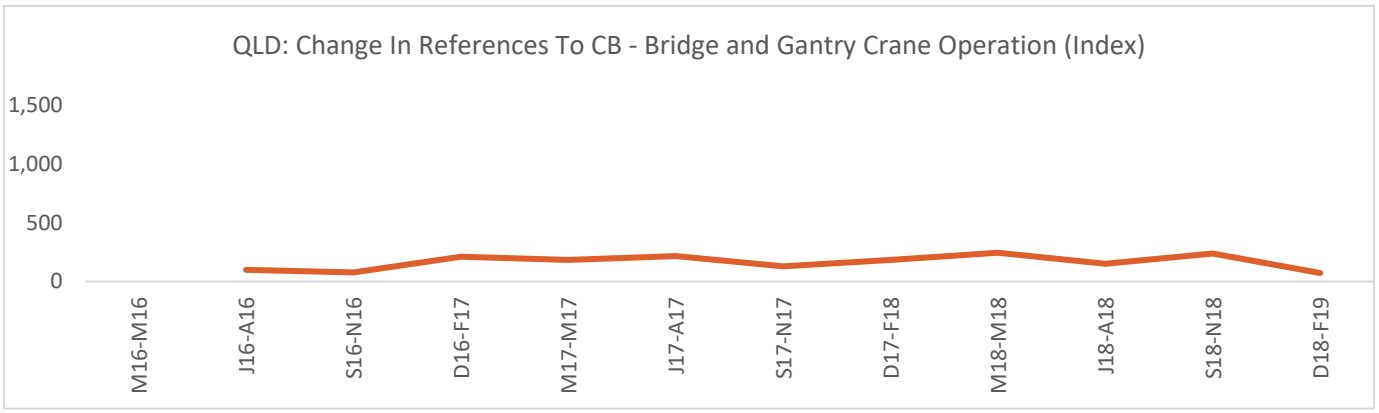
Total References: 575

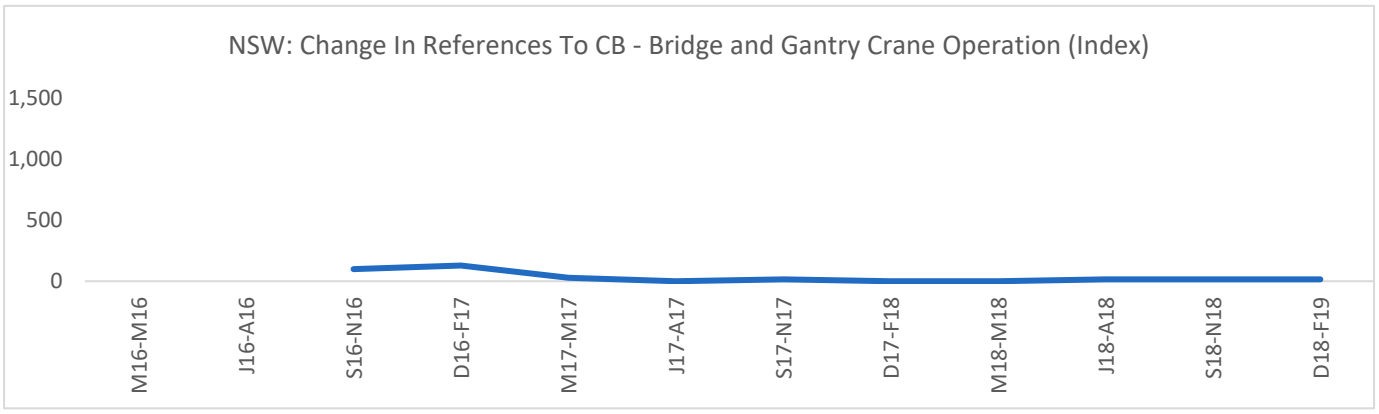


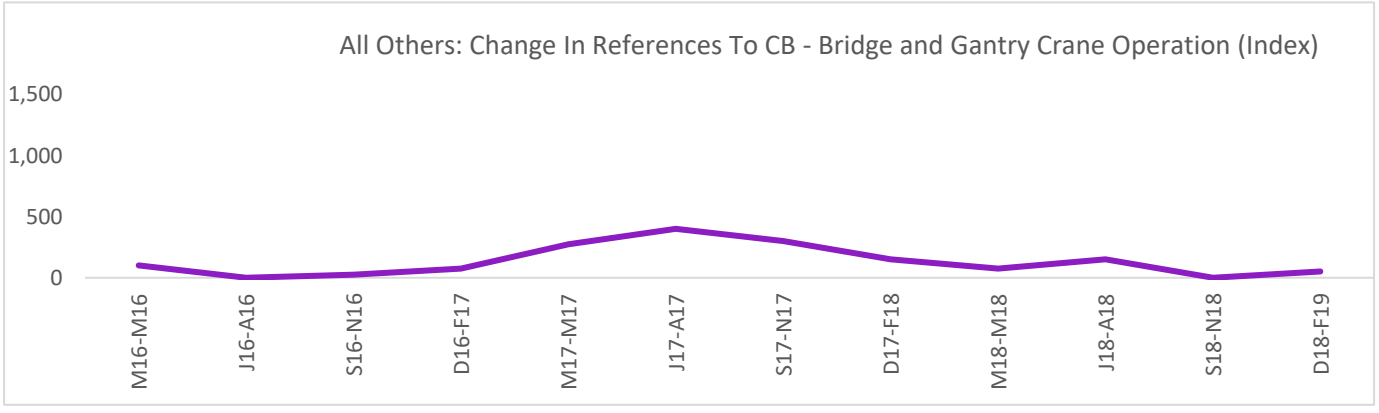


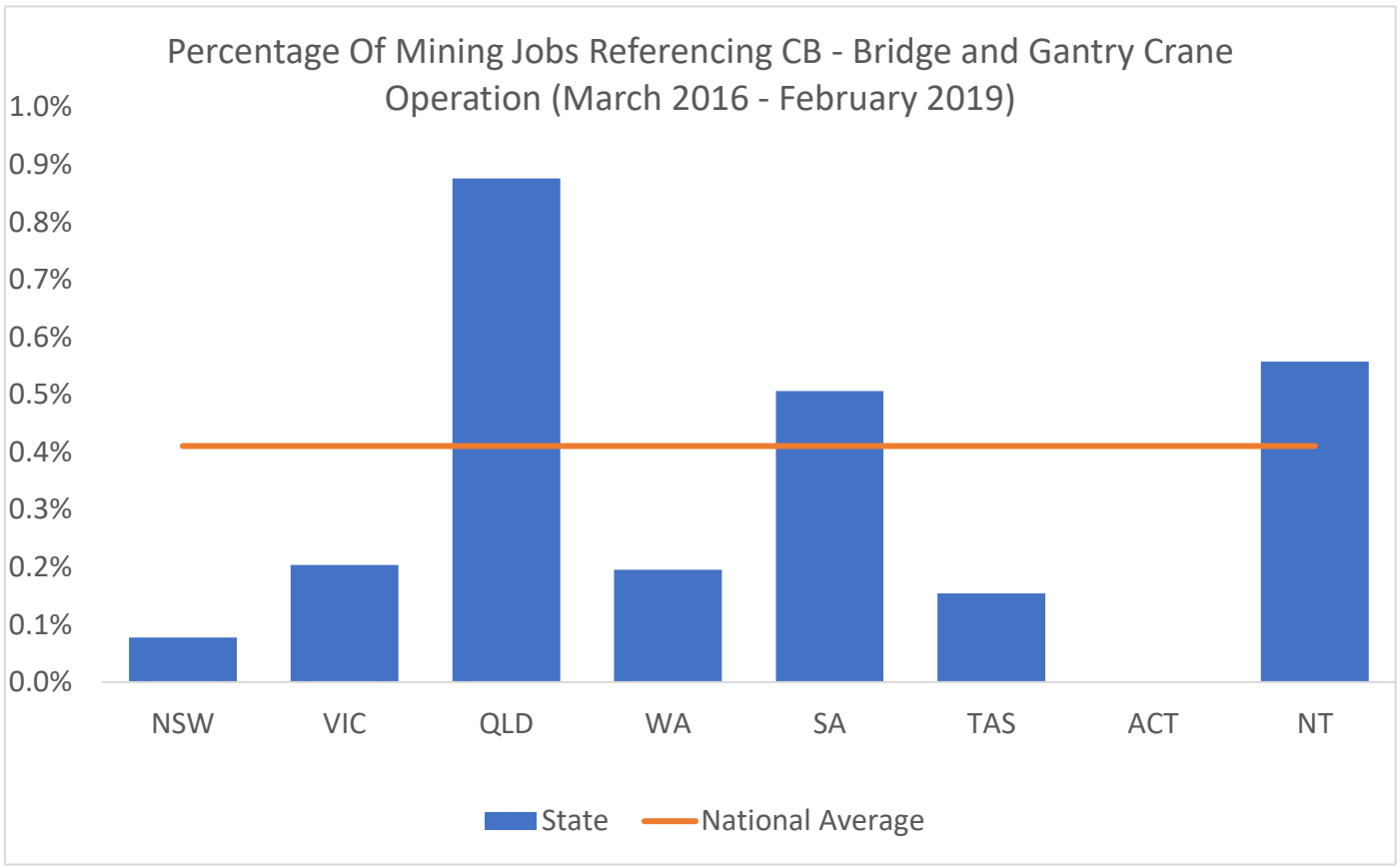
*Index: March - May 2016 = 100

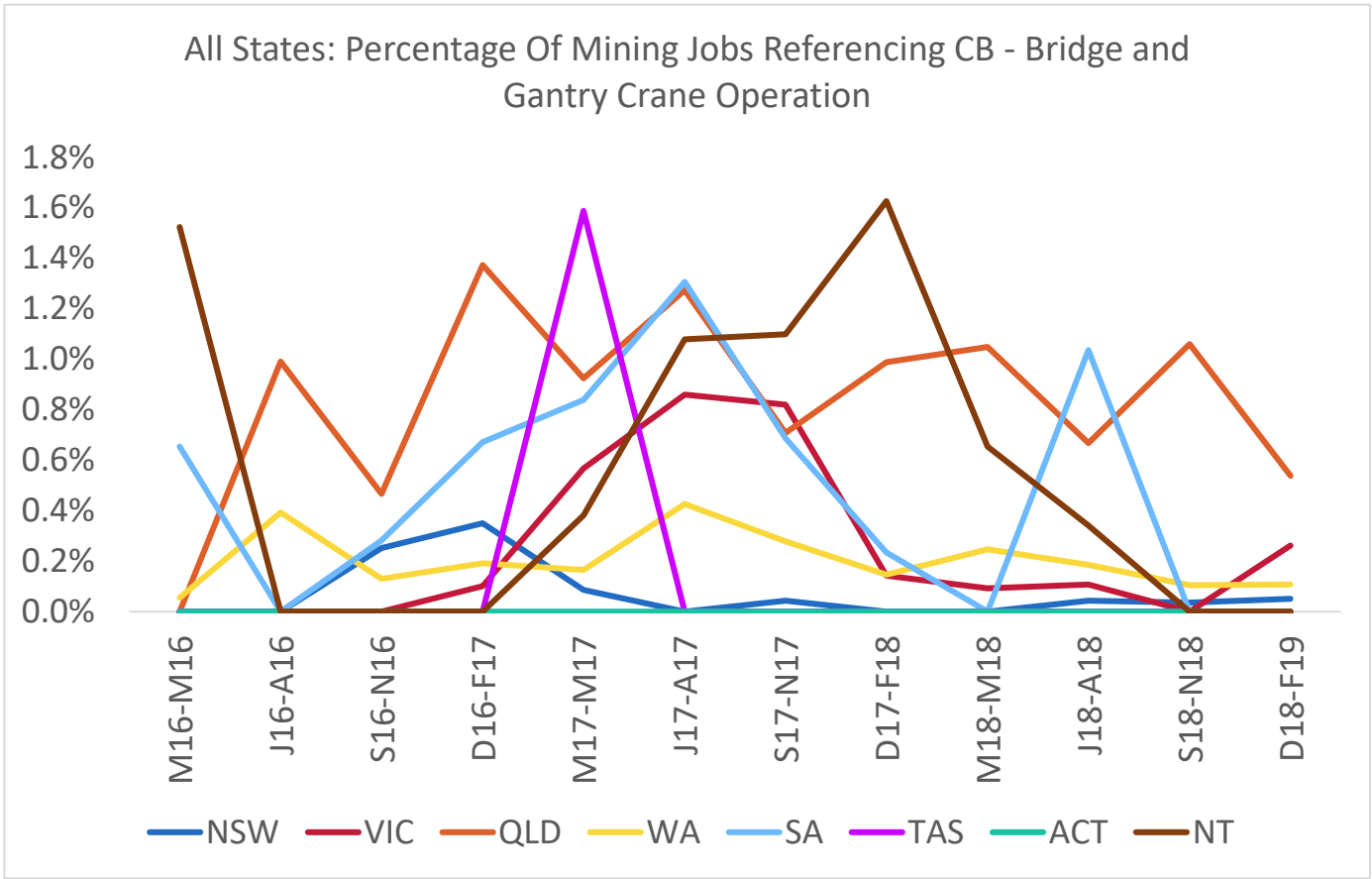

WA: Change In References To CB - Bridge and Gantry Crane Operation (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

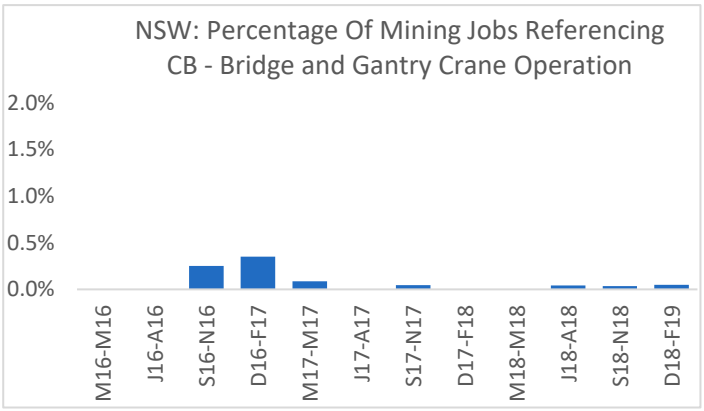

QLD: Change In References To CB - Bridge and Gantry Crane Operation (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

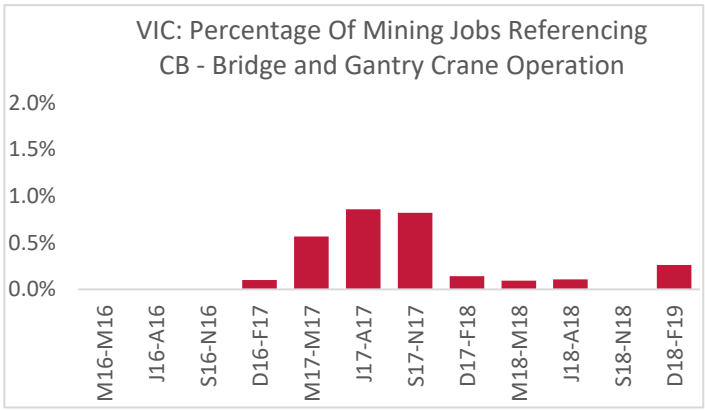

NSW: Change In References To CB - Bridge and Gantry Crane Operation (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

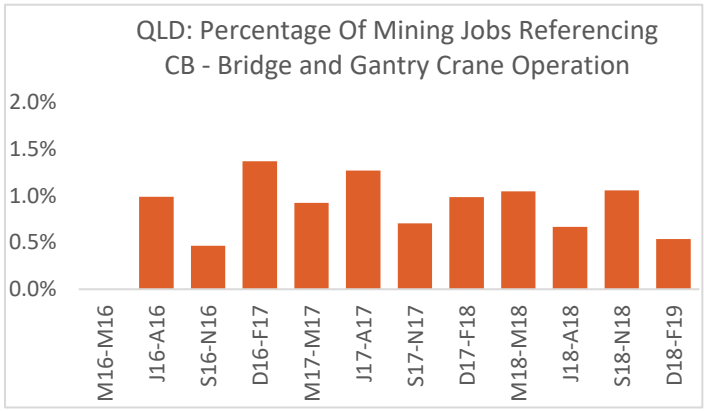

All Others: Change In References To CB - Bridge and Gantry Crane Operation (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

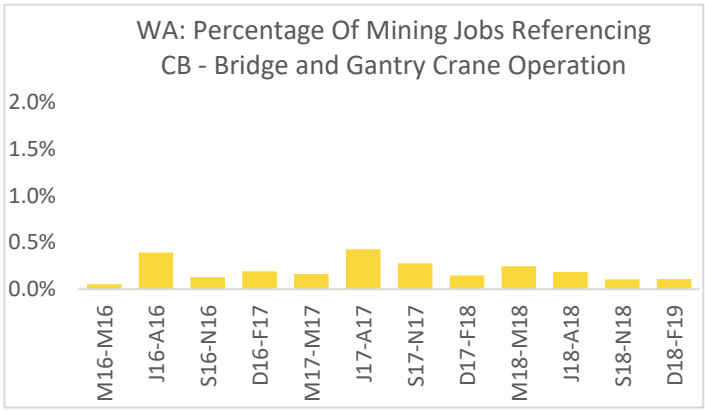

Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation (March 2016 - February 2019)
1.0%
0.9%
0.8%
0.7%
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

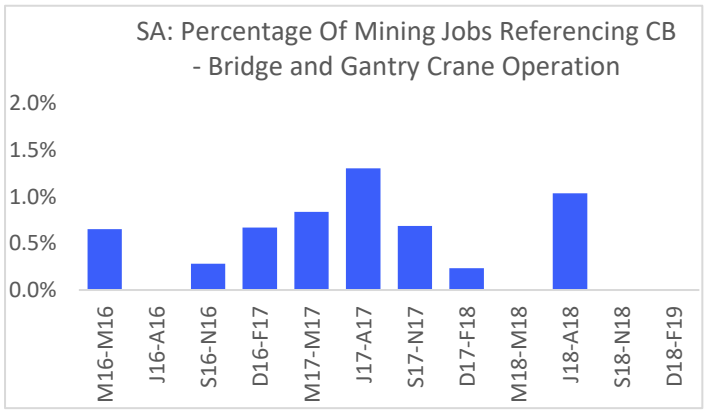

All States: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
1.8%
1.6%
1.4%
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

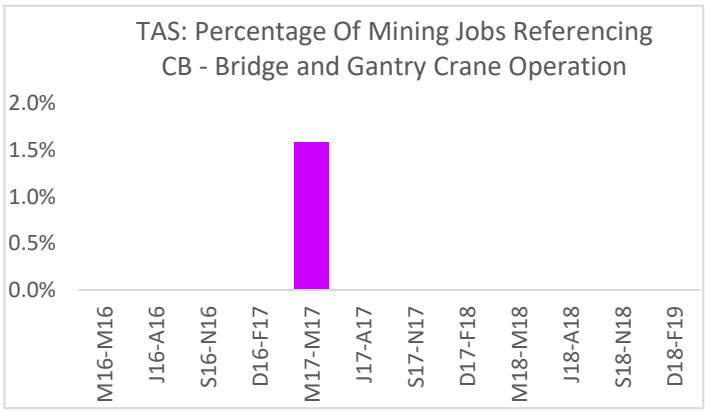

NSW: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

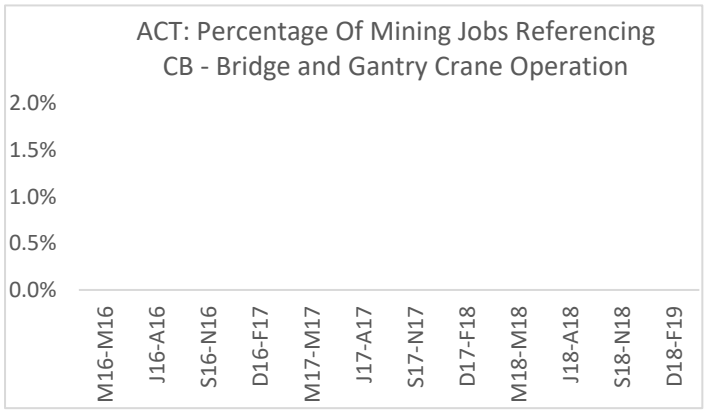

VIC: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

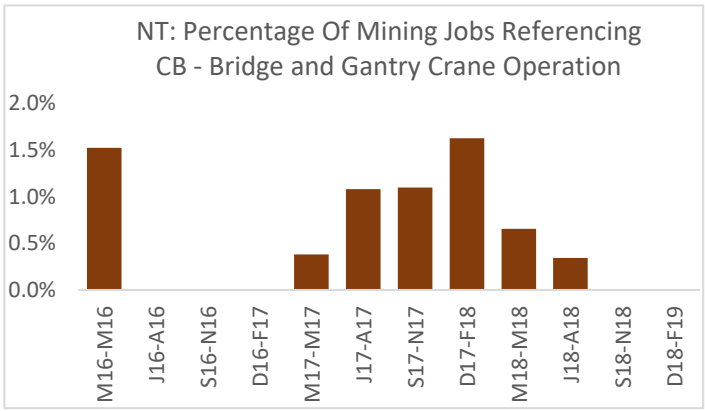

QLD: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

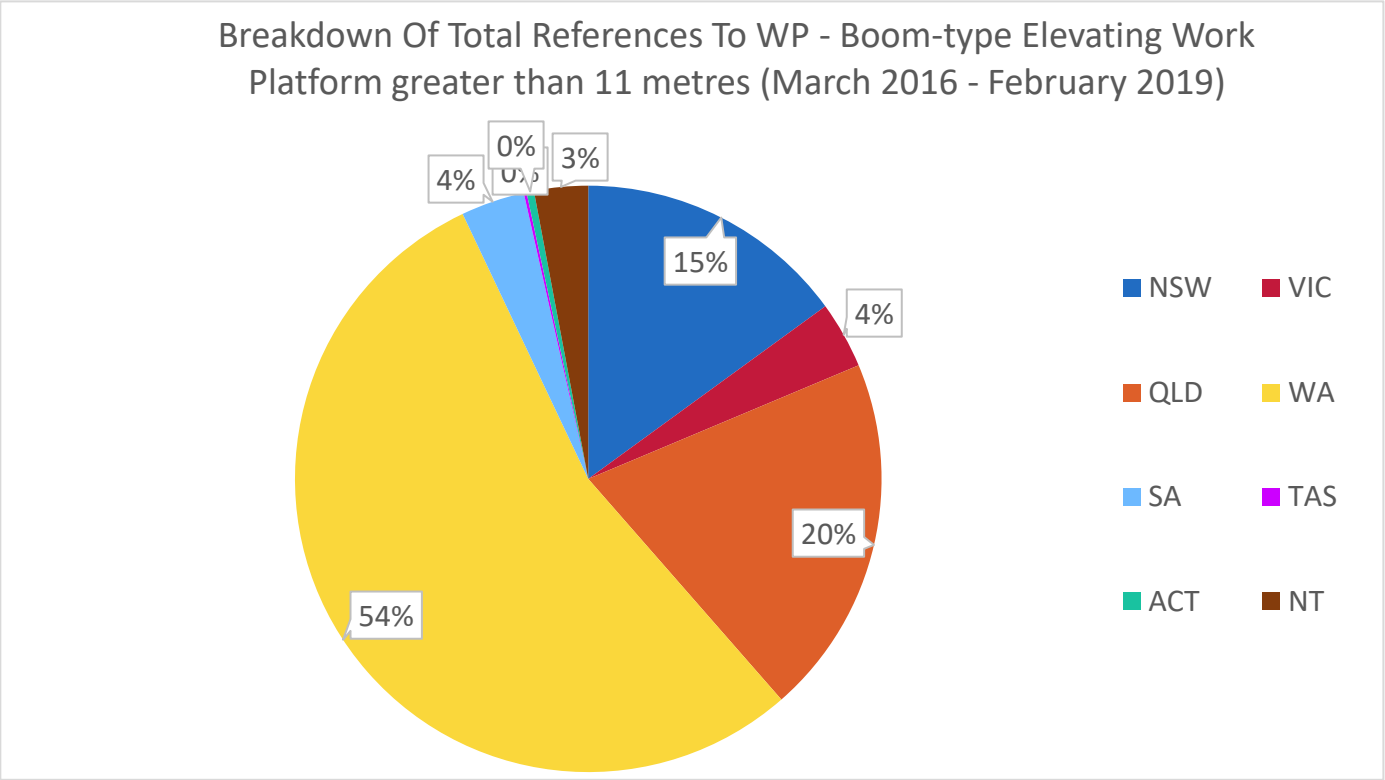

TAS: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

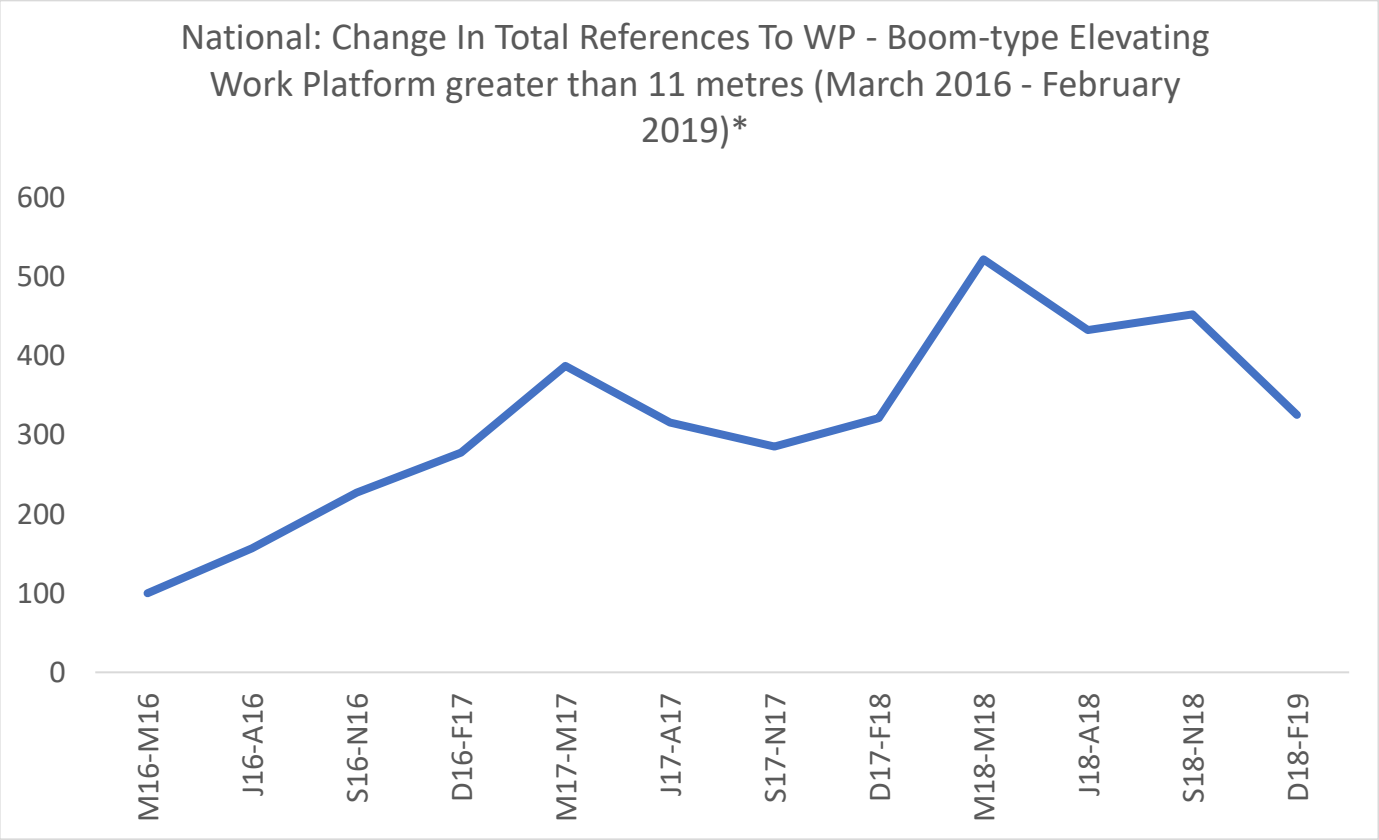

ACT: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing CB - Bridge and Gantry Crane Operation
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

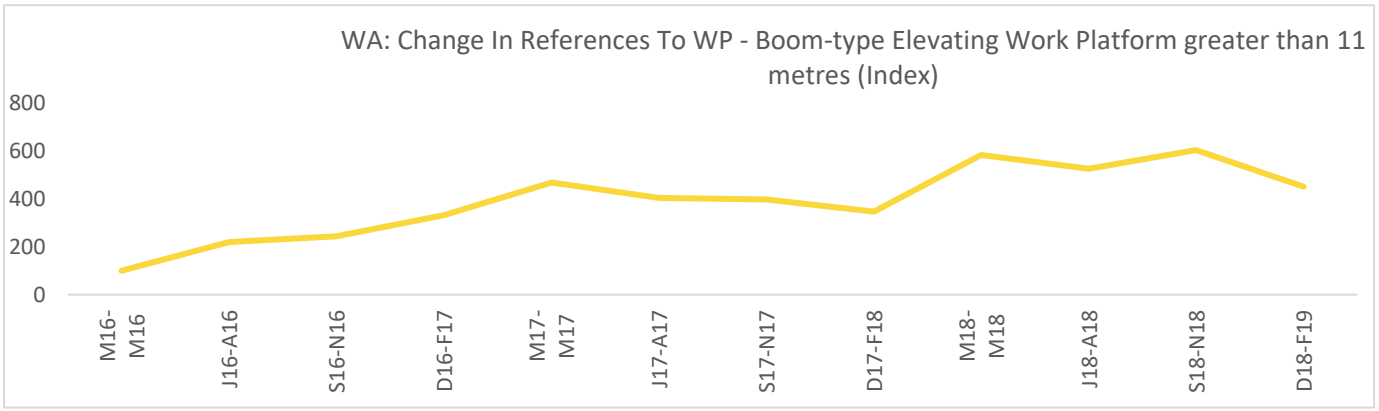
WP - Boom-type Elevating Work Platform greater than 11 metres

