

# Textiles, Clothing and Footwear Industry Reference Committee

## Skills Forecast and Proposed Schedule of Work 2019–2023



# Administrative Information

**Name of Industry Reference Committee (IRC):**

Textiles, Clothing and Footwear (TCF)

**Name of Skills Service Organisation (SSO):**

Innovation and Business Skills Australia (IBSA Manufacturing)

## About the Industry Reference Committee

The **Textiles, Clothing and Footwear Industry Reference Committee** comprises 10 members and was constituted in August 2017.

The 2019 Industry Skills Forecast and Proposed Schedule of Work was reviewed and approved by the IRC members below:

Mr Leon Drury (Chair)

Ms Meriel Chamberlin

Ms Kay Gerard

Ms Jenny Kruschel

Mr John Condilis

Ms Alison Bradshaw

Ms Ana Drougas

Ms Millie Gilbert

Dr Hilde Heim

Ms Kerry Wollington

## About the Skills Forecast

The Industry Reference Committee (IRC) Skills Forecast and Proposed Schedule of Work identifies priorities for training package development work to meet the needs of industry. This document is based on research, analysis and consultations with IRC members and industry stakeholders and provides evidence of current and emerging industry skills needs.

# Industry Reference Committee Signoff

This 2019 return of the Textiles, Clothing and Footwear IRC Skills Forecast and Proposed Schedule of Work was agreed as the result of a properly constituted IRC decision and was approved by:

IRC Chair: Leon Drury

Date: April 2019

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This IRC Skills Forecast and Proposed Schedule of Work has been prepared on behalf of the Textiles, Clothing and Footwear Industry Reference Committee for submission to the Australian Industry and Skills Committee (AISC).

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# Executive Summary

The Textiles, Clothing and Footwear (TCF) industry consists of diverse sectors with differing workforce development challenges and future opportunities. The impact of cheap imports has seen traditional TCF manufacturing largely replaced by sophisticated manufacturers offshoring all or some production work and local boutique manufacturers carving out niche and specialised market segments. Increasing consumer interest in quality and locally made products is providing scope for businesses to re-focus their offerings.

While businesses in the TCF services sector are not as directly impacted by import competition, businesses in the laundry and dry cleaning services sector have experienced ongoing consolidation of big players and resulting pricing pressures. TCF businesses are also facing the challenges associated with an ageing workforce, the introduction of new technologies and business models, changing consumer behaviour and environmental and ethical concerns. However, there are also opportunities for businesses that can access workers with appropriate skills.

Vocational Education and Training (VET) for the TCF industry needs to build advanced technical skills to support quality craftsmanship, as well as the broader science, technology, engineering and mathematics (STEM) and technological skills to capitalise on new ways of working.

The skills priorities identified in this forecast are detailed in the [Key Drivers for Change and Proposed Responses](#) section of this report and reflect the TCF industry's need to continue building a highly skilled workforce to support business growth and ability to respond to changes in manufacturing.

The [Proposed Schedule of Work 2019–2023](#), which lists the priorities over the next four years based on identified industry trends, was developed by the Textiles, Clothing and Footwear Industry Reference Committee (IRC) with support from IBSA Manufacturing. The priority identified by the IRC as critical and proposed for completion in 2019–2020 is the creation of a new Industrial Sewing skill set that will support the development of transferable, entry-level skills allowing workforce mobility across a range of TCF industry sectors. Further details about the proposed Industrial Sewing skill set can be found in the [Case for Change](#) section of this report.

# Sector Overview

## Industry Snapshot

The TCF industry operates in all Australian states and territories, with businesses in both city and regional areas and major hubs located in New South Wales and Victoria.

The industry can be grouped into three broad areas:

- Textile (processing and manufacturing): covering processing of natural (wool, cotton and leather) and synthetic materials such as polyvinyl chloride (PVC) and shade cloth
- TCF (production): covering production of clothing, textiles, footwear, leather goods and technical textiles
- TCF (services): covering provision of services including fashion and textile design, dry cleaning operations, laundry operations and clothing and footwear repairs.

Most TCF industry sectors can be defined as being in either mature or declining business lifecycle stages. The industry is trade exposed and subject to global economic trends, including competition from cheaper imports and the impact of offshoring manufacturing processes. TCF industry revenue for 2017 is estimated to be \$13.2b.<sup>1</sup>

Many businesses in the TCF industry subcontract services to manage fluctuations in work and concentrate on their core business activity, but this can distort the picture of TCF workforce numbers and skill requirements.

Although the TCF industry, and the manufacturing industry more broadly, have experienced declining output, employment and investment over the last decade, there are signs that this has stabilised and the industry could be poised for a recovery.<sup>2</sup> Employment in the TCF sector of the manufacturing industry increased from 31,700 employees in 2016–2017 to 38,800 in 2017–2018, one of the largest sector increases over this period.<sup>3</sup> Additionally, while business expenditure on research and development (BERD) fell 19.3% between 2013–2014 and 2015–2016 for the whole of the manufacturing industry, in the textile, leather, clothing and footwear sector, BERD increased by 128% from \$46m to \$105m.<sup>4</sup>

<sup>1</sup> Revenue aggregate from IBISWorld Industry Reports A0521, C1310, C1320, C1331, C1332, C1333, C1340, C1351A, C1351B, C1351C, C1351D, C1352, M6924, S9491 and S9531.

<sup>2</sup> The Australia Institute and Centre for FutureWork, Manufacturing: A moment of opportunity, June 2017.

<sup>3</sup> Department of Industry, Innovation and Science, Manufacturing Performance Report, 27 August 2018.

<sup>4</sup> Department of Industry, Innovation and Science, Manufacturing Performance Report, 27 August 2018.

Traditional TCF manufacturing in Australia is being revolutionised by innovation with new and specialised products and processes, and the servicing of bespoke markets.

<b>\$13.2b</b>	TCF Industry Revenue
<b>\$4.6b<sup>5</sup></b>	Textile (processing and manufacturing)
<b>\$4.9b<sup>6</sup></b>	TCF (production)
<b>\$3.7b<sup>7</sup></b>	TCF (services)

## Note on data

There are inherent difficulties in identifying industry and occupational data relevant to each Training Package. This report provides selected data from the Australian Bureau of Statistics (ABS), including counts of Australian businesses and labour force information. This data is based on two hierarchical classification systems – the Australian and New Zealand Standard Industrial Classification (ANZSIC) and the Australian and New Zealand Standard Classification of Occupations (ANZSCO). A list of ANZSIC and ANZSCO codes that have been identified by key industry stakeholders as relevant to this training package are provided at [Appendix A](#) and [Appendix B](#).

Census data, the most recent being 2016, can generally be broken down to the four-digit levels of these classifications. However, annual data is only available at the three-digit levels. Some of the industries or occupations that are included at the available level of aggregation may not be specifically relevant to this training package. To support the analysis of annual data included in the report, [Appendix C](#) provides a more detailed breakdown of occupational data based on the 2016 Census.

Furthermore, the ANZSIC and ANZSCO classification systems were introduced in 2006, with minor revisions incorporated into the ANZSCO structure in 2009 and 2013. Industry has noted that some ANZSIC and ANZSCO codes are now outdated and do not represent some emerging industries or occupations. In addition, the classification systems may not be sensitive to localised specialisations. Despite these limitations, the data can be useful in highlighting recent trends. When supplemented with qualitative advice from industry, this data helps to develop a useful picture of current and prospective industry conditions.

5 Industry group figure compiled from 2018 IBISWorld Industry Reports for A0521 Cotton Ginning (p. 3), C1310 Synthetic and Natural Textile Manufacturing (p. 3), C1320 Leather and Leather Substitute Product Manufacturing (p. 3), C1331 Carpet and Textile Floor Covering Manufacturing (p. 3), C1332 Rope Cordage and Twine Manufacturing (p. 4).

6 This figure does not include data for businesses in ANZSIC code 1334 Textile Finishing and Other Textile Product Manufacturing. The industry group is figure compiled from 2018 IBISWorld Industry Reports for C1333 Cut and Sewn Textile Product Manufacturing (p. 4), C1340 Knitted Product Manufacturing (p. 3), C1351A Men's and Boys' Wear Manufacturing (p. 3), C1351B Women's and Girls' Wear Manufacturing (p. 3), C1351C Sleepwear, Underwear and Infant Clothing Manufacturing (p. 4), C1351D Tailoring and Clothing Accessories Manufacturing (p. 4), C1352 Footwear Manufacturing (p. 3).

7 Industry group figure compiled from 2018 IBISWorld Industry Reports for M6924 Specialised Design Services (p. 14), S9491 Clothing and Footwear Repair (p. 3), S9531 Laundry and Dry-Cleaning Services (p. 4).

## Business Landscape

The Australian TCF industry continues to face vigorous competition from imports. Some businesses are realigning their operations to global supply chains, others are focusing on the supply of specialised or niche products to targeted markets. Between 2016–2017 and 2017–2018, the value of merchandise exports grew in most Australian manufacturing industry sectors. For the textile, leather, clothing and footwear sub-sector, the value of merchandise exports increased by 5.0% over this time. At the same time, the value of merchandise imports for the sub-sector increased by only 2.1%.<sup>8</sup>

There were approximately 14,000<sup>9</sup> businesses operating in the TCF industry at the end of June 2017, with the majority of these located in New South Wales and Victoria. Business numbers declined between 2015 and 2017 for most sectors within the TCF industry. The exceptions were textile finishing and other textile product manufacturing (increasing from 700 to 709 businesses), and Laundry and Dry Cleaning Services (increasing from 3,814 to 3,934 businesses).<sup>10</sup> Although the total business count for Other Specialised Design Services increased over this period from 13,998 to 14,383, it is not possible to determine whether this represents an increase in the number of businesses providing Fashion or Textile Design Services.<sup>11</sup>

TCF businesses are concentrated in the eastern states, with more than 30% of Textile Processing and Manufacturing businesses based in Victoria and more than one third of TCF Production businesses based in New South Wales. At the same time, Victoria is the base for 43% of the Textile Processing and Manufacturing workforce and 35% of the TCF Production workforce, as shown in Figure 1.

8 Department of Industry, Innovation and Science, Manufacturing Performance Report, 27 August 2018.

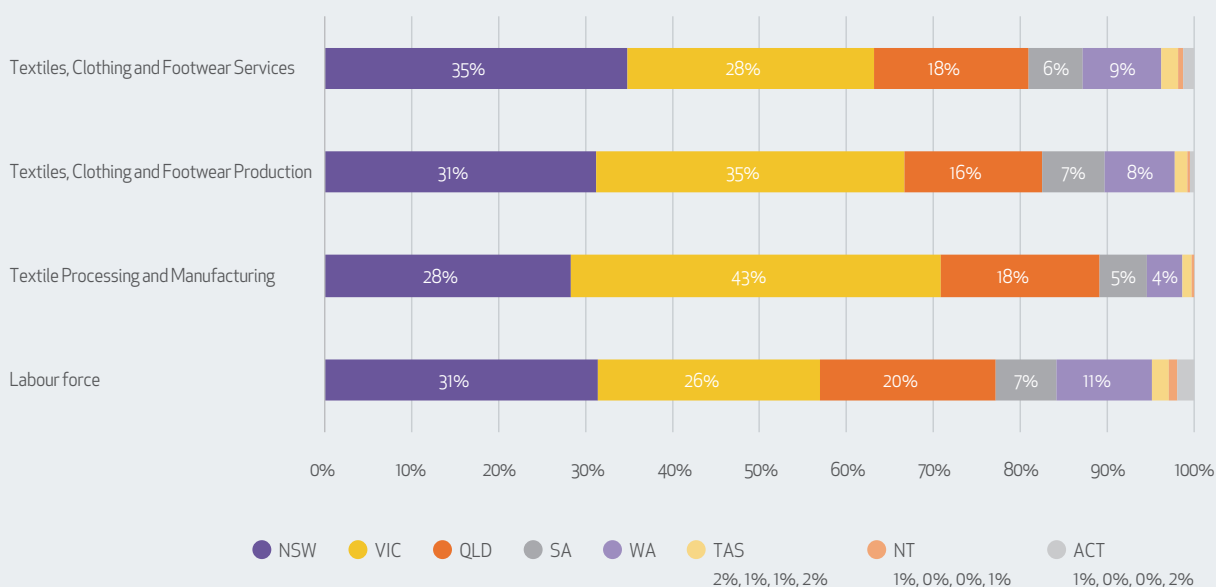
9 Note: previous estimates citing business numbers above 25,000 have been inflated due to the inclusion of units engaged in specialised design services that include commercial art services, graphic design services, interior design services, jewellery design services, signwriting and ticket writing.

10 ABS 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017.

11 Ibid.



Figure 1 – Distribution of TCF workforce by state, selected industries versus the overall labour force, 2016

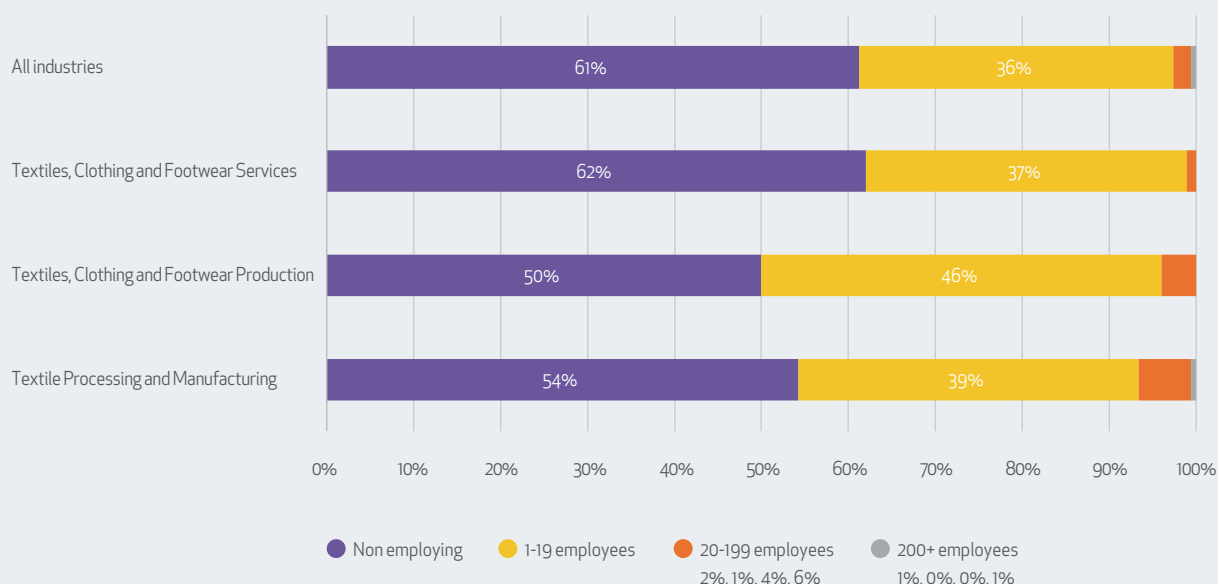


Source: Department of Jobs and Small Business, Labour Market Information Portal.

Although the TCF industry tends to be characterised as dominated by small and micro businesses, ABS data indicates that the size of TCF businesses is not that different from the wider Australian business landscape. The data also indicates that businesses in the manufacturing and production sectors of the TCF industry are less likely to be non-employing than those in the services sector.<sup>12</sup> While 61% of businesses in all industries are non-employing, and 62% of TCF services businesses are non-employing, only half of TCF production businesses and 54% of Textile Processing and Manufacturing businesses are non-employing. Figure 2 shows how the proportion of different-sized businesses varies between the sectors.

<sup>12</sup> Non-employing businesses are defined as sole proprietorships and partnerships without employees.

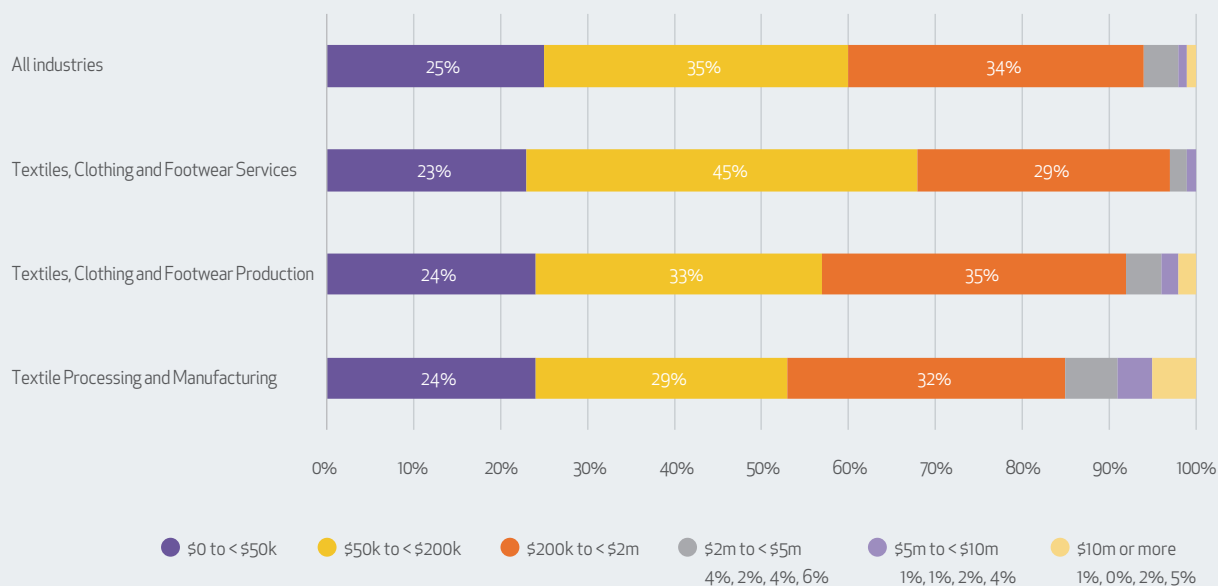
Figure 2 – Workforce size of TCF businesses, selected industries versus all industries, 2017



Source: ABS 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017.






Business turnover in the TCF industry also varies between industry sectors. Turnover is lower in the TCF services sector, where 68% of businesses had turnover of less than \$200,000 and 97% had turnover of less than \$2m in 2017. This difference is likely to reflect significant variances in operating expenses between production and service businesses. However, it is notable that (in line with all Australian industries) approximately one quarter of businesses in each TCF sector had turnover of less than \$50,000.

Figure 3 – Proportion of TCF businesses by turnover, selected industries versus all industries, 2017



Source: ABS 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017.

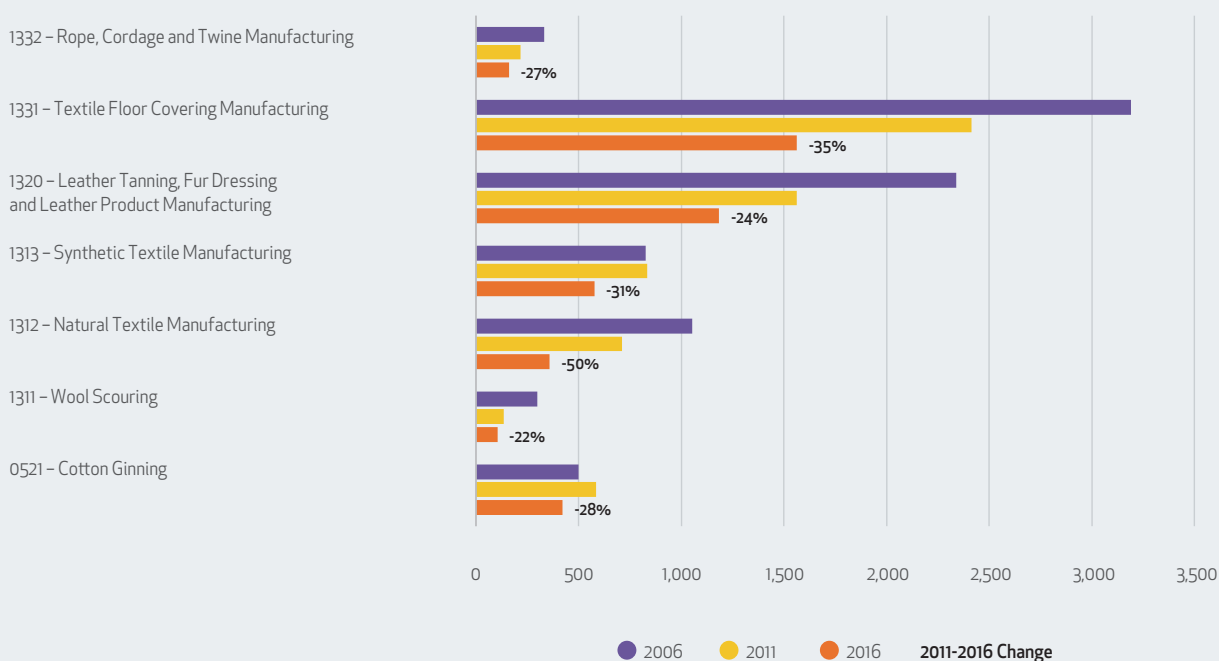
## Textile Processing and Manufacturing

Workforce <sup>13</sup>	Businesses <sup>14</sup>	Over 50 <sup>15</sup>	Gender Balance <sup>16</sup>	
				
4,367	724	41%	65%	35%

The textile processing and manufacturing sector comprises businesses that are primarily engaged in the production of textile products from raw materials. These may be natural such as cotton, wool and hemp, or synthetic such as PVC and a variety of emerging technical textiles.

The size of the workforce is declining across all sub-sectors of textile processing and manufacturing as shown in Figure 4.

**Figure 4 – Number of employees in textile processing and manufacturing industry classes, Census 2006–2016, and five-year change from 2011 to 2016**



Source: Department of Jobs and Small Business, Labour Market Information Portal.

<sup>13</sup> ABS 2016 Census, employees in selected industries.

<sup>14</sup> ABS 86165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017.

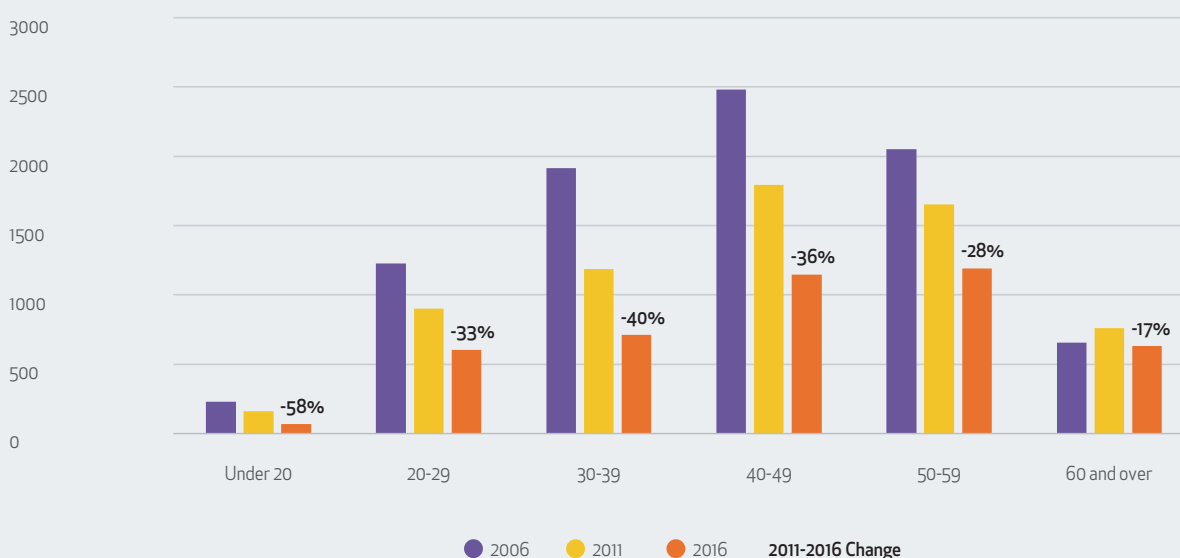
<sup>15</sup> Department of Jobs and Small Business, Labour Market Information Portal.

<sup>16</sup> Ibid.

The number of people employed in the textile processing and manufacturing sector declined over the 10 years from 2006 to 2016. In most areas of the industry the decline has been driven by increasing competition from low cost imports causing some operators to shift production offshore or to leave the industry entirely.<sup>17</sup> However, some of the decline in employment can also be attributed to the implementation of automation by remaining operators. For example, automated tanning and inventory management systems introduced by leather tanning firms have reduced the need for manual labour despite an increase in the number of skins processed.<sup>18</sup> Similar introductions of automation in the production of natural and synthetic textiles have contributed to declines in employment.<sup>19</sup>

Victoria is home to the largest share of the textile processing and manufacturing workforce, although the number of employees has declined steeply since 2006, with a reduction of 2,237 employees over the decade to 2016. While the overall size of the textile processing and manufacturing workforce is declining, it is declining more slowly in the older age brackets. Employees aged 50 and over are leaving the industry at a slower rate than those in younger age brackets, as shown in Figure 5.

Figure 5 – Number of employees in textile processing and manufacturing by age, 2011–2016



Source: Department of Jobs and Small Business, Labour Market Information Portal.

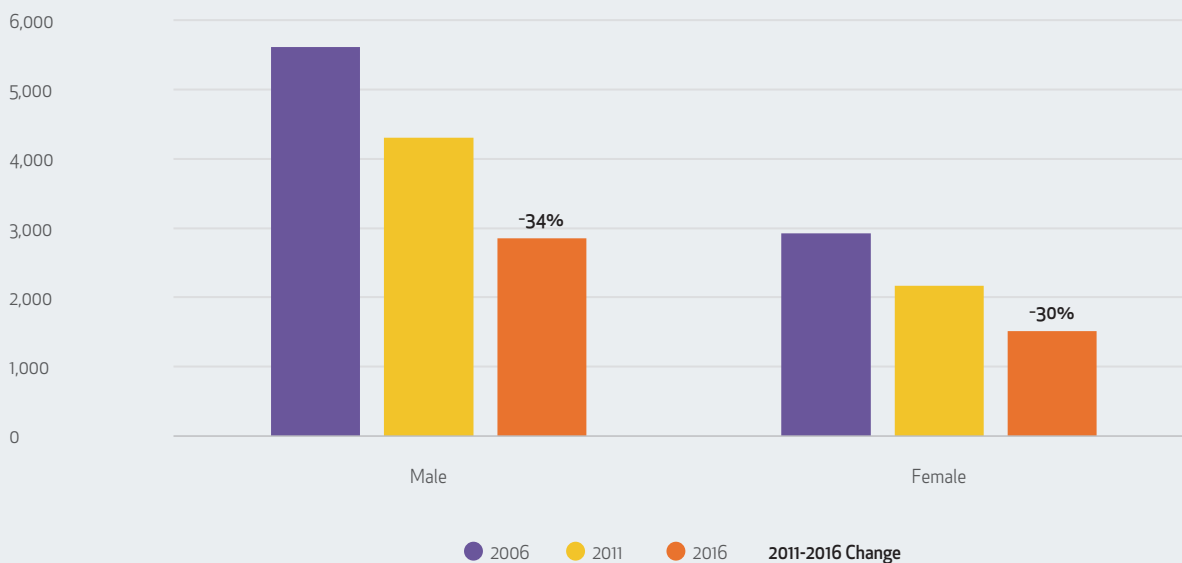
17 IBISWorld Industry Report: C1310 Synthetic and Natural Textile Manufacturing, C1320 Leather and Leather Substitute Product Manufacturing, C1331 Textile Floor Covering Manufacturing, and C1332 Rope Cordage and Twine Manufacturing.

18 IBISWorld Industry Report C1320 Leather and Leather Substitute Product Manufacturing, February 2018, p 7.

19 IBISWorld Industry Report C1310 Synthetic and Natural Textile Manufacturing in Australia, May 2018, p 7.

The textile processing and manufacturing workforce is male-dominated, unlike most sectors of the broader TCF industry. However, the size of the male workforce has declined at a greater rate than the female workforce, as shown in Figure 6.

**Figure 6 – Number of employees in textile processing and manufacturing by gender, 2011–2016**



Source: Department of Jobs and Small Business, Labour Market Information Portal.

Potential career pathways in the Textile Processing and Manufacturing sector are shown in Table 1.

Table 1 – Job pathways from Australian Apprenticeships &amp; Traineeships Information Service

## Cotton Ginning

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Assistant Cotton Ginner	Cotton Ginner	Supervisor/Leading Hand – Cotton Ginning		

## Textile Fabrication and Production

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Canvas and Sail Textile Fabricator	Textile Production Leading Hand	Textile Design Team Leader	Textile Technologist	
Textile Operator	Sail Maker/Canvas Goods Fabricator			
Textile Operator and Dispatcher				
Production Operator (Non-woven textiles)				






## Leather Production

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Hide, Skin and Leather Worker	Leather Goods Machinist			
Leather Goods Production Operator				

Source: Australian Apprenticeships & Traineeships Information Service, Job Pathways <https://www.aapathways.com.au/job-pathways/chart/textiles-clothing-and-footwear/fa3683e1-71a7-4a4f-bbc7-98e2a15cce53?stream=66c2eae4-0250-4ef9-bd63-0d368ef0820c> accessed on 14 November 2018.

## Cotton Ginning

Ginning is the process of separating cotton fibres (lint) from the cottonseed. Cleaned lint is pressed into bales and sold to cotton spinners and textile manufacturers.






Workforce <sup>20</sup>	Businesses	Revenue 2017–2018	Annual Growth 2013–2018	Predicted Growth 2018–2023
				
422	40	\$2.7b	-4.6%	-0.7%

The performance of the cotton ginning sector is closely linked to cotton growing activity which is affected by a range of local and global factors including climatic conditions, water supply regulation, fluctuations in global cotton consumption, and cotton stockpiling. The variability of these factors has caused significant volatility in industry revenue over the past five years.<sup>21</sup>

The cotton ginning sector is dominated by a small number of companies. These businesses are concentrated in the Murray-Darling Basin in New South Wales and Queensland where more than 90% of Australian cotton is grown. However, the geographic spread of ginning facilities may shift in coming years with the introduction of new storage containers that improve handling of the raw product and enable haulage over long distances. While improvements in freight bring the potential for Australian cotton to be ginned abroad, Australian cotton ginners are expected to boost local employment numbers over the next five years to meet increasing throughput requirements.<sup>22</sup>

## Synthetic and Natural Textile Manufacturing

This manufacturing sector is primarily engaged in wool scouring, spinning yarns and weaving fabrics made from natural and synthetic fibres.

Workforce <sup>23</sup>	Businesses	Revenue 2017–2018	Annual Growth 2013–2018	Predicted Growth 2018–2023
				
1,038	136	\$507.9m	-2.2%	-2.2%

<sup>20</sup> ABS 2016 Census, employees in selected industry.

<sup>21</sup> IBISWorld Industry Report A0521 Cotton Ginning in Australia, November 2017, p. 4.

<sup>22</sup> IBISWorld Industry Report A0521 Cotton Ginning in Australia, November 2017, pp. 8 and 17.

<sup>23</sup> ABS 2016 Census, employees in selected industry.








Fierce import competition in the synthetic and natural textile manufacturing sector has driven down revenue and forced industry exits.<sup>24</sup> In response, manufacturers have focused on moving away from price-based competitive products to providing high-value output for smaller niche markets, such as military protective clothing, fire retardant fabrics and technical textiles for industrial use.<sup>25</sup> New materials and products are not highly visible at the retail or consumer level because they are frequently used in downstream applications in manufacturing and service industries such as agriculture, building and construction, medical and hygiene, and packaging.<sup>26</sup>

To distinguish themselves from low-cost competitors, Australian operators are using new technology to develop high-performance fibres with improved durability, strength, moisture absorption and flame resistance. New manufacturing management software is also being used to optimise production processes allowing better inventory management, faster turnaround times and greater market responsiveness.

Synthetic and natural textile manufacturing businesses are highly concentrated in Victoria and New South Wales due to their closer proximity to large consumer markets and transport hubs, and the historical establishment of apparel manufacturing.<sup>27</sup>

## Leather Tanning, Fur Dressing and Leather Product Manufacturing

This sector includes operators that produce and process leather hides and other animal skins, along with manufacturers of leather and leather-substitute products like wallets, saddles and handbags. The sector excludes leather clothing and footwear manufacturing.

Workforce <sup>28</sup>	Businesses	Revenue 2017–2018	Annual Growth 2013–2018	Predicted Growth 2018–2023
				
1,184	378	\$420.4m	-6.4%	-1.5%

Falling demand from clothing and footwear manufacturers over the last five years has adversely impacted producers and processors of hides and skins. Australian businesses struggle to compete with cheap labour and overhead costs in many other manufacturing countries. As a result, some offshoring of leather production functions has occurred over recent years.<sup>29</sup>

<sup>24</sup> IBISWorld Industry Report C1310 Synthetic and Natural Textile Manufacturing in Australia, May 2018, p 4.

<sup>25</sup> IBISWorld Industry Report C1310 Synthetic and Natural Textile Manufacturing in Australia, May 2018, p 7.

<sup>26</sup> Technical Textiles and Nonwoven Association website, <http://ttna.com.au/industry/>, accessed on 15 November 2018.

<sup>27</sup> IBISWorld Industry Report C1310 Synthetic and Natural Textile Manufacturing in Australia, May 2018, p 17.

<sup>28</sup> ABS 2016 Census, employees in selected industry.






<sup>29</sup> IBISWorld Industry Report C1320 Leather and Leather Substitute Product Manufacturing, February 2018, p 4.

An increasing number of animals slaughtered in Australia, and demand for niche leather products, provide scope for Australian producers to expand their operations. However, the reputation of Australian hides in export markets is currently mediocre due to tick bite marks and cuts. This is particularly the case with hides from Queensland where the largest volume of cattle is slaughtered.<sup>30</sup>

Additionally, the implementation of advanced automated tanning and inventory management systems is reducing the need for manual labour in this sector.<sup>31</sup>

## Textile Floor Covering Manufacturing

Textile floor covering manufacturers produce carpets, rugs or other textile floor coverings. The sector also includes companies that manufacture felt or felt products, mats or matting of jute or twisted rags

Workforce <sup>32</sup>	Businesses	Revenue 2018–2019	Annual Growth 2014–2019	Predicted Growth 2019–2024
				
1,563	83	\$793.8m	-1.3%	-0.3%

Competition from imports and substitute products – such as tiles and wooden floorboards – have resulted in falling revenue for the sector over the past five years, although the decline has been limited by strong demand from multi-unit apartment and townhouse construction.<sup>33</sup>

With reducing profit margins, largely attributable to higher wages and higher wool prices, many smaller carpet manufacturers have exited the industry. Where operators have been able to take advantage of new manufacturing technologies to produce value-added or niche products, they have performed better.

Exports account for only 5.5% of revenue for Australian textile floor covering manufacturers.<sup>34</sup> While competition in the domestic market is increasing, it is having most impact on manufacturers supplying the cheaper end of the market.

<sup>30</sup> IBISWorld Industry Report C1320 Leather and Leather Substitute Product Manufacturing, February 2018, p 9.

<sup>31</sup> IBISWorld Industry Report C1320 Leather and Leather Substitute Product Manufacturing, February 2018, p 7.






<sup>32</sup> ABS 2016 Census, employees in selected industry.

<sup>33</sup> IBISWorld Industry Report C1331 Carpet and Textile Floor Covering Manufacturing, July 2018, p 4.

<sup>34</sup> IBISWorld Industry Report C1331 Carpet and Textile Floor Covering Manufacturing, July 2018, p 7.

## Rope, Cordage and Twine Manufacturing






The rope, cordage and twine manufacturing sector produce rope, cordage, twine, net and similar products from natural or synthetic fibres.

Workforce <sup>35</sup>	Businesses	Revenue 2017–2018	Annual Growth 2014–2019	Predicted Growth 2019–2024
				
160	63	\$141.9m	-3.6%	-1.6%

Rope, cordage and twine manufacturing is highly automated with limited demand for labour. The products are used as intermediate inputs in manufacturing, construction, mining and transport enterprises. Textile product manufacturers use cords as intermediate inputs for products such as textile blinds. Rope, cordage and twine manufacturers are vulnerable to the impact of declining demand from downstream product users. Only 17% of sector revenue is generated from the direct retail market.<sup>36</sup>

Over recent years, rope, cordage and twine manufacturers have faced increasing competition from low-cost imports in the domestic market.

## Textiles, Clothing and Footwear Production

Workforce <sup>37</sup>	Businesses <sup>38</sup>	Over 50 <sup>39</sup>	Gender Balance <sup>40</sup>	
				
16,389	5,680	45%	35%	65%

The TCF production sector use textiles to produce a wide range of final and intermediate products for the domestic and export market.

<sup>35</sup> ABS 2016 Census, employees in selected industry.

<sup>36</sup> IBISWorld Industry Report C1332 Rope Cordage and Twine Manufacturing, November 2018, p 16.

<sup>37</sup> ABS 2016 Census, employees in selected industries.

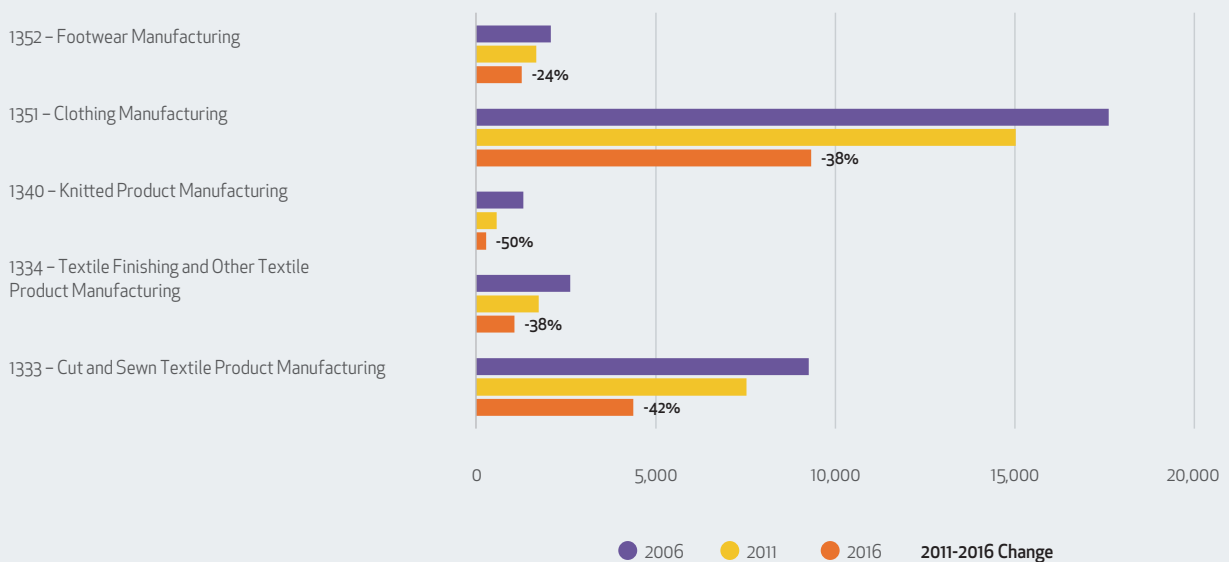
<sup>38</sup> ABS 86165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017.

<sup>39</sup> Department of Jobs and Small Business, Labour Market Information Portal.

<sup>40</sup> Ibid.

The size of the workforce is declining across all sectors of TCF production as shown in Figure 7.

**Figure 7 – Number of employees in TCF production, Census 2006–2016, and five-year change from 2011 to 2016**

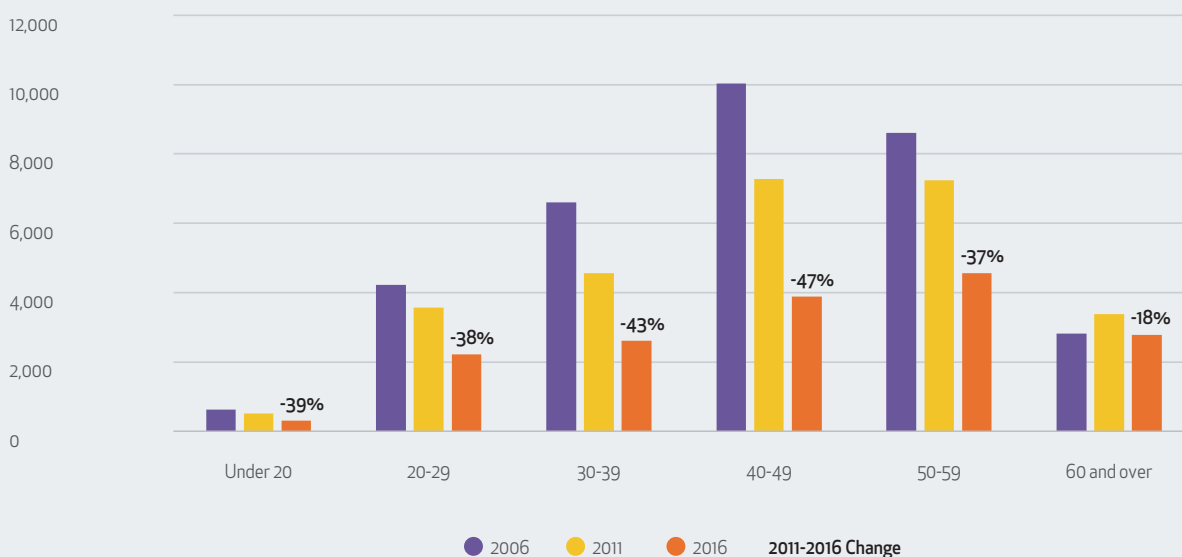


Source: Department of Jobs and Small Business, Labour Market Information Portal.

Victoria is home to the largest share of the TCF production workforce, although the number of employees has declined sharply since 2006 – with a reduction of 6,368 employees over the decade to 2016.

While the size of the TCF production workforce is declining, it is declining more slowly in the older age brackets. Employees aged 50 and over are leaving the industry at a slower rate than those in younger age brackets, as shown in Figure 8.

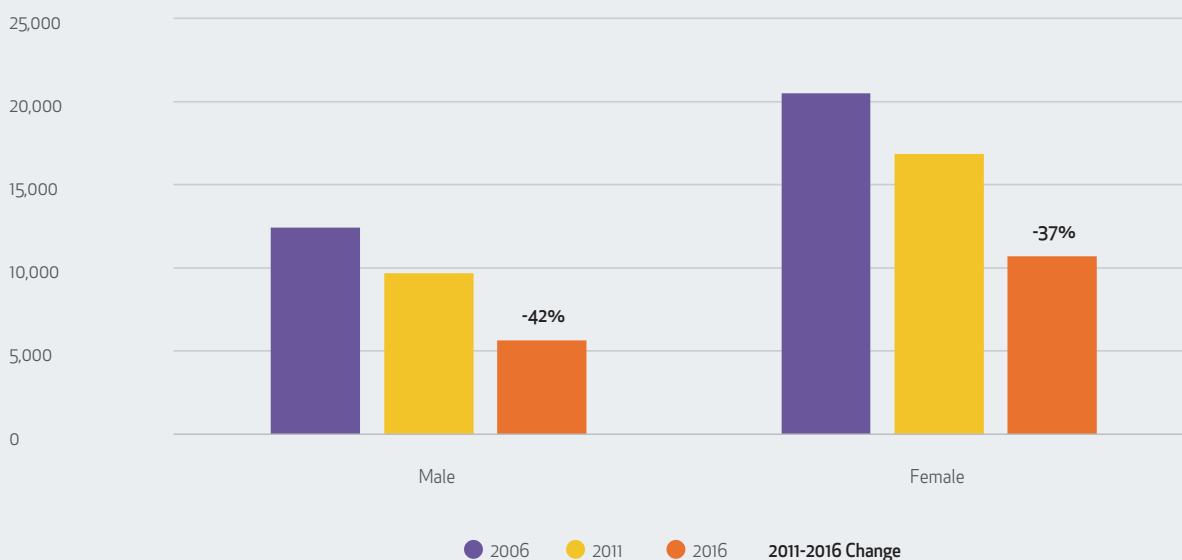
Figure 8 – Number of employees in TCF production by age, 2011–2016



Source: Department of Jobs and Small Business, Labour Market Information Portal.

The TCF production workforce is female-dominated, and the proportion of female employees has increased from 62% in 2006 to 65% in 2016. The size of the male workforce has declined at a greater rate than the female workforce, as shown in Figure 9.

Figure 9 – Number of employees in TCF production by gender, 2011–2016



Source: Department of Jobs and Small Business, Labour Market Information Portal.

Potential career pathways in the TCF production sector are shown in Table 2.