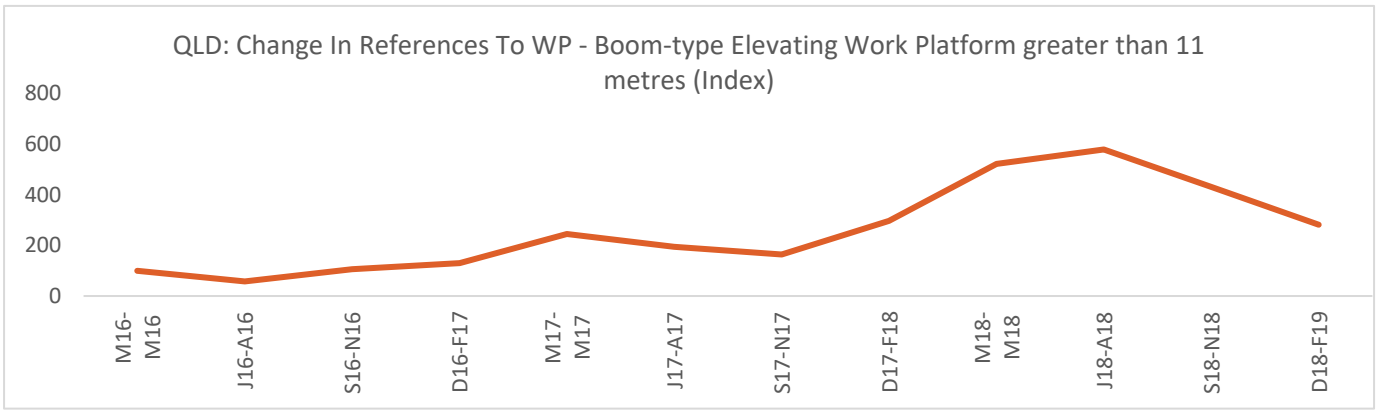
Total References: 5480

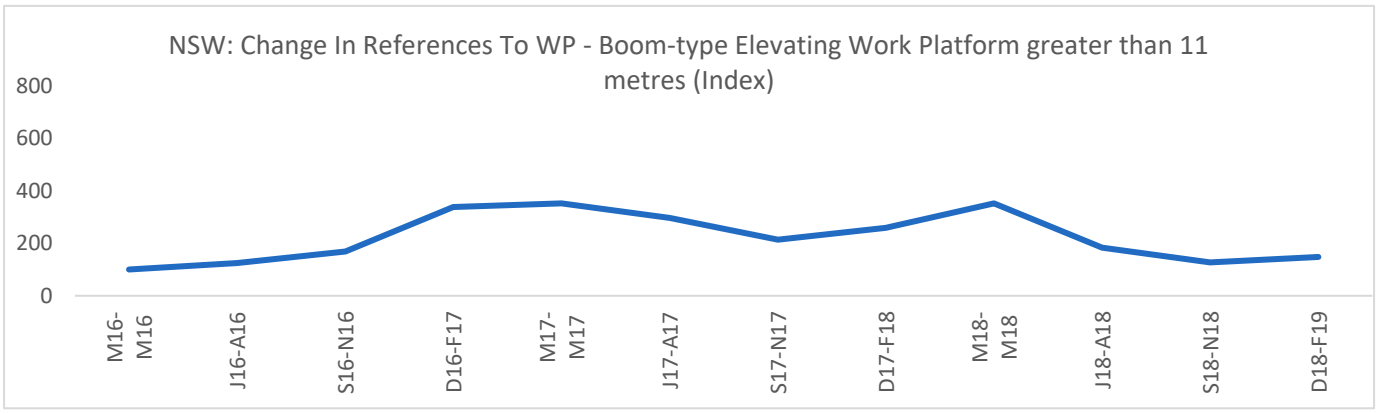


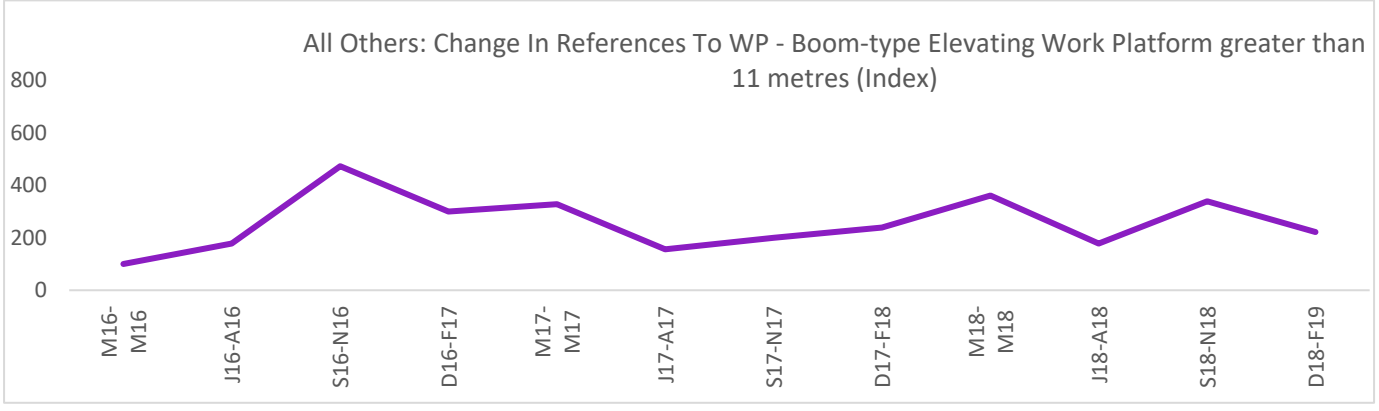


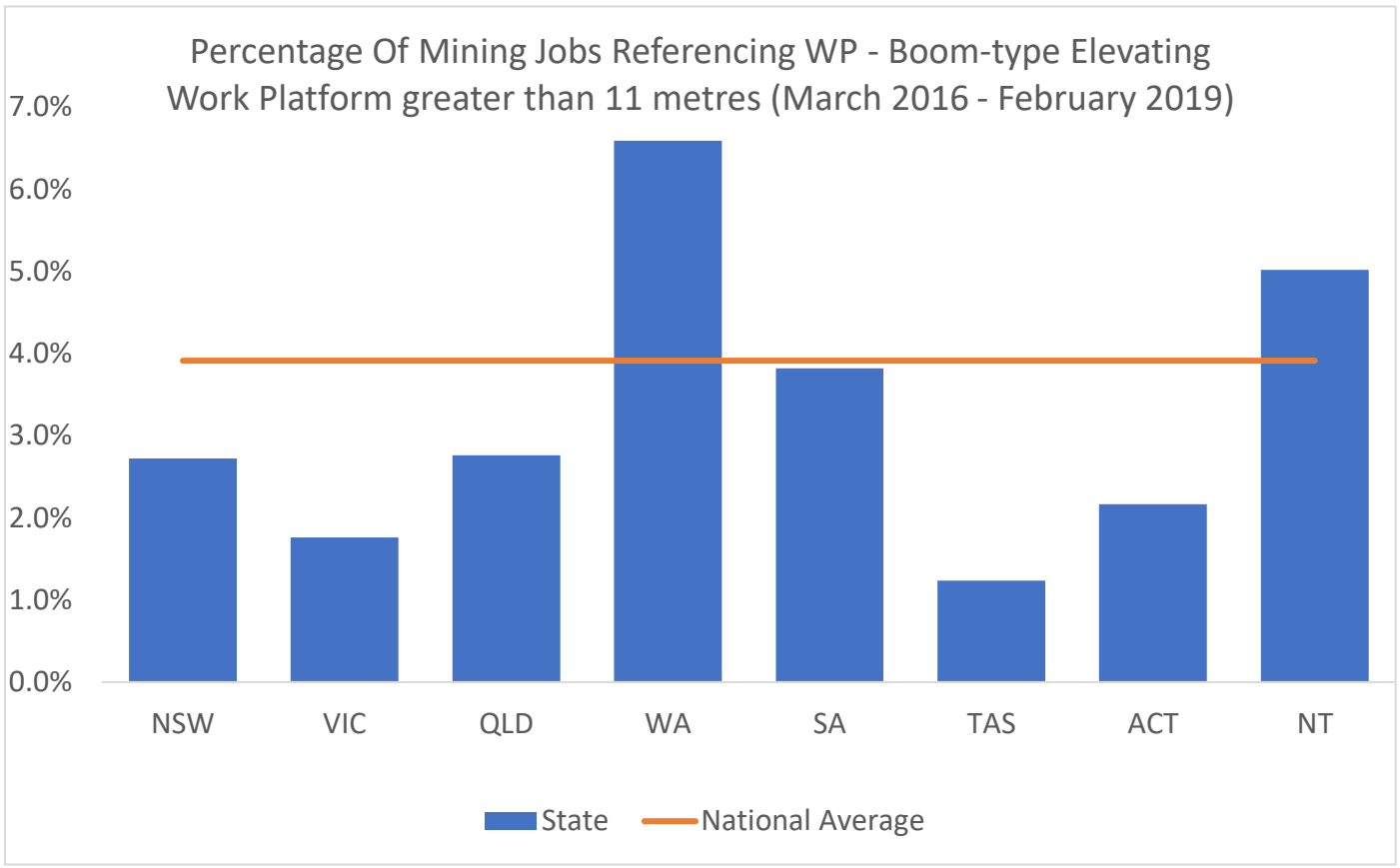
*Index: March - May 2016 = 100

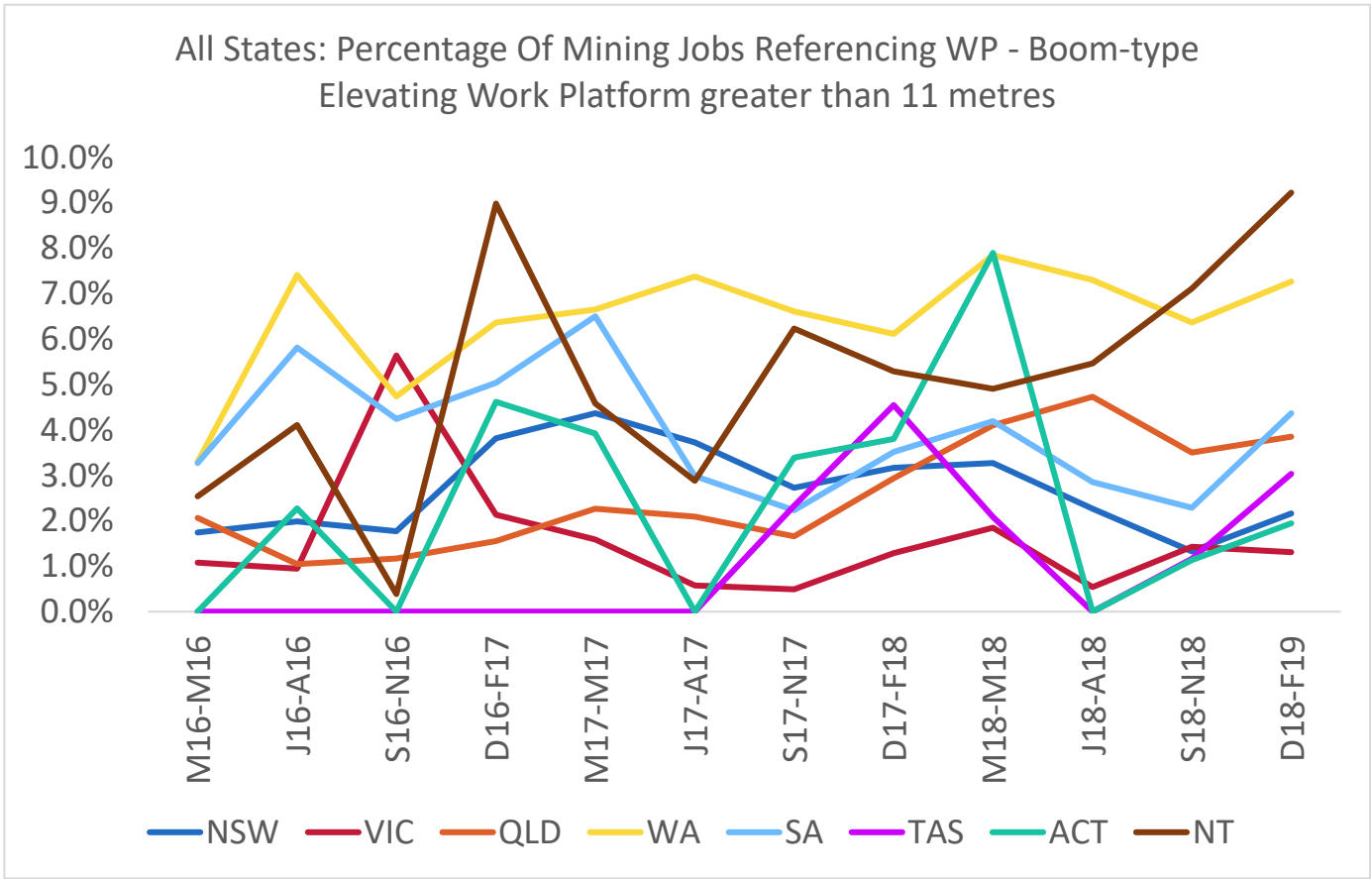

WA: Change In References To WP - Boom-type Elevating Work Platform greater than 11 metres (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

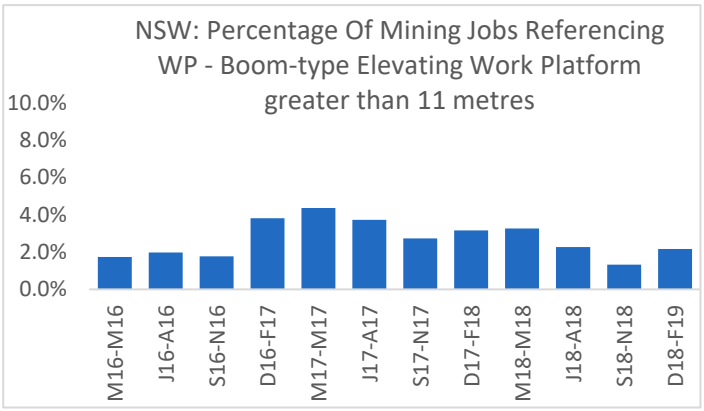

QLD: Change In References To WP - Boom-type Elevating Work Platform greater than 11 metres (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

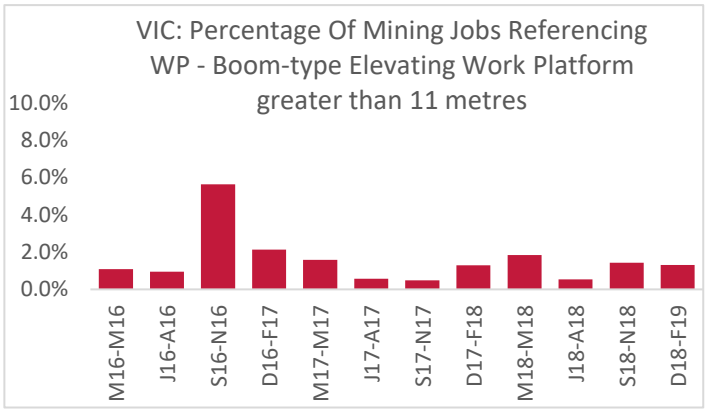

NSW: Change In References To WP - Boom-type Elevating Work Platform greater than 11 metres (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

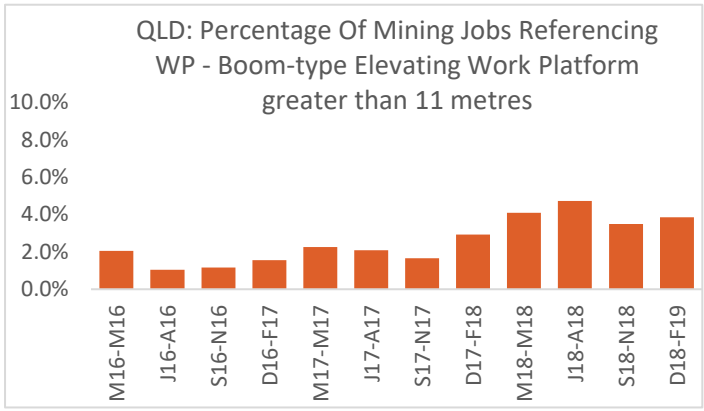

All Others: Change In References To WP - Boom-type Elevating Work Platform greater than 11 metres (Index)
800
600
400
200
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

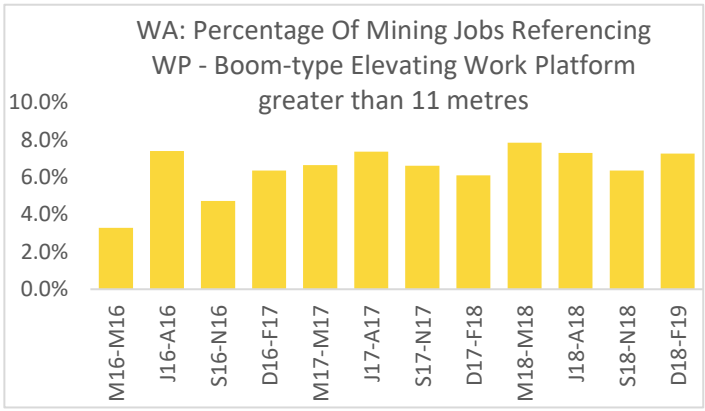

Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres (March 2016 - February 2019)
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

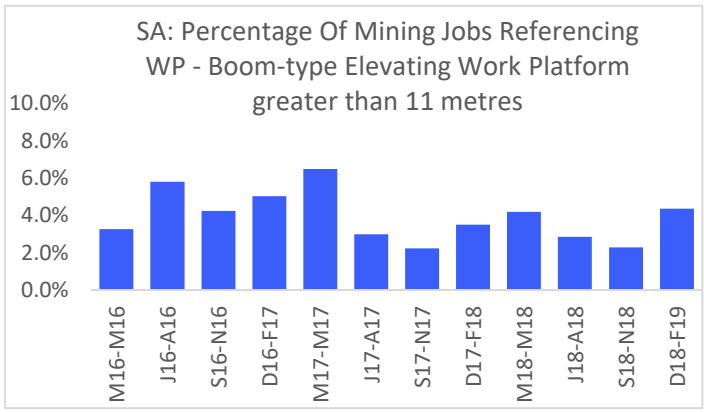

All States: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
9.0%
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

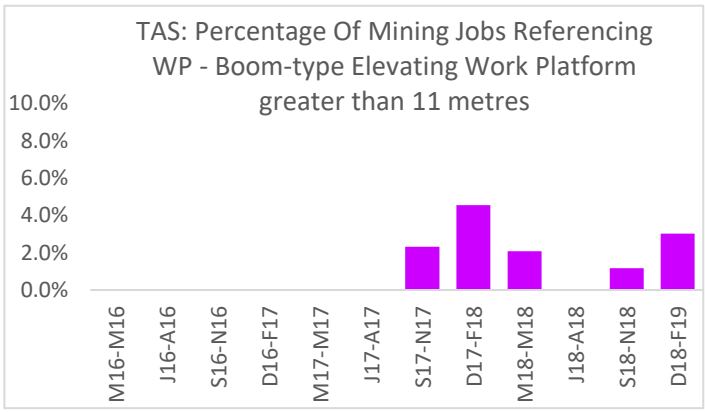

NSW: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

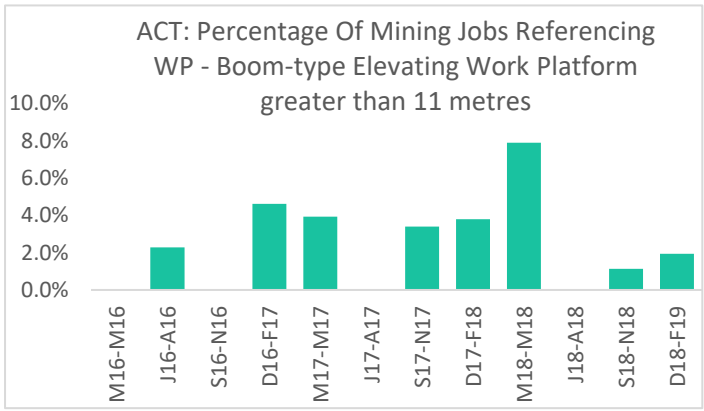

VIC: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

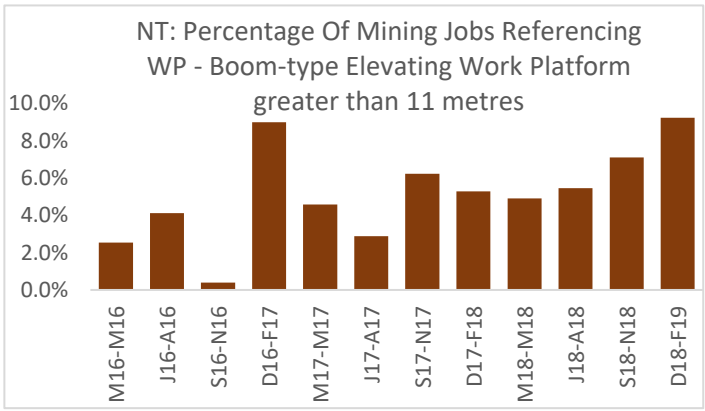

QLD: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

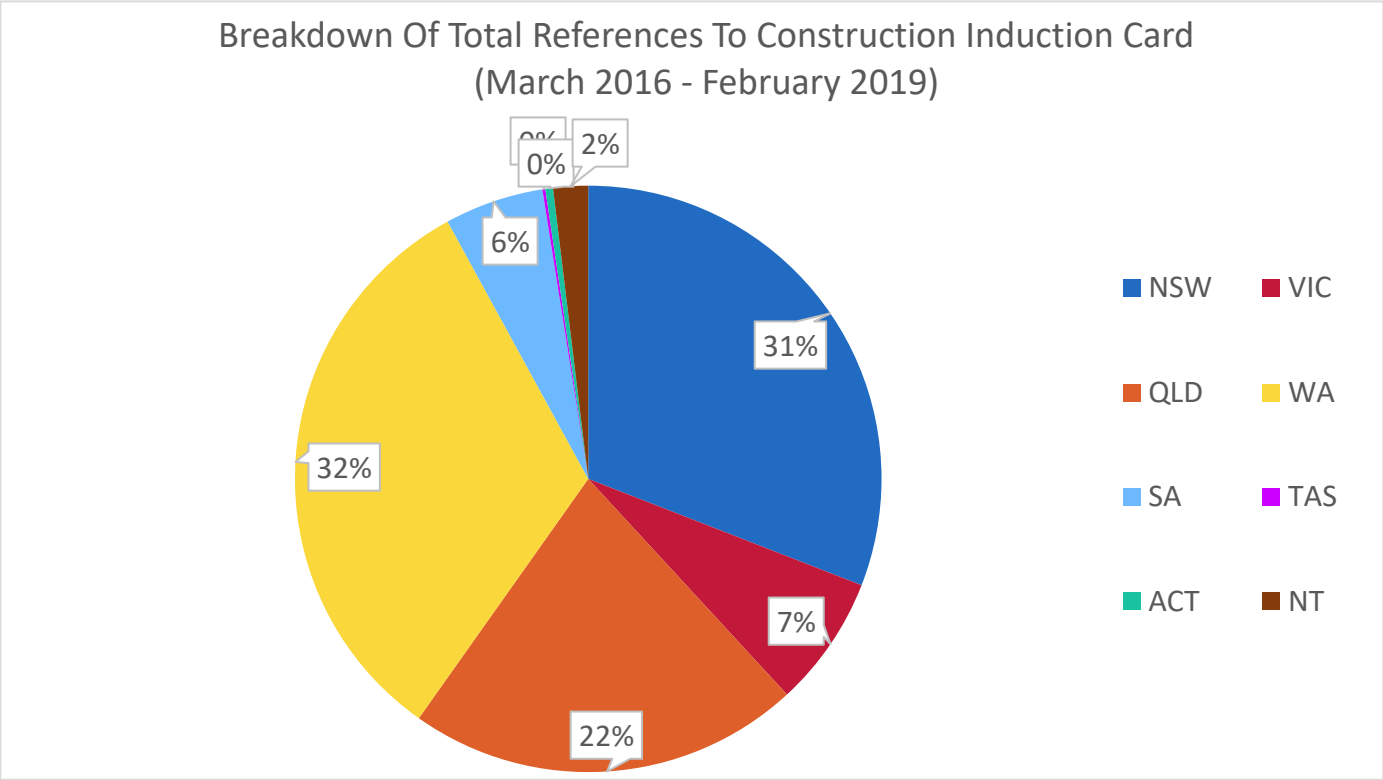

TAS: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

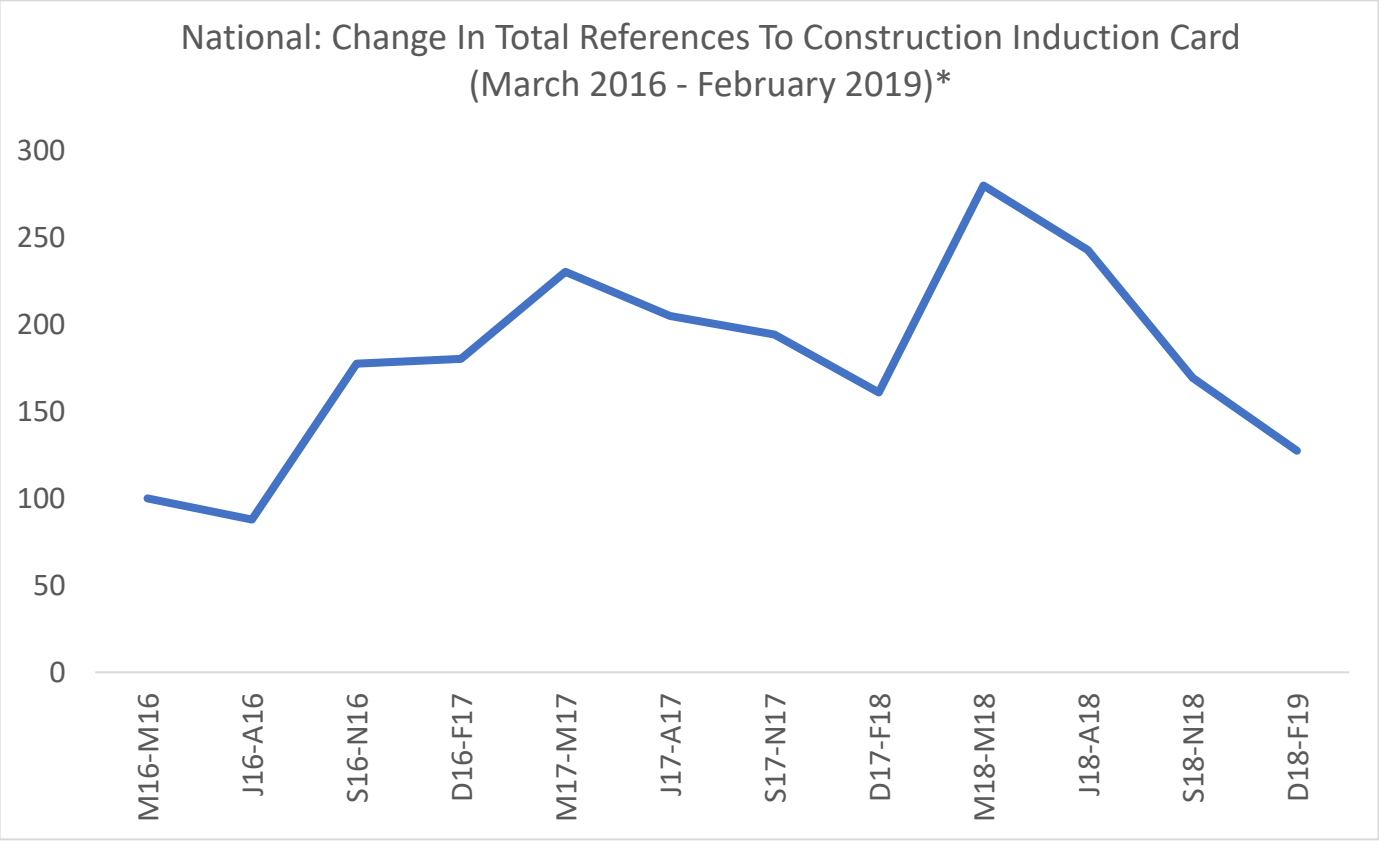

ACT: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing WP - Boom-type Elevating Work Platform greater than 11 metres
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

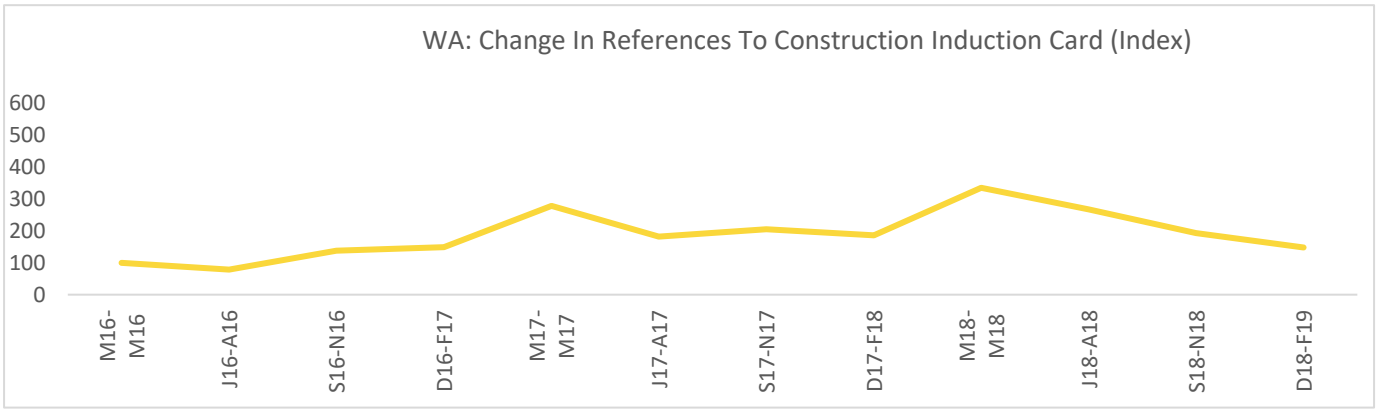
Construction Induction Card

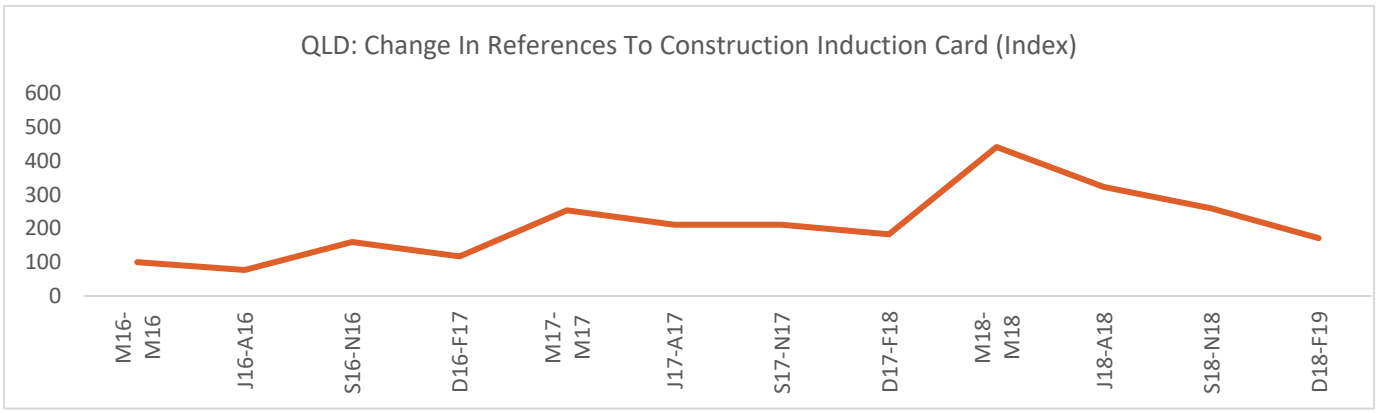
Total References: 8563

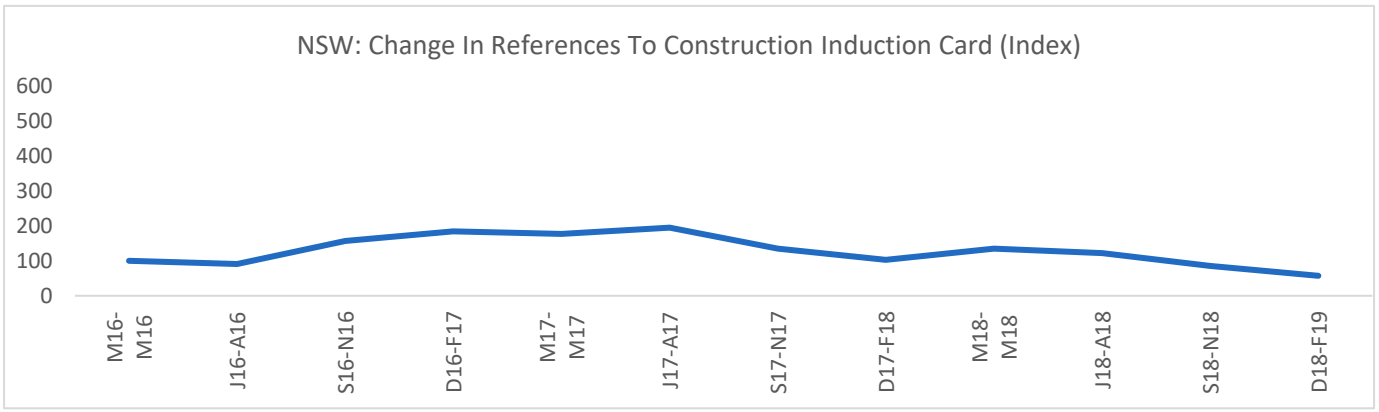


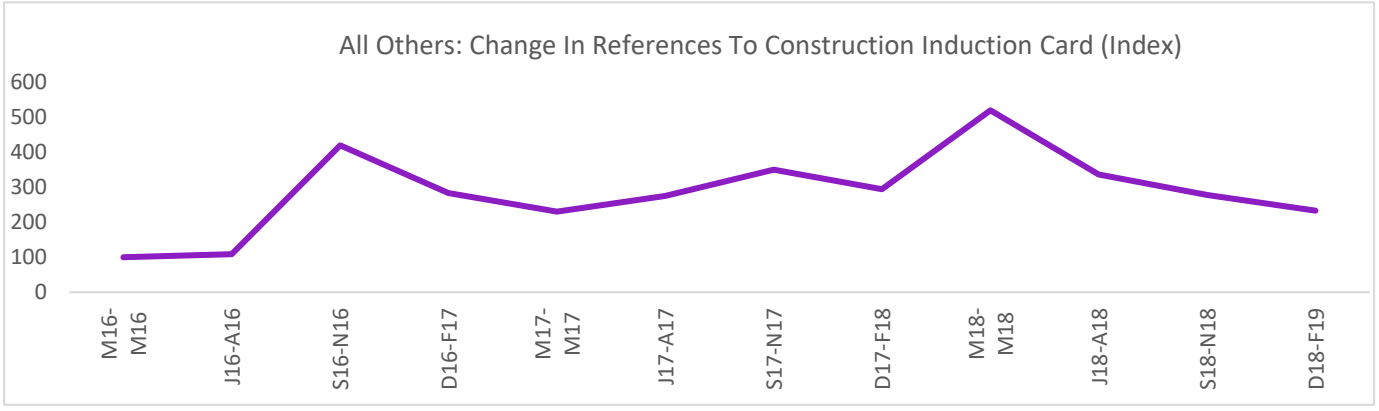


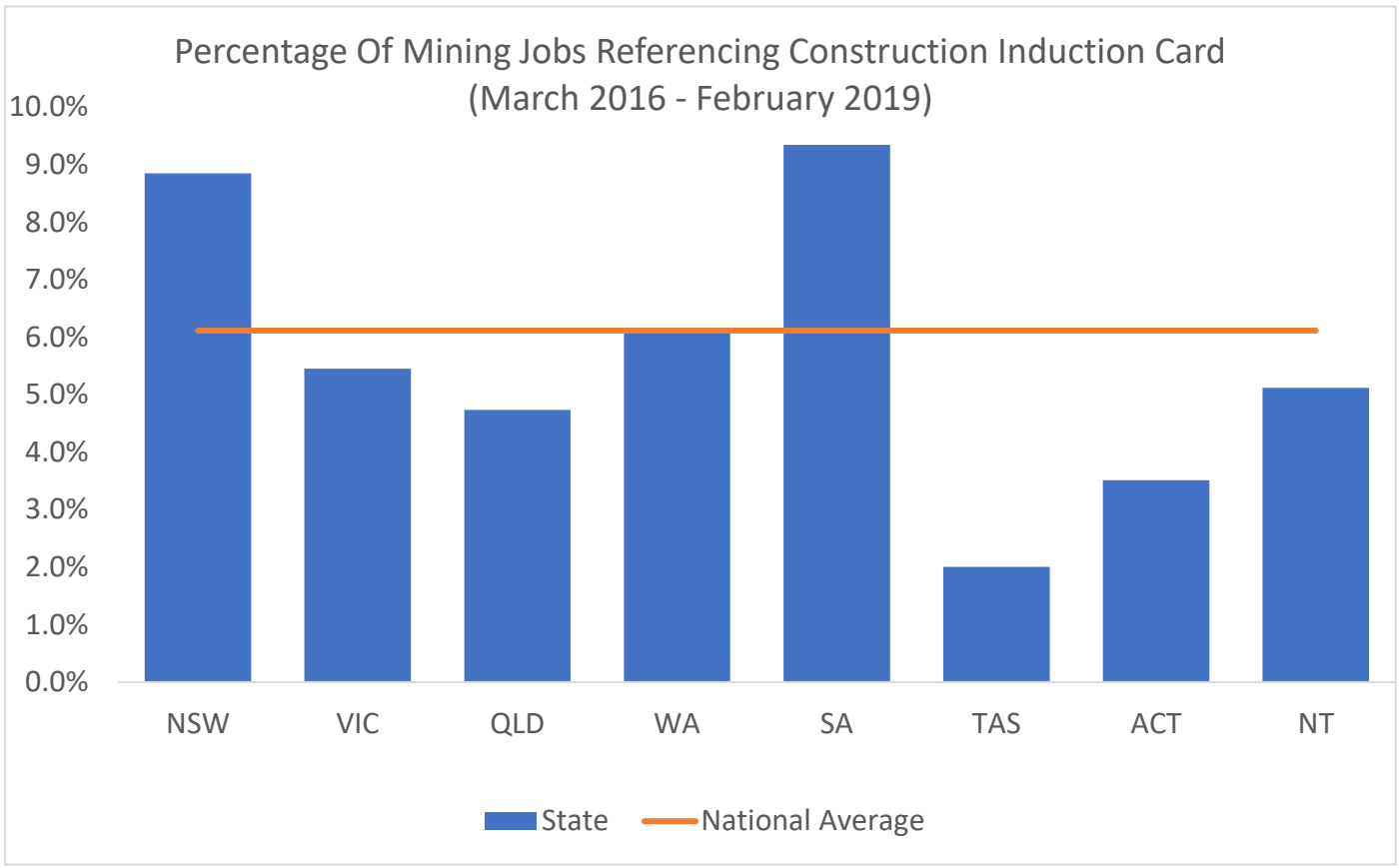
*Index: March - May 2016 = 100

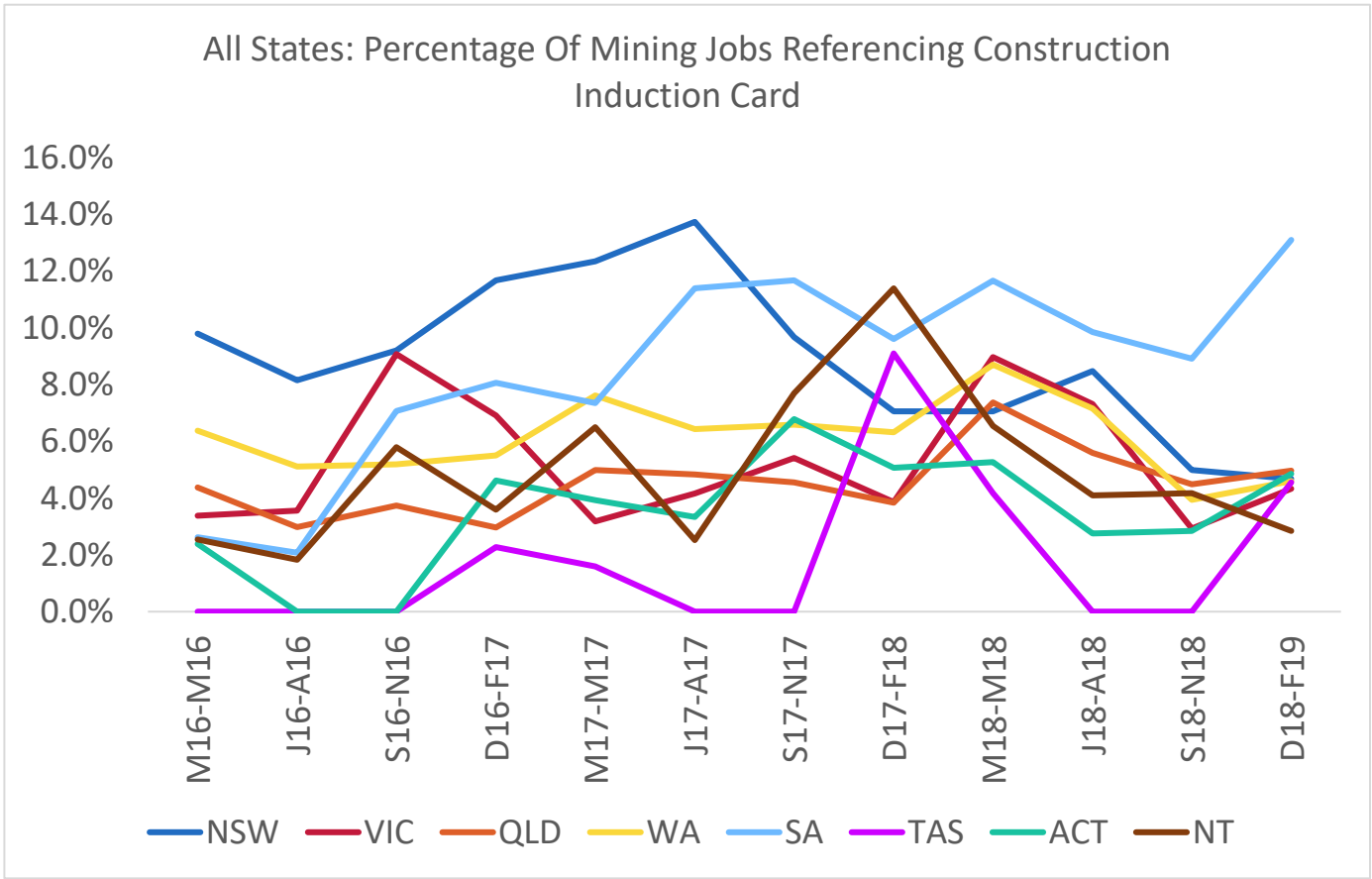

WA: Change In References To Construction Induction Card (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

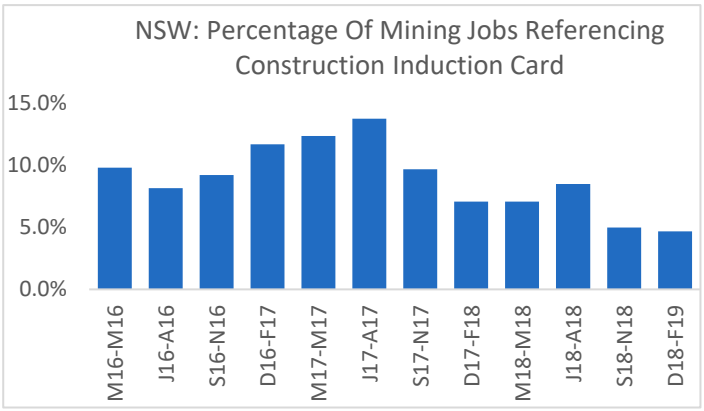

QLD: Change In References To Construction Induction Card (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

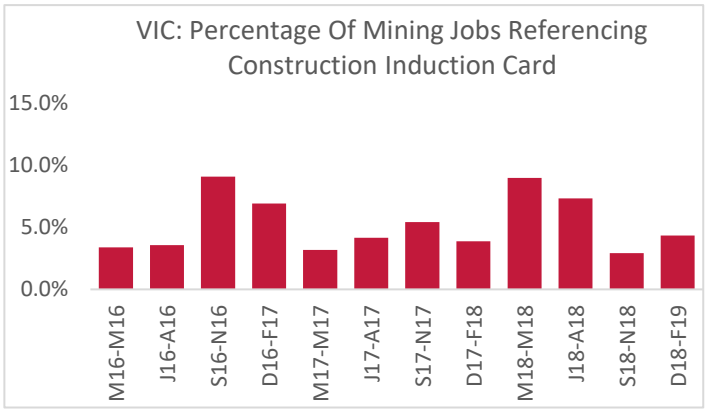

NSW: Change In References To Construction Induction Card (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

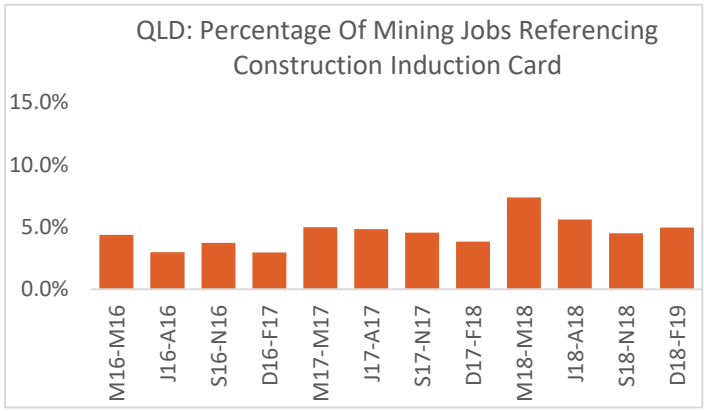

All Others: Change In References To Construction Induction Card (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

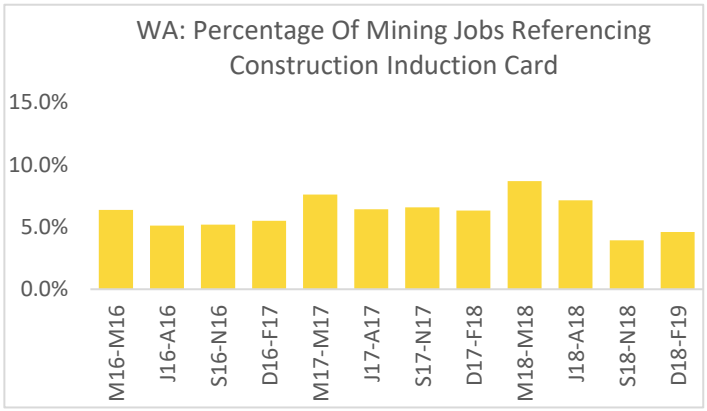

Percentage Of Mining Jobs Referencing Construction Induction Card
(March 2016 - February 2019)
10.0%
9.0%
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

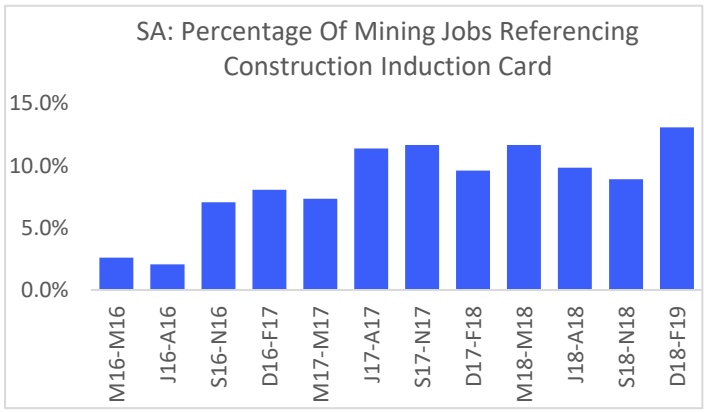

All States: Percentage Of Mining Jobs Referencing Construction Induction Card
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

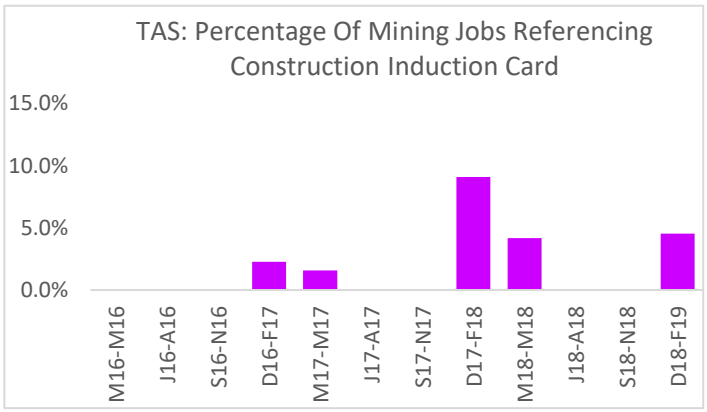

NSW: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

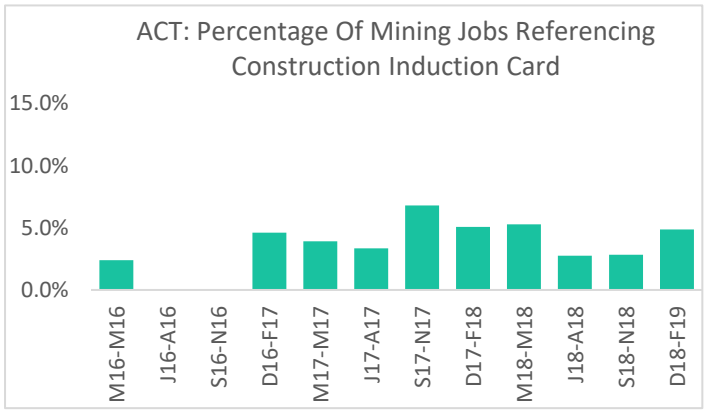

VIC: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

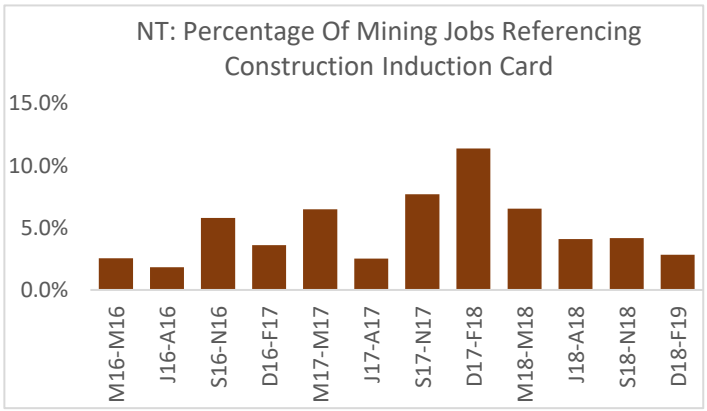

QLD: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

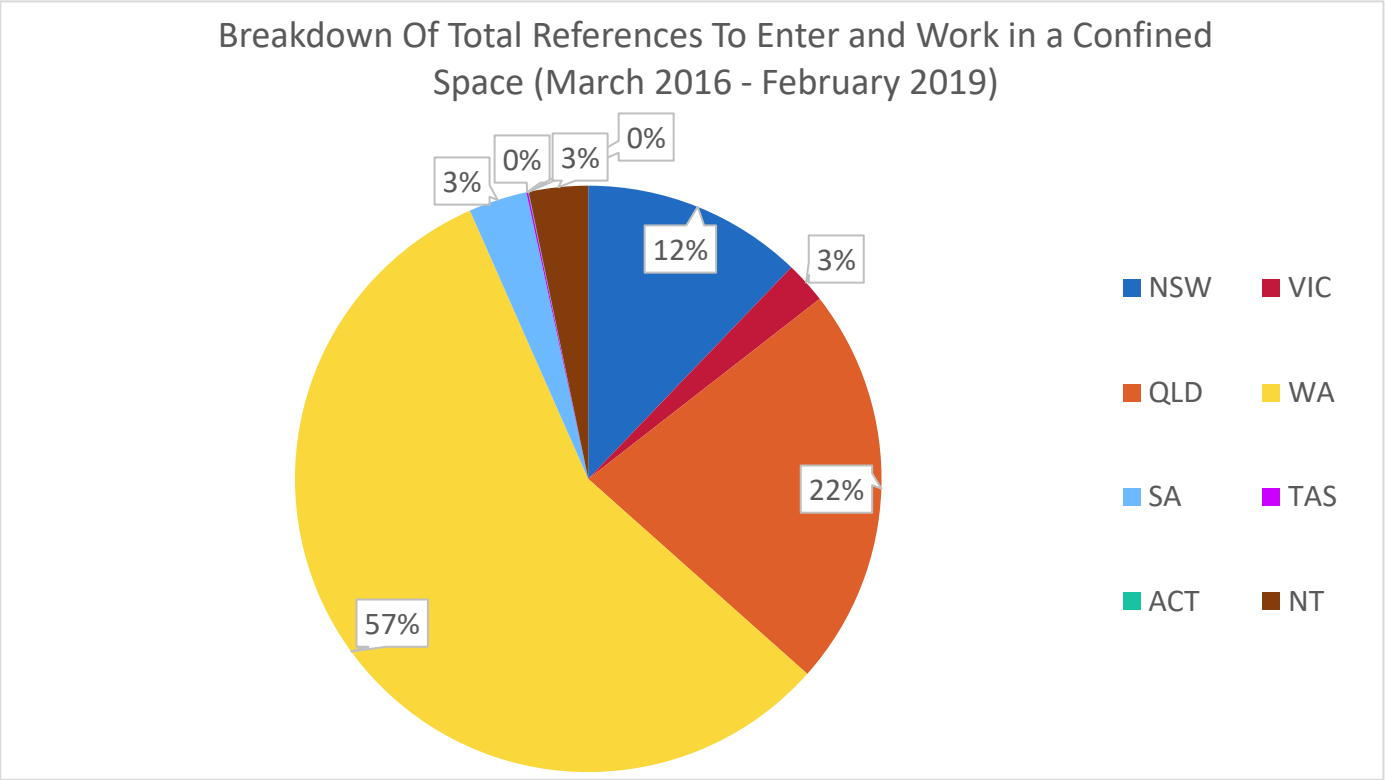

TAS: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

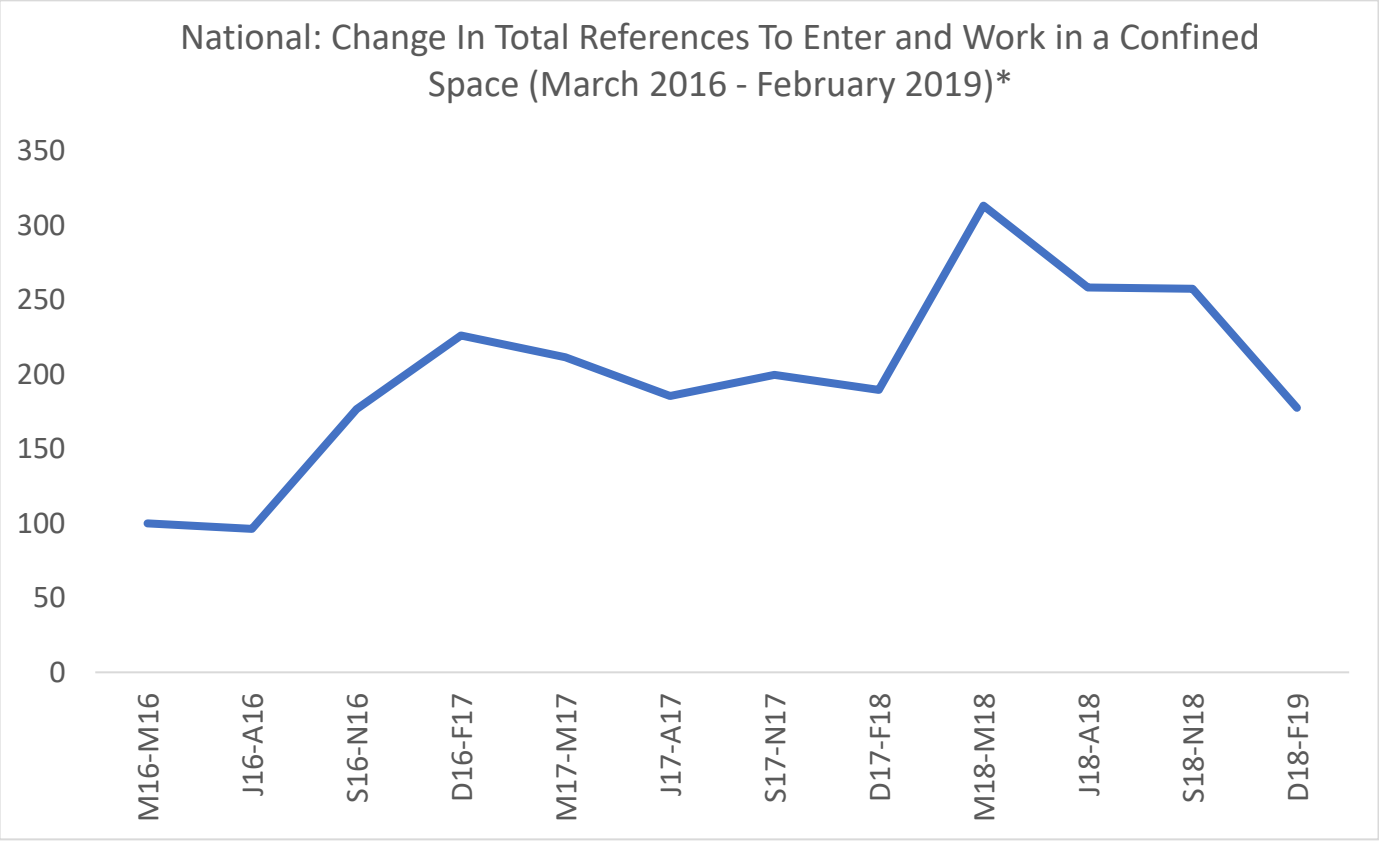

ACT: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing Construction Induction Card
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