**Table 2 – Job pathways from Australian Apprenticeships & Traineeships Information Service**

Textile Fabrication & Production

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Canvas and Sail Textile Fabricator	Textile Production Leading Hand	Textile Design Team Leader	Textile Technologist	
Textile Operator	Sail Maker/Canvas			
Textile Operator and Dispatcher	Goods Fabricator			
Production Operator (Non-woven textiles)				

Clothing Production

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Clothing Production Assistant	Clothing Machinist	Sample Machinist		
Clothing Production Assistant (Complex)	Embroiderer (Digitised and Computer based)			
Clothing Production (Complex or Multiple Processes)				
Garment Repairer				

Millinery

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Milliner's Assistant	Milliner	Milliner Technician		

## Footwear Production and Repair

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Footwear Production Operator (Intermediate)	Footwear Maker Footwear Repairer	Custom-made Footwear Maker		Medical Grade Footwear Maker
Footwear Production Operator (Complex or Multiple Processes)		Medical Grade Footwear Maker		
Footwear Repairer				






## TCF Services Mechanic

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
	TCF Mechanic – sewing machines TCF Mechanic (Composite Program)			

Source: Australian Apprenticeships & Traineeships Information Service, Job Pathways <https://www.aapathways.com.au/job-pathways/chart/textiles-clothing-and-footwear/fa3683e1-71a7-4a4f-bbc7-98e2a15cce53?stream=66c2eae4-0250-4ef9-bd63-0d368ef0820c> accessed on 14 November 2018.

## Cut and Sewn Textile Product Manufacturing

Cut and sewn textile product manufacturers produce household textile goods such as bed linen, curtains, towels and pillows. Other products manufactured include blinds, tents, awnings, sails, and tarpaulins produced from natural or synthetic fibres.

Workforce <sup>41</sup>	Businesses	Revenue 2017–2018	Annual Growth 2013–2018	Predicted Growth 2018–2023
				
4,390	1,667	\$2.0b	-0.9%	-2.3%

Industry profit margins vary among product segments in this sector, although low-cost imports have drawn demand away from some locally produced textile products. Products such as canvas awnings, tarpaulins and shade sails face limited competition due to the high manufacturing standards of domestic firms.<sup>42</sup>

<sup>41</sup> ABS 2016 Census, employees in selected industry.

<sup>42</sup> IBISWorld Industry Report C1333 Cut and Sewn Textile Product Manufacturing, January 2018, p 5.








Opportunities exist for manufacturers to focus on producing niche, higher value-added and export-oriented textile products. Investment in specialised technology and functionality of textile products has seen some larger players outperforming the rest of the industry. For example, Hunter Douglas Australia, the largest supplier of window coverings in Australia, has experienced success with the production of blinds and awnings with enhanced sound absorption capabilities, window insulation and child safety.<sup>43</sup>

Access to skilled textile workers has been a major issue facing the industry over the past five years. Employers in the sector have reported that they have difficulty retaining experienced workers and attracting new workforce entrants due to limited opportunities for career progression and the availability of higher salaries outside the industry.<sup>44</sup>

## Knitted Product Manufacturing

Knitted product manufacturers produce knitted or crocheted fabrics that are sold to other manufacturers for further production, and knitted clothing including hosiery, cardigans, jackets and pullovers.

Workforce <sup>45</sup>	Businesses	Revenue 2016–2017	Annual Growth 2012–2017	Predicted Growth 2017–2022
				
281	110	\$93.1m	-8.8%	-1.4%

Knitted product manufacturing in Australia has been declining for some time with many firms unable to compete with cheaper Chinese imports. Enterprise numbers have declined by 7.1% over the past five years and many larger players have taken production offshore.<sup>46</sup>

Australian businesses are moving towards boutique manufacturing of high-end goods for Australian retailers to avoid competing with low-cost imports. This shift of focus for Australian manufacturers, and improving retail conditions, are expected to reduce the rate of decline for the sector over the next five years.<sup>47</sup>

43 IBISWorld Industry Report C1333 Cut and Sewn Textile Product Manufacturing, January 2018, p 9.

44 IBSA consultations with the Specialised Textiles Association, November 2018.






45 ABS 2016 Census, employees in selected industry.

46 IBISWorld Industry Report Knitted Product Manufacturing, April 2017, p 6.

47 IBISWorld Industry Report Knitted Product Manufacturing, April 2017, p 8.

## Clothing Manufacturing (including Millinery)

Clothing manufacturing includes tailoring and the production of men's and boys' wear, women's and girls' wear, sleepwear, underwear and infant clothing, and accessories.

Workforce <sup>48</sup>	Businesses <sup>49</sup>	Revenue 2017–2018 <sup>50</sup>	Annual Growth 2013–2018 <sup>51</sup>	Predicted Growth 2018–2023 <sup>52</sup>
				
9,334	3,009	\$2.2b	-6.7%	-5.0%

As with other sectors in the TCF industry, the manufacturing of mass-produced, low-value products has largely been moved offshore. Australian businesses maintain viability by offering boutique brands, ethically manufactured garments and designer items customised to the Australian market. Some local producers have also successfully targeted specialised clothing sectors, e.g. apparel for defence, emergency services, mining and healthcare services. Emerging technologies such as 3D printing and more sophisticated automation techniques are likely to increase the competitiveness of smaller operations.<sup>53</sup> The rise of social media platforms has also increased the competitiveness of smaller manufacturers by giving producers direct access to consumers and allowing them to humanise their brands and build loyalty.<sup>54</sup>

Consultation with industry has identified skills shortages in key areas, including pattern making and experienced machinists. Consultations also highlighted that skilled workers are also in demand for swimwear and intimate wear production.

<sup>48</sup> ABS 2016 Census, employees in selected industry.

<sup>49</sup> ABS 2017 data.

<sup>50</sup> Calculated from IBISWorld reports for 1351 a, b, c and d.

<sup>51</sup> Ibid.






<sup>52</sup> Ibid.

<sup>53</sup> IBISWorld Industry Report C1351B Women's and Girls' Wear Manufacturing, March 2018, p 4.

<sup>54</sup> IBISWorld Industry Report C1351B Women's and Girls' Wear Manufacturing, March 2018, p 6.

## Footwear Manufacturing

Footwear manufacturers produce footwear or footwear components that are purchased by footwear wholesalers and retailers who on-sell them to consumers.

Workforce <sup>55</sup>	Businesses	Revenue 2017–2018	Annual Growth 2013–2018	Predicted Growth 2018–2023
				
1,280	181	\$643.9m	3.8%	2.8%

Australian footwear producers have faced difficult trading conditions over the last decade with increased import penetration in the local market and reduced tariff protection. Most Australian manufacturers that have remained in the industry do not compete directly with cheap imported products.<sup>56</sup>

Unlike most TCF industry sectors, Footwear Manufacturing has experienced positive annual growth over the past five years and future growth is forecast. Growth has been underpinned by a focus on specialised and premium goods. Branding and marketing exercises have seen some larger companies succeed in international markets by emphasising handmade craftsmanship, e.g. Redback Boots derive half of their annual revenue from exports. Rising domestic and overseas demand for Australian-made products has driven growth in industry output and employment.<sup>57</sup>

Australian footwear manufacturers also benefit from health and safety standards requiring specific types of workwear and footwear. Uniform contracts provide some manufacturers with stable, ongoing revenue.<sup>58</sup>

Employment in the sector is expected to remain steady over the next five years with the loss of some jobs to offshoring offset by remaining employers increasing their staff numbers.<sup>59</sup>

<sup>55</sup> ABS 2016 Census, employees in selected industry.






<sup>56</sup> IBISWorld Industry Report C1352 Footwear Manufacturing, June 2018, p 4.

<sup>57</sup> IBISWorld Industry Report C1352 Footwear Manufacturing, June 2018, p 6.

<sup>58</sup> IBISWorld Industry Report C1352 Footwear Manufacturing, June 2018, p 8.

<sup>59</sup> Ibid.

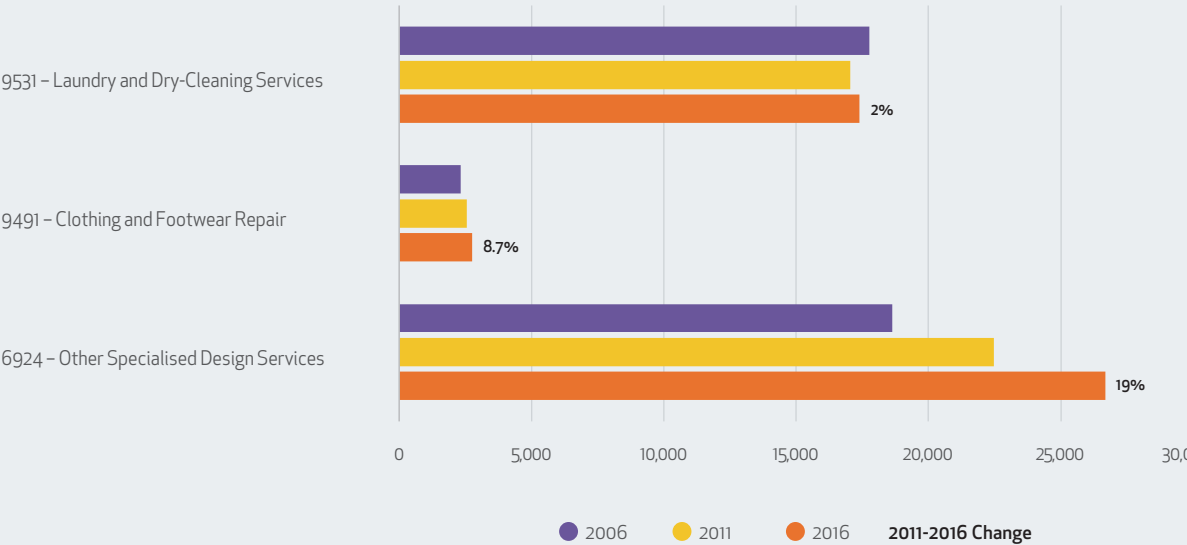
# Textiles, Clothing and Footwear Services

Workforce <sup>60</sup>	Businesses <sup>61</sup>	Over 50 <sup>62</sup>	Gender Balance <sup>63</sup>	
				
16,389	7,781	32%	47%	53%

The TCF services sector includes fashion and textile design services, clothing and footwear repair, and laundry and dry cleaning services.

The size of the TCF services workforce has increased over the past decade, although the laundry and dry cleaning services sector has remained relatively stable, as shown in Figure 10.

Figure 10 – Number of employees in TCF services, Census 2006–2016, and five-year change from 2011 to 2016



Source: Department of Jobs and Small Business, Labour Market Information Portal.

60 ABS 2016 Census, employees in selected industries. Note, the figure for 6924 Other Specialised Design Services has been adjusted to acknowledge the inclusion of services other than fashion and textile design in this ANZSIC code.

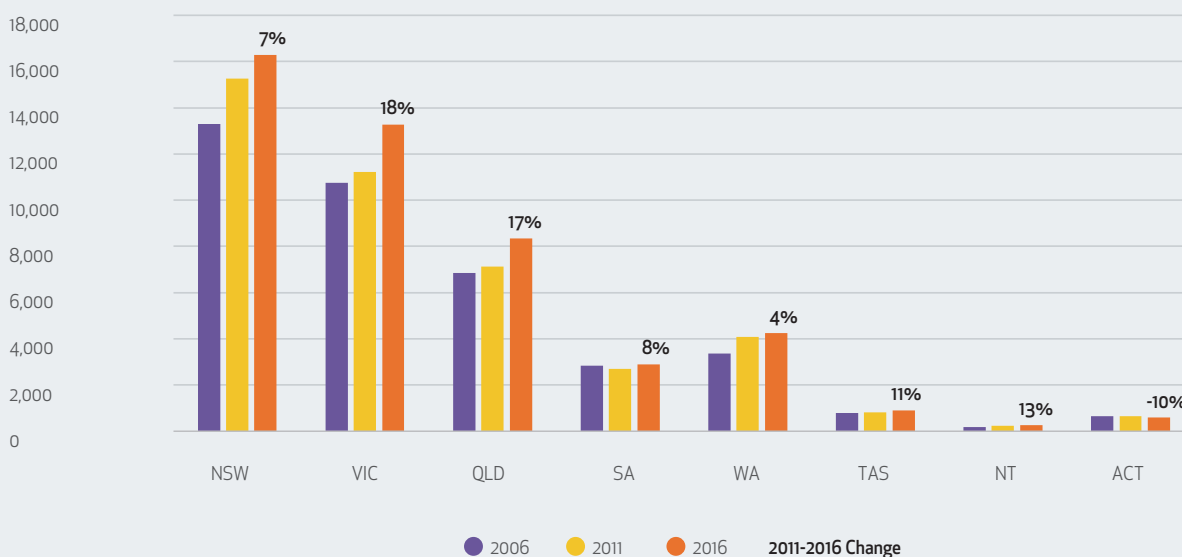
61 ABS 86165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017. Note, the figure for 6924 Other Specialised Design Services has been adjusted to acknowledge the inclusion of services other than fashion and textile design in this ANZSIC code.

62 Department of Jobs and Small Business, Labour Market Information Portal.

63 Ibid.

The distribution of the TCF services workforce across Australia is more closely aligned to population levels than the distribution of other sectors of the TCF industry. Between 2011 and 2016, the size of the workforce increased in every state/territory, with the exception of the ACT, as shown in Figure 11.

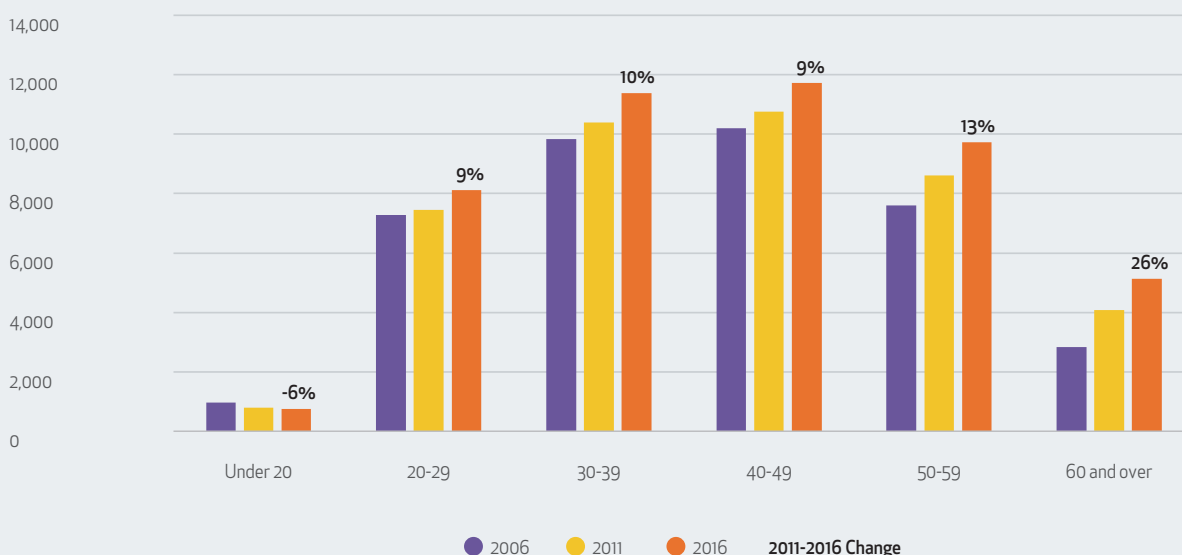
Figure 11 – Number of employees in TCF services, 2011–2016



Source: Department of Jobs and Small Business, Labour Market Information Portal.

The TCF services workforce has an age distribution that is only slightly older than that of the whole Australian labour force. However, the number of employees in the sector aged over 50 has increased at a greater rate than it has for younger age brackets, as shown in Figure 12.

Figure 12 – Number of employees in TCF services by age, 2011–2016



Source: Department of Jobs and Small Business, Labour Market Information Portal.

Significant growth in employment in design services over the decade to 2016 has coincided with declines in employment in manufacturing. For some operators in the TCF industry, design jobs have been maintained or expanded in Australia while production has shifted offshore.<sup>6465</sup> However, it must be noted that 6924 Other Specialised Design Services shown in Figure 10 comprises many activities outside the TCF industry including graphic design, web design, signwriting, ticket writing, interior design and commercial art design.<sup>66</sup> As a result, it is not possible to identify the extent of change in the fashion design workforce.

The proportion of female employees in the TCF services workforce has increased over the last decade. In 2006, 51% of the sector's workforce was female, rising to 53% in 2016.

64 IBISWorld Industry Report M6924 Specialised Design Services in Australia, October 2018, p. 15.

65 IBISWorld Industry Report C1333 Cut and Sewn Textile Product Manufacturing in Australia, October 2018, p. 7.

66 IBISWorld Industry Report M6924 Specialised Design Services in Australia, October 2018, p. 13.

Potential career pathways in the TCF services sector are shown in Table 3.

**Table 3 – Job pathways from Australian Apprenticeships & Traineeships Information Service**

**Fashion & Textile Design & Merchandising**

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Fashion Design Assistant	Fashion Design Assistant (Digital Printing) Fashion Design Worker	Textile Design Team Leader Fashion Merchandiser Fashion Design Assistant Manager	Textile Designer Fashion Designer	Senior Fashion Designer Commercial Textile Designer

**Dry Cleaning & Laundry Operations**

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Laundry Hand Dry Cleaning Assistant	Laundry Team Leader Dry Cleaning Team Leader	Production Manager (Laundry)		






**Footwear Production and Repair**

Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Footwear Production Operator (Intermediate)	Footwear Maker Footwear Repairer	Custom-made Footwear Maker Medical Grade Footwear Maker		Medical Grade Footwear Maker
Footwear Production Operator (Complex or Multiple Processes)				
Footwear Repairer				

Source: Australian Apprenticeships & Traineeships Information Service, Job Pathways <https://www.aapathways.com.au/job-pathways/chart/textiles-clothing-and-footwear/fa3683e1-71a7-4a4f-bbc7-98e2a15cce53?stream=66c2eae4-0250-4ef9-bd63-0d368ef0820c> accessed on 14 November 2018.

## Fashion and Textile Design Services

Fashion and textile design services businesses provide design services to other sectors of the TCF industry, and to other industries such as publishing, media, event management, architecture, furnishing and interior design.

Workforce <sup>67</sup>	Businesses	Revenue 2018–2019 <sup>68</sup>	Annual Growth 2014–2019	Predicted Growth 2019–2024
				
5,873	3,164	\$1.23b	2.5%	2.6%

Fashion and textile design services are difficult to distinguish in Australian industry and workforce statistics because they are recorded as a component of the ANZSIC code M6924 'Other specialised design services'. This ANZSIC code includes commercial art services, graphic design services, signwriting, ticket writing, interior design services and jewellery design services, along with fashion and textile design services. As a result, sector-level data does not necessarily reflect the experience of the fashion and textile design services sector.

IBISWorld reports that 'fashion design, jewellery design, web-based design, textile design, commercial art services and media production (excluding video)' account for 22% of total revenue for other specialised design services. For the purposes of this report, this proportion (22%) has been used to provide an estimate of workforce size and business count for fashion and textile design services, but these figures must be regarded as highly unreliable and are likely to be an over-estimation of real figures for fashion and textile design services.<sup>69</sup>

Demand for fashion and textile design services is influenced by the level of manufacturing activity in the broader TCF industry. However, while offshoring has reduced manufacturing activity in Australia, product development and design processes are still undertaken in Australia. Specialised design services firms are mostly small; 65.1% are non-employing, and 34.1% have fewer than 20 employees. Almost 70% of firms generate less than \$200,000 in revenue per year. The sector's high fragmentation and many small businesses can be attributed to the freelance nature of design work and low barriers to entry.<sup>70</sup>

<sup>67</sup> ABS 2016 Census, employees in selected industry.

<sup>68</sup> Estimate drawn from product and services segmentation in IBISWorld Industry Report, M6924 Specialised Design Services in Australia, October 2018, p 15.






<sup>69</sup> IBISWorld Industry Report M6924 Specialised Design Services in Australia, October 2018, P 15.

<sup>70</sup> IBISWorld Industry Report M6924 Specialised Design Services in Australia, October 2018, P 20.



## Laundry and Dry Cleaning Services

In addition to laundry and dry cleaning services, this sector provides linen, uniform and nappy hire services.

Workforce <sup>71</sup>	Businesses	Revenue 2017–2018	Annual Growth 2013–2018	Predicted Growth 2018–2023
				
17,385	3,912	\$2.2b	3.7%	2.8%

Greater outsourcing from hospitals and the hospitality sector has contributed to strong growth in this sector. However, revenue from the dry cleaning segment is expected to decline due to lower household demand, with fewer clothing articles requiring dry cleaning. Corporate clients now account for a greater share of revenue for the laundry and dry cleaning services sector and households are becoming less important.<sup>72</sup>

Rationalisation of the laundering and rental services segment is expected over the next five years through mergers and acquisitions, as major companies seek to increase revenue growth and profitability. Restructuring will also occur in the dry cleaning segment where stricter government regulation of environmental issues and work health and safety will particularly impact smaller operators. Dry cleaning services will increasingly use web-based technologies to increase convenience for customers.<sup>73</sup>

Environmental factors are expected to become increasingly important for businesses in this sector, particularly in relation to chemical, water and energy use.






<sup>71</sup> ABS 2016 Census, employees in selected industry.

<sup>72</sup> IBISWorld Industry Report S9531 Laundry and Dry-Cleaning Services in Australia, April 2018, p 8.

<sup>73</sup> IBISWorld Industry Report S9531 Laundry and Dry-Cleaning Services in Australia, April 2018, p 9.

## Clothing and Footwear Repair

Operators in the clothing and footwear repair sector undertake repairs or alterations to clothing and footwear. Services offered range from basic repairs to complete restyling of older garments to make new clothing.

Workforce <sup>74</sup>	Businesses	Revenue 2017–2018	Annual Growth 2013–2018	Predicted Growth 2018–2023
				
2,750	705	\$241.1m	2.1%	2.1%

Clothing and footwear repairers may operate under a franchise model or as independent businesses. Stores are primarily located in shopping centres or shopping strips, which increases their exposure to passing consumer traffic.

Recent economic uncertainty has benefited the clothing and footwear repair sector because negative consumer sentiment tends to be correlated with increased likelihood to choose to repair items rather than purchase new clothing or footwear. Additionally, an increased focus on reducing waste and landfill is prompting consumers to repair existing items. However, fierce competition from cheap online fashion stores will continue to affect demand.<sup>75</sup>

There are a large number of small independent operators in this labour-intensive sector and a few large operators that are expanding their networks and building operational efficiencies. With the growth of online shopping, clothing alterations historically undertaken by tailors and seamstresses are now increasingly being done by national industry operators offering accessibility and quick turnaround times.

<sup>74</sup> ABS 2016 Census, employees in selected industry.

<sup>75</sup> IBISWorld Industry Report S9491 Clothing and Footwear Repair in Australia, October 2018, p 4.