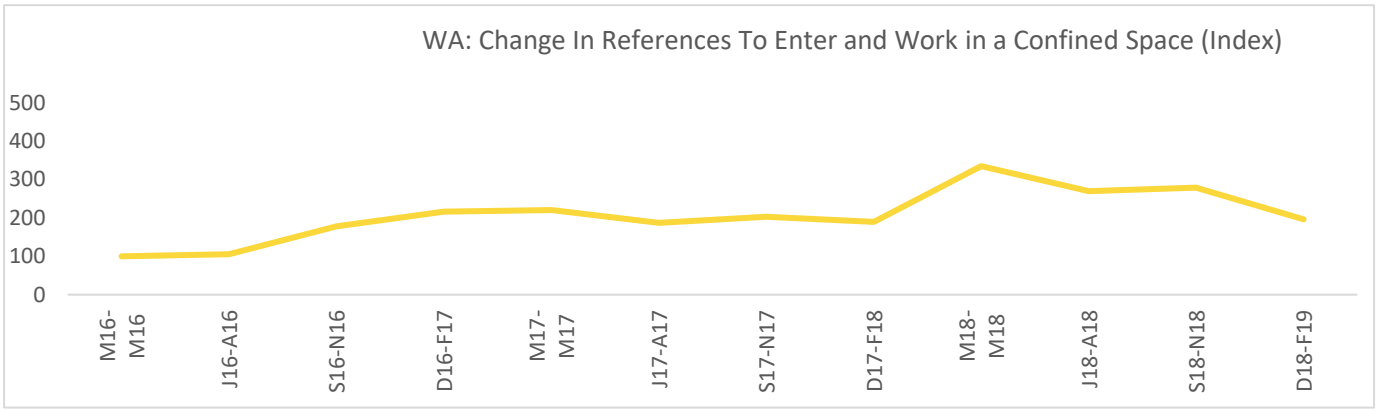
Enter and Work in a Confined Space

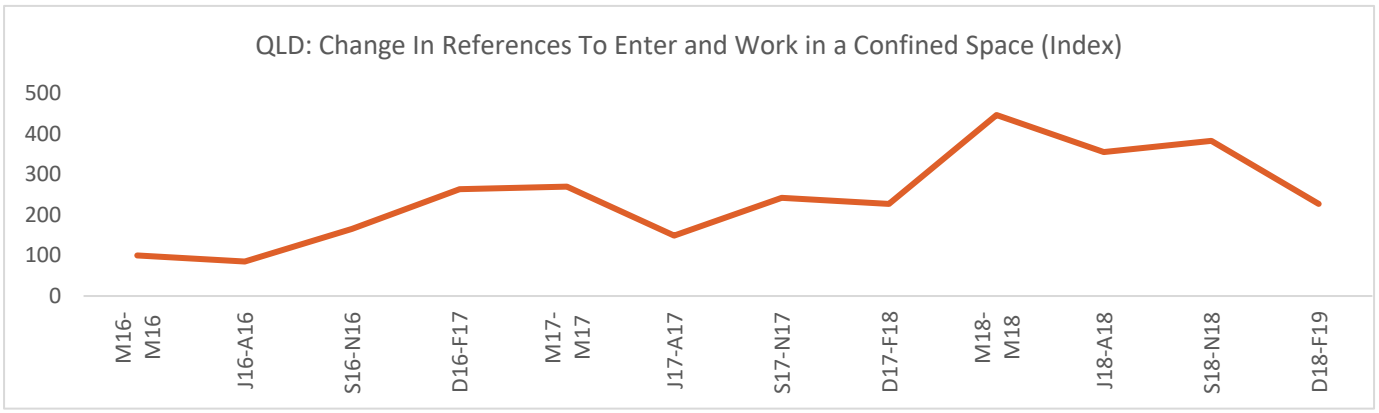
Total References: 6483

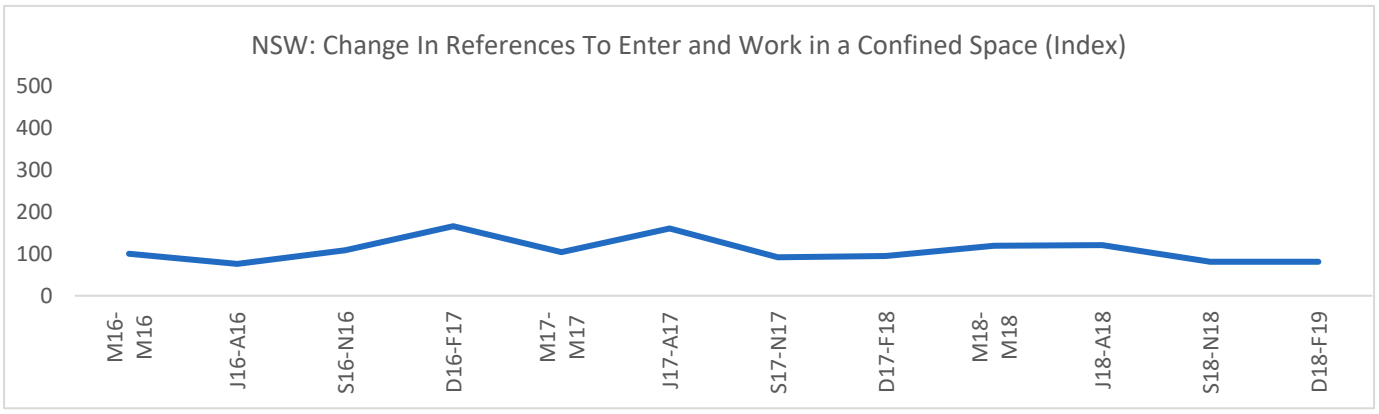


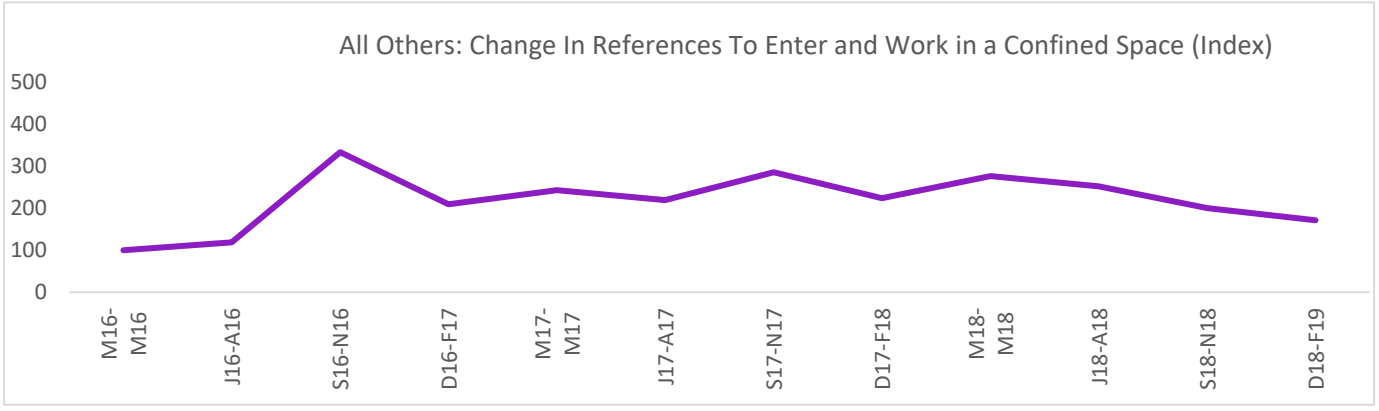


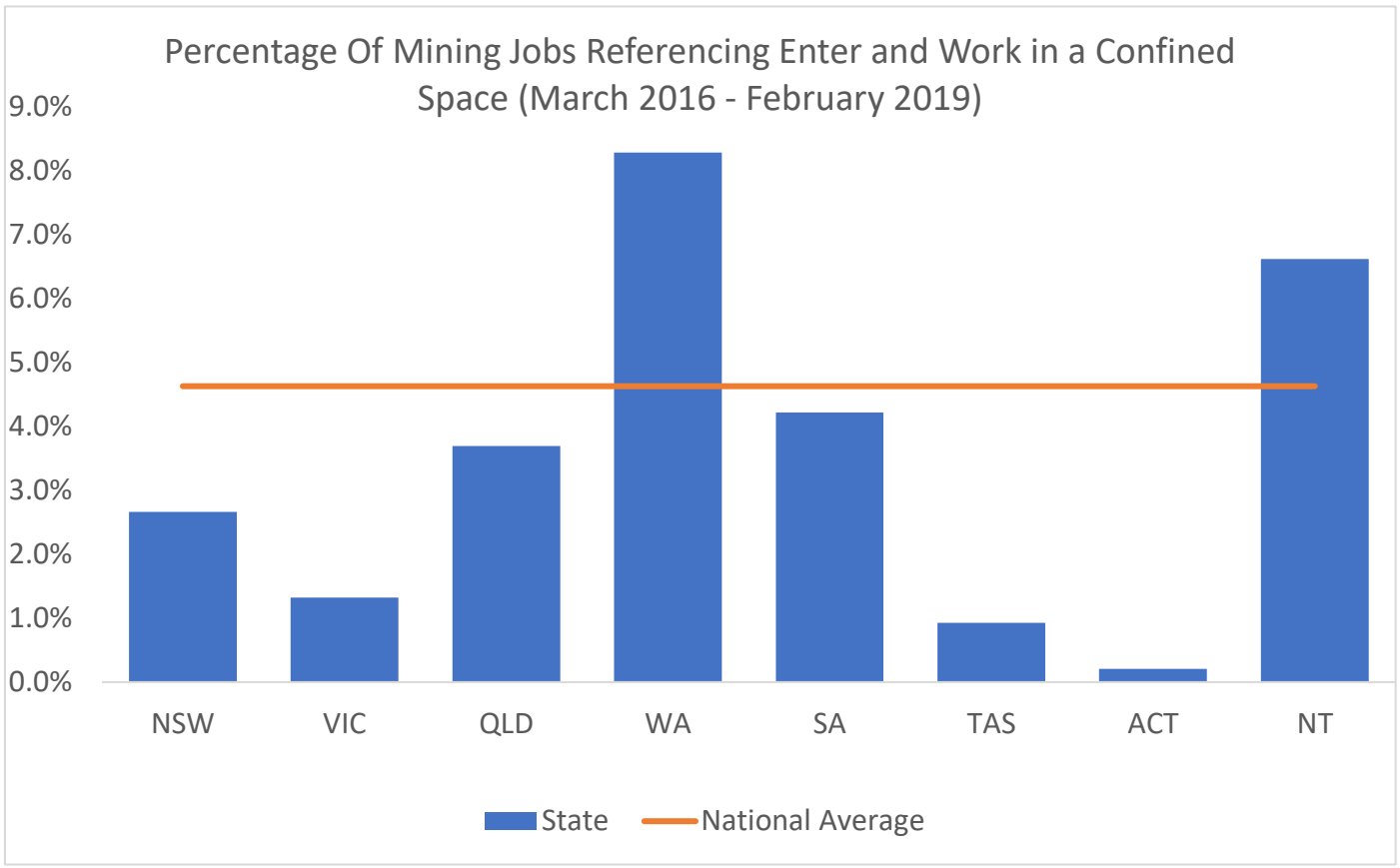
*Index: March - May 2016 = 100

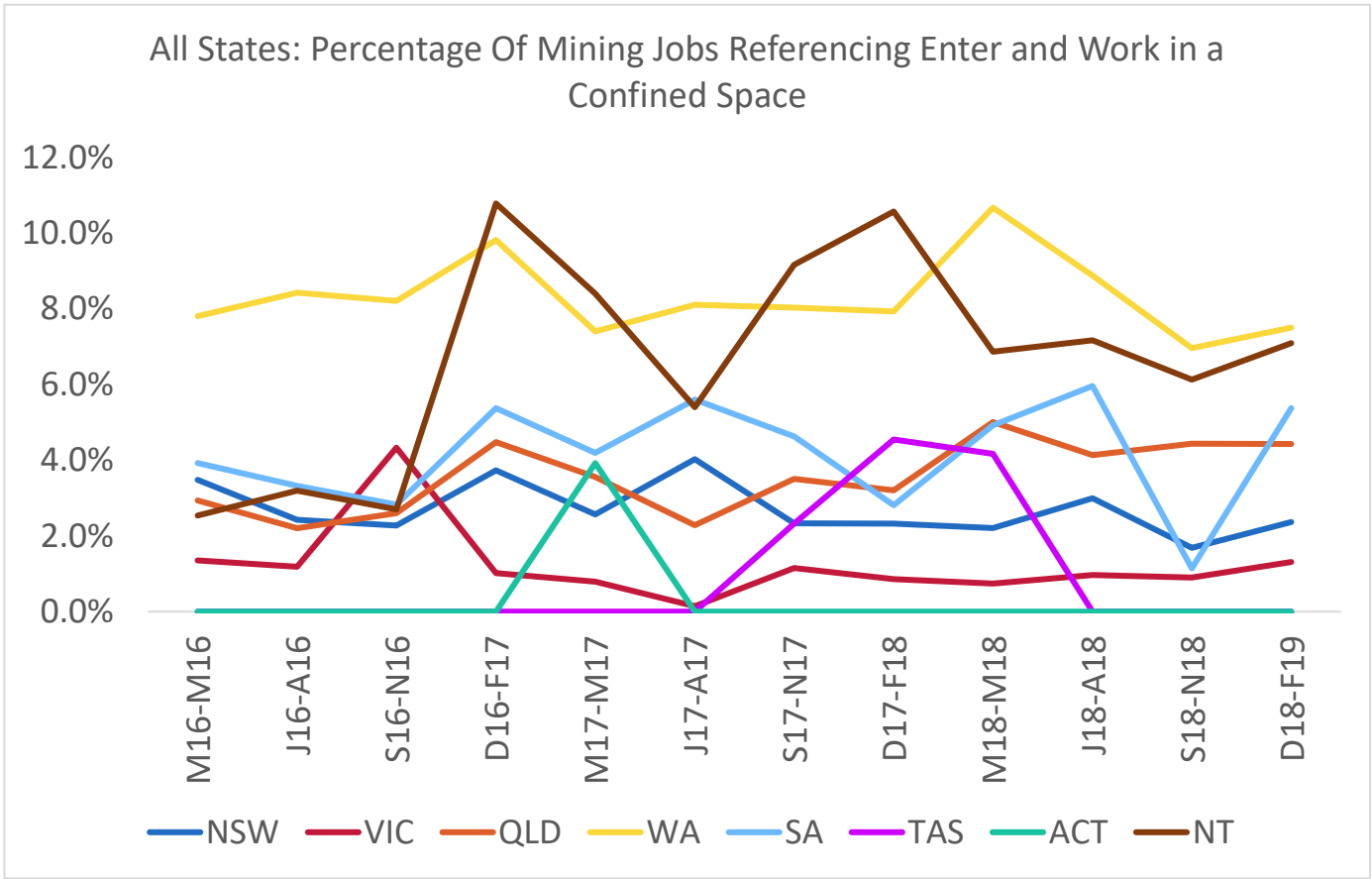

WA: Change In References To Enter and Work in a Confined Space (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

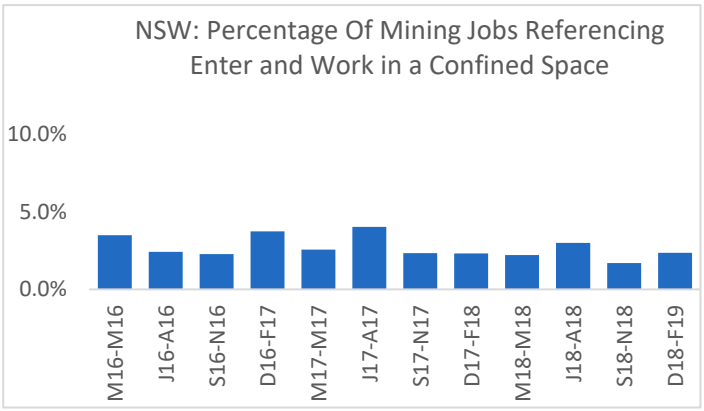

QLD: Change In References To Enter and Work in a Confined Space (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

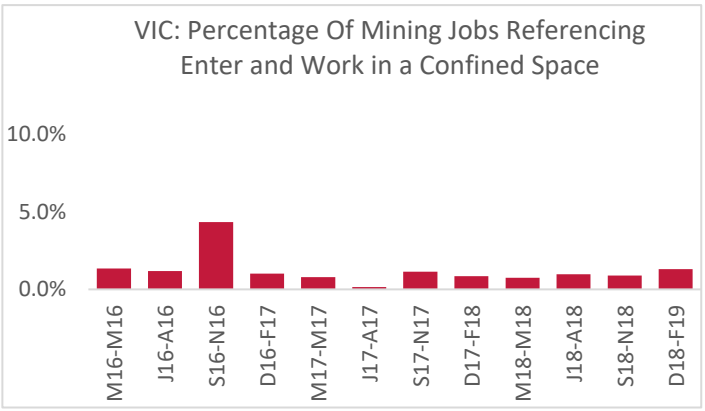

NSW: Change In References To Enter and Work in a Confined Space (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

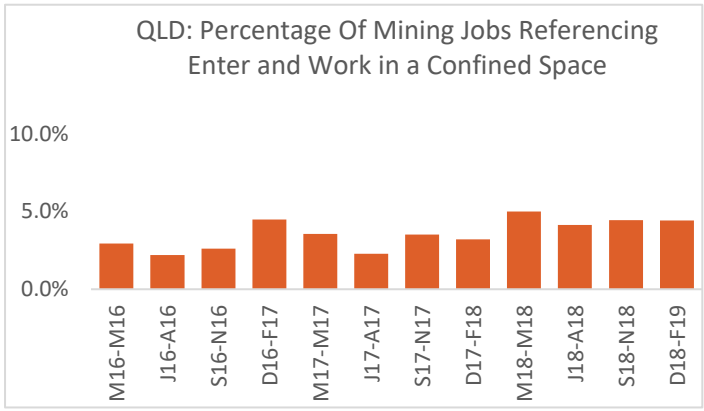

All Others: Change In References To Enter and Work in a Confined Space (Index)
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

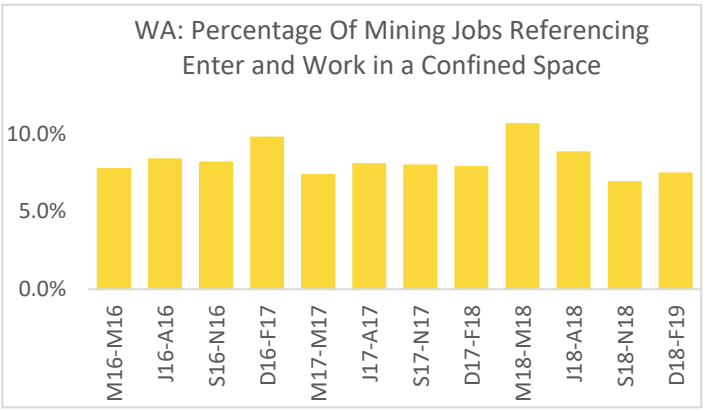

Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space (March 2016 - February 2019)
9.0%
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

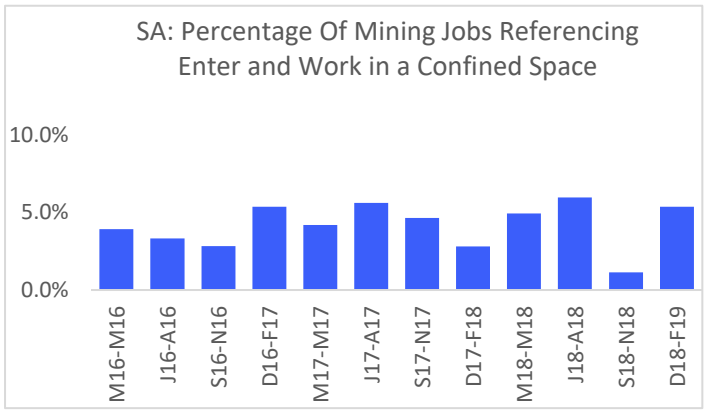

All States: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

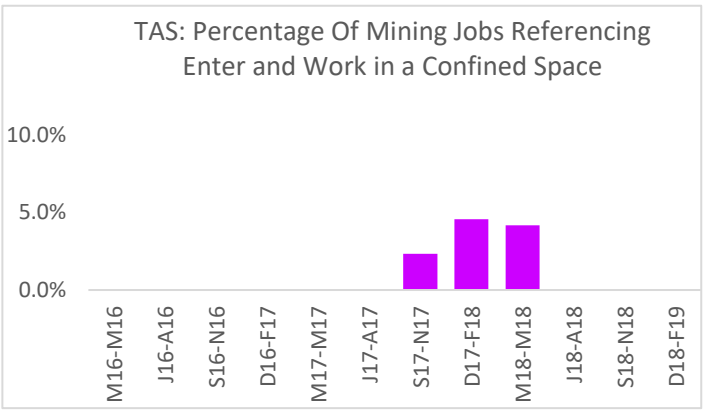

NSW: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

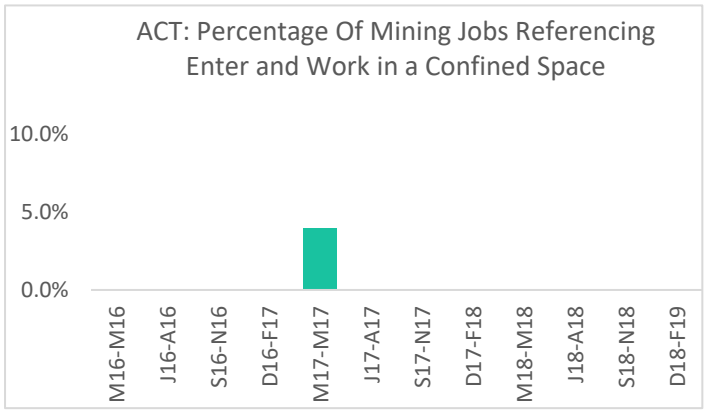

VIC: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

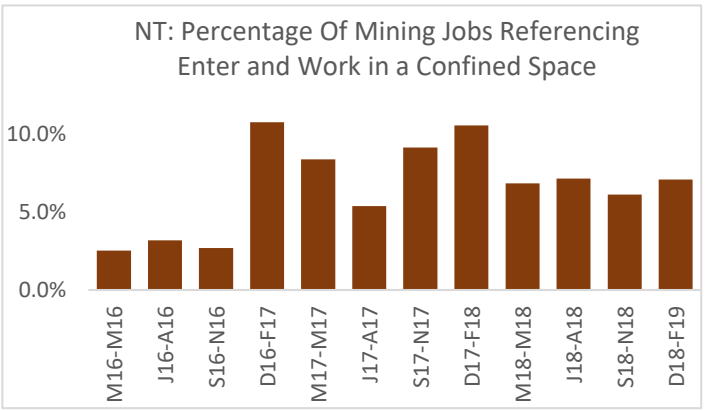

QLD: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

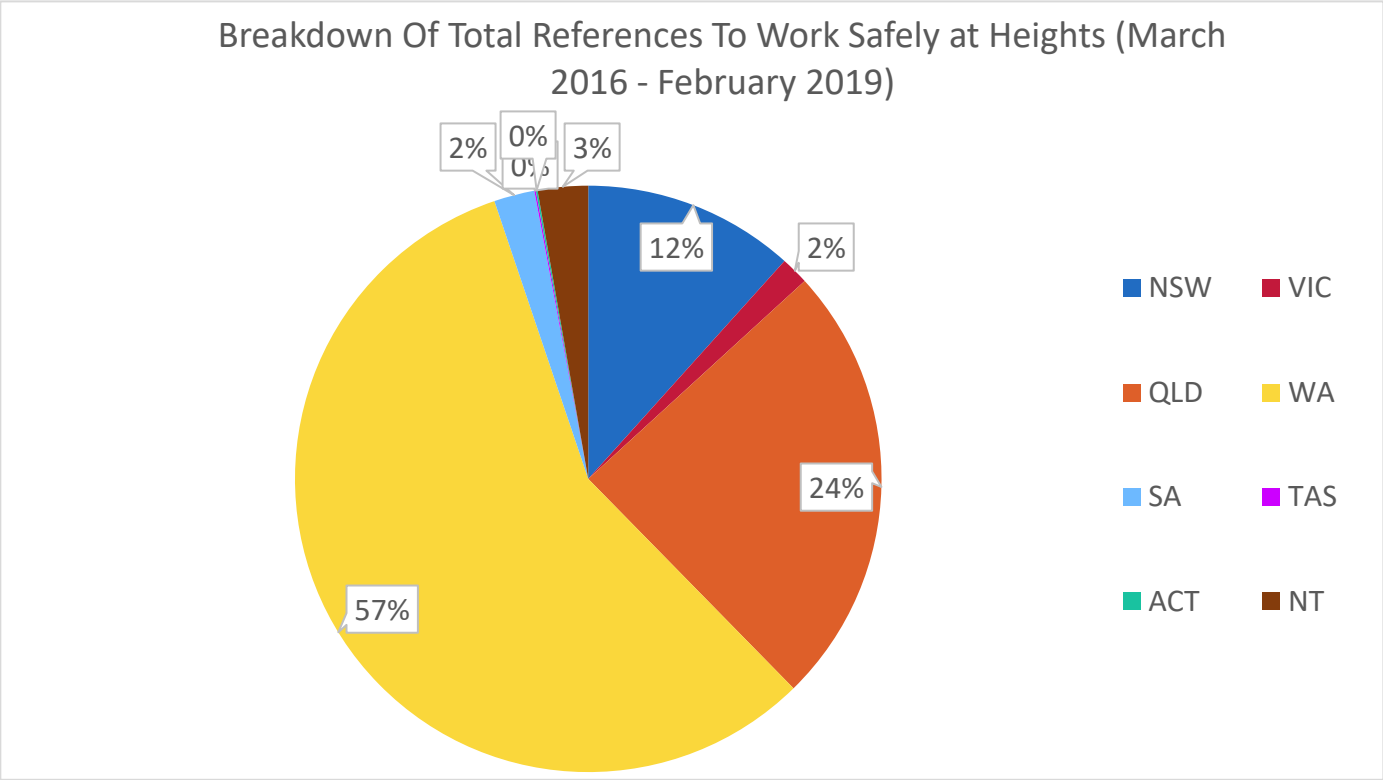

TAS: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

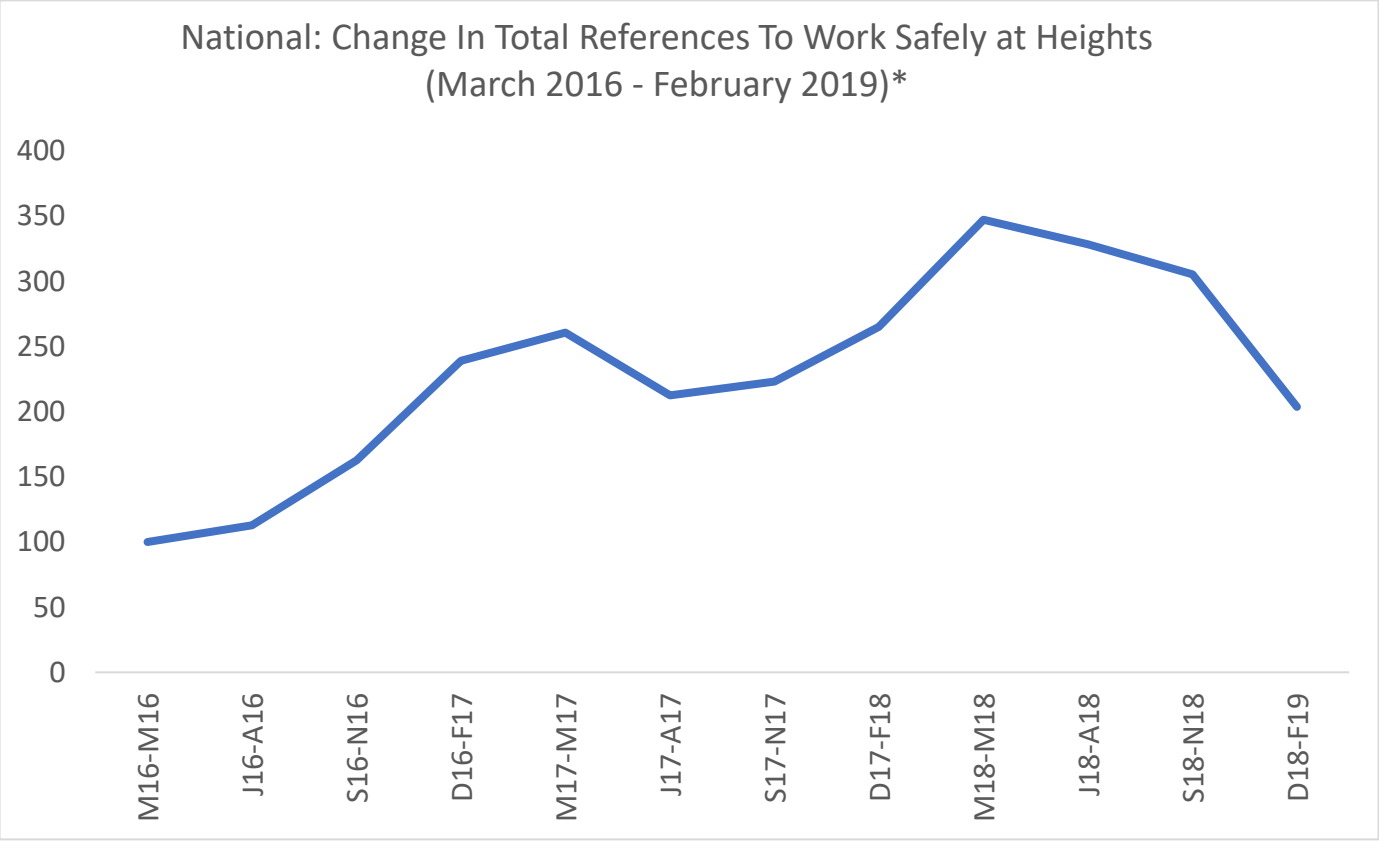

ACT: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing Enter and Work in a Confined Space
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

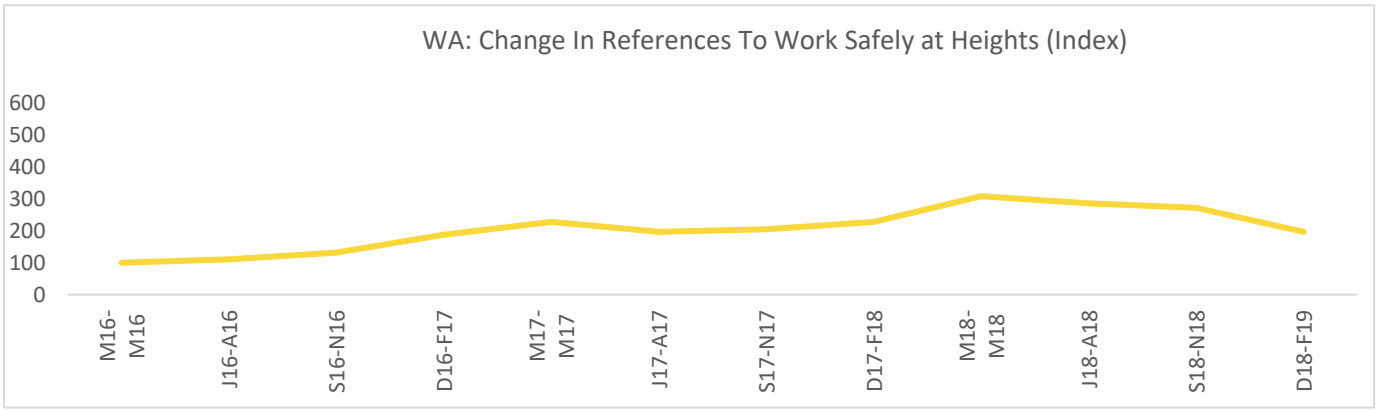
Work Safely at Heights

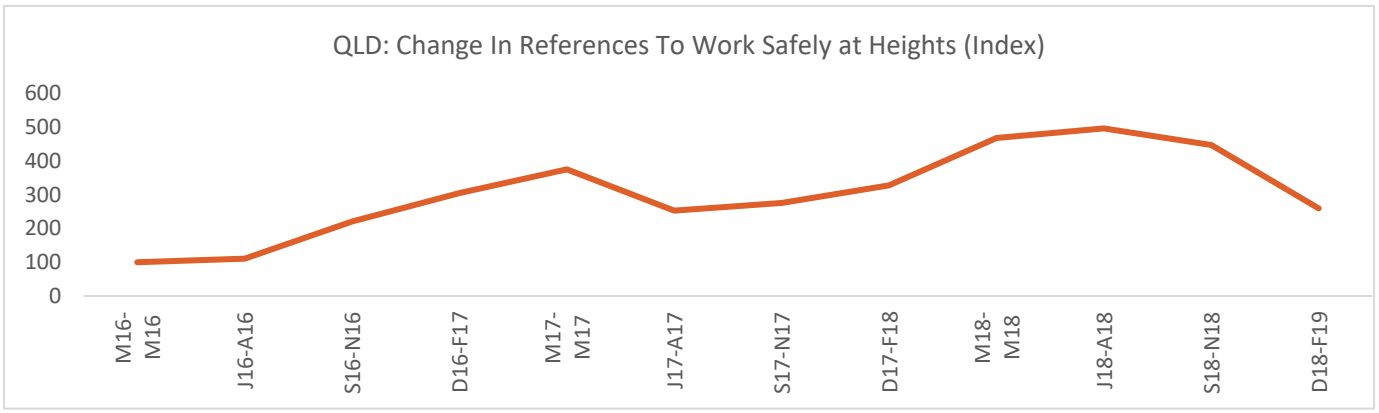
Total References: 8999

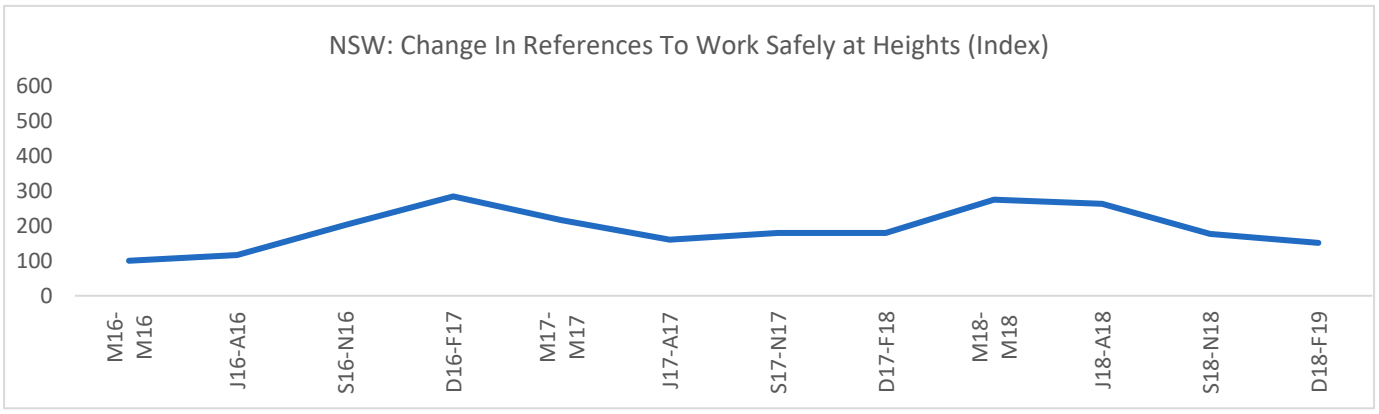


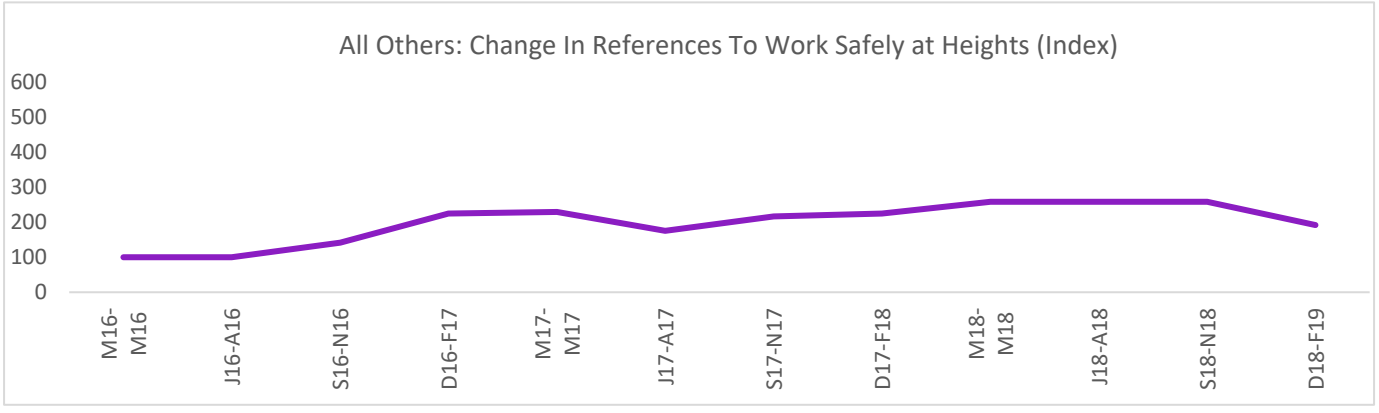


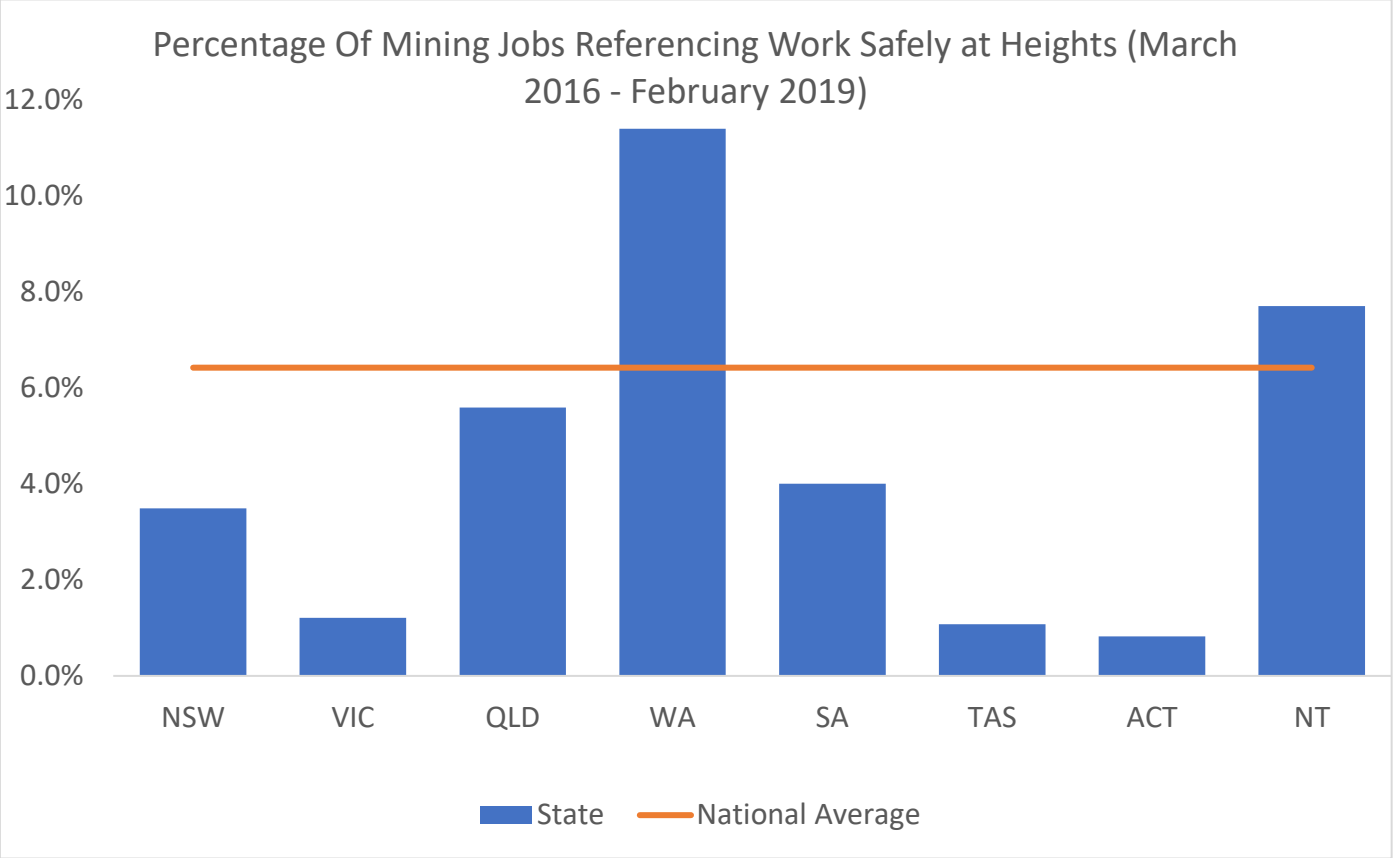
*Index: March - May 2016 = 100

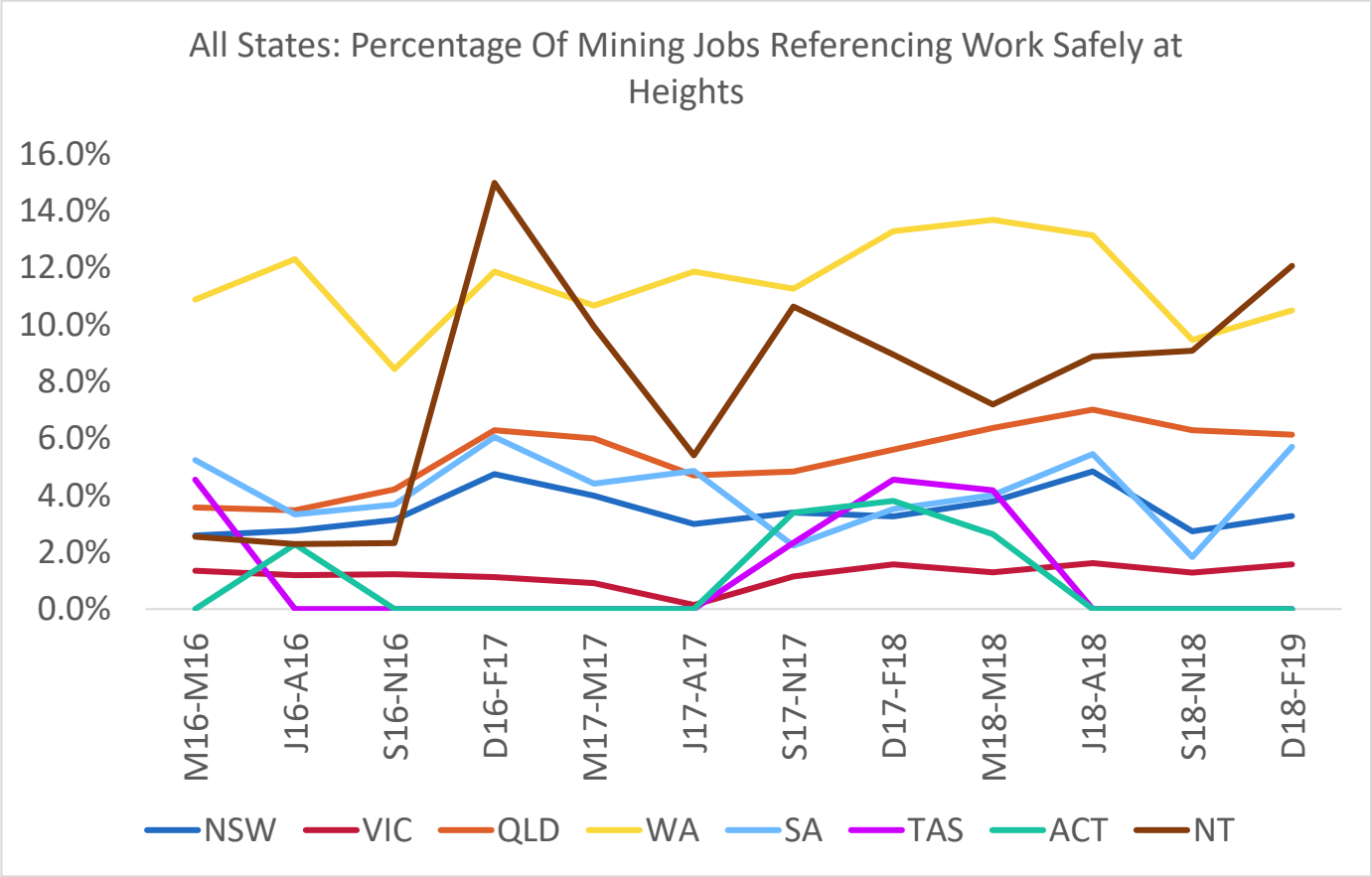

WA: Change In References To Work Safely at Heights (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

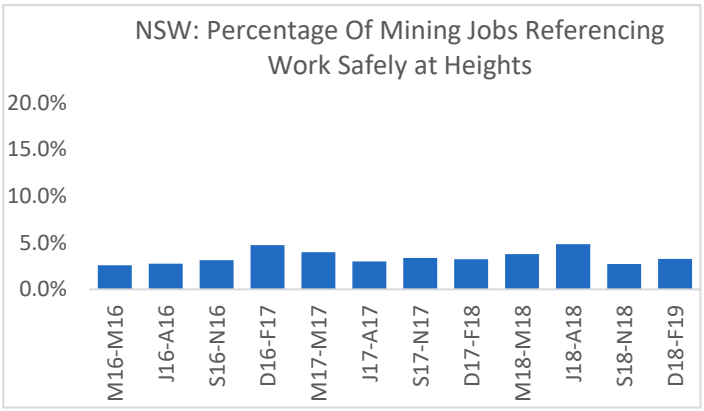

QLD: Change In References To Work Safely at Heights (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

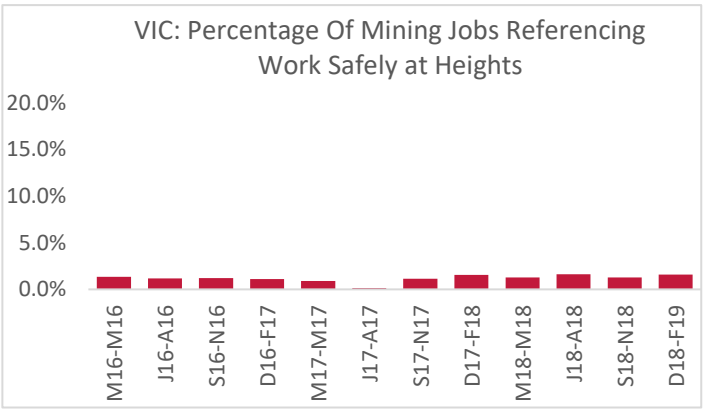

NSW: Change In References To Work Safely at Heights (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

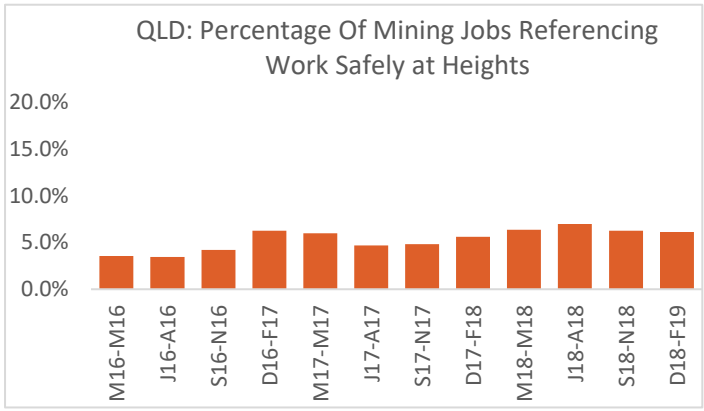

All Others: Change In References To Work Safely at Heights (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

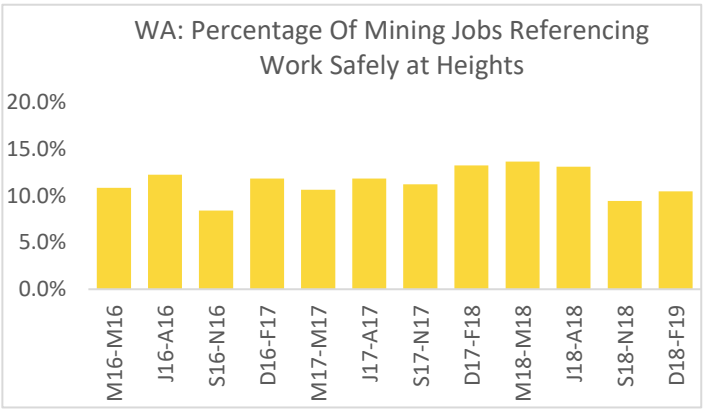

Percentage Of Mining Jobs Referencing Work Safely at Heights (March 2016 - February 2019)
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

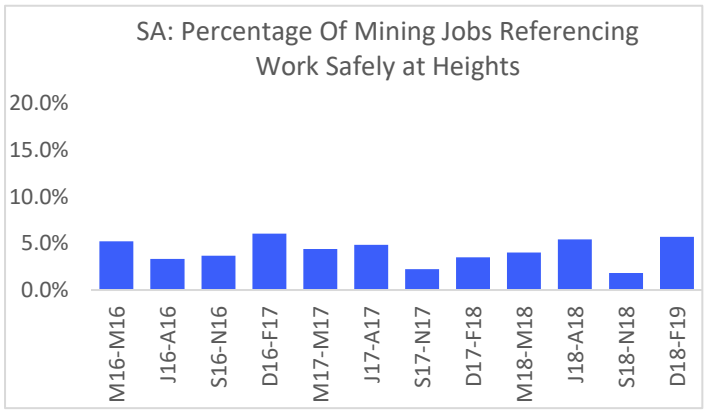

All States: Percentage Of Mining Jobs Referencing Work Safely at Heights
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

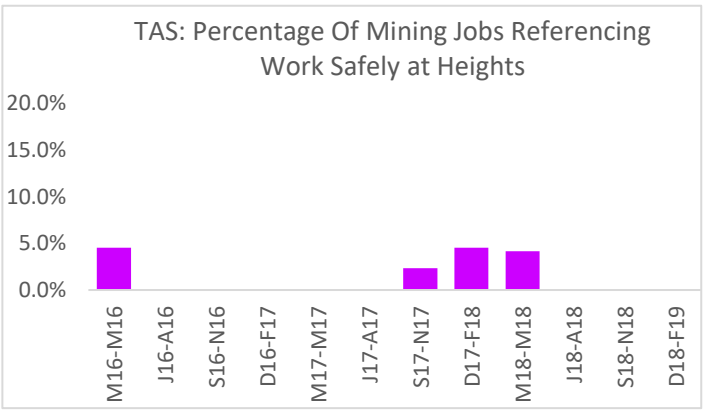

NSW: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

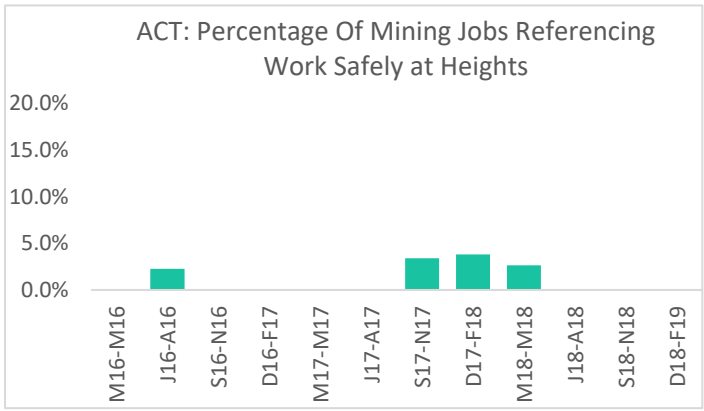

VIC: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

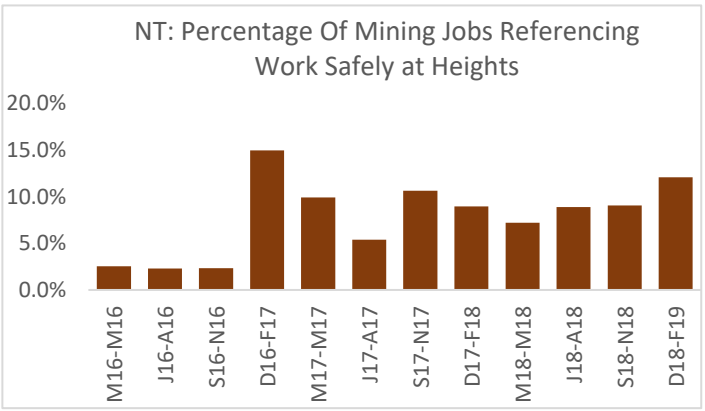

QLD: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

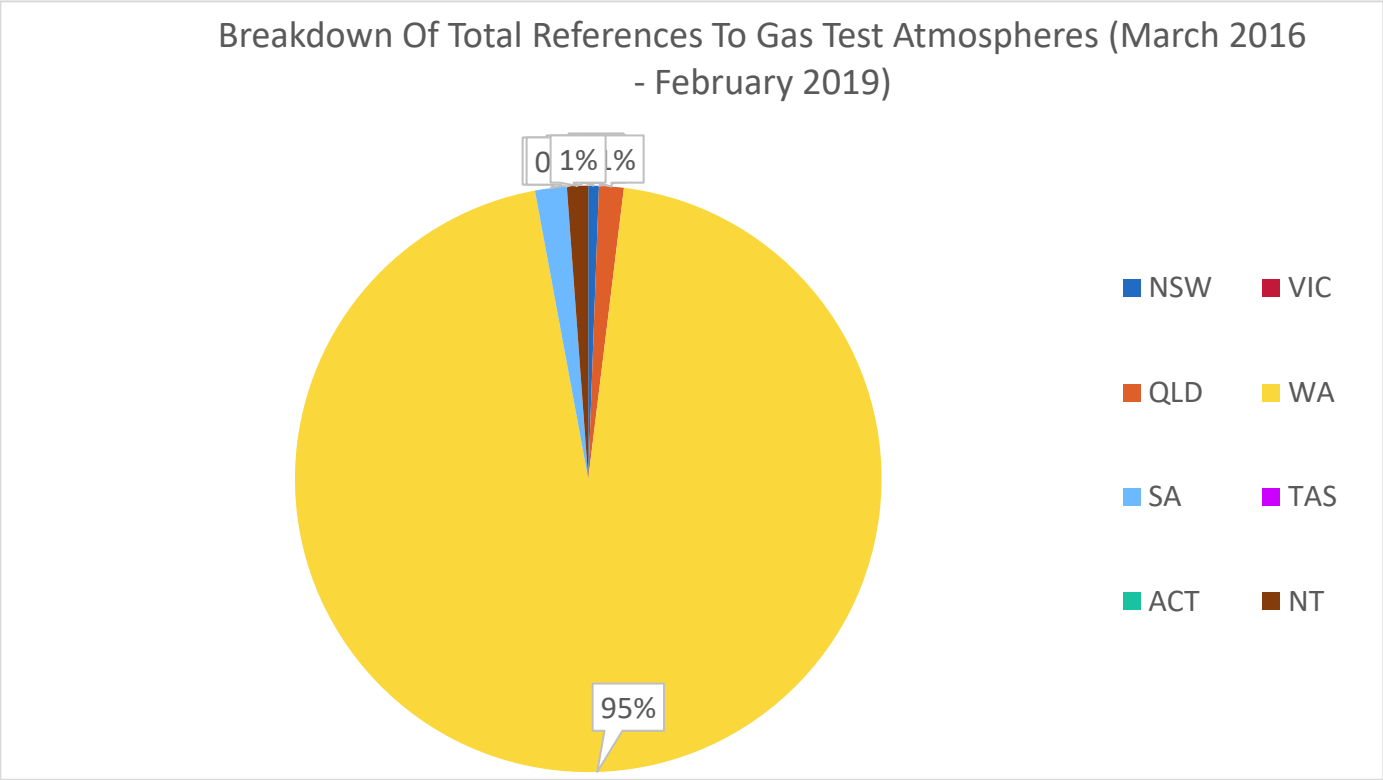

TAS: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

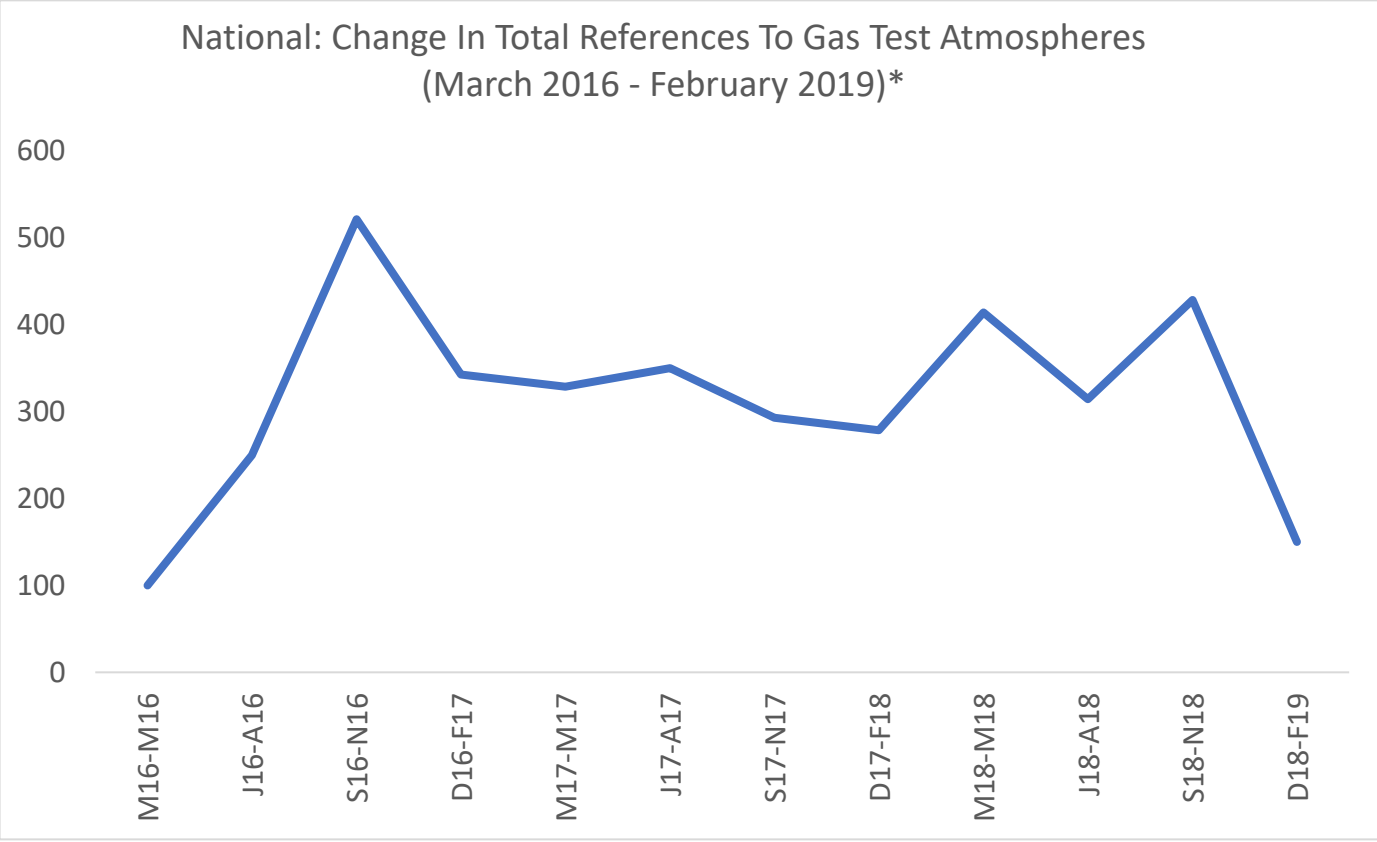

ACT: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing Work Safely at Heights
20.0%
15.0%
10.0%
5.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