## Key Industry Stakeholders

There are a number of peak bodies representing the interests of the Textiles Processing and Manufacturing, TCF Production and TCF Services sectors within Australia, including:

**Australian Cotton Ginners Association** – represents the interests of cotton ginnerers

**Australian Council of Wool Exporters and Processors** – represents the interests of wool-buying firms and early-stage wool processing companies

**Australian Fashion Council** – promotes the growth of the textile and fashion industry in Australia

**Australian Hide, Skin and Leather Exports Association** – represents the major exporters of Australian cattle hides, calf skins, sheep and lamb skins, kangaroo skins and goat skins

**Blind Manufacturers' Association of Australia** – represents manufacturers and component suppliers of blinds, awnings and shutters

**Cotton Australia** – peak representative body for the Australian cotton growing industry

**Dry Cleaning Institute** – represents dry cleaners in Australia and provides members with assistance in areas of small business

**Food, Fibre and Timber Industries Training Council (FFTITC)** – provides an interface between the WA government and industry on the training and workforce development needs of the food, fibre and timber industries

**Footwear Manufacturers' Association of Australia** – represents the collective interests of the local Australian footwear industry

**Industry Skills Advisory Council NT** – provide advice on matters related to industry Vocational Education & Training and development of a skilled workforce through proactive engagement and research

**Laundry Association of Australia** – represents companies in the rental of textiles and commercial laundering and re-distribution of textile products

**Manufacturing Skills Australia** – provides an interface between the New South Wales Government and industry on the training and workforce development needs of the textiles, clothing and footwear industry.

**Millinery Association of Australia** – promotes millinery items and events showcasing the work of members

**National Footwear Retailers Association** – represents and supports the commercial interests of footwear retailers and repairers

**Paul Saunders** – provides the Curriculum Maintenance Management Service for General Manufacturing including the TCF industries to the Victorian Department of Education and Training

**Pedorthic Association of Australia** – professional association for pedorthists

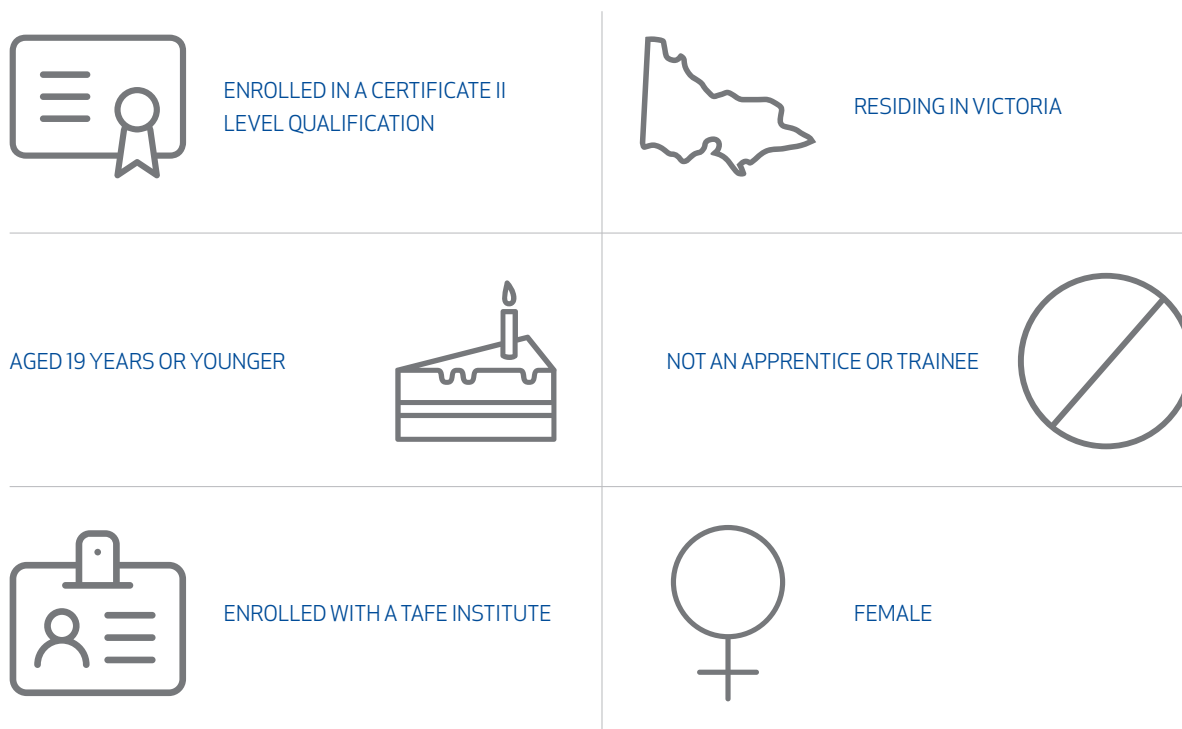
**QMI Solutions** – ensures connectivity between the VET system and Queensland manufacturing and engineering businesses.

**Specialised Textiles Association** – represents fabricators, installers and suppliers of textiles, equipment, accessories and services in the specialised textiles industry including awnings and blinds, shade sails, tarpaulins, bladders, camping annexes and yacht sails

**Technical Textiles and Non-Woven Association** – peak body for manufacturers of technical textiles and non-woven fibres

# Training Snapshot

In 2017, a learner enrolled in a qualification from the MST Textiles, Clothing and Footwear Training Package was most likely to be:



Over the period 2014–2017:

- The total number of enrolments in MST Textiles, Clothing and Footwear Training Package qualifications has declined by 19% (from 8,108 enrolments in 2014 to 6,578 in 2017).
- Enrolments in Certificate III qualifications have increased since 2015 while enrolments at other Australian Qualification Framework (AQF) levels fell.
- Enrolments declined in all jurisdictions except Western Australia and South Australia, where there was growth of 55% and 4% respectively.

## Note on data

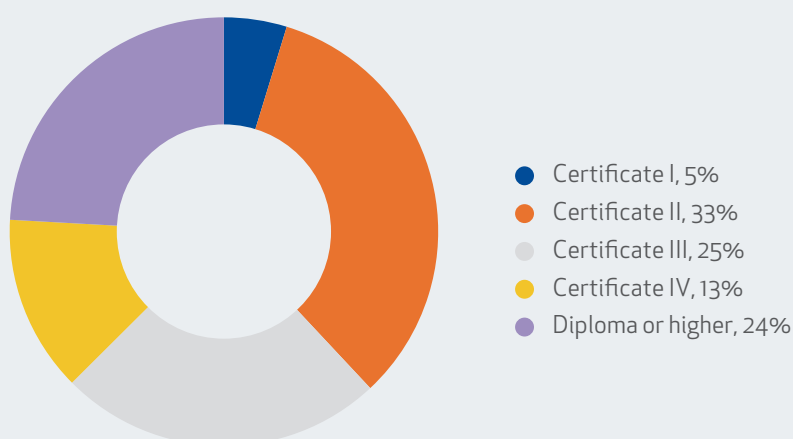
Total VET Activity for 2014 may be less complete than for other years as this was the first year of collection. Some providers were granted exemptions from reporting and others did not report.

[Appendix D](#) presents a graphical snapshot of enrolment data from the MST Textiles, Clothing and Footwear Training Package.

## Training Delivery

The delivery of Certificate II qualifications accounted for one third of total VET activity in the TCF industry in 2017, as shown in Figure 13.

Figure 13 – Total VET activity in TCF qualifications, 2017

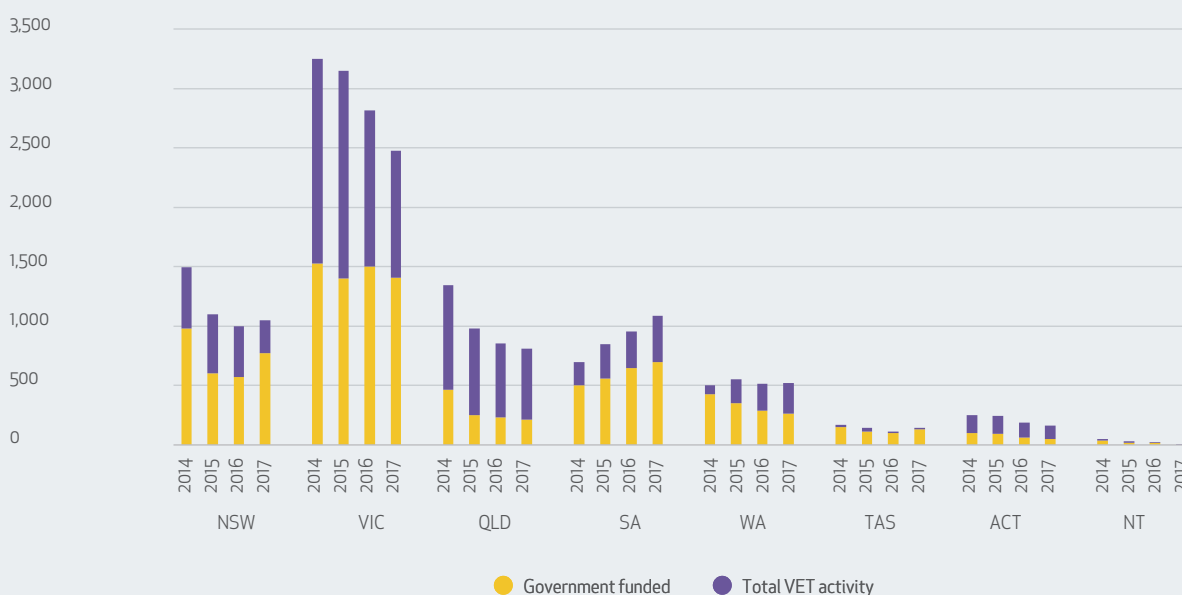


Source: NCVET VOCSTATS, extracted on 29 August 2018.

Although Certificate II qualifications currently have the highest proportion of enrolments, the Certificate II is being used as a vocational product for delivery to school students in most states, which may account for the majority of enrolments. The proportion of enrolments in Certificate III qualifications has increased, from 16% in 2015 to 25% in 2017. Between 2015 and 2017, only Certificate III qualifications recorded increased enrolments.

Enrolments in TCF qualifications are dominated by the eastern states and particularly Victoria. This is consistent with Victoria's historical connection with the TCF industry. However, Figure 14 shows that enrolments have increased steadily in Western Australia, increasing by 55% between 2014 and 2017. South Australia has also seen a small increase in enrolments over this period. Consultations indicate that this was a result of a change to the Western Australian Certificate of Education (WACE); school students could complete a Certificate II and it contributed towards their WACE.

Figure 14 – TCF course enrolments by state of student residence, 2014–2017



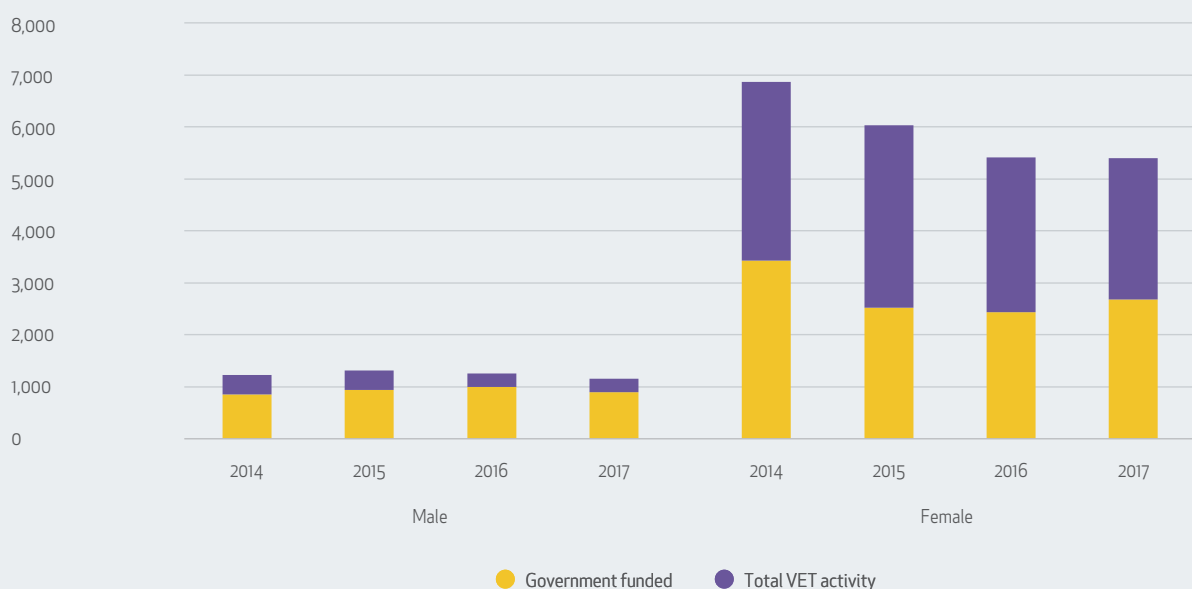
Source: NCVET VOCSTATS, extracted on 29 August 2018.

The increased enrolments in Western Australia now give that state the same share of total course enrolments as that for New South Wales – both states account for 17% of total enrolments. Stakeholder feedback has suggested that enrolment growth in Western Australia is driven by the availability of quality programs and teaching in TCF qualifications, rather than by employment outcomes in Western Australia. Consultations with training providers indicated that many top students find employment outside the state due to the limited local TCF industry opportunities.

In 2017, students aged 19 years and younger accounted for 38% of all TCF enrolments. Enrolments in the younger age groups have declined over recent years. However, enrolments by students aged 30 to 39 years held steady between 2014 and 2017 and enrolments in the 60-years-and-over age group have increased by 30%, albeit from a very small base.

Enrolment in TCF qualifications is dominated by female students who have traditionally been associated with employment in this industry. More than 80% of students enrolled in TCF qualifications in 2017 were female. However, the number of male enrolments has held relatively steady between 2014 and 2017 while female enrolments have declined, as shown in Figure 14.

Figure 14 – TCF course enrolments by gender, 2014–2017



Source: NCVET VOCSTATS, extracted on 29 August 2018.

Apprenticeships and traineeships comprise only a small portion of TCF training delivery. Although most states and territories offer funding for some TCF apprenticeships and traineeships (as shown in Table 1), uptake is very low, with apprenticeships and traineeships accounting for only 4% of total VET activity in 2017. Additionally, participation in TCF apprenticeships and traineeships declined by 58% between 2014 and 2017. Over the same time period, training outside of apprenticeships and traineeships declined by 16%.

**Table 4 – Participation in apprenticeships and traineeships and availability of funding, as at 13 August 2018**

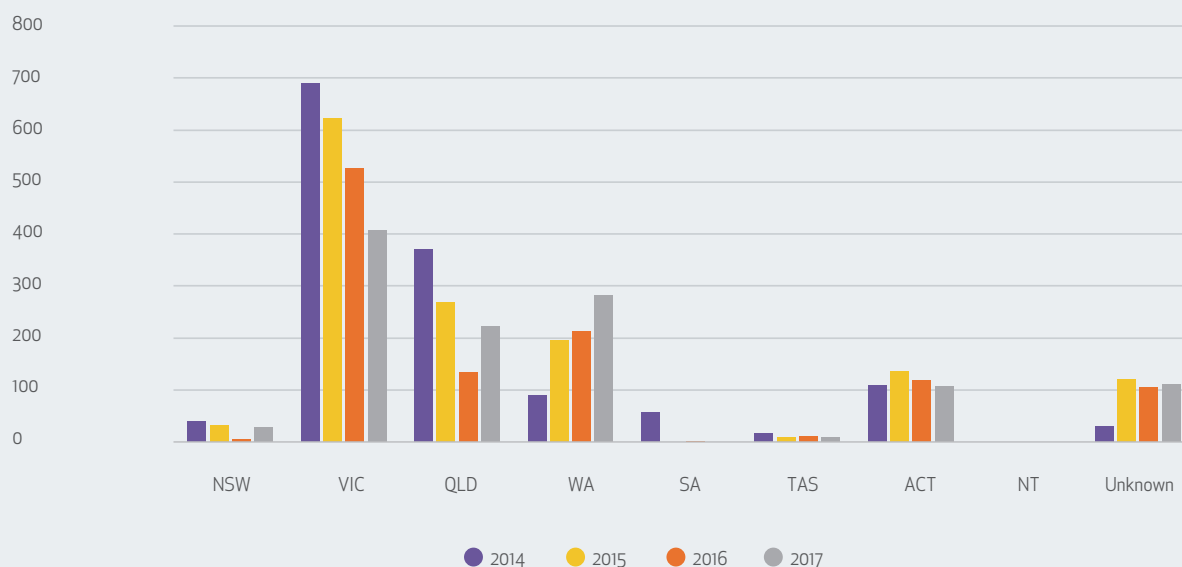
Qualification	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Certificate II in Laundry Operations	-	-	-	23	-	-	-	-
Funded	N	N	N	Y	N	Y	N	N
Certificate III in Cotton Ginning	2	-	-	-	-	-	-	-
Funded	N	N	Y	N	N	N	N	N
Certificate III in Clothing and Textile Production	-	2	-	-	-	-	-	-
Funded	N	Y	N	Y	N	N	N	N
Certificate III in Manufactured Textile Products	3	2	9	2	-	-	-	-
Funded	Y	N	Y	Y	N	Y	Y	N
Certificate III in Footwear	-	-	1	-	-	-	-	-
Funded	N	N	N	Y	N	N	N	N
Certificate III in Laundry Operations	36	-	-	2	-	-	-	-
Funded	N	Y	Y	Y	N	Y	Y	N
Certificate III in Dry Cleaning Operations	1	1	-	-	-	-	-	-
Funded	N	Y	Y	Y	N	Y	Y	N
Certificate IV in Textile Design, Development and Production	-	1	-	-	-	-	-	-
Funded	N	Y	N	N	N	N	N	N

Source: Australian Apprenticeships and Traineeships Information Service (AATIS). This data is sourced from state and territory training authorities and is provided for information only. It must be confirmed with these authorities.



VET delivered to secondary students delivery is a significant part of TCF delivery, accounting for 18% of total enrolments in 2017. In 2017, 35% of VET delivered to secondary students delivery was in Victoria. However, Victorian VET delivered to secondary students delivery has declined steadily since 2014, while delivery in Western Australia has increased as shown in Figure 15.

Figure 15 – TCF VET delivered to secondary students enrolments by state, 2014–2017



Source: NCVET VOCSTATS, extracted on 29 August 2018.

The qualification most frequently offered as VET delivered to secondary students was Certificate II in Applied Fashion Design and Technology, accounting for 83% of all VET delivered to secondary students delivery.

TAFE delivers the bulk of TCF training. In 2017, TAFE providers delivered 64% of all TCF training. Although TAFE enrolments have declined since 2014, TAFE providers experienced a 6% increase in enrolments between 2016 and 2017. Enrolments have declined more consistently for private RTOs, dropping 31% between 2014 and 2017. In contrast, from a small initial base, university enrolments have risen 73% between 2014 and 2017.

## Qualifications Available

Training package qualifications for the TCF industry are available in the MST Textiles, Clothing and Footwear Training Package and the LMT07 Textiles, Clothing and Footwear Training Package. Refer to the [Training Product Review](#) section for information on work to transition the LMT07 Textiles, Clothing and Footwear Training Package.

[Appendix E](#) contains a list of all training package qualifications and the number of RTOs with each qualification on scope.

An examination of RTO scope for the delivery of qualifications in the TCF industry indicates that seven current qualifications are not on scope with any RTO. However, as noted in the [Training Product Review](#) section, some of these qualifications are undergoing change as part of the transition of the LMT07 Textiles, Clothing and Footwear Training Package. The qualifications that are not on scope with any RTO are:

- Certificate IV in Cotton Ginning
- Certificate IV in Supply and Fitting of Pre-manufactured Medical Grade Footwear
- Diploma of Medical Grade Footwear
- Diploma of Textile Technology and Production Management
- Advanced Diploma of Medical Grade Footwear
- Certificate II in TCF Services and Repair
- Certificate III in Leather Production.

A further seven TCF qualifications are only on scope with RTOs for delivery in one or two states. These include:

- Certificate II in Cotton Ginning
- Certificate III in Cotton Ginning
- Certificate IV in Laundry Operations and Supervision
- Certificate II in Leather Production
- Certificate III in Footwear
- Certificate IV in Textile Design, Development and Production
- Certificate IV in Custom-Made Footwear.

Geographically limited delivery of qualifications in cotton ginning can be expected as the industry is concentrated in New South Wales and Queensland. However, the lack of availability of qualifications in laundry operations, leather production, footwear, and TCF services and repair is frustrating for employers who are operating in these sectors. In consultation with IBSA, employers have reported that even when RTOs have a TCF qualification on scope, training delivery is often not available because it is deemed commercially unviable. Feedback from stakeholders indicate that some industry sectors have looked to higher education and accredited course development to ensure training is available for their workforce, particularly in niche sectors.

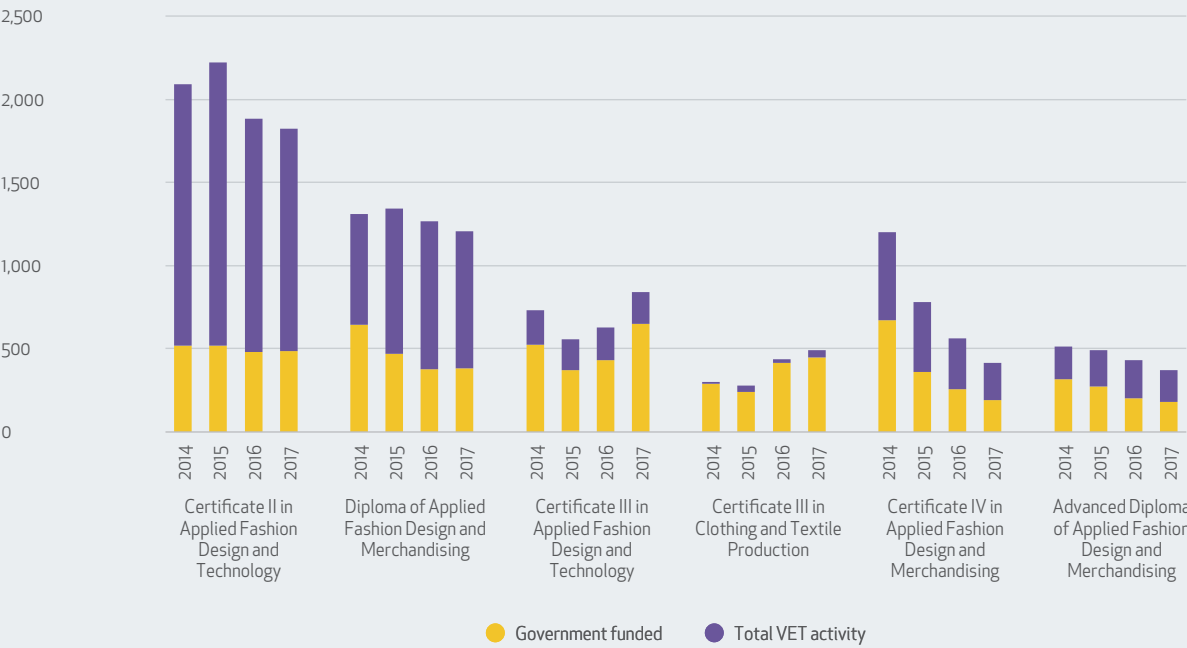
The Textiles, Clothing and Footwear IRC has considered the issues and challenges of ensuring that training is available in thin markets.<sup>76</sup> Rationalisation of training products based only on the uptake of units and qualifications risks losing workforce development options for niche and emerging businesses. The IRC is of the view that further research and industry consultation is needed to unpack reasons for low usage of training products and to identify critical areas of skill that must remain available for the benefit of future industry.

## Qualification Uptake

As previously noted, there is limited availability of some TCF qualifications in some or all states and territories. Unsurprisingly, those qualifications have had limited or no enrolments over the past four years.

Six qualifications accounted for more than 80% of all TCF enrolments in 2017. Enrolment activity in these qualifications is shown in Figure 16.

Figure 16 – Enrolments in top six TCF qualifications by 2017 TVA enrolments, 2014–2017



Source: NCVER VOCSTATS extract on 29 August 2018.

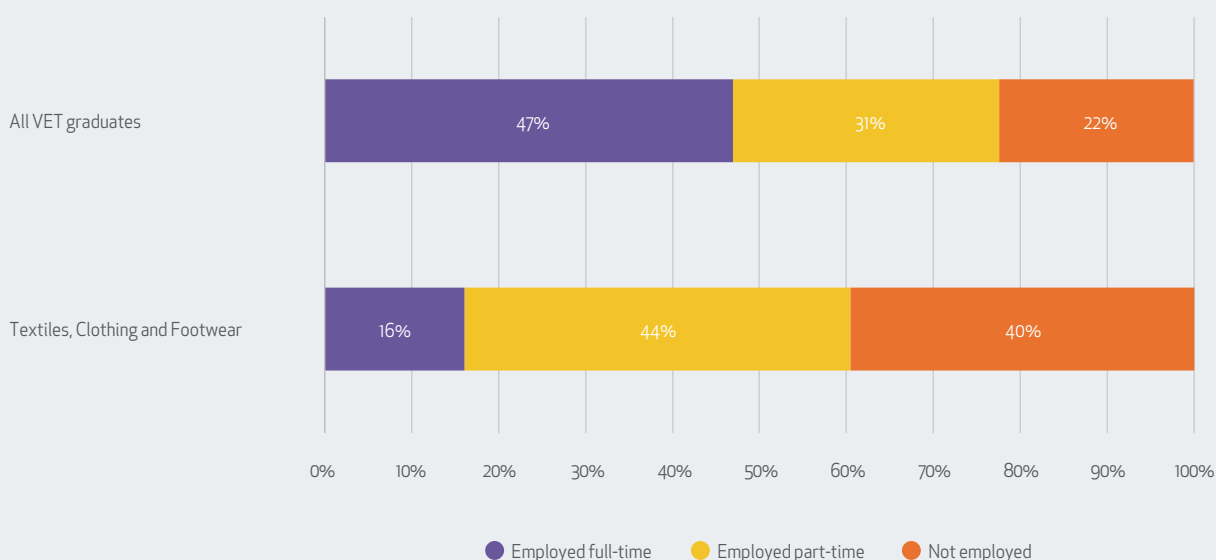
76 TCF Industry Reference Committee meeting 17 October 2018.

The Certificate II in Applied Fashion Design and Technology is the most highly used TCF qualification. The high level of use is largely driven by VET delivered to secondary students delivery which accounted for 63.7% of enrolments in the qualification in 2017. Overall, Fashion Design qualifications account for approximately 73% of all enrolments in the MST Textiles, Clothing and Footwear Training Package.

Over recent years, there has been an increase in enrolments in Certificate III qualifications. Total VET enrolments in Certificate III in Applied Fashion Design and Technology rose 15% between 2014 and 2015, while total VET enrolments in Certificate III in Clothing and Textile Production rose 65% over the same period. Unlike other high-use TCF qualifications, the majority of learners undertaking Certificate III qualifications are accessing government funding.

The annual Student Outcomes Survey conducted by the National Centre for Vocational Education Research (NCVER) captures data on learner outcomes after completing a VET qualification. The survey indicates that TCF graduates are significantly less likely to be in employment full-time after training than are all VET graduates, as shown in Figure 18. This survey data also shows that TCF graduates who are employed after training are also less likely to be employed in the same occupation as their training.

Figure 17 – Employment outcomes for all VET graduates, 2017



Source: NCVER VET student outcomes 2017, Data visualisation – VET graduate outcomes, all VET graduates.

It is possible that the high proportion of VET delivered to secondary students enrolments in Certificate II in Applied Fashion Design and Technology may impact survey findings for the TCF industry. These graduates may pursue further education options on completion of their qualification rather than seek work in the industry. Feedback from stakeholders indicates that the majority of students who undertake applied fashion design, at any level, do not want jobs as clothing production workers. Figure 18 shows that TCF graduates are more likely to be in further study after training.

Figure 18 – Further study for TCF graduates



Source: NCVER VET student outcomes 2017, Data visualisation – VET graduate outcomes, all VET graduates.

Feedback to IBSA from one large RTO has reported that:

- Diploma graduates are securing jobs with young designers who have established businesses after graduating with a university degree. The experience has been that university graduates have business skills but little practical skill in pattern making, product development and the development of Tech Packs<sup>77</sup> for overseas production. Diploma graduates can bring these skills to the business.
- Approximately 80% of the RTO's graduates gain employment on completion of Diploma of Applied Fashion Design and Merchandising in the Design and Product Development and Merchandising streams.
- A very high proportion of the RTO's graduates gain employment in the TCF industry on completion of Advanced Diploma of Applied Fashion Design and Merchandising. On completion of the Advanced Diploma, graduates have the knowledge and skills to manage a department or start their own business.

<sup>77</sup> A Tech Pack, also known as specification sheets, is a set of documents which is created by a designer to explain the design to a manufacturer. Typically, designers will include measurements, materials, colours, trim, hardware, grading, labels, tags, etc. With outsourced production, many contractors and factories will not accept manufacturing work unless the designer provides a clear Tech Pack.

# Challenges and Opportunities

## For Industry and Employers

### Global Market

Textile Processing and Manufacturing and TCF production businesses are being significantly affected by globalisation, primarily through competition from imported products that can be produced more cheaply outside of Australia. While some local businesses have responded by offshoring manufacturing processes, others have targeted niche and bespoke markets where competition is more about quality than price.

Unpredictability in the global economy was highlighted in a recent report from the Business of Fashion and McKinsey and Company.<sup>78</sup> The report states that fashion executives need to accept change and instability as fixed features in the current economic climate and focus their efforts on aspects of the business they can control. To succeed in this environment, the report recommends that companies should be technically agile: working fast and iteratively with a focus on customer needs.

IBSA consultations found that Australian TCF employers have also identified the need for agility and customer focus. Businesses need to build flexible supply chains and delivery models that can rapidly bring solutions to customers and respond quickly when the business environment changes. The challenge will be to ensure that Australian businesses can develop and foster these skills. Globalisation has, in part, provided a solution with many Australian workers consolidating their skills overseas, particularly around supply chain expertise. Industry consultations have revealed that Australia's small and micro business environment results in workers and business operators developing versatile skills in multiple industry sectors.

### Technology and New Materials

All industry is being impacted by the introduction of new technologies. The TCF industry is no exception, but new technology is impacting the sectors in different ways. For many sectors, the introduction of new technologies provides an opportunity to increase business efficiencies and expand service offerings. This is the case in laundry and dry cleaning services where data capture devices are improving efficiency, reducing emissions and energy consumption, and improving volume capacity. RFID is assisting with stock control and traceability, which is important for infection containment. Textile processors and manufacturers also stand to benefit from the introduction of new technologies such as automated CAD cutting and laser measuring equipment.

IBSA industry consultation indicates that some, generally larger, businesses are better placed than others to make the transition to new technologies. Employers report that while the introduction of new technologies may increase business efficiency and enable the production of new or more customisable products, it does not replace the need for workers. Employers now need workers who can combine the ability to use new technology with traditional textile knowledge and skills.

*"You must have the textiles background to understand how fabric flexes and stretches".*

Participant in Specialised Textile Consultation

<sup>78</sup> The Business of Fashion and McKinsey and Company, The State of Fashion 2018.

With a predominantly female workforce in some sectors of the TCF industry, Vogue Australia has identified the need to increase the number of women with the STEM skills to support technological development in the industry. Vogue Codes is a growing annual event that aims to inspire and encourage more women into tech careers.

For textile processors and manufacturers, technological advances bring opportunities for new products. Technical textiles and nonwoven fibres are a thriving and fast-growing sector of the global textile industry. Innovation in new materials, processes and applications is expanding non-traditional end-uses for both new and existing textile products.<sup>79</sup> Research and development is fuelling this expansion in areas such as:<sup>80</sup>

- carbon fibres and composites in clothing and footwear
- functional fibrous materials used in medical textiles, super hydrophobic textiles and protective garments and gloves
- nanofibers used in filtration, tissue engineering, energy generation and reinforcement sensors
- biomedical applications of natural fibre structures.

## Environmental Sustainability

Environmental sustainability has become an issue of concern across all aspects of the economy. The Australian TCF industry faces similar challenges to those in the broader manufacturing industry relating to use of finite resources, energy and water consumption, and safe disposal of waste. This is requiring greater focus on transparency and traceability in supply chains. Global TCF industry research has identified sustainability as one of the top ten trends, predicting that sustainability will evolve to be an integral part of the planning system where circular economy principles are embedded through the value chain. However, Australia is recognised internationally as a leader in sustainability and there are opportunities for Australian businesses to harness the circular economy to unlock technical innovations and efficiencies.<sup>81</sup>

Increasing consumer interest in sustainability presents business opportunities in the clothing and footwear repair sector and for businesses in other sectors that can successfully communicate their credentials. The use of online platforms and social media to build brands and connect with customers is becoming crucial for maintaining market presence and relevance for the industry's small and micro businesses.

<sup>79</sup> Technical Textiles and Nonwoven Association, <http://ttna.com.au/industry/>, accessed on 15 November 2018.

<sup>80</sup> Institute for Frontier Materials, The future of fibres, Deakin University, <https://www.deakin.edu.au/ifm/research-strengths/fibres-polymers-composites-and-textiles>, accessed on 18 November 2018.

<sup>81</sup> Rosie Dalton, Key Takeaways from The State of Fashion 2018 Event in Melbourne, Well Made Clothes, May 2018, <https://wellmadeclothes.com.au/articles/cat/news/post/TakeawaysFromTheStateOfFashionEvent/>, accessed 18 November 2018.

Australian research and development is exploring innovative solutions in areas such as:<sup>82</sup>

- separating blends of cotton-polyester material for recycling<sup>83</sup>
- water and energy saving technologies for processing natural fibres.

International industry commentators have predicted an exciting future for textile production as a result of recycling breakthroughs that bring valuable materials back into the supply chain.<sup>84</sup>

Increasing consumer demand for greater corporate and social responsibility is driving change in business approaches to environmental sustainability and ethical sourcing. In 2018, the introduction of modern slavery legislation in Australia increased the focus on the responsibility of companies to more closely monitor and manage their supply chains. International fashion brands are increasingly aware of the need to disclose supply chain information and an increasing number are publishing lists of their suppliers.<sup>85</sup> In 2018, 37% of brands surveyed for the Fashion Transparency Index disclosed first-tier supplier information, a 5% increase on the previous year.<sup>86</sup>

Cotton production is an industry that carries an especially high risk of child labour, with almost every major cotton producing country being impacted. However, among the large cotton-producing nations, Australia is one of only a few exceptions to this trend,<sup>87</sup> providing the Australian TCF industry with access to a premium raw material that is internationally recognised. The Australian development of an internationally successful Good On You app – now the world's leading source of information on ethical and sustainable fashion<sup>88</sup> – has also contributed to Australia's reputation as a leader in the field of ethical and sustainable production.

82 Institute for Frontier Materials, The future of fibres, Deakin University, <https://www.deakin.edu.au/ifm/research-strengths/fibres-polymers-composites-and-textiles>, accessed on 18 November 2018.

83 Institute for Frontier Materials, Process takes textile recycling to a new level, Deakin University, <https://www.deakin.edu.au/ifm/our-impact/process-takes-textile-recycling-to-a-new-level>, accessed on 18 November 2018.

84 Maura Brannigan, The suddenly surging business of recycled plastic puffer jackets, Fashionista, 8 November 2018, <https://fashionista.com/2018/11/recycled-plastic-puffer-jackets-trend-2018>, accessed on 16 November 2018.

85 Fashion Revolution, Transparency is trending, November 2018, <https://www.fashionrevolution.org/transparency-is-trending>, accessed on 18 November 2018.

86 Fashion Revolution, Fashion Transparency Index 2018.

87 Baptist World Aid Australia, The 2018 Ethical Fashion Report: The truth behind the barcode, April 2018.

88 Good On You, <https://goodonyou.eco/about/>, accessed 15 November 2018.



## Consumer Behaviour

Fashion industry commentators have suggested that growing consumer interest in ethical and sustainable products and services is heralding the arrival of a Slow Fashion movement.<sup>89</sup> With a focus on buying better-quality, longer-lasting garments and greater care around garment maintenance and repair, this movement has implications for laundry and dry cleaning services, and clothing and footwear repair as well as for manufacturers and designers.

IBSA industry consultation indicates that there is also a shift in consumer behaviour toward renting outfits rather than buying them. This is likely fuelled by consumer concerns around sustainability and value-for-money. At a corporate level, the shift toward renting linen, uniforms and other textiles has already been recognised as a catalyst for growth in laundry and dry cleaning services.<sup>90</sup>

Consumers are also increasingly well-informed and discerning. There is increased demand for more unconventional and signature items, and for products with higher quality, exclusivity and authentic and engaging stories.<sup>91</sup> This is good news for Australian manufacturers creating high-quality niche products. However, businesses also need the skills to communicate the unique story behind their products to empowered consumers.

To reap the benefits of shifting consumer behaviour, the TCF industry will need a workforce with advanced production and repair skills, traditional craftsmanship, and sophisticated marketing skills to connect authentically with consumers.

## Business Models

New business models are emerging in the TCF industry in response to the rapidly changing global marketplace and the demands of empowered consumers. Business directions and structures are being informed through granular analyses of customer insights. The drive to innovate is encouraging businesses to emulate the qualities of start-ups: agility, collaboration and openness. Even traditional businesses are seeing the need to pursue talent from outside the industry – seeking people with entrepreneurial mindsets and skills in data analytics and technology.<sup>92</sup>

As more business and engagement with customers is conducted online, businesses are being forced to venture into this world. With online marketplaces increasingly dominated by major global players such as Amazon, businesses need to find ways to engage with these powerful sales channels.

“As online platforms grow in size and market power, the risk of not being present could become higher than the downside of not having complete control of the online channel.”<sup>93</sup>

There are opportunities within the Australian TCF industry to target niche markets with innovative new business ideas.<sup>94</sup> However, consultation with industry indicates that TCF graduates require sound small business skills to capitalise on these opportunities. Knowledge and skills in budgeting, costing and other aspects of small business management were reported by industry stakeholders as essential for establishing and maintaining viable new businesses.

89 Madeleine Hill, What is slow fashion?, Good on You, November 2018, [https://goodonyou.eco/what-is-slow-fashion/?branch\\_match\\_id=591807411728620650](https://goodonyou.eco/what-is-slow-fashion/?branch_match_id=591807411728620650), accessed on 16 November 2018.

90 IBISWorld Industry Report, S9531 Laundry and Dry-Cleaning Services, April 2018, p 7.

91 The Business of Fashion and McKinsey and Company, The State of Fashion 2018.

92 Ibid.

93 Ibid.

94 IBISWorld Industry Reports: C1310 Synthetic and Natural Textile Manufacturing, C1333 Cut and Sewn Textile Product Manufacturing, C1351B Women's and Girls Wear Manufacturing, C1351D Tailoring and Clothing Accessories Manufacturing.

## Supply-side Challenges and Opportunities

### Ageing Workforce

The textile processing and manufacturing and TCF production sectors of the TCF industry have an ageing workforce, as reported in the [Industry Snapshot](#) section. This is having a marked impact on the industry's ability to maintain skills and knowledge, a problem shared globally as reported by Alvanon in their 2018 survey report *The State of Skills in the Apparel Industry*.

"The last generation of people who possess hands-on experience in factories and deep industry knowledge are now between 55 to 75 years old. There is only a small window of time left to harness and encapsulate some of that experience into learning journeys for both corporates and individuals. Failing to act within that window will result in the generalisation of poor market practices, as well as a pattern of ill-informed decisions with unanticipated impact on other people in the supply chain".<sup>95</sup>

The report found that despite business awareness of the impending loss of workforce skills, most companies fail to implement training solutions.

IBSA consultation with industry confirms a similar experience in Australia. Although employers are keen to retain the knowledge and skills of experienced workers, they do not have mechanisms that enable this knowledge and skill to be passed on – and often they do not have anyone to pass it on to.

### Industry Attractiveness

Through industry consultations, employers in the TCF industry have reported difficulty in attracting new workforce entrants. The issue is not limited to Australia. In an international study, 62% of employers in the apparel industry said they were struggling to fill certain positions.<sup>96</sup> Three TCF occupations are currently included on the Australian Government's Short Term Skilled Occupation List for visa eligibility. These are Dressmaker or Tailor, Fashion Designer, and TCF Mechanic.

Australian employers have reported that low wages in the sector act as a deterrent to workforce entrants but limited public awareness of opportunities in the industry is also a factor. In consultations with IBSA, industry players have called for greater promotion of the TCF industry through careers advice and awareness-raising around opportunities for apprenticeships.

Industry consultations also indicate that there is a common misperception about the industry being 'all fashion and glamour', when realistically, it is clothing production with routine and repetitive tasks.

<sup>95</sup> Alvanon and MOTIF, *The State of Skills in the Apparel Industry*, 2018.

<sup>96</sup> Alvanon, (2018) *The State of Skills in the Apparel Industry*.

## High-Level Skills Pipeline

A shift in Australia to more niche and bespoke products in the TCF industry relies on the availability of quality craftsmanship and strong technical skills. The Alvanon survey of the international apparel industry found that respondents emphasised the need for technical training rather than leadership or soft skills.<sup>97</sup> In their resulting report, the authors stated that because technical skills are outsourced by many businesses, universities have stopped providing these skills in fashion qualifications. Additionally, the introduction of sophisticated digital technologies into the industry has made it hard for educators to keep pace with the technical skills that are applied in the industry.<sup>98</sup>

- Academic institutions are still focusing on the glamour side of it. Students graduate thinking 'I'm going to be a fashion designer', without understanding the business, commercial and technical side of things.<sup>99</sup>

TCF manufacturing in the USA is sharing the experiences of Australian industry with functions that had been outsourced overseas now returning onshore due to consumer interest in locally made products. The impact of the outsourcing experience on maintaining a skilled workforce has been observed by industry commentators:

- North Carolina used to be a big textile producer. But, if you go there now, you'll see many people in the industry talking about a 15-year skill gap in knowledge. That's exactly when they started outsourcing to China. Suddenly, with 'onshoring' and people increasingly opting to shop locally, they just don't have the skills.<sup>100</sup>

The Australian Advanced Manufacturing Council has warned of a similar skill gap in Australia due to the lengthy lead-time for workers to gain the high-level skills that will be needed in the manufacturing industry to exploit future opportunities.<sup>101</sup>

By 2026, the Australian Manufacturing Growth Centre estimates that Australia's manufacturing workforce will consist of an additional 47,000 high-skill jobs involving elite design or technical expertise, as well as 31,000 more sales and service workers. In contrast, it predicts there will be 55,000 fewer manual or narrowly focused production roles in the lower-skill bracket.<sup>102</sup> Feedback from IBSA's industry consultations strongly reinforced the importance of higher-level skills and customer service skills for businesses to meet the needs of well-informed consumers.

<sup>97</sup> Alvanon, (2018) The State of Skills in the Apparel Industry.

<sup>98</sup> Ibid.

<sup>99</sup> Catherine Cole, Alvanon Executive Director in an interview with FashionUnited, September 2018.

<sup>100</sup> Marjorie van Elven, War for talent: fashion professionals lack skills, reveals worldwide study, Fashion United, 04 October 2018, <https://fashionunited.uk/news/business/war-for-talent-fashion-professionals-lack-skills-reveals-worldwide-study/2018100439279>, accessed 25/10/18.

<sup>101</sup> IBSA Manufacturing, Preparing for Industry 4.0 – will digital skills be enough? November 2017.

<sup>102</sup> Advanced Manufacturing Growth Centre, Submission to Innovation and Science Australia, 2017.

## Thin Markets

As noted in the Training Snapshot section, there is limited availability and very low uptake of some TCF qualifications. The issue of thin markets was examined in 2017 by the FFTITC in Western Australia. The FFTITC study found that a number of industry sectors were experiencing skill shortages in thin market areas and were finding it difficult to source training to meet workforce development needs.<sup>103</sup>

Thin markets in VET have been defined as those in which the actual and potential number of learners may be too small to attract training providers.<sup>104</sup> Reasons for this situation can include low and volatile student numbers, higher costs for the long travel distances for delivery to regional and remote areas, and insufficient funding.

The small size of the TCF industry, and the variety of sectors and occupations within it, limit industry demand for training and affect the viability of training provision. The IRC is interested in pursuing innovative solutions that will benefit the whole industry. Industry consultation identified potential starting points for further exploration:

- reduce bureaucracy for small business to take on apprentices (legislation currently prohibits subcontractors from taking on apprentices, but much of the work in the TCF industry is subcontracted)
- use existing government training facilities to create 'makers' spaces where microbusinesses and communities can access industry equipment and learn in collaboration
- identify and develop training products that address core technical skills that are relevant across multiple industry sectors.

## Delivery Issues

Through consultation, industry peak bodies voiced concerns about the quality of delivery of some TCF qualifications. Low-level qualifications are a popular vehicle for the provision of work skills for disengaged learners. While the IRC acknowledges that such delivery may benefit learners through the development of generic foundation and employability skills, these programs are often delivered by trainers without relevant or sufficient industry expertise.

The IRC contends that TCF training should reflect current industry requirements and technologies. Trainers need to be equipped to deliver digital skills, such as CAD, digital measuring and 3D design. Greater focus on the use of these skills in the TCF industry will also help to capture the imagination and interest of potential industry entrants.

<sup>103</sup> Food, Fibre and Timber Industries Training Council (WA) Inc, Thin Markets: Improving workforce development opportunities in thin markets of the food, fibre and timber industries, 2017.