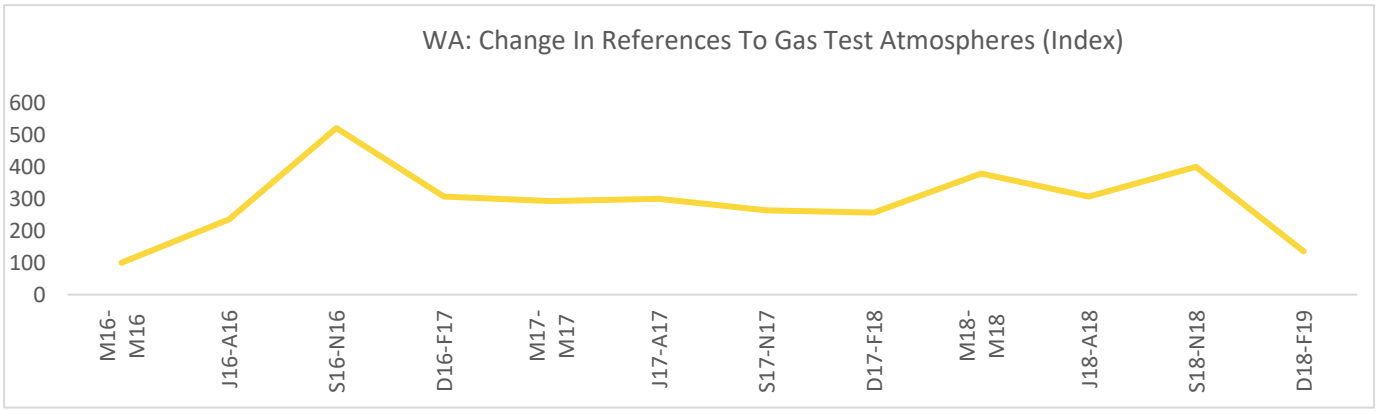
Gas Test Atmospheres

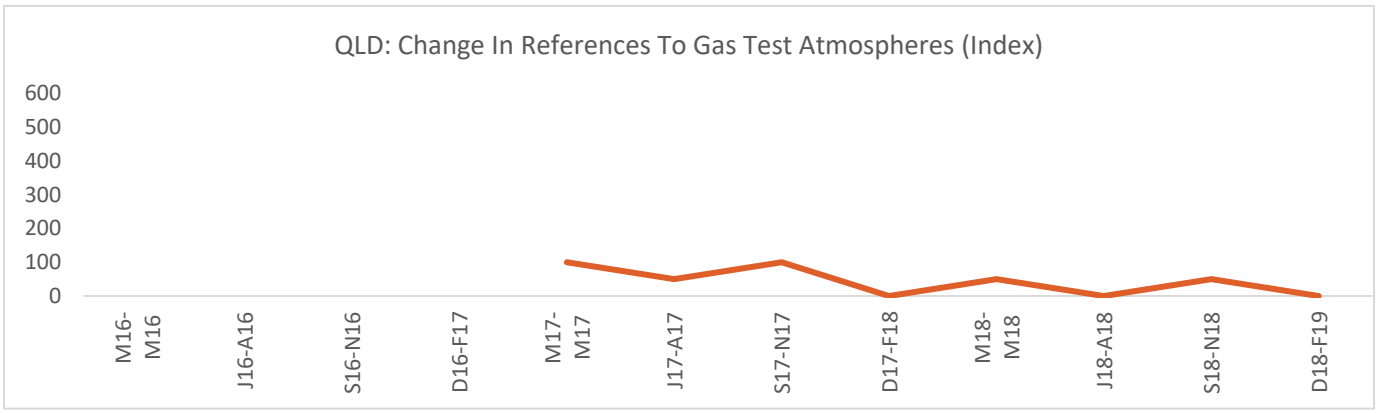
Total References: 528

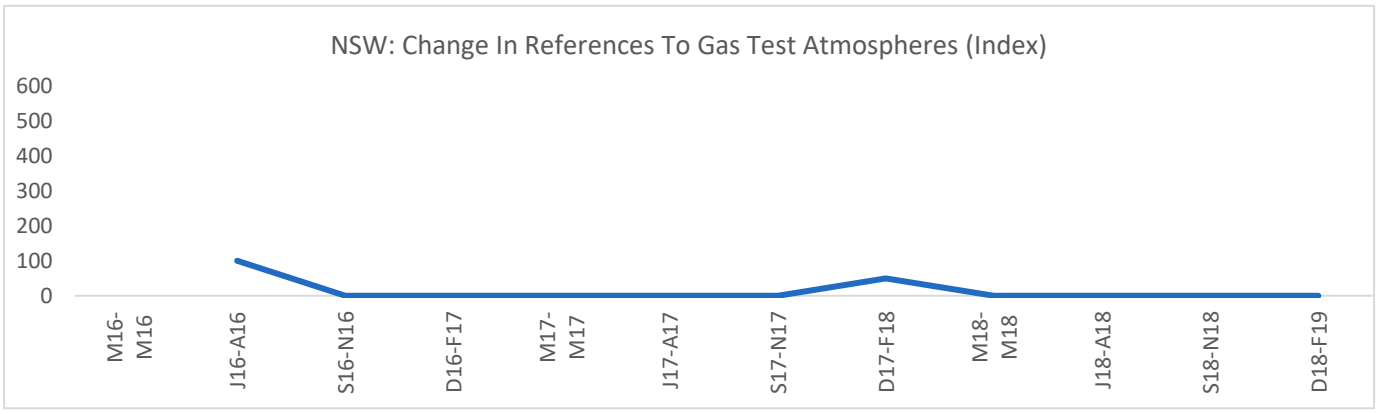


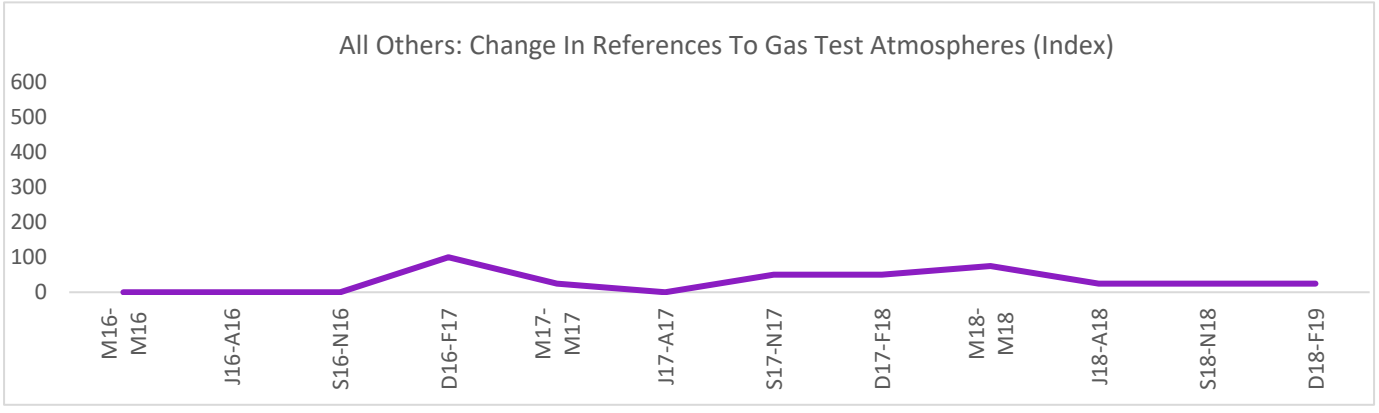


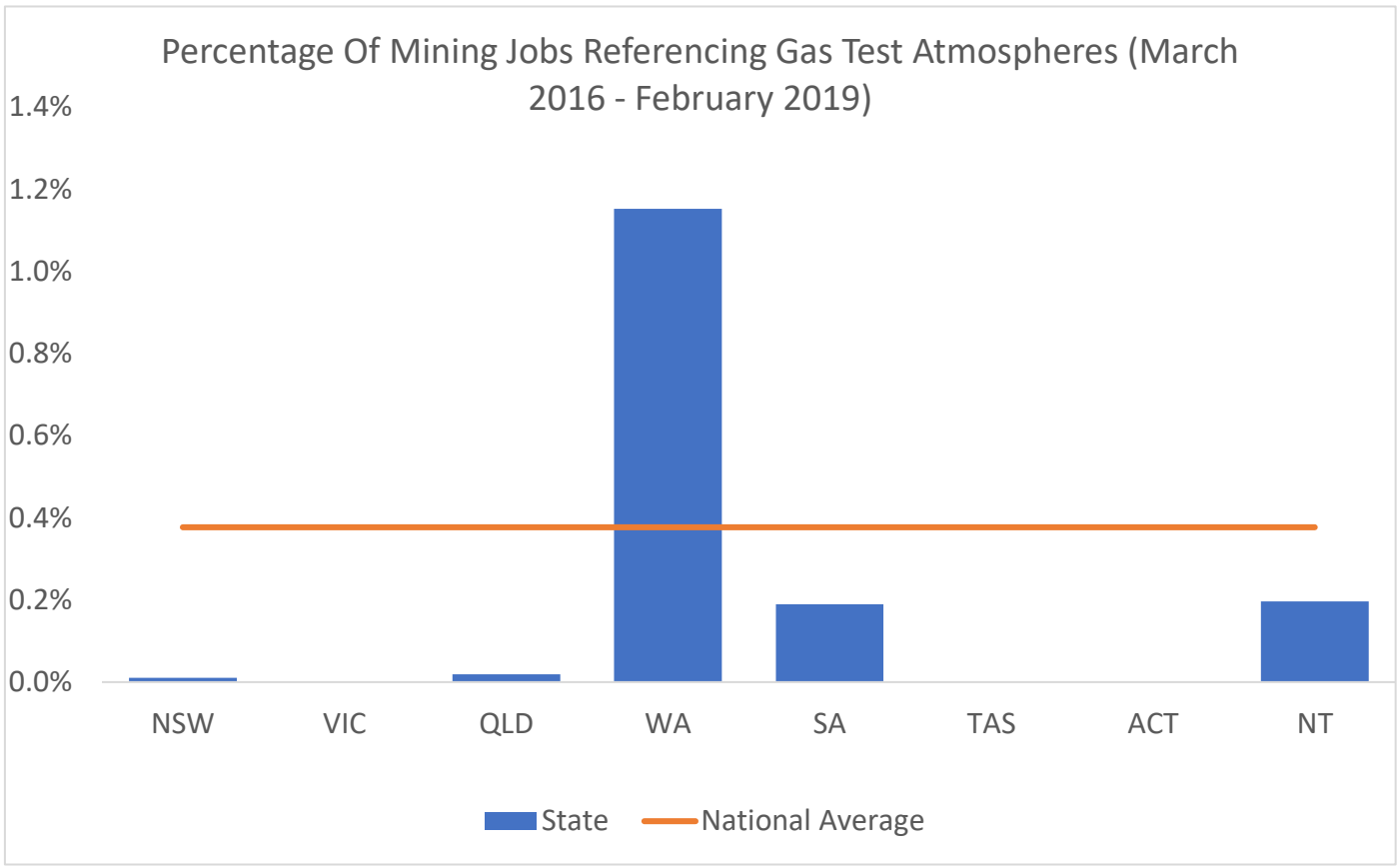
*Index: March - May 2016 = 100

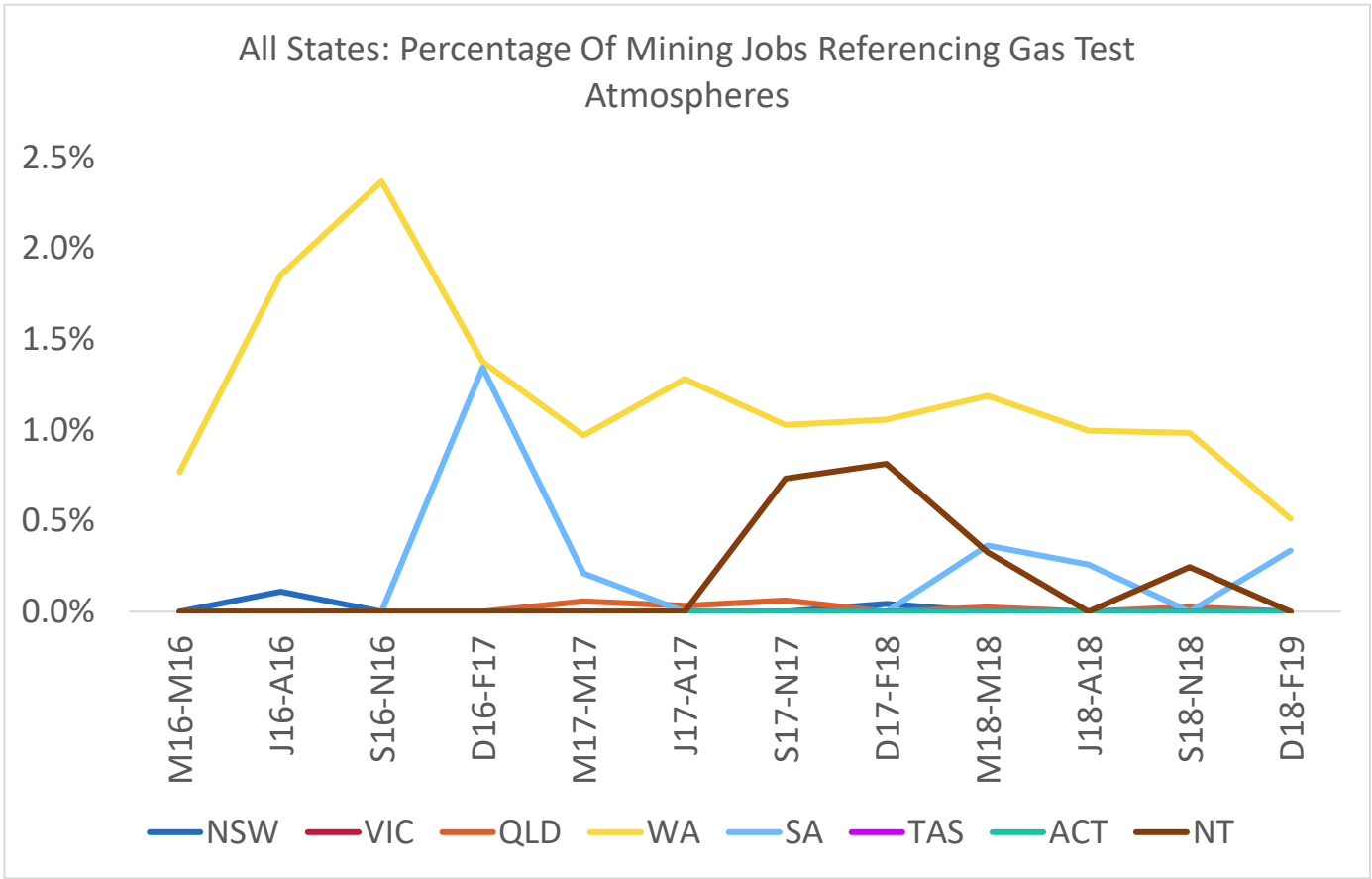

WA: Change In References To Gas Test Atmospheres (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

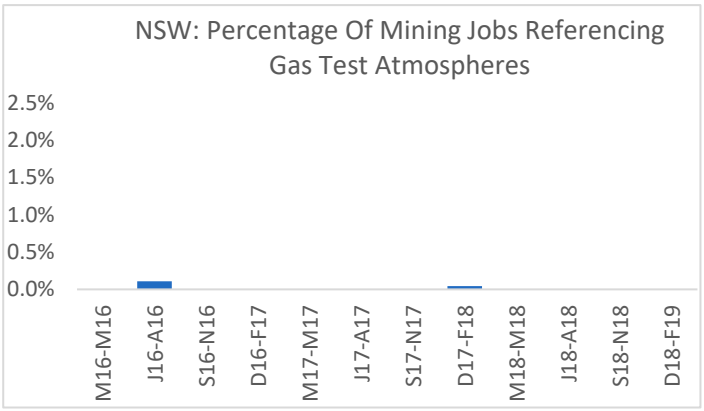

QLD: Change In References To Gas Test Atmospheres (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

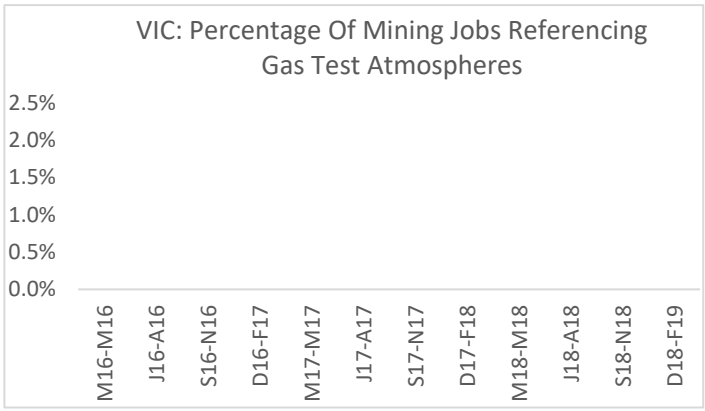

NSW: Change In References To Gas Test Atmospheres (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

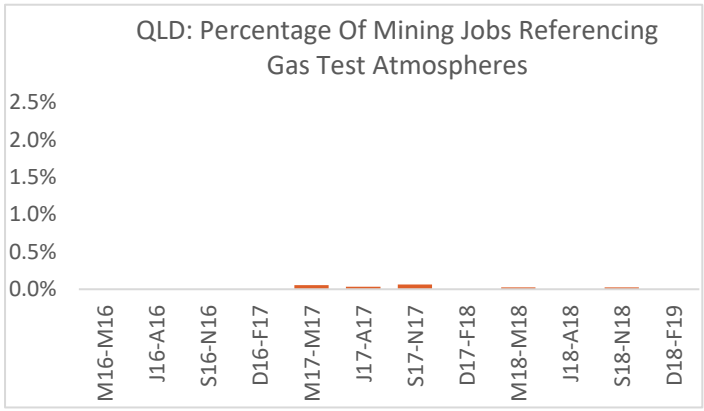

All Others: Change In References To Gas Test Atmospheres (Index)
600
500
400
300
200
100
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

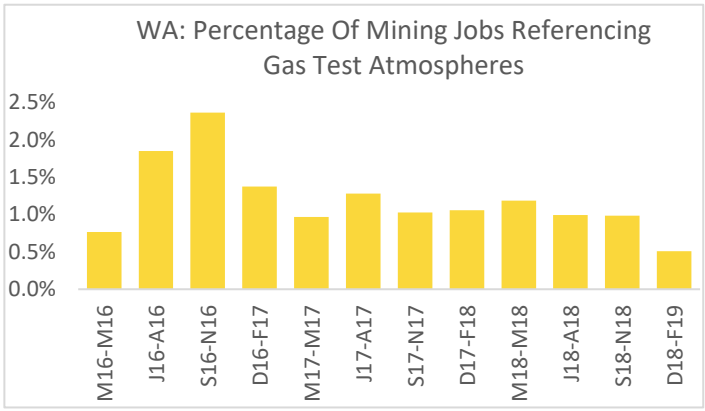

Percentage Of Mining Jobs Referencing Gas Test Atmospheres (March 2016 - February 2019)
1.4%
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

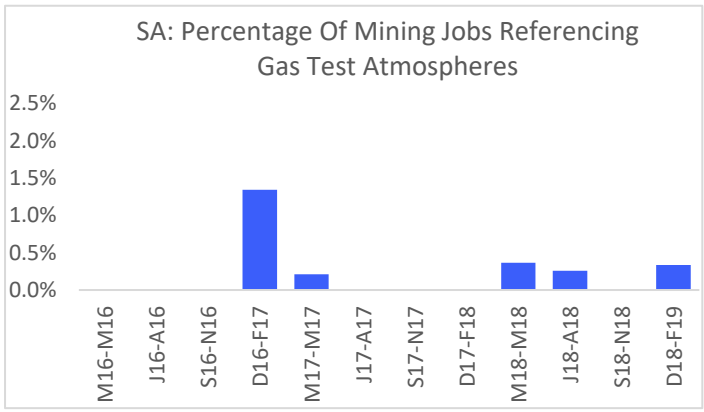

All States: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

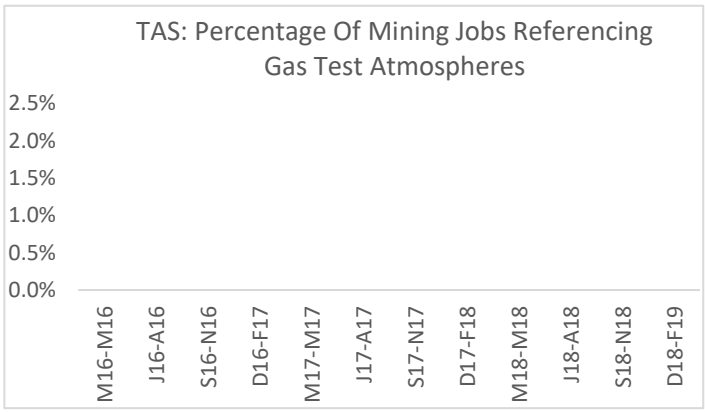

NSW: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

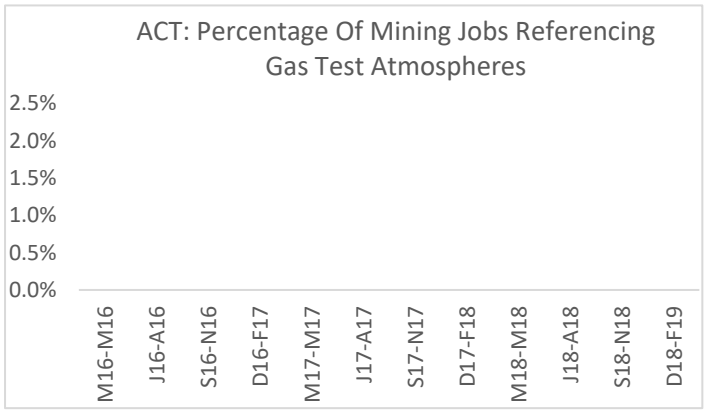

VIC: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

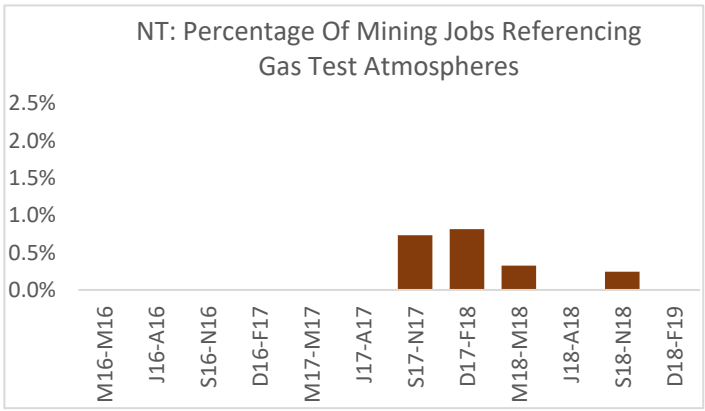

QLD: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

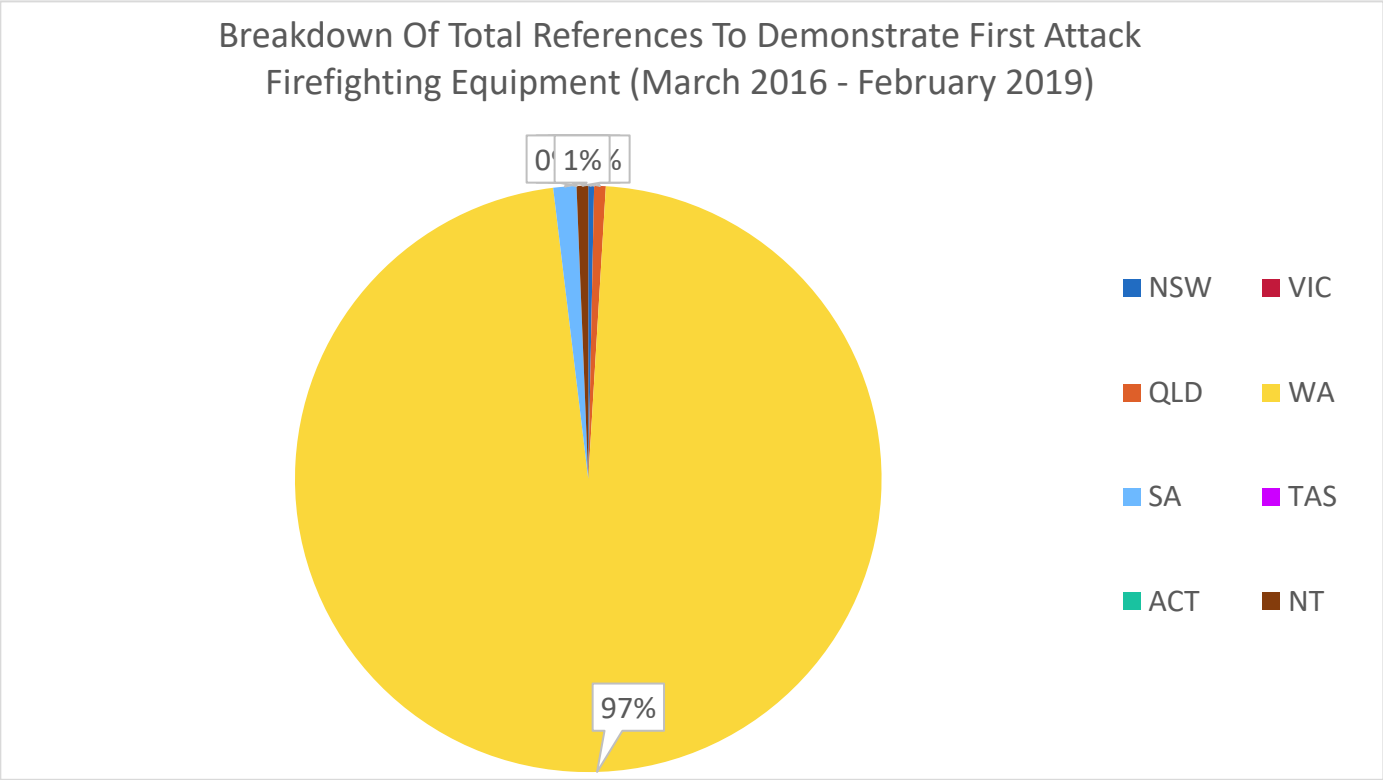

TAS: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

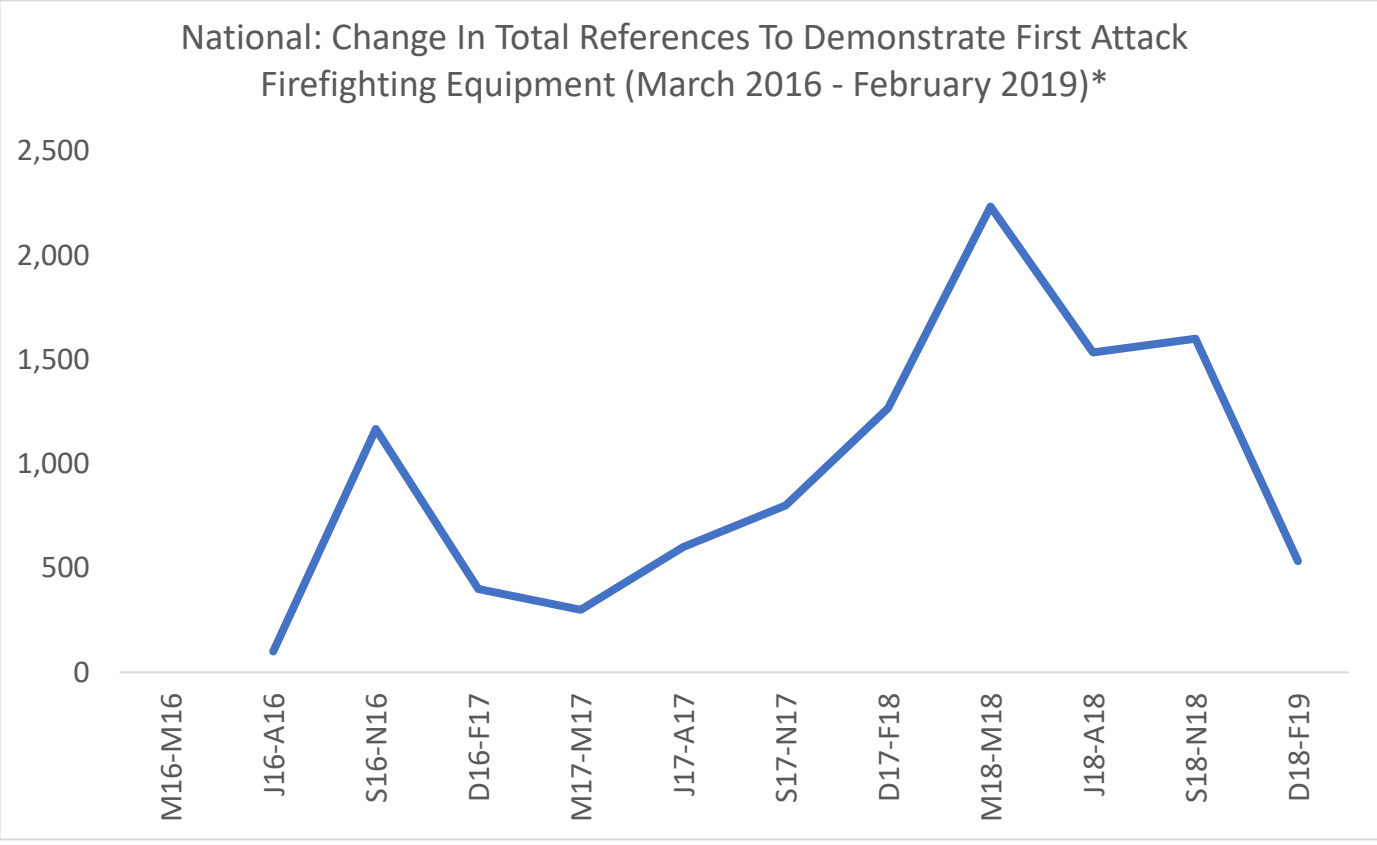

ACT: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing Gas Test Atmospheres
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