<sup>104</sup> Ferrier, F, Dumbrell, T and Burke, G, Vocational education and training providers in competitive training markets, NCVER, Adelaide, 2008.

## For Learners and Training Package Development

Training products need to continue to respond to the needs of the TCF industry. Consultations with both industry and training providers suggest that demand for lower-level qualifications is expected to decline in favour of more advanced skills gained through higher-level qualifications, skill sets and non-accredited training.

Industry feedback suggests that business owners and workers are undertaking skills development when and how they need it on the job (just-in-time/do-it-yourself), rather than using traditional, formal education or training pathways. Skill sets may be more highly valued if they can provide realistic workplace experiences during delivery. Employers in niche areas are interested in the possibility of combining skills from multiple training packages to suit the needs of an increasingly multiskilled workforce, e.g. shade sail installers may need skills in working with concrete and metal.

In the niche area of marine trimming, Australian businesses are achieving international recognition for the quality of their work, and there is interest in pursuing internationally recognised Master Craftsman credentials. Other sectors of the TCF industry may take similar action as businesses strive for recognition of their quality status.

Through consultation, RTOs reported that they are sharpening their focus on digital skills and knowledge in TCF qualifications. Areas of focus that have been identified as important for the TCF industry in future include:

- digital design realisation, digital pattern making
- new fabric technologies
- supply chain management
- radio frequency for garment identification tracking the manufacturing process
- digital 3D for the development of tech packs.

## Cross-industry Challenges and Opportunities

The IRC has identified industrial sewing skills as integral to multiple sectors within and beyond the TCF industry, including marine and motor trimming, blinds and awnings, upholstery, clothing manufacturing, textile finishing, leather and canvas, and other segments of the cut and sewn textile product manufacturing sector. The proposed Industrial Sewing Skill Set would provide workforce mobility and expanded occupational pathways and has potential to help employers address skill gaps. Refer to the Case for Change for more information.

The IRC has also identified connections with existing cross sector projects that have potential to address TCF industry workforce development needs. These are:

- Increasing focus on ethical sourcing and the implications of modern slavery legislation have emphasised the need for strong supply chain management in the TCF industry, including product traceability.
- Consumer and government interest in environmental sustainability across all industries will increase attention on resource efficiency, waste management and recycling in the TCF industry.
- Shifting business models and consumer empowerment mean that businesses in the TCF industry need to build their capacity to engage with consumers through social media and online platforms to build and manage their brand and differentiate their products from competitors.

The IRC will engage with cross sector projects to provide input on the skill needs and experiences of the TCF industry. See the [Cross Sector Projects](#) section for more details.

# Employment and Skills Outlook

## Employment Outlook

The TCF industry is characterised by offshoring of repetitive, high-volume work and subcontracting of low-volume specialised work. Employment numbers for this industry are difficult to quantify, with some subcontractors working from home not readily visible.

Refer to the [Industry Snapshot](#) section for five-year predicted growth for each sector of the TCF industry. Of the eleven sectors identified, four have positive annual growth predicted over the next five years. They are:

- Footwear Manufacturing - 2.8% annual growth predicted 2018–2023
- Fashion and Textile Design Services - 2.6% annual growth predicted 2019–2024
- Laundry and Dry Cleaning Services - 2.8% annual growth predicted 2018–2023
- Clothing and Footwear Repair - 2.1% annual growth predicted 2018–2023.

Occupational outlook information is available for some roles within the industry. As shown in Figure 20, these reflect broader economic indicators for each industry sector with declines in many sectors but stable or strong growth in others.

### Figure 19 – Employment outlook, selected occupations

#### Clothing Trades Workers

Clothing Trades Workers prepare and cut garment patterns and fabric, and make and repair garments.



**Unavailable**  
Weekly Pay



**Decline**  
Future Growth



**Medium Skill**  
Skill Level

#### Canvas and Leather Goods Makers

Canvas and Leather Goods Makers make and repair boots, shoes, leather goods, canvas and sailcloth articles, and related products.



**Unavailable**  
Weekly Pay



**Stable**  
Future Growth



**Medium Skill**  
Skill Level

#### Fashion, Industrial and Jewellery Designers

Fashion, Industrial and Jewellery Designers plan, design, develop and document products for manufacture and prepare designs and specifications of products for mass, batch and one-off production.



**\$1,354**  
Weekly Pay



**Very Strong**  
Future Growth



**Very High Skill**  
Skill Level

## Textile and Footwear Production Machine Operators

### Textile and Footwear Production Machine

Operators operate machines to process raw hides and skins, raw textile fibres, and dye, weave and knit fibres for use in textile and footwear production.



**\$1,146**  
Weekly Pay



**Decline**  
Future Growth



**Lower Skill**  
Skill Level

## Sewing Machinists

Sewing Machinists operate industrial sewing machines to sew and finish garments and soft furnishings such as curtains.



**\$749**  
Weekly Pay



**Decline**  
Future Growth



**Lower Skill**  
Skill Level

## Laundry Workers

Laundry Workers sort, clean, fold, iron and package linen, clothing and other items in laundries and dry cleaning establishments, and private residences.



**\$795 Weekly**  
Pay



**Stable**  
Future Growth



**Entry Level**  
Skill Level

Source: <https://joboutlook.gov.au/> accessed on 14 November 2018.

Even with negative growth forecast in some parts of the TCF industry, the retirement of the ageing TCF workforce will mean there is some demand for new workforce entrants in all industry sectors. Consultation with industry indicates that replacement demand is high for occupations with a relatively older workforce, such as experienced machinists. Employers have expressed concern about future training implications when fewer experienced workers are available to train and supervise apprentices, resulting in a training lag time that is not always factored in to avoid future skill shortages.<sup>105</sup> With increased competition from emerging markets and an ageing workforce, the industry needs to consider how to attract new entrants.

<sup>105</sup> Shah, C and Dixon J 2018, Future job openings for new entrants by industry and occupation, NCVER, Adelaide.



## Workforce Supply Challenges

The Textiles, Clothing and Footwear IRC released a Future Skills Outcomes report<sup>106</sup> compiling trends and considerations for the TCF industry arising from work commissioned by the Australian Industry and Skills Committee (AISC). Informed by the AISC work on current and future Australian and international megatrends, the IRC identified issues and challenges affecting the TCF industry.<sup>107</sup> These issues and challenges have been reiterated and reinforced by industry stakeholders consulted during the preparation of this Industry Skills Forecast.

**Table 5 – Workforce supply challenges affecting the TCF industry**

Affecting the TCF Industry	Now	... in 3–5 years	... in 5–10 years
<b>Society and Culture</b>	<b>Global Mobility:</b> With labour moving offshore, employers are struggling to fill current positions in general sewing, furnishing and preparation of specialised textiles. Recent changes to 457 visa arrangements mean employers can no longer use experienced overseas workers to fill labour gaps.	<b>Ageing Population:</b> Industry expertise and technical skills and knowledge are held by workers now in their 60s and 70s. There is no funded pipeline for new entrants. Ageing business owners must close businesses due to a lack of successors.	<b>Changing Work and Career Values:</b> Many people perceive manufacturing as a declining industry with limited future work opportunities. New industry entrants are self-taught and undertake sporadic skills development. Underpinning industry skills, like sewing, cutting and patternmaking, are dying out.
<b>Business and Economics</b>	<b>Changing Workplace Dynamics:</b> Job roles are becoming more fragmented and less specialised. SMEs are subcontracting much of the local production but are losing influence over training these workers/contractors.	<b>Empowered Customers:</b> Demand for 'fast fashion' and demand for serviceability and access to end-to-end design, repair and alteration services are polarising the market with a need for skilled workers in bespoke manufacturing as well as large-run production.	<b>Start-up Thinking:</b> Limited work opportunities mean that many of those wanting to enter the industry need to start their own business. Attracting corporate investors is difficult due to risk aversion in new markets and production models.
<b>Technology</b>	<b>Science and Big Data:</b> Large retailers use big data to predict what people want to buy, but boutique retailers are still attractive to consumers through provision of customer service, retail expertise, and garment and textile knowledge.	<b>Automation:</b> Use of Programmable Logic Controllers and sensors provides efficiency gains and lower costs in laundry and other large operations. These technologies are cost prohibitive for smaller operators and they are unable to keep up with big business.	<b>Artificial Intelligence:</b> The industry could see onshoring of some production as labour inputs are reduced in favour of robots.
<b>Resources and Environment</b>	<b>Internet Access:</b> Australian businesses are hampered by variable access to reliable, high-speed internet, which is essential for online collaboration, real-time ordering and online tracking of orders through the supply chain.	<b>Environmental Sustainability:</b> Despite its good reputation, Australian industry is behind the international community in responding to consumers' growing interest in ethical and sustainable products. There are few textile recyclers in Australia and the industry is grappling with ethical sourcing.	<b>Climate Change:</b> There are opportunities for the textiles industry to provide solutions for adverse events, e.g. cleaning up oil spills, providing emergency housing or tents, creating resilient weather-resistant materials.

Source: IBSA Manufacturing, Textiles, Clothing and Footwear Industry Reference Committee, Future Skills Workshop Outcomes, February 2018.

<sup>106</sup> MST Textiles, Clothing and Footwear Industry Future Skills Outcomes, November 2018.

<sup>107</sup> IBSA Manufacturing, Textiles, Clothing and Footwear Industry Reference Committee, Future Skills Workshop Outcomes, February 2018.

## Skills Outlook

In reviewing the ranking of generic skills for the TCF industry, the IRC noted that demand for generic skills may vary considerably between industry sectors, regions and individual businesses. Employers may prioritise some generic skills over others depending on their context, and their workforce and business imperatives.

The Textiles, Clothing and Footwear IRC considers that all the identified generic skills are important throughout the workforce. The ranking listed here represents the importance of generic skills across the TCF industry but should not be expected to reflect the specific experience of every business and employer within the industry.

As background to the ranking presented here, the IRC noted that:

- the application of technology is currently central to the TCF industry as businesses innovate, reinvent and reconfigure their operations to maintain competitiveness and viability; design thinking is also critical for this transformative process
- STEM and Language, Literacy and Numeracy (LLN) skills are vitally important in the TCF workforce, but employers have an expectation that new workers have developed these skills to a suitable entry level before they commence work
- environmental and sustainability issues are an ongoing concern for the TCF industry; however, many of the skills needed to address these issues are captured in broader generic skills such as technology use and application, and design/thinking/problem solving.

## Key generic workforce skills

Table 6 – Key generic workforce skills

Combined Manufacturing IRCs		Textiles, Clothing and Footwear IRC	
1	Design mindset/Thinking critically/Systems thinking/ Problem solving skills	1	Technology use and application skills
2	Technology use and application skills	2	Design mindset/Thinking critically/Systems thinking/ Problem solving skills
3	Learning agility/Information literacy/Intellectual autonomy and self-management skills	3	Communication/Collaboration including virtual collaboration/Social intelligence skills
4	Communication/Collaboration including virtual collaboration/Social intelligence skills	4	Learning agility/Information literacy/Intellectual autonomy and self-management skills
5	STEM skills	5	Customer service/Marketing skills
6	LLN skills	6	Entrepreneurial skills
7	Data analysis skills	7	STEM skills
8	Managerial/Leadership skills	8	LLN skills
9	Customer service/Marketing skills	9	Data analysis skills
10	Environmental and Sustainability skills	10	Managerial/Leadership skills
11	Entrepreneurial skills	11	Financial skills
12	Financial skills	12	Environmental and Sustainability skills

Table 7 – Priority areas for training package development

Rank	Skill	How identified
1	Industrial sewing	Industry consultation
2	Use of new technologies and materials	Analysis of industry performance and outlook data Industry consultation
3	Advanced clothing production and garment alterations	Analysis of industry performance and outlook data Industry consultation
4	STEM skills	Industry consultation
5	Ethical sourcing and supply chain management	Analysis of industry performance and outlook data Peak body reports
6	Fashion business – law and compliance and small business skills	Industry consultation

# Key Drivers for Change and Proposed Responses

While the broader manufacturing industry remains in transition, the public perception is of an industry with limited future opportunities. This is slowly changing, but it is still affecting the ability of the TCF industry to attract people into the industry, and into training pathways. University pathways are increasingly seen as providing a more secure future, and this can be observed in increasing interest in higher-level TCF qualifications. AVETMIS data indicates that enrolments in some Diploma and Advanced Diploma qualifications have been relatively steady over recent years while enrolments in related qualifications have decreased significantly.

The TCF industry is experiencing significant change in the way it does business and meets customer needs. Global competition and a global marketplace provide significant opportunities and challenges for Australian businesses and they are responding in a variety of ways. There has been a resurgence of commitment to the traditional skills necessary for providing high-quality and bespoke products, but they must be applied in contemporary workplace settings that also leverage new technologies and work practices.

Job and workplace analysis are needed to ensure the MST Textiles, Clothing and Footwear Training Package remains relevant to future workforce requirements. The proposed responses would undertake industry-focused analyses in the context of workforce development across all industries. Opportunities for strengthening pathways into and between industries would be explored, including through consideration of training products emerging from cross sector developments. New units and skill sets will be developed only where suitable products are not available outside the MST Textiles, Clothing and Footwear Training Package.

Table 8 – Priority skills and key drivers for change

Priority Skills	Key Driver for Change	Proposed Response
<b>Regulatory/legislative</b>		
Ethical sourcing and supply chain management	Modern Slavery Legislation and raised consumer awareness	Identification of industry skill requirements for potential development of new units and/or skill set, including consideration of developments arising from cross sector supply chain work
<b>Industry-specific</b>		
Industrial sewing transferable skills	Ageing workforce and offshoring contributing to a shortage of skilled sewing machine operators for work across the TCF industry	Development of skill set to meet requirements across multiple industry sectors
Repairs and alterations for mass-produced garments and textiles	Consumer demand and expanding business opportunities	Identification of industry skill requirements for potential skill set development
Fashion design	Skills mismatch due to industry demand for higher-level skills and knowledge for workforce entry	Identification of industry skill requirements and how best to introduce them into the qualifications
<b>Technology</b>		
CAD, laser cutting, 3D prototyping and performance textiles	Digitisation and automation	Identification of industry skill requirements and how best to introduce them into the qualifications
Radio Frequency Identification (RFID)	Automation	Identification of industry skill requirements and how best to introduce them into the qualifications
STEM skills	Cross-disciplinary nature of work and advancing technical requirements	Integration of STEM skills into training products
<b>Business</b>		
Consumer engagement and marketing through social media	Increasing direct-to-consumer selling by micro producers	Identification of industry skill requirements for potential development of new units and/or skill set, including consideration of developments arising from cross sector consumer engagement work
Fashion business, including intellectual property and copyright, standards and compliance	Increasing complexity of TCF industry landscape driving the need to upskill for owners and managers in small and micro businesses	Identification of industry skill requirements for potential development of skill set

# Training Product Review

## Current Activities

### Buying Skills

In February 2017, IBSA Manufacturing was commissioned to undertake training package development work on behalf of the Textiles, Clothing and Footwear IRC on the MST Textiles, Clothing and Footwear Training Package. The Training Package review and development work, the Buying Skills Project, focused on the key area of Buying/Merchandising to strengthen this essential job skill requirement for graduates in the Diploma and Advanced Diploma in Applied Fashion Design and Merchandising. The work aligns the qualifications with job roles and provides more focus for students wishing to pursue a career in buying.

The training package development work will be submitted for AISC consideration in 2019.

### LMT Qualifications

Work to transition seven LMT07 Textiles, Clothing and Footwear qualifications to the MST Textiles, Clothing and Footwear Training Package is being progressed.

The Buying Skills Case for Endorsement contains information on the following transition work:

- Seven qualifications have been recommended for deletion from training.gov.au as they had no workplace outcomes, were incorporated into or superseded by another qualification:
  - LMT11107 Certificate I in Textiles, Clothing and Footwear
  - LMT32011 Certificate III in Digitising and Computerised Embroidery
  - LMT50407 Diploma of Textile Technology and Production Management
  - LMT40907 Certificate IV in Supply and Fitting or Pre-manufactured Medical Grade Footwear
  - LMT50207 Diploma in Medical Grade Footwear
  - LMT60207 Advanced Diploma of Medical Grade Footwear.

Further consultation will be undertaken as part of the Laundry and Dry Cleaning Operations project to consider the Certificate IV in Laundry Operations and Supervision.

Three cotton ginning qualifications and the Certificate III in Engineering – TCF Mechanic are being considered for transition to the Manufacturing and Engineering (MEM) Training Package as part of Release 3 mid-2019.

## Laundry and Dry Cleaning

In September 2018, IBSA Manufacturing was commissioned to undertake training package development work on behalf of the Textiles, Clothing and Footwear IRC to ensure graduates are 'job ready', develop key skills and can demonstrate more sustainable operations in the Laundry and Dry Cleaning industry.

This work will review existing qualifications and units within the MST Textiles, Clothing and Footwear Training Package and develop a number of skills sets including skill sets addressing hygiene & infection control and safe handling and disposal.

The training package development work is due to be completed and submitted for AISC consideration end 2019.

### Training Product Review – Activities Timeline



## AISC Cross Sector Projects

In 2017 the AISC established nine cross sector projects in the common skill areas of: automation, big data, digital skills, consumer engagement through social media, cybersecurity, environmental sustainability, inclusion of people with disability in VET, supply chain, and team work and participation. This signalled a new approach to training package development that aims to simplify VET and improve mobility through recognition of qualifications between occupations.

To ensure cross sector units are relevant to multiple occupations and industry sectors, each project includes representation across multiple industries. Cross sector units of competency will be housed in the most relevant training package and marked with a cross sector identifier. Once available on training.gov.au, the units can be adopted across all industry training packages as qualifications and skills are reviewed or developed.

The following cross sector projects have been identified as potentially impacting the MST Textiles, Clothing and Footwear Training Package Training Package:

- The **Consumer Engagement Through Online and Social Media** cross sector project is looking at key skills for businesses to remain competitive in a global market including cultural awareness, customer service, marketing, communication and social media skills. The project proposes the development of eight new cross sector units and four skill sets in the areas of ethical practices, privacy regulations and protocols and awareness of online/social media users.
- The **Supply Chain Skills** cross sector project aims to support industries, increase efficiencies and meet consumer demands through the development of ten new skill sets related to the establishment and maintenance of high-performing supply chains.
- The **Teamwork and Communication** cross sector project aims to develop common 'team work' and 'communication' units that can be used across multiple industries. The project includes the development of five new units to be included in the BSB Business Services Training Package.

There are a further two cross sector projects that may also impact the MST Textiles, Clothing and Footwear Training Package Training Package: Digital Skills and Environmental Sustainability. The next phase of work on these projects is being determined and the Textiles, Clothing and Footwear IRC will continue monitoring their progress for consideration in future training package development work.



# Upcoming Activities

## Priorities 2019–2023

Following consideration and analysis of the industry challenges and opportunities, current and emerging skills needs and the key drivers for change, the Textiles, Clothing and Footwear IRC have identified a number of areas for training product development. These training priorities are outlined in the IRC's [Proposed Schedule of Work 2019–2020 to 2022–2023](#) table which lists the priorities for the next four years. This table also provides a rationale for the priorities, proposed scope and timeframes for these activities.

## Priorities with a Case for Change in 2019–2020

The IRC identified the following training priority as critical and request that the AISC consider this as a priority for the 2019–2020 schedule of work.

- **Industrial Sewing Skill Set:** The proposed skill set will support the development of transferable, entry-level skills allowing workforce mobility across a range of industry sectors including marine and motor trimming, blinds and awnings, upholstery, clothing manufacturing, textile finishing, leather and canvas, and other segments of the cut and sewn textile product manufacturing sector.

A Case for Change has been prepared and is included within this document. The [2019–2020 Case for Change](#) provides further information on the industry imperatives, consultation plan and proposed scope of the project.

## Important Priorities for 2019–2020

The IRC identified the following training priorities as important and propose their inclusion as a priority for the 2019–2020 schedule of work.

- **New Technologies and Materials:** The project will investigate the skills impact of new technologies and materials to ensure that training products provide industry with required skills in CAD, laser cutting, 3D prototyping, performance textiles, and use of digital skills and mobile technologies in design, pattern making, social media marketing and online retailing.
- **Advanced Clothing Production and Garment Alteration Skill Sets:** The proposed skill sets will address industry requirements for targeted skill development in pattern making and grading, sizing, and garment making and machining to meet identified industry needs.

## Priorities Over the Next Three Years

The IRC identified the following training priorities to be considered over the next three years.

- **Leather Production, Footwear and Millinery:** The project will investigate contemporary workplace skill requirements for the specialised Leather Production, Footwear and Millinery sectors, including the need for integration of soft skills and STEM skills.
- **Fashion Business (Law and Compliance) Skill Set:** The proposed skill set will address industry requirements for skills and knowledge in legal aspects of governance, intellectual property and copyright, standards and compliance, labelling, ethical sourcing, procurement and supply chain management (including compliance with modern slavery legislation).
- **Fashion Design:** The project will review Applied Fashion Design and Technology/Merchandising qualifications and develop skill sets to ensure targeted qualification pathways are available and fit-for-purpose.

## Future Priorities

In their analysis of the industry challenges and opportunities, current and emerging skills needs and the key drivers for change, the Textiles, Clothing and Footwear IRC identified the following areas for future training product development:

- consideration of the impact of cross-industry training product developments and ways in which they can address TCF industry needs for skills and knowledge in relation to environmental sustainability, ethical supply chain management and consumer engagement through social media
- integration of required soft skills and STEM skills
- product design to address workforce development needs in thin markets.

# Consultation Undertaken

The 2019 Skills Forecast and Proposed Schedule of Work 2019–2023 builds on the consultations undertaken as part of the 2018 return. Feedback on industry imperatives were also captured as part of training package development projects undertaken throughout 2018.

More specifically, key individual industry and group stakeholders, identified by the Textiles, Clothing and Footwear IRC, were consulted during the development of the Industry Skills Forecast. See [Appendix F](#) for the consultation list.

Feedback was gathered via the following methods:

- forums, meetings and focus groups – in person and via webinar
- interviews and one-on-one consultations – via phone/teleconference and/or face-to-face
- nationwide and organisation-specific surveys or questionnaires.

## Issues and Sensitivities Raised

Industry consultation identified a number of issues and sensitivities, relating to particular areas within the industry, which have been outlined in Table 5 below. The [Proposed Schedule of Work](#) section provides further information on the action to be taken to address these issues/sensitivities.

**Table 5 – Issues and sensitivities raised by stakeholders during consultation**

Area	Issue and/or sensitivity	Action to be taken
<b>Industrial Sewing Skill Set</b>	<ul style="list-style-type: none"> <li>• Sewing skills are integral to multiple sectors within and beyond the TCF industry.</li> <li>• There is a shortage of skilled sewing machine operators due to an ageing workforce and offshoring.</li> <li>• Lack of workforce mobility means that employers are struggling to fill positions in general sewing.</li> <li>• There are limited occupational pathways.</li> <li>• The Certificate III in Manufactured Textile Products lacks training opportunities related to automotive and marine trimming.</li> </ul>	2019–2020 Case for Change

Area	Issue and/or sensitivity	Action to be taken
<b>New Technologies and Materials</b>	<ul style="list-style-type: none"> <li>• New markets are opening for the development and application of a variety of technical and performance textiles.</li> <li>• New materials have already been developed, including PTFEs, silicon, etc. Learners need to be trained to understand this new material's behaviour.</li> <li>• To capitalise on new ways of working, there is a need to develop advanced technical and STEM skills.</li> <li>• The Training Package needs to be reviewed and developed to take into consideration new technologies and materials, including skill requirements in CAD, laser cutting, 3D prototyping, performance textiles, digitisation and social media marketing.</li> <li>• Learners are not being taught the necessary skills to use new technology; particularly in relation to design, pattern making, social media marketing and online retailing.</li> <li>• Businesses and individuals are currently seeking or stumbling across new technology, rather than this being facilitated by industry.</li> <li>• Due to a lack of the necessary skills in TCF graduates, businesses are hiring computer science graduates to use the new machines. However, they do not understand the behaviour of the different fabric (an underpinning skill of the industry) and, therefore, are sometimes causing more harm than good.</li> </ul>	Proposed activity 2019-2020
<b>Advanced Clothing Production and Garment Alteration Skills Sets</b>	<ul style="list-style-type: none"> <li>• Industry requires targeted skill development in pattern making and grading, sizing, and garment making and machining.</li> <li>• The industry is being polarised by a demand for 'fast fashion,' as well as a demand for serviceability and access to end-to-end design, resulting in a need for skilled workers in bespoke manufacturing as well as large-run production.</li> <li>• There is a skills shortage for people with advanced clothing production skills to make patterns and samples for limited production. These skills are required for clothing repair and alteration also.</li> </ul>	Proposed activity 2019-2020
<b>Leather Production, Footwear and Millinery</b>	<ul style="list-style-type: none"> <li>• The specialised leather production, footwear and millinery sectors have contemporary workplace skills requirements, including the integration of STEM and soft skills.</li> <li>• Due to significant changes in workplace operations in the Australian TCF industry, current TCF qualifications and units of competency may no longer meet industry skill needs.</li> <li>• Leather production, footwear and millinery have had low or no enrolments for some time, exacerbated by limited RTO delivery.</li> </ul>	Proposed activity 2020-2021

Area	Issue and/or sensitivity	Action to be taken
<b>Fashion Design</b>	<ul style="list-style-type: none"> <li>The 'Fashion Design' stream is the most popular stream of the MST Textiles, Clothing and Footwear Training Package and represents 70% of all enrolments.</li> <li>Driven by the need to compete in the international arena, the sector is seeking workers with high-level qualifications for entry-level roles to compete.</li> <li>Industry requires improvements relating to packaging rules, skill sets, streamlining and language simplification.</li> <li>Identified potential development opportunities relating to technical skill sets, supply chain management, merchandising, product range design, tech packs, and technical drawing</li> </ul>	Proposed activity 2021-2022
<b>Fashion Business (Law and Compliance) Skills Set</b>	<ul style="list-style-type: none"> <li>Industry requires skills and knowledge in legal aspects of governance, intellectual property and copyright, standards and compliance, labelling, ethical sourcing, procurement and supply chain management (including compliance with modern slavery legislation).</li> <li>Australian standards imposed on manufacturers are impacting Australian businesses in the TCF industry and, in some cases, are seen to be prohibiting expansion and increasing bureaucracy.</li> <li>Businesses spend a lot of money understanding the potential risks and liabilities associated with business contracts. For smaller businesses (the majority of businesses in this sector) this is a significant cost.</li> <li>The complexity of the contracting environment is putting businesses at risk of becoming legally liable for assuring compliance with unrealistic requirements.</li> <li>The complexity of the contracting environment can also put businesses at risk if they become legally liable for assuring compliance with unrealistic fire retardancy requirements (nothing in the textile world is non-combustible).</li> <li>Small-/micro-businesses do not have access to the internal business support services available to larger manufacturers. As such, there is a need for trade-qualified individuals running or working for small businesses to upskill in the areas of business skills, merchandising and distribution.</li> </ul>	Proposed activity 2021-2022

# Proposed Schedule of Work 2019–2020 to 2022–2023

## Textiles, Clothing and Footwear IRC

### MST Textiles, Clothing and Footwear Training Package

**Contact details:** Leon Drury

**Date submitted to Department of Education and Training:** MONTH, 2019

Year	Items to be included in the <a href="#">National Schedule</a>
2019–2020	<p><b>Industrial Sewing Skill Set</b></p> <p>Further information on the industry imperatives, consultation plan and proposed scope of this project is provided in the <a href="#">2019–2020 Case for Change</a> section that follows.</p>
2019–2020	<p><b>New technologies and materials</b></p> <p>Investigate the skills impact of new technologies and materials that are coming into more widespread industry use and, where required, develop new units to address industry skill requirements in CAD, laser cutting, 3D prototyping, and performance textiles. The project would include integration of required soft skills and STEM skills, digital skills in design and pattern making, and skills in mobile technologies such as social media marketing and online retailing.</p> <p>Further investigation of Certificate II would be undertaken to strengthen entry-level pathways.</p> <p><b>Rationale</b></p> <p><b>What has changed?</b></p> <p>Existing workers faced with the introduction of these emerging technologies and materials need to develop post-trade skills and knowledge to upskill/reskill and maintain their value in the workplace.</p> <p>See <a href="#">Challenges and Opportunities</a> section.</p> <p><b>Employer/Industry Drivers</b></p> <p>Industry stakeholders have identified that the introduction of new technologies and materials requires workers to have a different range of skills and the ability to use traditional textile skills and knowledge to adapt and apply new technology.</p> <p>The 2017 TCF Industry Survey / 2018 RTO Consultation undertake by IBSA Manufacturing identified that employers identified technical skills including, 3D design, digital skills, social media and Radio frequency identification tags, as emerging skills needs twice as often and trade skills.</p> <p>Further evidence will be provided in the Case for Change.</p> <p><b>Employment Data/Occupational Outcomes</b></p> <p>The textile and clothing sectors Fashion and Textile Design Services are predicted to grow 2.6% annual over 2019–2024.</p>

Year Items to be included in the [National Schedule](#)

### Qualification Usage and History

The below table shows enrolment figures for the qualifications identified for consideration in the project. The data shows a decrease in some qualification's enrolments, this will be further investigated along with low enrolments and opportunities for rationalisation will be identified in the Case for Change. Further evidence on their State/Territory funding arrangements will be provided in the Case for Change.

Qualification Code	2014	2015	2016	2017	Total
Certificate II in TCF Services and Repair*	8	0	0	0	8
Certificate II in TCF Production Operations	88	104	50	49	291
Certificate II in TCF Production Support	82	34	52	32	203
Certificate III in Clothing and Textile Production	302	278	439	491	1510
Certificate III in Manufactured Textile Products*	52	39	28	21	140
Certificate IV in Textile Design, Development and Production	210	258	200	280	948
Certificate IV in Clothing Production	88	81	124	114	407
Diploma of Textile Design and Development	70	34	21	4	129
Advanced Diploma of Textile Design and Development*	3	0	11	17	31

\*Low enrolments

### Ministers' Priorities Addressed:

At its inaugural meeting, the Council of Australian Governments (COAG) Industry and Skills Council (CISC) agreed on six objectives for reform of the VET system. The table below outlines the priorities that would be addressed by this project.

Ministers' Priority	How Addressed
Removing obsolete and superfluous qualifications from the training system;	The review will evaluate and remove obsolete and superfluous qualifications and units of competency where identified.
Making more information available about industry's expectations of training product delivery;	The Implementation Guide will include information industry expectations.
Ensuring the training system better supports individuals to move easily from one related occupation to another;	Transportability of skills will be supported through the redevelopment of qualification packaging rules.
Improving the efficiency of the training system by creating units that can be owned and used by multiple industry sectors and housing these units in a 'work and participation bank';	Where relevant the updated training package components will use cross sector units. When reviewing or developing UoC consideration will be given to write units that can be used by multiple industry sectors.

### Consultation Plan:

The IBSA Manufacturing training development uses a five-phase methodology which follows the Training Development and Endorsement Process Policy that includes the establishment of a Technical Advisory Group (TAC), identification of key stakeholders, the creation of a project web page and coordination of project and work with the IRC.

A more detailed consultation plan will be included in the Case for Change

Year Items to be included in the [National Schedule](#)

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**Scope of Project:**

Estimated Project Duration: 12 months

If approved, the project would be undertaken in stages.

Anticipated Start Date: April 2020

- Anticipated Completion Date: Case for Endorsement to be submitted April 2021

**Training products potentially impacted:**

Details of individual components are provided in Table A as an excel attachment.

Further analysis and consultation need to be undertaken to validate this activity and determine all training package components in the Case for Change.

**The following qualifications have been identified as potentially impacted:**

- Certificate III in Clothing and Textile Production
  - Certificate III in Manufactured Textile Products
  - Certificate IV in Textile Design, Development and Production
  - Certificate IV in Clothing Production
  - Diploma of Textile Design and Development
  - Advanced Diploma of Textile Design and Development
  - Certificate II in TCF Production Support
  - Certificate II in TCF Production Operations
  - Certificate II in TCF Services and Repair.
- 

**Advanced Clothing Production and Garment Alteration Skill Sets**

Incorporating the skills required to make alterations, tailoring, repairs and mending. Businesses offering these services include a national franchise chain (Look Smart) located in many shopping centres, independent dressmakers and tailors, and dry cleaning businesses providing garment alterations as an 'add-on' service to their customers.

The proposed skill set will provide a pathway to skill workers in pattern making and grading, sizing, and garment making and machining ranging from samples to limited-run production of garments and commercial-led design.

**Rationale**

**What has changed?**

Manufacturing of mass-produced, low-value garments has largely moved offshore, which has discouraged new entrance into clothing production and machining roles. This has led to skill shortages for people with advanced clothing production skills and sample machinists to make samples for limited production and make alterations and repairs (see [Challenges and Opportunities](#) section).

**Employer/Industry Drivers**

Although the demand for mass production of clothing is in decline, the demand for bespoke clothing production continues to grow. There is also an emerging trend for sustainable clothing, with people choosing to keep and repair clothing. Experienced sample machinists who are core to the growth of these businesses are retiring and employers are finding it difficult to recruited new skilled workers to take their place.

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Year Items to be included in the [National Schedule](#)

2019–2020

### Employment Data/Occupational Outcomes

Although there is a general decline in employment outlooks for clothing trades workers there is a demand for workers that can make patterns, produce samples and repair/alter clothing.

### Qualification Usage and History

Further analysis will be undertaken to define the full range of skills required. This information will be used to identify training package components.

### Ministers' Priorities Addressed:

At its inaugural meeting, the Council of Australian Governments (COAG) Industry and Skills Council (CISC) agreed on six objectives for reform of the VET system. The table below outlines the priorities that would be addressed by this project.

Ministers' Priority	How Addressed
Making more information available about industry's expectations of training product delivery:	The Implementation Guide will include information about the skill set.
Ensuring the training system better supports individuals to move easily from one related occupation to another:	The skill set supports upskilling of existing workers and reskilling of workers transitioning across sectors.
Improving the efficiency of the training system by creating units that can be owned and used by multiple industry sectors and housing these units in a 'work and participation bank':	Where relevant the skill set will use existing unit's native to MSF and imported.
Fostering greater recognition of skill sets:	The development of skill sets provides alternative pathways and supports upskilling of existing workers.

### Consultation Plan:

The IBSA Manufacturing training development uses a five-phase methodology which follows the Training Development and Endorsement Process Policy that includes the establishment of a Technical Advisory Group (TAC), identification of key stakeholders, the creation of a project web page and coordination of project and work with the IRC.

A more detailed consultation plan will be included in the Case for Change.

### Scope of Project:

Estimated Project Duration: 12 months

If approved, the project would be undertaken in stages.

Anticipated Start Date: April 2020

- Anticipated Completion Date: Case for Endorsement to be submitted April 2021

### Training products potentially impacted:

Details of individual components will be provided in the Case for Change.

Year	Items to be included in the <a href="#">National Schedule</a>
2020–2021	<p><b>Leather Production, Footwear and Millinery</b></p> <p>Investigate the contemporary workplace skill requirements for the highly specialised sectors of leather production, footwear and millinery, including the need for integration of soft skills and STEM skills.</p> <p><b>Rationale</b></p> <p>Qualifications in leather production, footwear and millinery have had low or no enrolments for some time. This situation of low enrolments and limited RTO delivery needs to be investigated to better understand the contributing factors, including how well current training products meet industry requirements.</p> <p>The TCF industry in Australia continues to experience significant changes in workplace operations involved in leather production, footwear and millinery, impacting on workforce skill requirements. These changes need to be examined to determine amendments required in the current qualifications and units of competency to better meet industry skill needs.</p> <p>See commentary and Figure 17 in the <a href="#">Qualification Uptake</a> section.</p> <p>Further analysis and consultation need to be undertaken to validate this activity.</p> <p><b>Training products potentially impacted:</b></p> <ul style="list-style-type: none"> <li>• Certificate II in Leather Production</li> <li>• Certificate III in Leather Production</li> <li>• Certificate III in Millinery</li> <li>• Certificate IV in Millinery</li> <li>• Certificate III in Footwear</li> <li>• Certificate IV in Custom Made Footwear</li> </ul>

Year	Items to be included in the <a href="#">National Schedule</a>
2021–2022	<p><b>Fashion Design</b></p> <p>This project will review the applied fashion design and technology/merchandising qualifications and develop skill sets to ensure targeted qualification pathways are available and fit-for-purpose. The project would include integration of required soft skills and STEM skills.</p> <p><b>Rationale</b></p> <p>The applied fashion design qualifications represent over 70% of all enrolments in the MST Textiles, Clothing and Footwear Training Package. While Fashion Design continues to be the most popular stream, interest continues to grow in the Fashion Business and Fashion Technologies sectors of the industry. All qualifications need to be reviewed to ensure that targeted pathways are available in the three streams to reflect industry job roles and required skills, and to ensure appropriate alignment with the AQF.</p> <p>Increasingly, the sector is seeking workers with high-level qualifications for entry-level roles to compete in an international arena. Job outcomes for those with lower-level qualifications are unclear.</p> <p>An industry survey and consultation with RTOs have provided detailed feedback on improvements required to these qualifications to better meet industry requirements. Feedback identified opportunities for improvement related to packaging rules, skill sets, streamlining and language simplification. Also identified were development opportunities in relation to: technical skill sets, supply chain management, merchandising, product range design, tech packs, and technical drawing.</p> <p>Further analysis and consultation need to be undertaken to validate this activity.</p> <p><b>Training products potentially impacted:</b></p> <ul style="list-style-type: none"> <li>• Certificate II in Applied Fashion Design and Technology</li> <li>• Certificate III in Applied Fashion Design and Technology</li> <li>• Certificate IV in Applied Fashion Design and Merchandising</li> <li>• Diploma of Applied Fashion Design and Merchandising</li> <li>• Advanced Diploma of Applied Fashion Design and Merchandising.</li> </ul>

Year	Items to be included in the <a href="#">National Schedule</a>
2021–2022	<p><b>Fashion Business (Law and Compliance) Skill Set</b></p> <p>The proposed skill set will address industry requirements for skills and knowledge in legal aspects of governance, intellectual property and copyright, standards and compliance, labelling, ethical sourcing, procurement and supply chain management (including compliance with modern slavery legislation) first identified in the 2018 Textiles, Clothing and Footwear Industry Skills Forecast.<sup>108</sup></p> <p><b>Rationale</b></p> <p>The trend to move mass clothing production offshore has given rise to many microbusinesses in the Textiles sector. These businesses typically employ one or two people who service bespoke markets and do not have access to the internal business support services available to larger manufacturers. This has driven a need for trade qualified people running or working for small business to upskill in the areas of business skills, merchandising and distribution. The development of a Fashion Business Skill Set provides a pathway to support clothing production microbusinesses to protect and grow their business interests.</p> <p>For details of issues and sensitivities identified in relation to this activity see the <a href="#">Consultation Undertaken</a> section above.</p> <p>Further analysis and consultation need to be undertaken to validate this activity.</p> <p><b>Training products potentially impacted:</b></p> <p>Further analysis is required to identify training products within the Design, Technology and Merchandising stream and identify opportunities for rationalisation within the MST Textiles, Clothing and Footwear Training Package as well as use of other Training Package components. It is anticipated that the development of this skill set will be at the same time as the redevelopment of the fashion design stream of qualifications.</p>

<sup>108</sup> 2018 Textiles, Clothing and Footwear Industry Skills Forecast and Proposed Schedule of work, November 2018

# 2019–2020 Case for Change

## Textiles, Clothing and Footwear IRC

### MST Textiles, Clothing and Footwear Training Package

**Contact details:** Leon Drury

**Date submitted to Department of Education and Training:** 2019

Description	The project will develop an Industrial Sewing Skill Set that is applicable to several related industry sectors for the development of transferable, entry-level skills to facilitate the movement of workers with similar skills and assist employers experiencing skill shortages.
Rationale	<p>Industrial sewing (machinist) is a critical skill required in a broad range of contexts within furnishing, automotive, marine and textile fabrication industries. The foundational industrial sewing skills to be included in the proposed skill set are central to the operation of manufacturing businesses in these industry sectors. Employers in several sectors have provided feedback through industry consultation about the shortage of skills and difficulty in recruiting workers with industrial sewing skills for the following reasons:</p> <ul style="list-style-type: none"> <li>• Thin markets – full TCF qualifications are not being delivered by Registered Training Organisations RTOs due to thin markets.<sup>109</sup> This is evidenced in low take up of some TCF qualifications by with a viable training product. A Skill Set may provide a more viable product offering for RTOs as it has the potential to open a pathway for learners into other occupations.</li> <li>• Ageing workforce – experienced workers are reaching (or often past) retirement age. Employment data indicates that 45% of workers in the Textiles, Clothing and Footwear Production sector of the TCF industry are aged over 50.<sup>110</sup></li> <li>• Offshoring – over the last two decades the offshoring of sewing production has radically decreased the size of the Australian workforce with sewing skills. Few new recruits have been skilled to enter the workforce during this long period of downsizing.</li> <li>• Gender sensitivities regarding males undertaking “sewing” skills training or undertaking a career in “industrial sewing” have also contributed to the low uptake</li> </ul> <p>The development of a skill set for industrial sewing that includes common industrial sewing skills that can be applied to a range of industry, products and materials provides a pathway for the upskilling or reskilling of workers and skilling of new entry level recruits.</p>

<sup>109</sup> Food, Fibre and Timber Industries Training Council (WA) Inc, Thin Markets: Improving workforce development opportunities in thin markets of the food, fibre and timber industries, 2017.

<sup>110</sup> Department of Jobs and Small Business, Labour Market Information Portal.

Rationale	<p>Although the size of the workforce in the Textiles, Clothing and Footwear Production sector has declined steeply since 2006 (with a reduction of 16,533 employees over the decade to 2016), employees.<sup>111</sup> Those aged 50 years and over are leaving the industry at a slower rate than those in younger age brackets. Employers in the sector are reporting that this amplified ageing of the workforce is adversely impacting the availability of skilled workers as older workers begin to reduce their hours or leave the industry altogether. Employers expect this impact to escalate in coming years, especially since business conditions have stabilised in some parts of the sector with businesses successfully targeting niche, high-end markets. Some products in the Cut and Sewn Textile Product Manufacturing, such as canvas awnings, tarpaulins and shade sails, face limited competition from imports due to the high manufacturing standards of domestic firms. Opportunities exist for manufacturers to focus on producing niche, high value-added and export-oriented textile products.<sup>112</sup> As a result, employers in a variety of TCF, Furnishing and Light Manufacturing sectors require skilled workers to meet demand for quality, bespoke and customised Australian-made products.</p> <p>The ageing of the TCF workforce is having a marked impact on the industry's ability to maintain skills and knowledge, a problem shared through the western world as reported by Alvanon in their 2018 survey report <i>The State of Skills in the Apparel Industry</i>.</p> <p><i>The last generation of people who possess hands-on experience in factories and deep industry knowledge are now between 55 and 75 years old. There is only a small window of time left to harness and encapsulate some of that experience into learning journeys for both corporates and individuals</i><sup>113</sup></p> <p>The report found that despite business awareness of the impending loss of workforce skills, most companies fail to implement training solutions. IBSA Manufacturing consultation with industry confirms similar experience in Australia. Although employers are keen to retain the knowledge and skills of experienced workers, they do not have mechanisms that enable this knowledge and skill to be passed on. This is further compounded as often they do not have anyone to pass the skills and knowledge on to.</p> <p>Enrolments in most TCF qualifications have been declining over recent years, although the Certificate III in Clothing and Textile Production has recorded enrolment growth of 62% between 2014 and 2017 (from 302 enrolments in 2014 to 491 enrolments in 2017).<sup>114</sup> Employers report difficulty sourcing workers with suitable entry-level skills in a wide range of TCF production roles. This problem is exacerbated by the wide selection of elective units that learners may complete as part of a TCF qualification.</p>
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<sup>111</sup> Department of Jobs and Small Business, Labour Market Information Portal

<sup>112</sup> IBISWorld Industry Report C1333 Cut and Sewn Textile Product Manufacturing, January 2018

<sup>113</sup> Alvanon and MOTIF, *The State of Skills in the Apparel Industry*, 2018