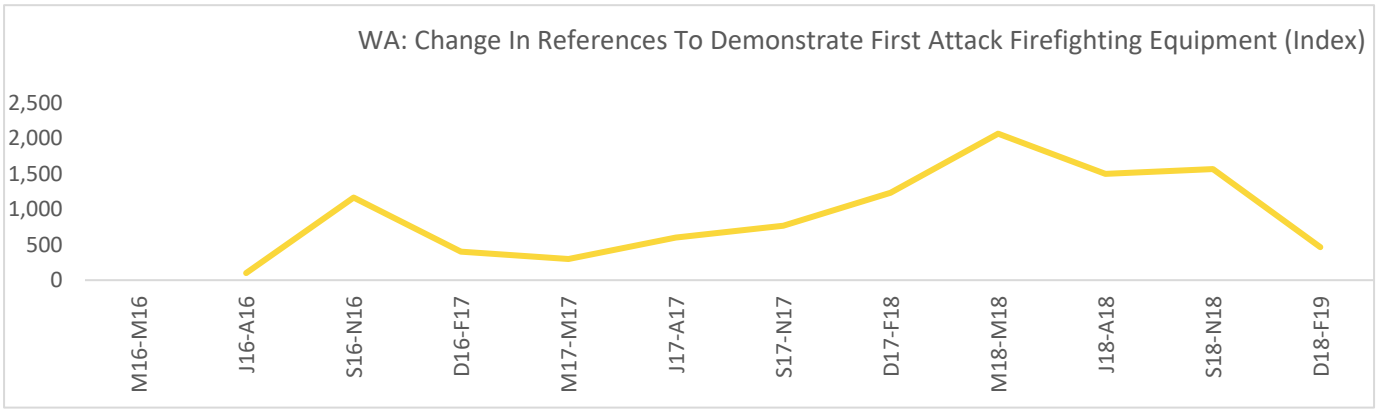
Demonstrate First Attack Firefighting Equipment

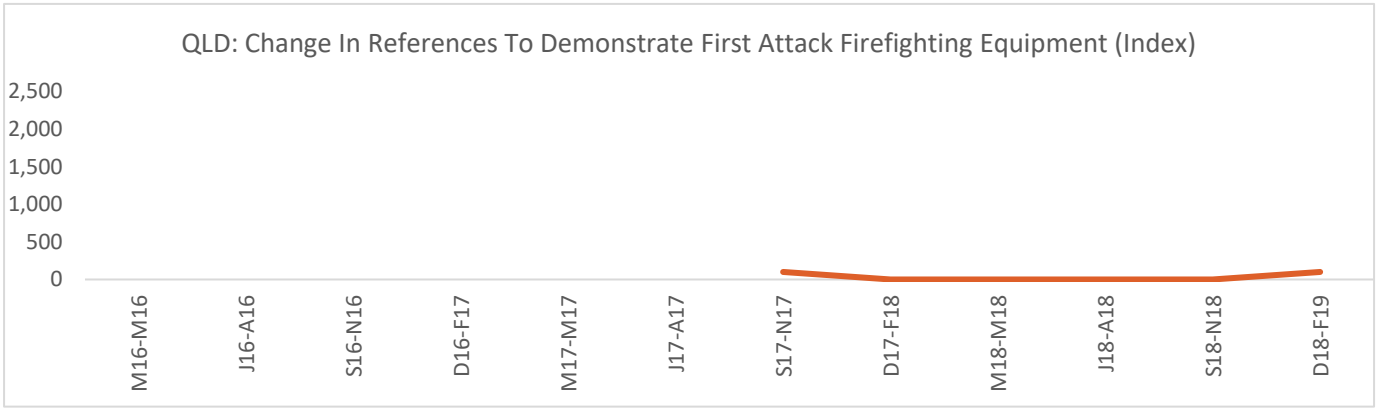
Total References: 316

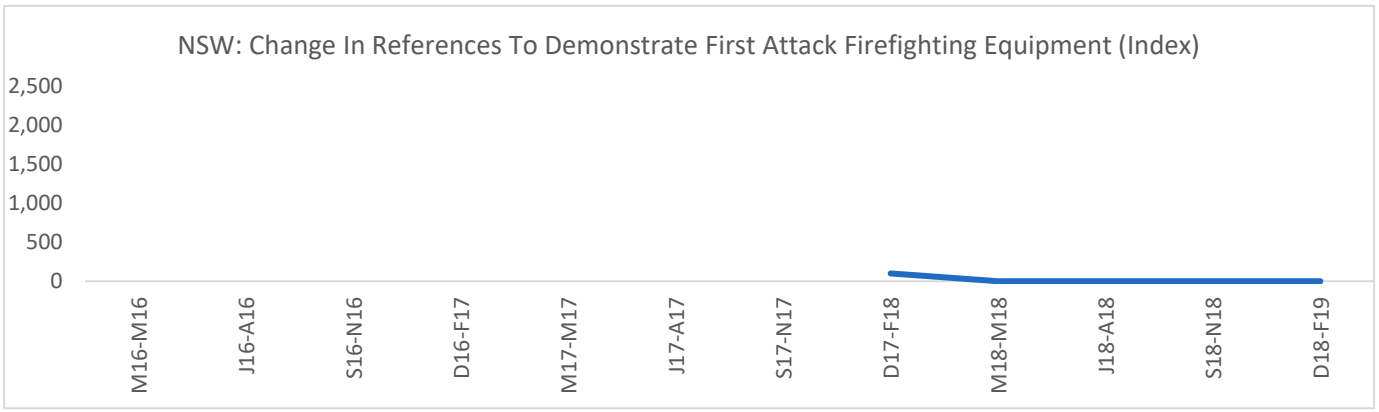


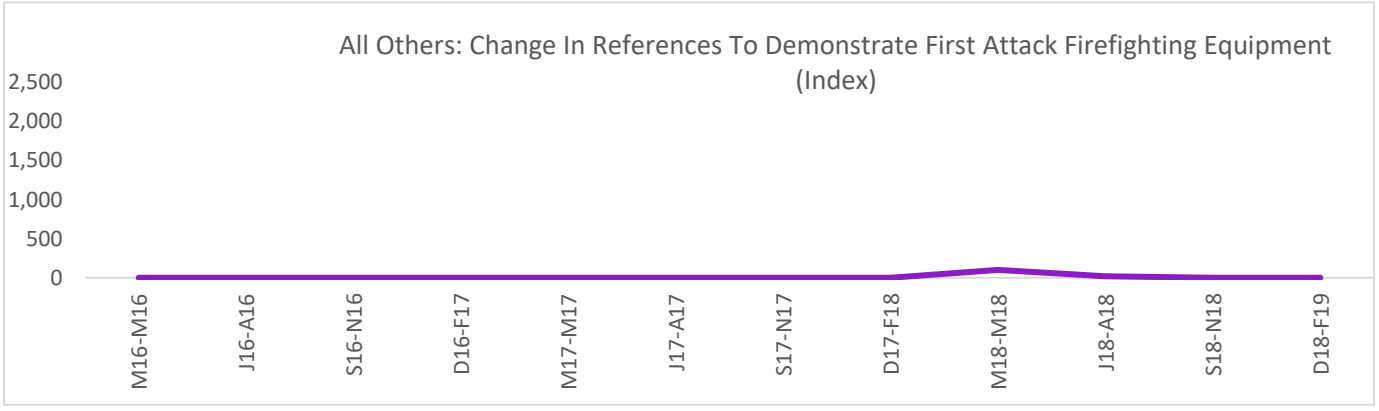


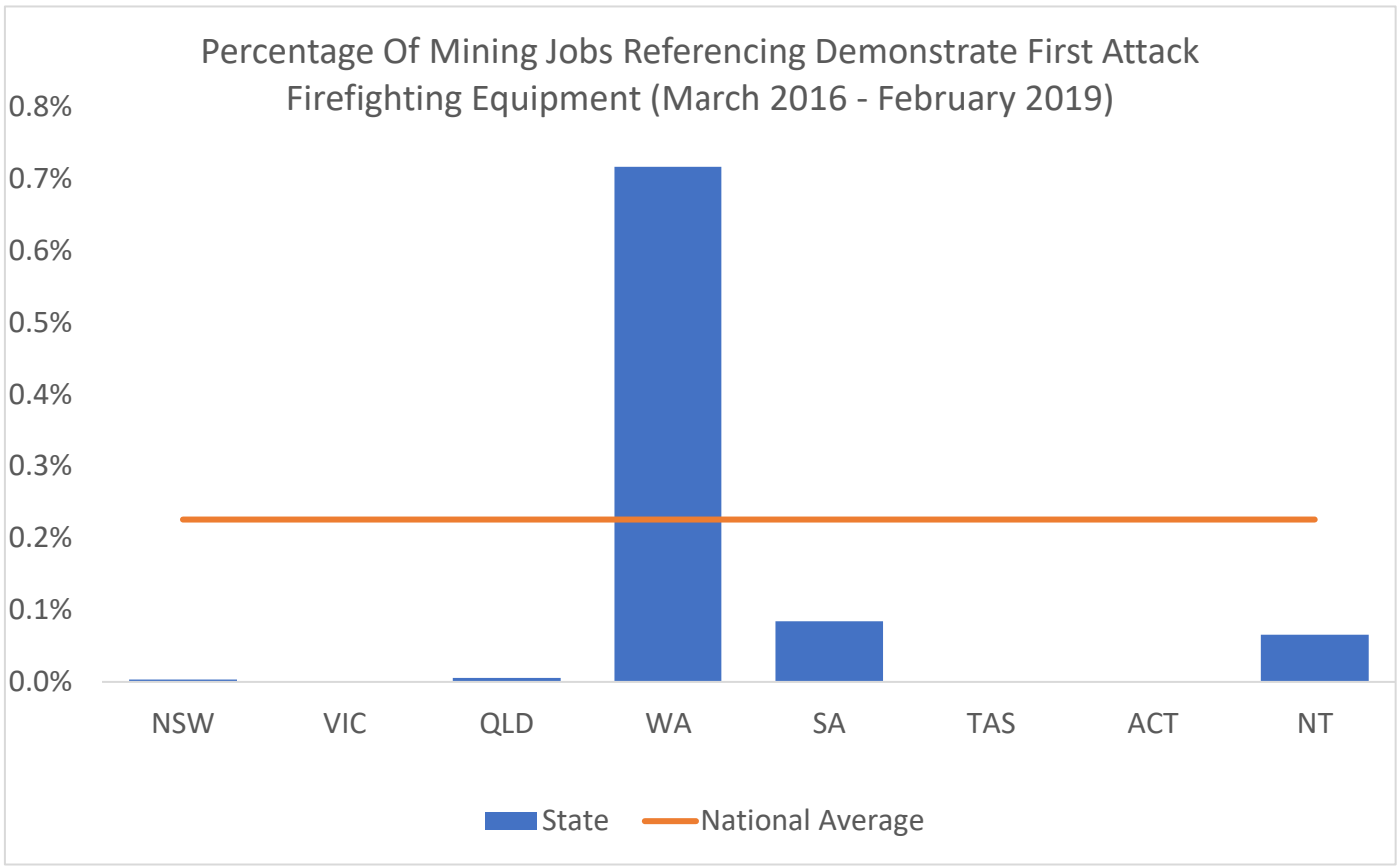
*Index: March - May 2016 = 100

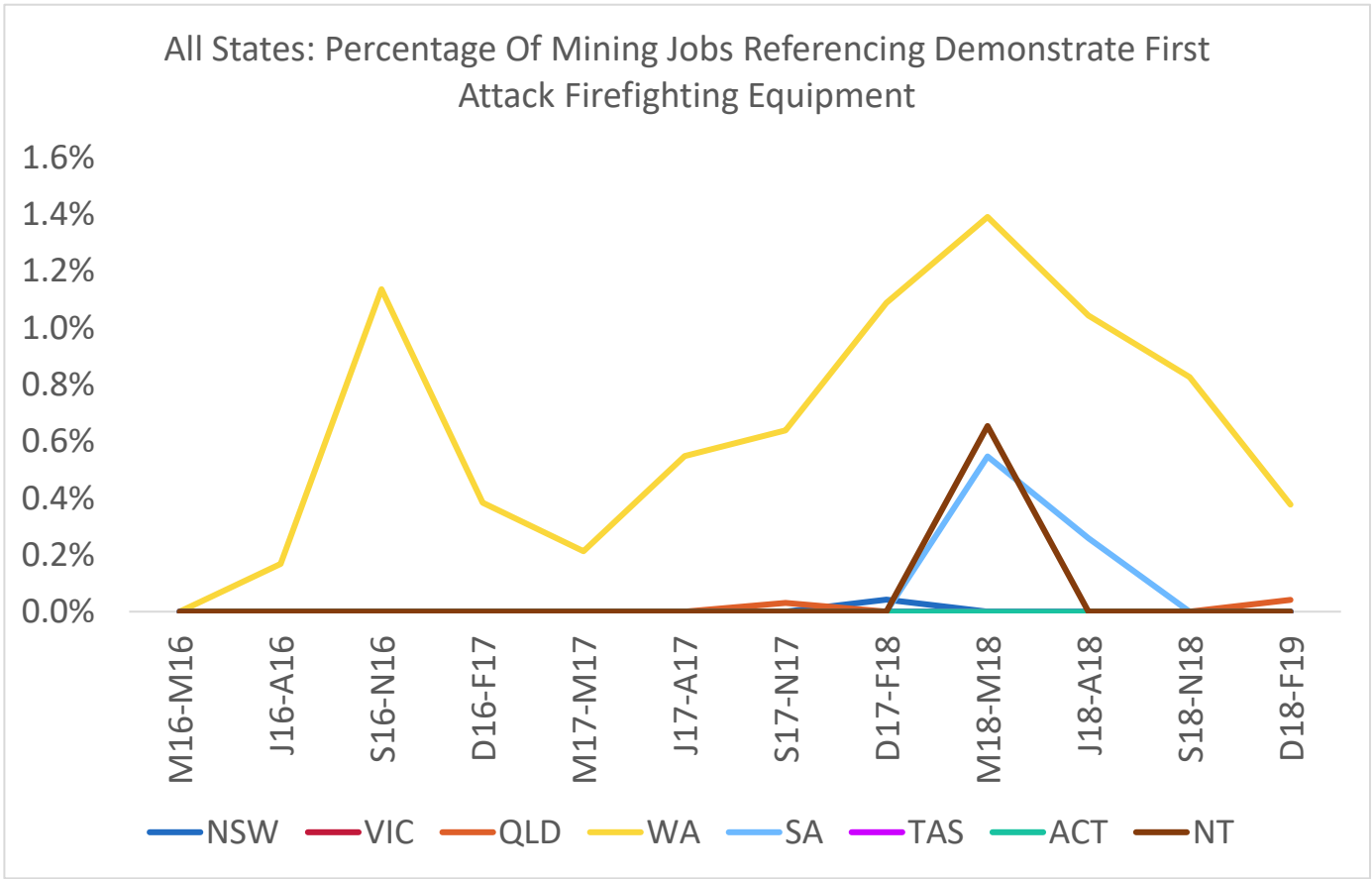

WA: Change In References To Demonstrate First Attack Firefighting Equipment (Index)
2,500
2,000
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

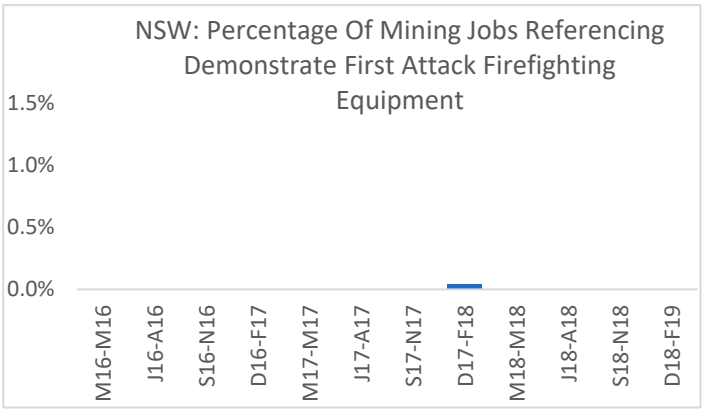

QLD: Change In References To Demonstrate First Attack Firefighting Equipment (Index)
2,500
2,000
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

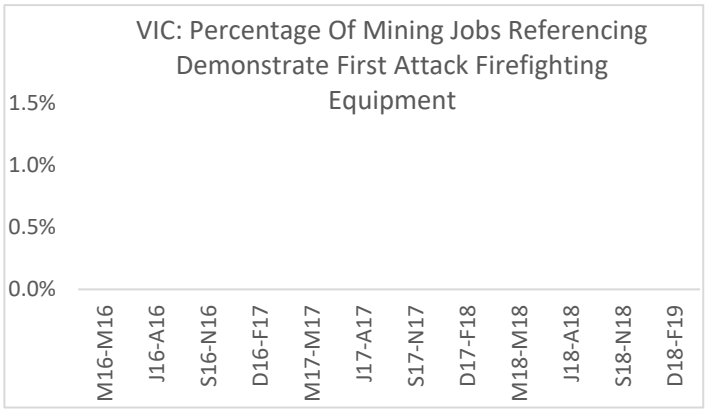

NSW: Change In References To Demonstrate First Attack Firefighting Equipment (Index)
2,500
2,000
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

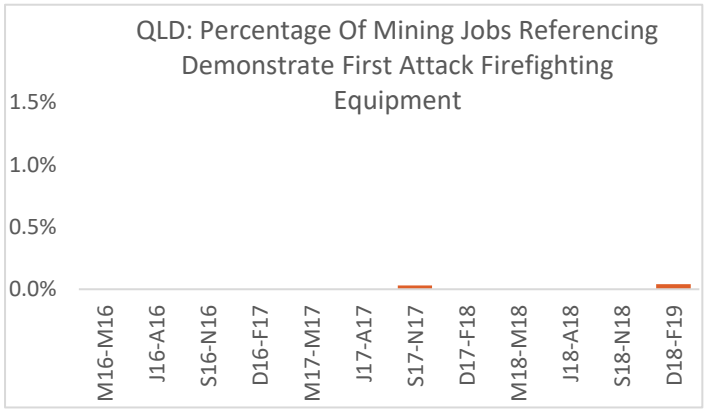

All Others: Change In References To Demonstrate First Attack Firefighting Equipment (Index)
2,500
2,000
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

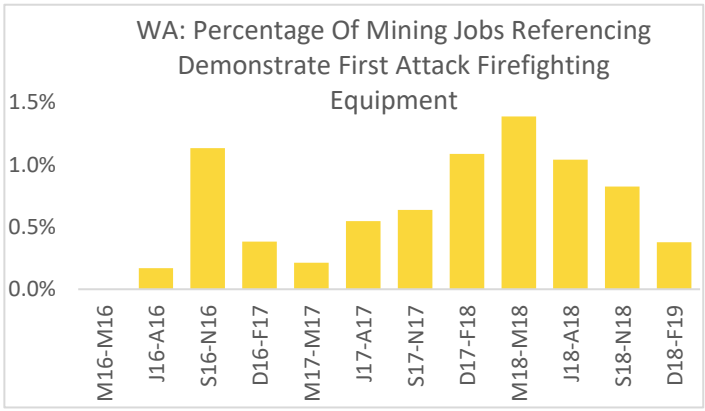

Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment (March 2016 - February 2019)
0.8%
0.7%
0.6%
0.5%
0.4%
0.3%
0.2%
0.1%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

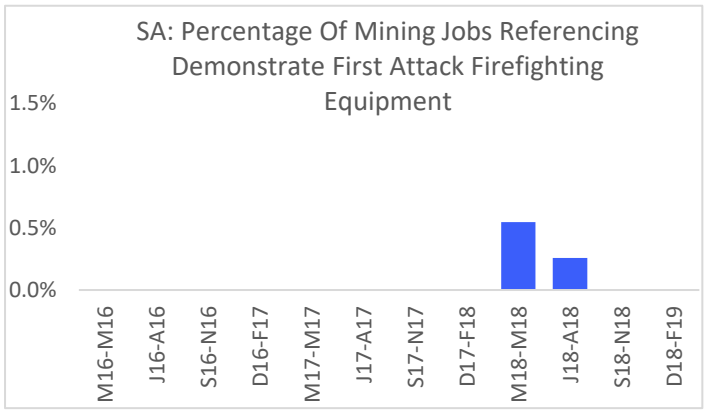

All States: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.6%
1.4%
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

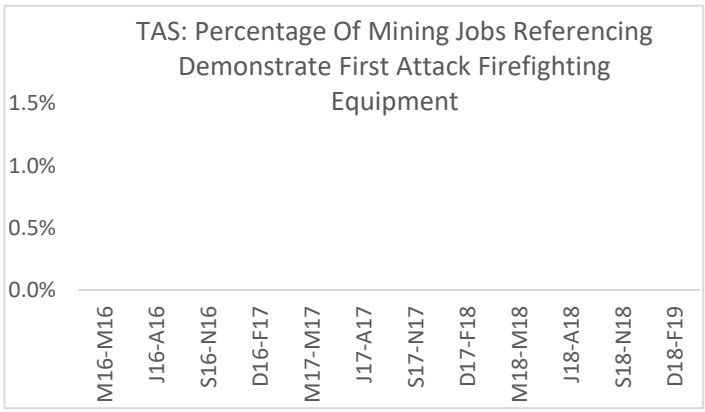

NSW: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

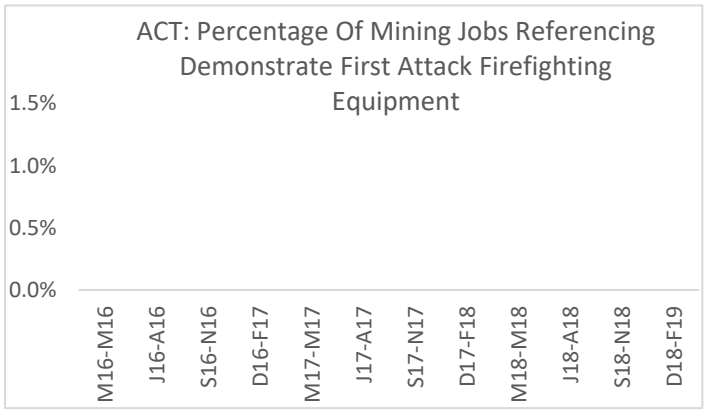

VIC: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

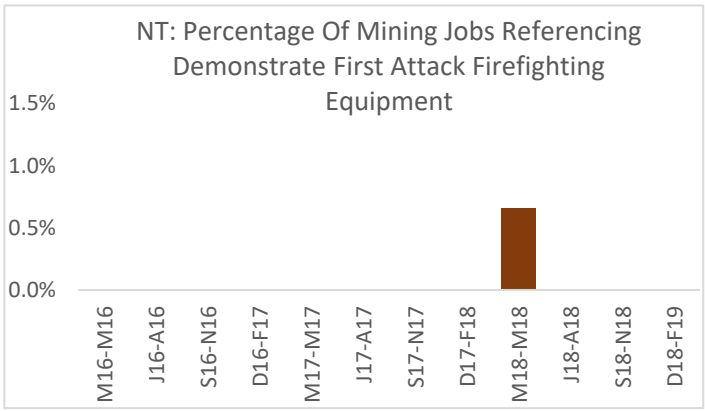

QLD: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

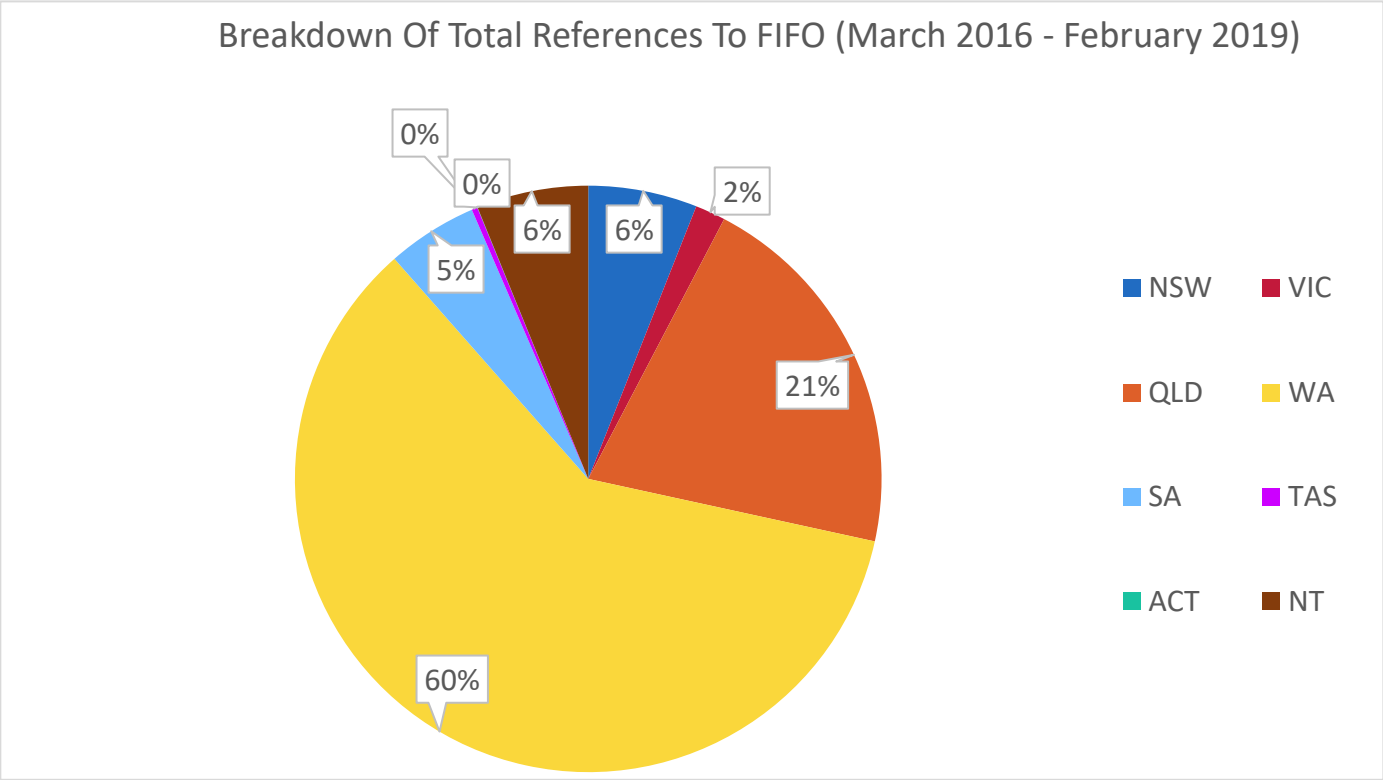

TAS: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

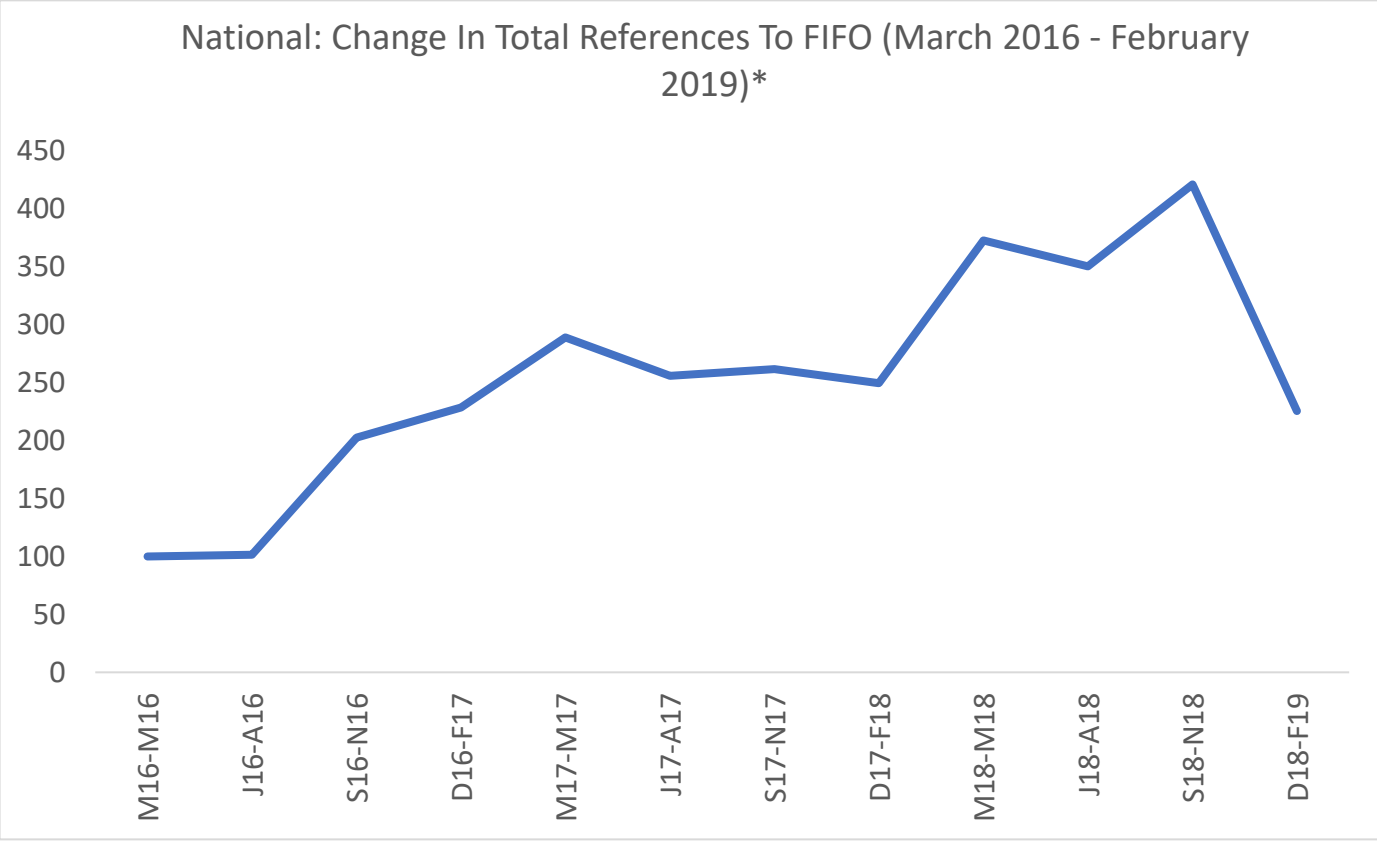

ACT: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing Demonstrate First Attack Firefighting Equipment
1.5%
1.0%
0.5%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

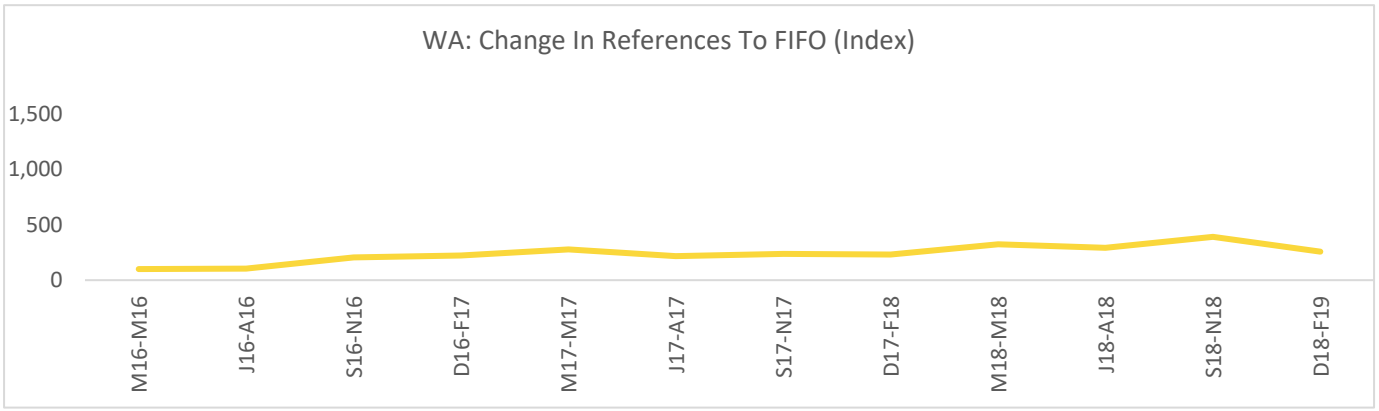
FIFO

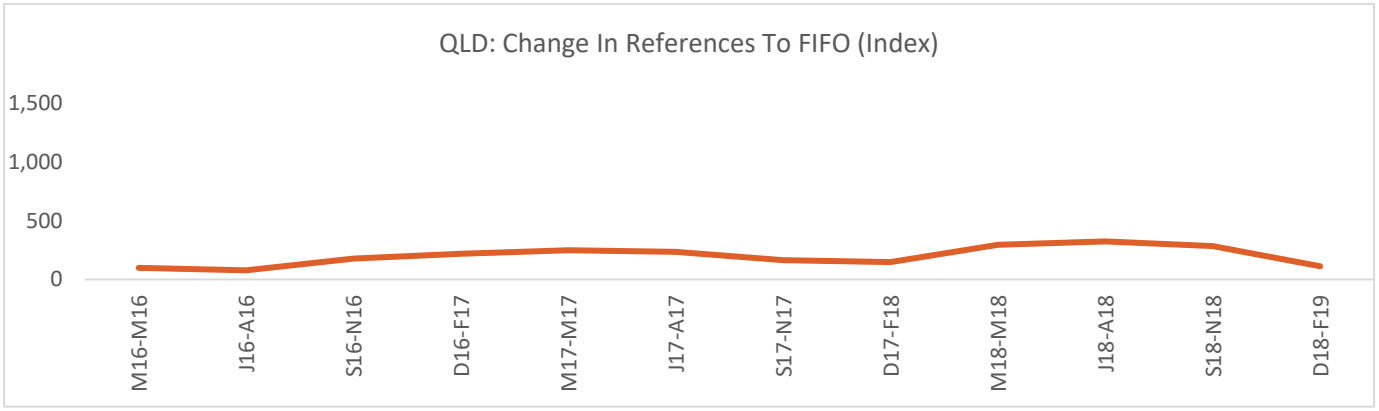
Total References: 24779

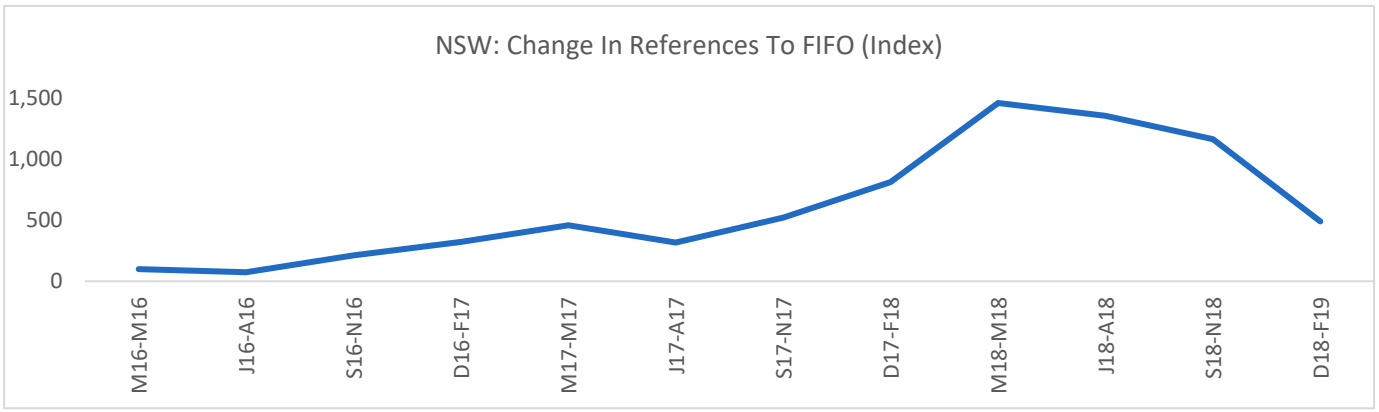


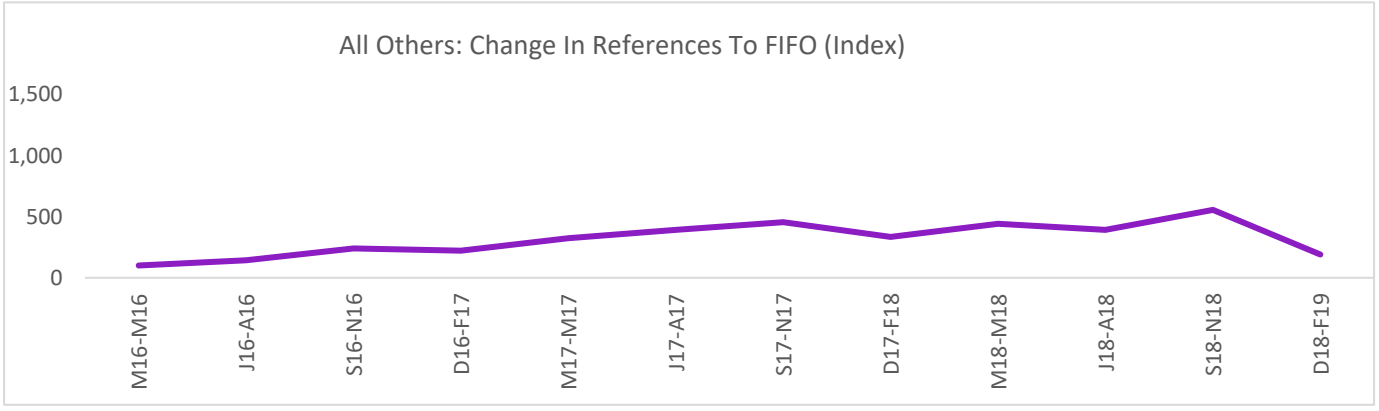


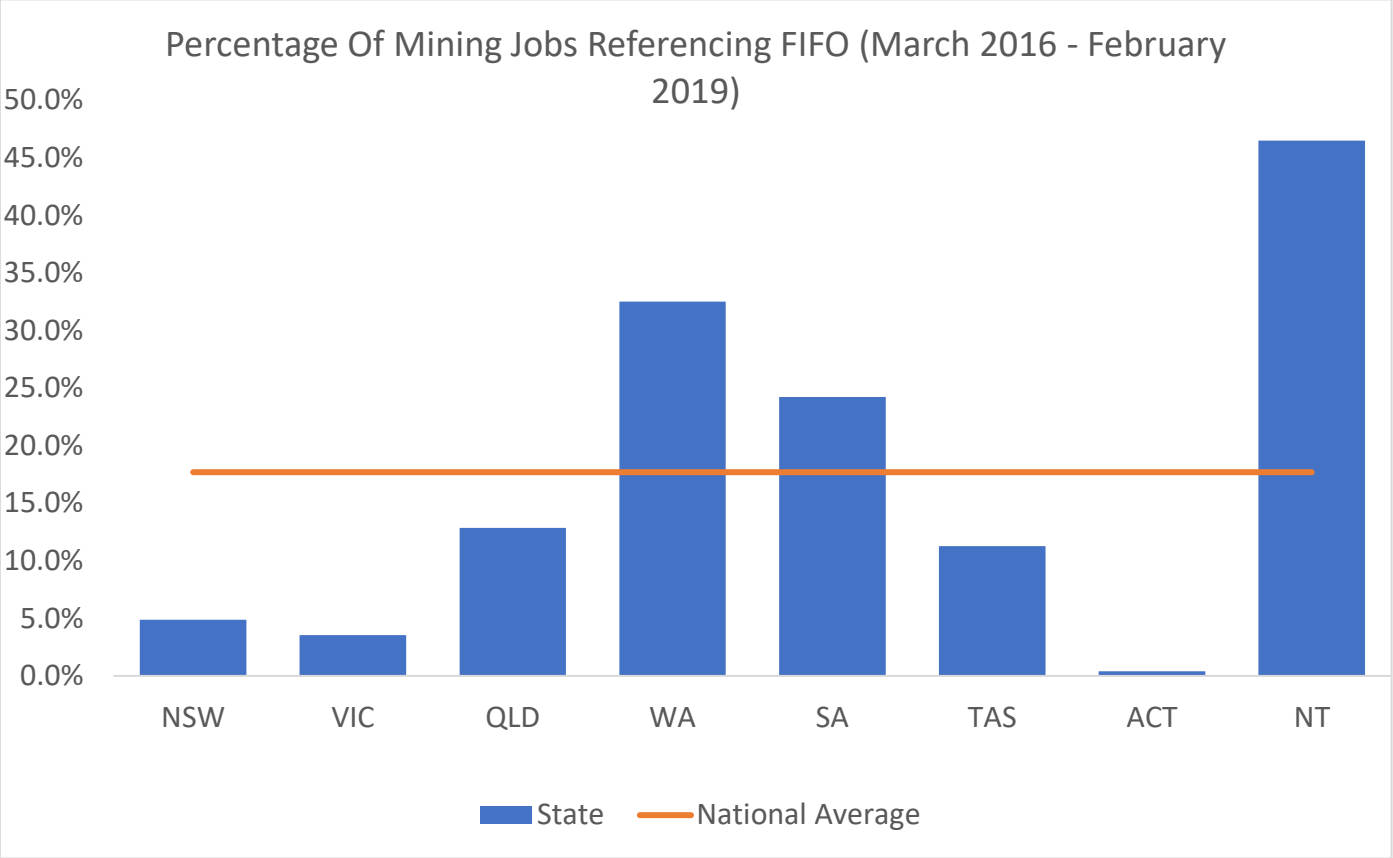
*Index: March - May 2016 = 100

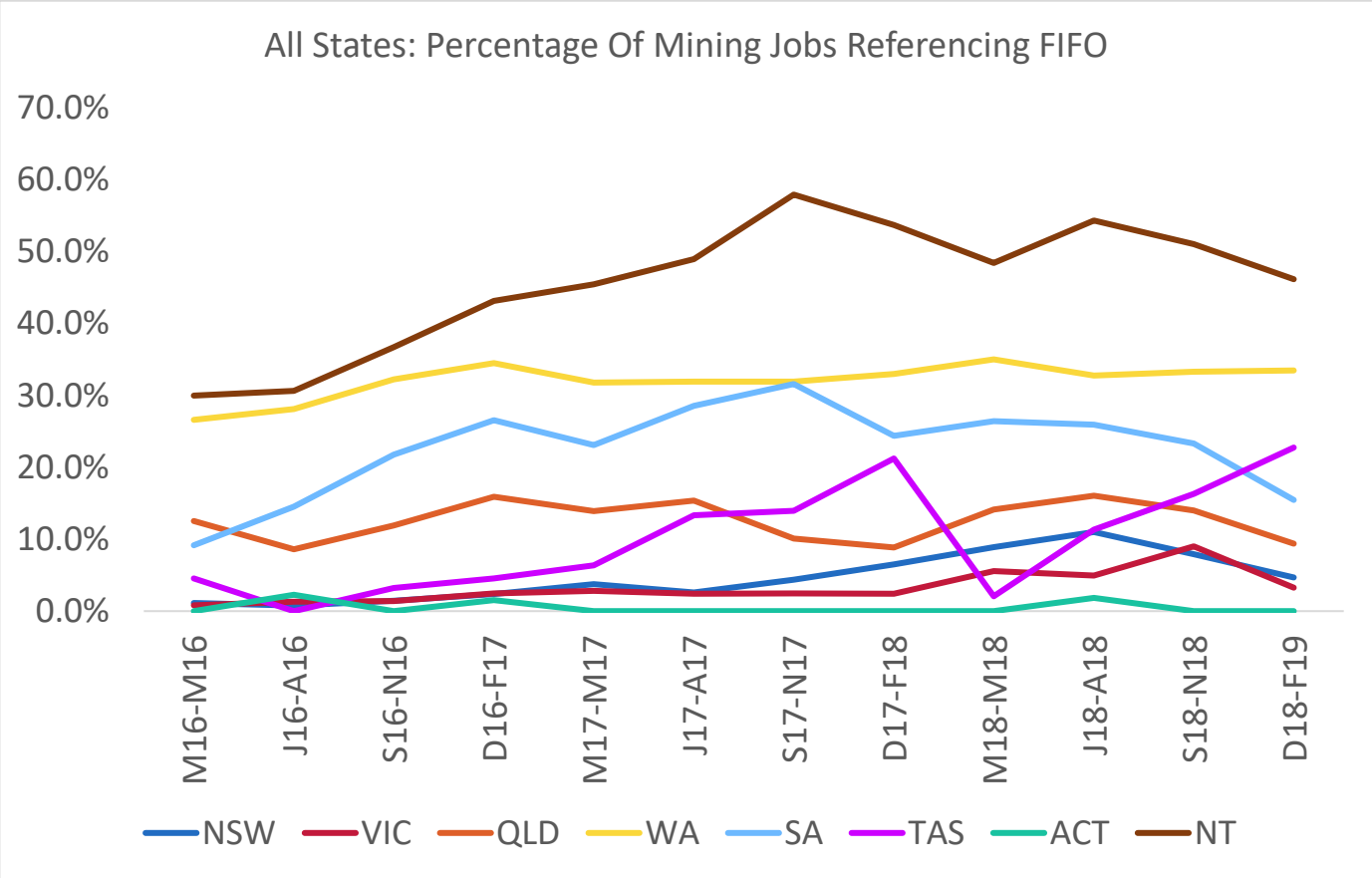

WA: Change In References To FIFO (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

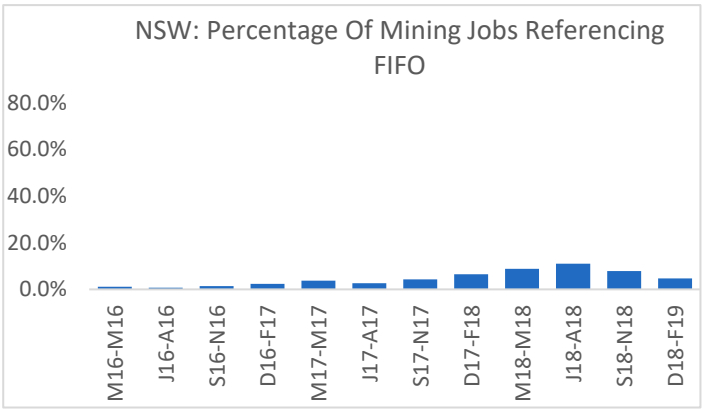

QLD: Change In References To FIFO (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

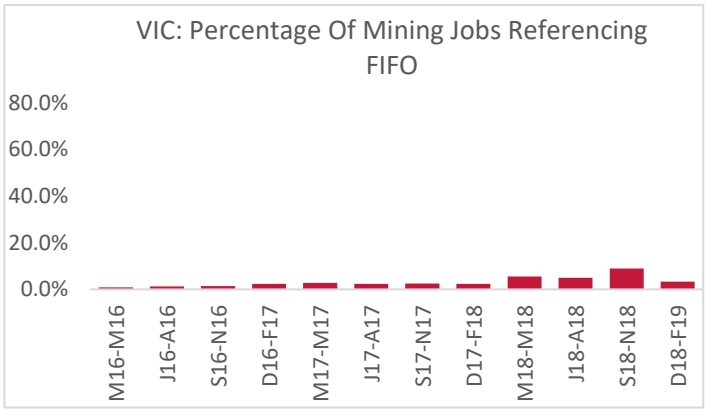

NSW: Change In References To FIFO (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

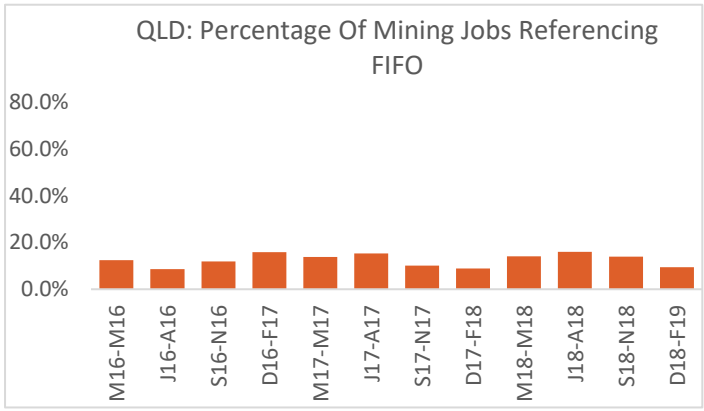

All Others: Change In References To FIFO (Index)
1,500
1,000
500
0
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

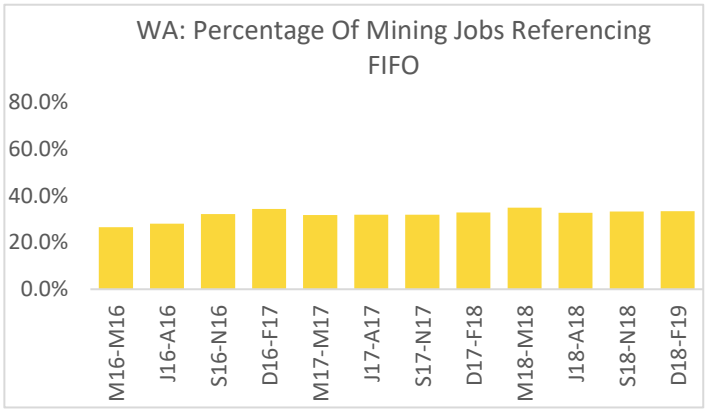

Percentage Of Mining Jobs Referencing FIFO (March 2016 - February 2019)
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
NSW
VIC
QLD
WA
SA
TAS
ACT
NT
State
National Average

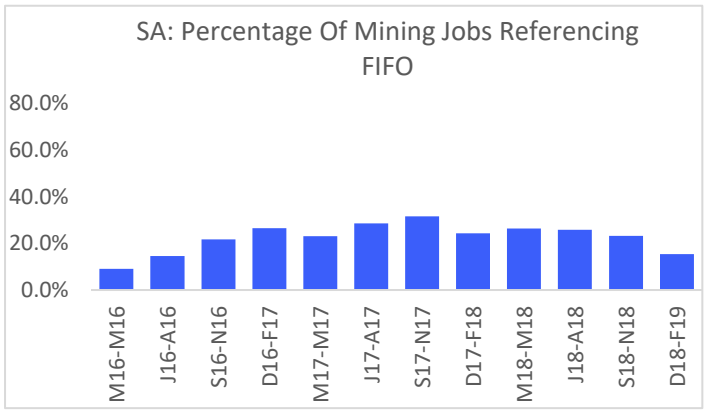

All States: Percentage Of Mining Jobs Referencing FIFO
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19
NSW
VIC
QLD
WA
SA
TAS
ACT
NT

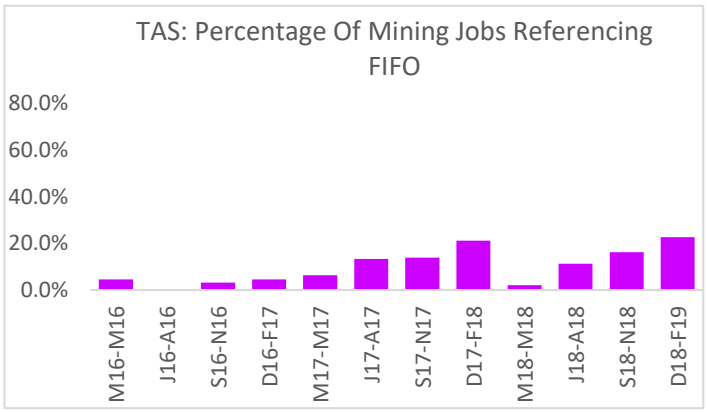

NSW: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

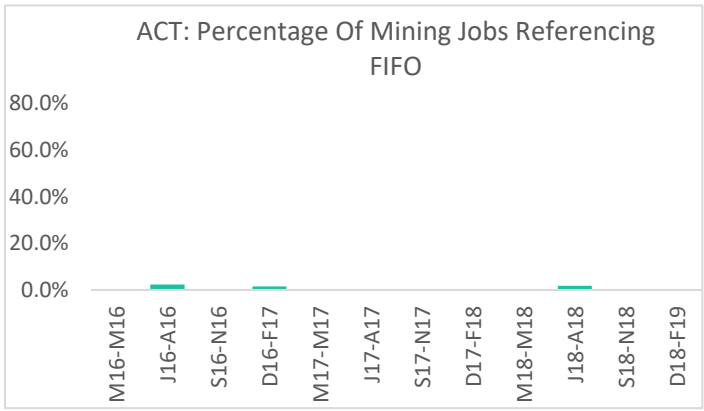

VIC: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

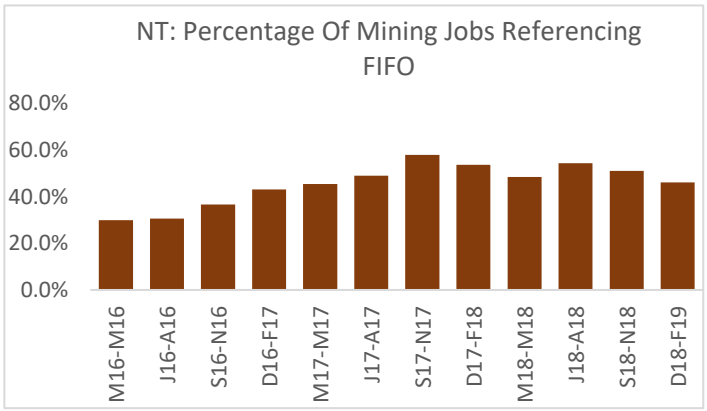

QLD: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


WA: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


SA: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


TAS: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


ACT: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19


NT: Percentage Of Mining Jobs Referencing FIFO
80.0%
60.0%
40.0%
20.0%
0.0%
M16-M16
J16-A16
S16-N16
D16-F17
M17-M17
J17-A17
S17-N17
D17-F18
M18-M18
J18-A18
S18-N18
D18-F19

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Minerals Council of Australia and CoverCard Mining Job Advertisement Analysis Pilot

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CC: Sid Marris, Principal Adviser Future Workforce, Minerals Council of Australia
Karolina Szukalska, Minerals Council of Australia

Final Prepared by: Matt Tomlins, CEO and Co-Founder, CoverCard

Date: March 7 2019

Background and Overview

The Minerals Council of Australia (MCA) represents Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable development and society. A key component of this is advocating for the impact of the minerals sector on the employment market, including understanding job market trends and the skills and qualifications in demand.

CoverCard has built unique technology to automate at scale the identification and categorisation of key information from digital job advertisements, with a focus on blue collar job qualifications. To CoverCard's knowledge there is no other company currently able to match the extent of this capability.

CoverCard has Partnered with a major job search engine to provide the input data needed. This includes all job advertisements from the last three years, creating a powerful research and analytics proposition.

This document defines the opportunity and outlines a proposed approach for a pilot project that applies CoverCard's unique capability to the mining sector in order to assist MCA in its mission to understand and advocate for skill and employment outcomes.

Research Scope

It is proposed that relevant mining job advertisements from March 1 2016 to February 28 2019 are included in this analysis to determine changes over time, and that the output data is then updated quarterly.

The analysis proposed below will be performed on a quarter-by-quarter basis covering the 36 months (12 quarters) to February 28 2019 to ascertain changes over time, and then updated for two additional quarters. Analysis for each of the six states and two territories will be split out separately, and then rolled up to a national level for each item, creating nine sets of data for each item below.

The following items are proposed for inclusion in the analysis:

- Mining job advertisement growth / change – month on month, by states and territories, and nationally (NOTE: this will be monthly analysis, where all other items will be quarterly);
- Share of jobs that are FIFO vs non-FIFO – quarter on quarter, by states and territories, and nationally;
- Growth / change in demand for High Risk Work Licence (HRWL) Types – there are 28 different HRWL categories that are state regulated but consistent across Australia. A HRWL is a very common requirement in the mining industry and this analysis will determine the change in demand for each of the 28 licence classes, quarter on quarter, by states and territories, and nationally, across the research period;
- Growth / change in demand for five other key qualifications that are of particular interest to MCA – quarter on quarter, by states and territories, and nationally. A few common options are below, but the targeted qualifications can be negotiated;
    - Construction Induction Card
    - Enter and Work in a Confined Space
    - Work Safely at Heights
    - Gas Test Atmospheres
    - Demonstrate First Attack Firefighting Equipment.

Further Research Options

The following are other potential options, that may be included in the Pilot by negotiation (these are suggestions and other options of interest to MCA can be explored):

- Growth / change in demand for Drivers Licence Types – there are 10 different Drivers Licence categories that are state regulated but consistent across Australia. This analysis will determine the change in demand for each of the 10 licence classes, quarter on quarter, by states and territories, and nationally, across the research period;
- Growth / change in demand for additional blue-collar qualifications – i.e. exploring more than five target qualifications of interest;
- Analysis of common Job Titles in the mining industry for growth / change in demand over the research period – this is potentially highly valuable and will require MCA and CoverCard to work together to identify an appropriate taxonomy. It is proposed that CoverCard's technology be used to create a count of all job titles from the prior 36 months of mining job advertisements, and these counts are then reviewed and grouped where the job titles are effectively the same;
- Analysis of growth / change in demand for soft skills / skills of the future – CoverCard's technology may be adapted to identify references to key skills of interest. For example, this could include parameters such as leadership, innovation / creativity, adaptability / agility, digital and others. A suggested starting point is to identify three to five discrete skills for analysis. Implementation of this approach will require further collaboration between MCA and CoverCard.

Job Advertisement Scope

The job advertisements used in this Pilot will be those in the mining sector. This will include all job advertisements that include the key industry term of 'mining.' The job listing will be de-duped to ensure multiple listings of the same job are removed. In addition, CoverCard will identify and remove false positives for known errors, such as the term 'data mining.'

This approach will provide a robust job advertisement listing with which to perform the required analysis. This methodology will be held consistent across the three years of job advertisements to be analysed, ensuring validity of the changes that are observed over time.

Model Outputs

The outputs will be provided visually to best demonstrate changes over time. This will include an extensive series of graphs and charts. Based on the Research Scope outlined above the output will potentially contain approximately 300 graphs (states, territories and nationally for each item and qualification under investigation).

There is the opportunity to collaborate to determine the exact format of the research output.

Use of Model Outputs

CoverCard owns the Intellectual Property associated with the research output and will grant MCA the rights to use the outputs internally to inform policy and advocacy work, as MCA sees fit.

External reproduction, for example in reporting, media releases, or any other format, is limited to 10% of the graphical outputs in any one activity. Attribution to CoverCard is also required where the model outputs are used externally.

This approach will enable MCA to share industry key insights externally (for example headline growth and changes in mining job advertisements by state and nationally) whilst enabling CoverCard to further commercialise its unique technology. This approach can be reviewed and discussed during and after the Pilot period.

Investment

CoverCard will provide the services described above under 'Research Scope' at a cost of:

- $15,000 (ex. GST) for system set-up and providing model outputs for the prior three years of job advertisement data;
- A subscription fee of $2,500 (ex. GST) per quarter for updating the data outputs, with this Pilot proposed to include two future quarters, through to end August 2019.

The items under 'Other Research Options' are open for negotiation and may be provided in addition or in substitute of the other items.

The analysis scope and associated subscription fee will be reviewed and negotiated following the Pilot.

CoverCard Capability

CoverCard's technology is currently focussed on blue collar skills and qualifications and is based on a comprehensive taxonomy of tickets, licences, trades and other qualifications. This taxonomy also powers CoverCard's public website (www.covercard.com.au) which connects workers and employers based on the specific qualifications required for the role, along with related complementary benefits for both parties.

CoverCard is an awarded technology startup. We have received Queensland Government funding as one of 25 technology startups from around the world selected to participate in the inaugural Hot DesQ program. CoverCard have been featured in numerous media and startup publications.

CoverCard was co-founded by Jon Gwynne, a trade qualified boilermaker, and Matt Tomlins, who has previously consulted in the resources sector and holds an MBA. Gordon Craick is CoverCard's Technical Lead and has over 15 years experience in software development working for both corporates and startups. CoverCard's advisory network is lead by Phil de Courcey whose current substantive role is CEO of the Resources and Engineering Skills Alliance. Phil has extensive mining and skills development experience and networks.

About our Job Advertisement Partner
CoverCard's Job Advertisement Partner is a search engine for job advertisements used by over 2 million visitors per month that aims to list every job, everywhere. They search thousands of websites, bringing together millions of ads in one place to give jobseekers the information they need to take control of their careers.

Their Australian team is based in Sydney and they currently have approximately 130,000 jobs listed from across Australia. Our arrangement with our Job Advertisement Partner provides access to a back series of approximately four million job advertisements over the last three years. We have strong alignment with our Job Advertisement Partner and have extensively tested their job advertisement inputs within CoverCard's software model.

We look forward to working with you.

Best Regards,

Matt Tomlins
CoverCard CEO and Co-Founder