<sup>114</sup> NCVET VOCSTATS, extracted on 29/08/2018

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Rationale	<p>Employers and RTOs have identified the economies of scale that could be realised by making training available that meets basic entry-level needs and is applicable across several industry segments. An Industrial Sewing Skill Set has potential to fill this identified workforce development gap. Below is a breakdown of each industry and examples of products where industrial sewing skill set applies:</p> <ul style="list-style-type: none"> <li>• Marine trimming – canopies, boat covers, seat covers and awnings</li> <li>• Motor trimming – vehicle seats, seat covers and interiors</li> <li>• Blinds and awnings – heavy duty curtains, external canvas awning and shade blinds</li> <li>• Upholstery – furniture covering</li> <li>• Clothing manufacturing – uniforms and garments made from heavy materials</li> <li>• Leather and canvas – handbags, ute covers, leather jackets, saddles, tents/tarpaulins and swags</li> <li>• Specialised textiles – shade sales and banners</li> <li>• Automotive aftermarket products – motor vehicle awnings, roof top tents and awning rooms</li> <li>• Cut and sewn textile product manufacturing – household textile goods such as curtains and blinds, canvas awnings, linen, shade sails, tarpaulins, tents, towels and soft furnishings.</li> </ul> <p>The customised and bespoke nature of much of the modern Australian TCF industry relies on workforce flexibility. Employers need workers who can shift between roles and tasks. They also need access to additional workers during busy periods. Employers have identified examples of their workforce skills need as follows.</p> <ul style="list-style-type: none"> <li>• Upskilling, e.g. workers who would be more useful across the business if they could add industrial sewing to their existing skills</li> <li>• Initial skilling, e.g. workers who could use industrial sewing as the basis for their entry into the industry</li> <li>• Reskilling, e.g. workers who could move more seamlessly between industry segments if they added industrial sewing to their existing skills and experience.</li> </ul> <p>For individuals who do not need the full qualification the proposed skill set would provide entry to employment and improve job portability and employment flexibility. The skill set would also equip individuals skilled in one of the identified industry sectors with adequate skills to be able to work across multiple industry sectors, in job roles utilising a similar skill base to produce a broad range of products all relying on competent operation of industrial sewing skills.</p>
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Impact of Change	<p>The proposed skill set will support the development of transferable, entry-level skills, allowing workforce mobility across the range of industry sectors listed above.</p> <p>Impact of the recommended changes on stakeholders and on other training packages:</p> <ul style="list-style-type: none"> <li>• Employers – are more likely to be able to access training to upskill existing workers (by combining training for multiple industry sectors some of the barriers of provision in thin markets will be overcome); employers will also have a larger pool of potential recruits with basic entry-level skills</li> <li>• Employees – will be able to access training to broaden their skills enabling movement into related industry sectors</li> <li>• Students – will have access to short, targeted training that provides a good foundation for workforce entry in a variety of industry sectors. The skill set will also open up a pathway into trade qualifications.</li> <li>• RTOs – will have a viable training product that serves the needs of several industry sectors, and allows for contextualisation to meet specific employer or learner needs</li> <li>• Government – will have a training product that is targeted for the development of entry-level skills that are in demand across multiple industry sectors</li> <li>• Other training packages – will experience greater RTO and learner take-up of existing units of competency that have been identified by industry as necessary in the workforce.</li> </ul> <p>The proposed industrial sewing skill set will bring together existing units of competency aligned to the skills required of an industrial machinist from across training packages. Initial consultation has identified the following units for consideration in an industrial sewing skill set:</p> <ul style="list-style-type: none"> <li>• AURVTT020 Select and use leather in automotive and marine trimming</li> <li>• AURVTT015 Fabricate and install canvas products for automotive and marine components</li> <li>• MSS402051 Apply quality standards</li> <li>• MSTTX2009 Perform industrial sewing on textile products</li> <li>• MSTTX3003 Set up, adjust and maintain industrial sewing machines</li> <li>• MSTTF2009 Select and apply canvas and sail materials</li> <li>• MSFBA2004 Construct roll-up and pull-down style blinds and awnings</li> <li>• MSFUP2004 Machine sew basic upholstery final cover materials</li> <li>• MSFSF2002 Machine sew materials</li> <li>• MSFSF2003 Machine sew specialized sewn products.</li> </ul>
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Impact of Change	<p>Analysis of these units has identified that there is overlap across some of these units.</p> <p>The Australian government's Job Outlook web service provides employment information for the occupation of sewing machinists (ANZSCO 7116). Job Outlook reports that the number of sewing machinists fell over the past 5 years and is expected to fall over the next 5 years from 9,700 in 2018 to 8,500 by 2023. Most of the future job openings are predicted to result from workforce turnover, with 4,000 job opening predicted over the next 5 years.<sup>115</sup></p> <p>Sewing machinists are employed predominantly in manufacturing industries (76.6%) but are also employed in retail trade (20.0%), arts and recreation services (1.1%), health care and social assistance (1.0%) and other industries (1.3%). Victoria employs the largest share of the sewing machinist workforce (38.3%), followed by New South Wales (24.5%) and Queensland (15.2%).<sup>116</sup></p> <p>Risks of not undertaking the project:</p> <ul style="list-style-type: none"> <li>• RTOs and learners may not recognise the potential for employment in the TCF industry, further exacerbating the shortage of available workers as workforce ageing continues.</li> </ul> <p>Inability of employers to source the necessary skills may result in a greater level of offshoring or the closure of Australian TCF businesses.</p>
Industry Support for Change	<p>Western Australia has identified a skill shortage for sewing machinists in the areas of canvas making, soft furnishing and industries like upholstery since 2010. In 2015 the Food, Fiber &amp; Timber Industries Training Council (WA) Inc published some research on Thin Markets that included a case study about Industrial Sewing which raised the option of developing a skill set as a solution to skill workers to meet industry demand for industrial sewers.</p> <p>Since then, it has continued to be raised by the Textiles, Clothing and Footwear Industry Advisory Group, particularly with respect to thin markets. It was also identified as a priority in the 2018 Skills Forecast and Proposed Schedule of Work.</p> <p>IBSA Manufacturing has undertaken further national consultation with industry and RTO's to validate the need for and interest in an industrial sewing skill set. The consultation involved webinars and targeted forums with stakeholders from specialised textile manufacturers held in late 2018. Feedback received validated that issues identified in Western Australia are prevalent in other states and territories.</p> <p>There was strong support for the development of an industrial sewing skill set as a solution to skill workers to fill machinist roles in thin markets and for small runs and sample work.</p>

<sup>115</sup> Australian Government, Job Outlook, Sewing Machinists ANZSCO ID 7116, accessed 16 January 2019.

<sup>116</sup> ABS Labour Force Survey, annual average 2017, Cat. No. 6291.0.55.003: Customised Report.

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Consultation Plan	<p>In preparing this case for change IBSA has conducted fit for purpose consultation appropriate to the scope of the project. Further industry assessment to validate skills required will be undertaken with a broad cross sector of industry stakeholders as part of the project. ISA will consult closely with the project IRC and Technical Advisory Committee (TAC), representative unions and industry associations to identify and engage with key stakeholders within the furnishing, automotive, marine and textile fabrication industries.</p> <p>The IBSA Manufacturing training development uses a five-phase methodology which follows the Training Development and Endorsement Process Policy and. IBSA Manufacturing will coordinate the project and work with the IRC.</p> <p><b>Phase 1 – Initial research and analysis</b></p> <p>Establishment of a TAC to validate the project scope and plan, to contribute to further industry assessment and to assist in determining industry needs and job role functional analysis.</p> <p>The IRC will appoint a TAC to inform this work that will have current skills and knowledge across a broad range of industry job roles.</p> <p>Due to the cross industry focus of the proposed skill set it is critical that a broad range of industry representatives from the marine trimming, automotive upholstery and aftermarket products, furniture upholstery, leather production and manufactured textiles sectors are consulted. Engagement will also be undertaken with sewing machine suppliers who may be able to provide technical knowledge about common/ transferable skills required to operate a range of industrial sewing machines including, straight sewer, over locker, blind hemmer and tacking machines.</p> <p>Further industry assessment will determine the potential users of the skill set, how transferrable industrial sewing skills are between industry sectors, the skills specific to the industrial sewing skills set and the benefits its creation will have on effected industry sectors.</p> <p>The proposed skill set will be developed under the direction of the TAC and then reviewed by the IRC at each phase.</p> <p><b>Phase 2 – Round 1 and public consultation</b></p> <p>The first draft of training package components will be developed by the TAC and circulated to the textiles, clothing and footwear industry, the broader specialised textiles industry and RTOs for feedback.</p> <p><b>Phase 3 – Round 2 and public consultation</b></p> <p>Second drafts of training package components are refined in response to the feedback in line with TAC advice. Further feedback is sought in a second round of consultation from the textiles, clothing and footwear industry, the broader specialised textiles industry and RTOs.</p> <p><b>Phase 4 – Approval process</b></p> <p>Final drafts are developed in response to further feedback and in line with TAC advice and recommendations are made to the IRC for approval before being circulated to State and Territory Training Authorities for feedback.</p>
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Consultation  
Plan

**Phase 5 – Submission to Department-AISC**

Submit to the Department of Education and Training for AISC approval.

**Consultation Plan**

IBSA will create a project web page to provide project updates, gather feedback from stakeholders and validate training package components.

Proposed consultations include but are not limited to:

- industry representatives and employers to identify the industry, and job requirements, and trends, and work opportunities as recommended by the TCF IRC and TAC members including:
  - relevant associations and industry training boards including members of the following associations:
    - + Specialised Textiles Association
    - + Australasian Furnishing Association
    - + Australian Automotive Aftermarket Association
    - + Motor Trades Association of Australia
    - + WA Furniture Manufacturers Association
- RTOs with these qualifications on scope and recent or current students, if accessible, to gain feedback on the actual qualifications and employment outcomes
- State Training Authorities to ensure all jurisdictions are engaged

IRC's with responsibility for units of competency from training packages. IBSA will liaise with the Furnishing and Automotive IRC's through their Skill Service Organisation (SSO) to inform them to reach out to stakeholders which may be affected by this change and where their native unit is being included in the Industrial Sewing skill set and establish a conduit for ongoing feedback and continuous improvement of the units.

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Ministers' Priorities Addressed	<p>This Case for Change addresses the following Ministers' Priorities:</p> <ul style="list-style-type: none"> <li>removing obsolete and superfluous qualifications from the training system to make it easier for consumers to find the training relevant to their needs; <ul style="list-style-type: none"> <li>The new skill set will draw on existing units of competency. Sewing units in MST, MSF and AUR training packages will be considered for their applicability for use across related industry sectors. This work may lead to recommendations for the removal of obsolete or superfluous units of competency. The development of the skill set is not expected to require the creation of new units of competency simply repackaging and possible revision of existing MST units.</li> </ul> </li> <li>making more information available about industry's expectations of training delivery to training providers to improve their delivery and to consumers to enable them to make more informed course choices; <ul style="list-style-type: none"> <li>The development of an Industrial Sewing Skill Set will clearly signal employer requirements for these skills to RTOs. RTOs delivering in this area have previously been aware of industry demands and have in some cases responded by creating courses that will provide similar cross-sectoral outcomes.</li> <li>Industry's expectations of training delivery will be provided in the Companion Volume.</li> </ul> </li> <li>ensuring the training system better supports individuals to move easily from one related occupation to another; <ul style="list-style-type: none"> <li>The new skill set is responding to demand for more transferable workforce skills. It will provide individuals with entry-level skills that are common across several segments of the TCF, furnishing, and automotive/marine industries and enable greater recognition and portability of skills.</li> </ul> </li> <li>improving the efficiency of the training system by creating units that can be owned and used by multiple industry sectors and housing these units in a 'work and participation bank'; <ul style="list-style-type: none"> <li>The skill set will be applicable to several industry sectors and will be developed with input from affected IRCs in the furnishing and automotive/marine industries. The most appropriate home for the units comprising the skill set will be considered throughout the skill set development. However, while the units are applicable across several industry segments, they are not broadly applicable across the whole workforce. It is anticipated that the most appropriate 'home' for the units will be within their current training package (MST, MSF and/or AUR) and not in a 'work and participation bank'.</li> </ul> </li> <li>fostering greater recognition of skill sets <ul style="list-style-type: none"> <li>The proposed development of a cross-industry skill set has the potential to raise awareness among employers and RTOs of the valuable role that skill sets can play in building a skilled workforce through developing entry-level skills, and upskilling and reskilling existing workers.</li> </ul> </li> </ul>
Potential Outcomes	<p>The development of an Industrial Sewing Skill Set has potential to support greater workforce mobility across sectors of the TCF, Furnishing, Automotive and Marine industries, providing workforce entrants with more diverse employment opportunities and employers with increased access to workers with required entry-level skills.</p>

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## Scope of Project

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Timing	<p><b>Estimated Project Duration:</b> 12 months</p> <p>If approved, the project would be undertaken in stages.</p> <p><b>Anticipated Start Date:</b> July 2019</p> <p><b>Anticipated Completion Date:</b> Case for Endorsement to be submitted June 2020</p>
Training Package	MST Textiles, Clothing and Footwear Training Package
Qualifications	No qualifications are impacted by this project
Skill Sets	<p>A total of <b>1 Skill Set</b> will be developed as part of this project:</p> <p><b>Industrial Sewing Skill Set</b></p>
Units of Competency	<p>A total of 3 native units of competency are to be reviewed for application and updated if needed as part of this project.</p> <ul style="list-style-type: none"> <li>• MSTTX2009 Perform industrial sewing on textile products</li> <li>• MSTTX3003 Set up, adjust and maintain industrial sewing machines</li> <li>• MSTTF2009 Select and apply canvas and sail materials</li> </ul> <p>The following units from other training packages will be assessed for suitability for inclusion in the Skill Set:</p> <ul style="list-style-type: none"> <li>• AURVTT020 Select and use leather in automotive and marine trimming</li> <li>• AURVTT015 Fabricate and install canvas products for automotive and marine components</li> <li>• MSFBA2004 Construct roll-up and pull-down style blinds and awnings</li> <li>• MSFUP2004 Machine sew basic upholstery final cover materials</li> <li>• MSFSF2002 Machine sew materials</li> <li>• MSFSF2003 Machine sew specialized sewn products</li> <li>• MSS402051 Apply quality standards</li> </ul>

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### Detail on training components proposed for work for 2019-20.

Qualification/ unit/Skillset	Code and Title	Previous change (endorsement date)	Previous work (transition / update / establishment)	Work (new / update / deletion)	Entry level / trade / post-trade qualification	Expected date for endorsement
Skillset	[CODE TBC] Industrial Sewing	N/A	N/A	New	Trade / Post trade	June-2020
Unit	MSTTX2009 Perform industrial sewing on textile products	04/07/2016	Transition	Potentially updated	Trade / Post trade	June-2020
Unit	MSTTX3003 Set up, adjust and maintain industrial sewing machines	04/07/2016	Transition	Potentially updated	Trade / Post trade	June-2020
Unit	MSTTF2009 Select and apply canvas and sail materials ABCDEF5678	04/07/2016	Transition	Potentially updated	Trade / Post trade	June-2020

# Appendix A: Industry Classifications

For the purposes of analysing the business landscape, the IRC has selected the following ANZSIC codes as representative of the TCF industry in Australia.

ANZSIC Code	ANZSIC 4-digit Class Name
<b>Textiles, Clothing and Footwear Production</b>	
1333	Cut and Sewn Textile Product Manufacturing
1334	Textile Finishing and Other Textile Product Manufacturing
1340	Knitted Product Manufacturing
1351	Clothing Manufacturing (which includes Millinery)
1352	Footwear Manufacturing
<b>Textiles, Clothing and Footwear Services</b>	
6924	Other Specialised Design Services*
9491	Clothing and Footwear Repair
9531	Laundry and Dry Cleaning Services
<b>Textiles Process Manufacturing</b>	
0521	Cotton Ginning
1331	Wool Scouring
1312	Natural Textile Manufacturing
1313	Synthetic Textile Manufacturing
1320	Leather Tanning, Fur Dressing and Leather Product Manufacturing
1331	Textile Floor Covering Manufacturing
1332	Rope, Cordage and Twine Manufacturing

\* This class consists of units mainly engaged in providing specialised design services not elsewhere classified. These include Commercial art service, Fashion design service, Graphic design service, Interior design service, Jewellery design service, Signwriting, Textile design service, Ticket writing.

# Appendix B:

## Occupation Classifications

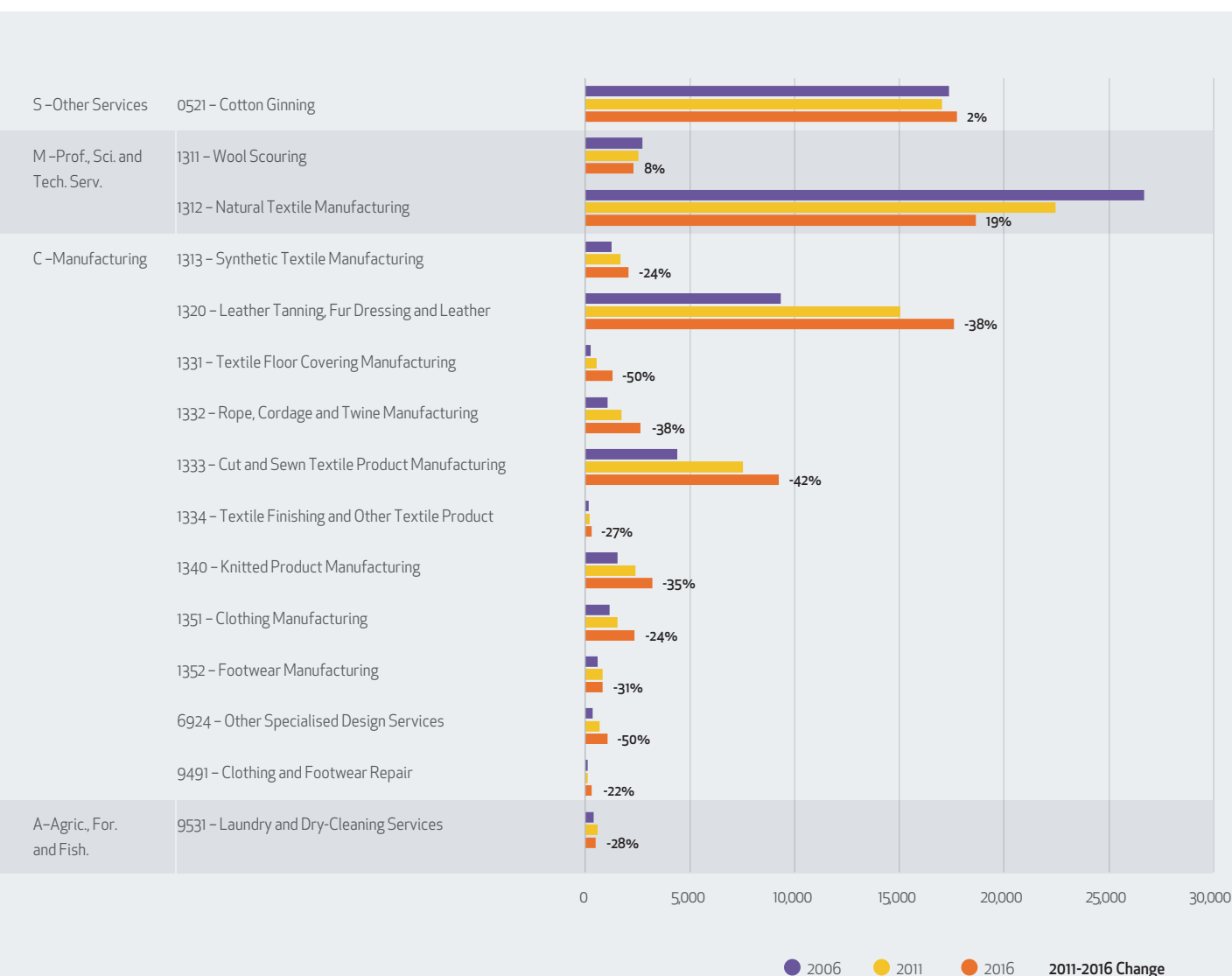
For the purposes of analysing employment trends, the following ANZSCO codes have been used.

4-digit classification		6-digit classification	
2323	Fashion, Industrial and Jewellery Designers	232311	Fashion Designer
		232312	Industrial Designer
		232313	Jewellery Designer
3931	Canvas and Leather Goods Makers	393111	Canvas Goods Fabricator
		393112	Leather Goods Maker
		393113	Sail Maker
		393114	Shoemaker
3932	Clothing Trades Workers	393200	Clothing Trades Workers
		393211	Apparel Cutter
		393212	Clothing Patternmaker
		393213	Dressmaker or Tailor
		393299	Clothing Trades Workers nec
3933	Upholsterers	393311	Upholsterer
7116	Sewing Machinists	711611	Sewing Machinist
7117	Textile and Footwear Production Machine Operators	711711	Footwear Production Machine Operator
		711712	Hide and Skin Processing Machine Operator
		711713	Knitting Machine Operator
		711714	Knitting Machine Operator
		711715	Textile Dyeing and Finishing Machine Operator
		711716	Textile Dyeing and Finishing Machine Operator
		711799	Weaving Machine Operator
8115	Laundry Workers (General)		Yarn Carding and Spinning Machine Operator
			Textile and Footwear Production Machine Operators nec
8115	Laundry Workers (General)	811511	Laundry Worker (General)
		811512	Dry Cleaner
		811513	Ironer or Presser
8399	Other Factory Process Workers	839914	Fabric and Textile Factory Worker Hide and Skin Processing Worker
		839917	Fabric and Textile Factory Worker Hide and Skin Processing Worker

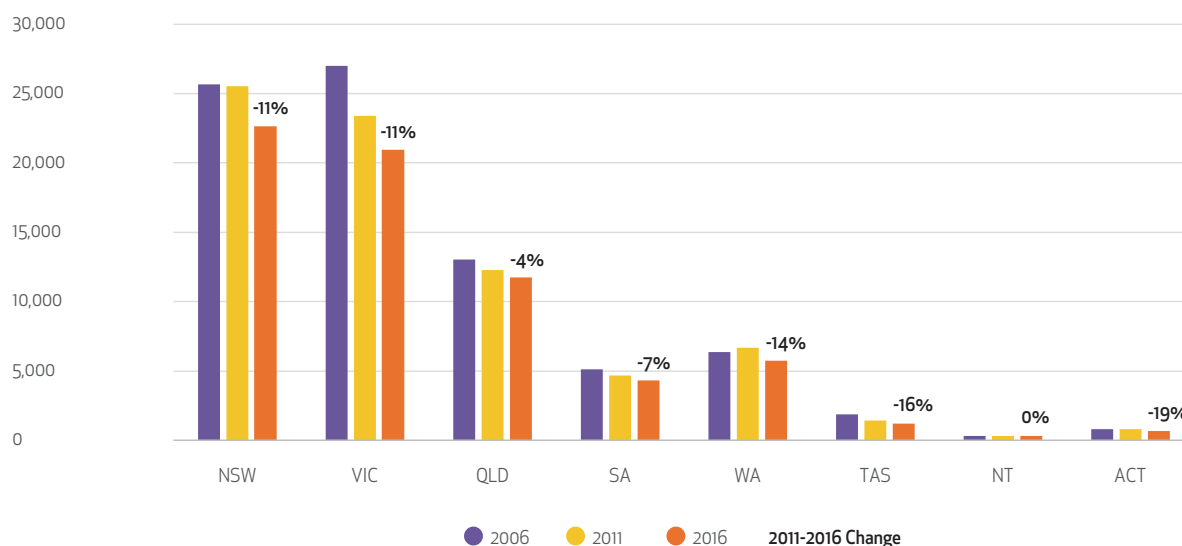


# Appendix C: Census Snapshot

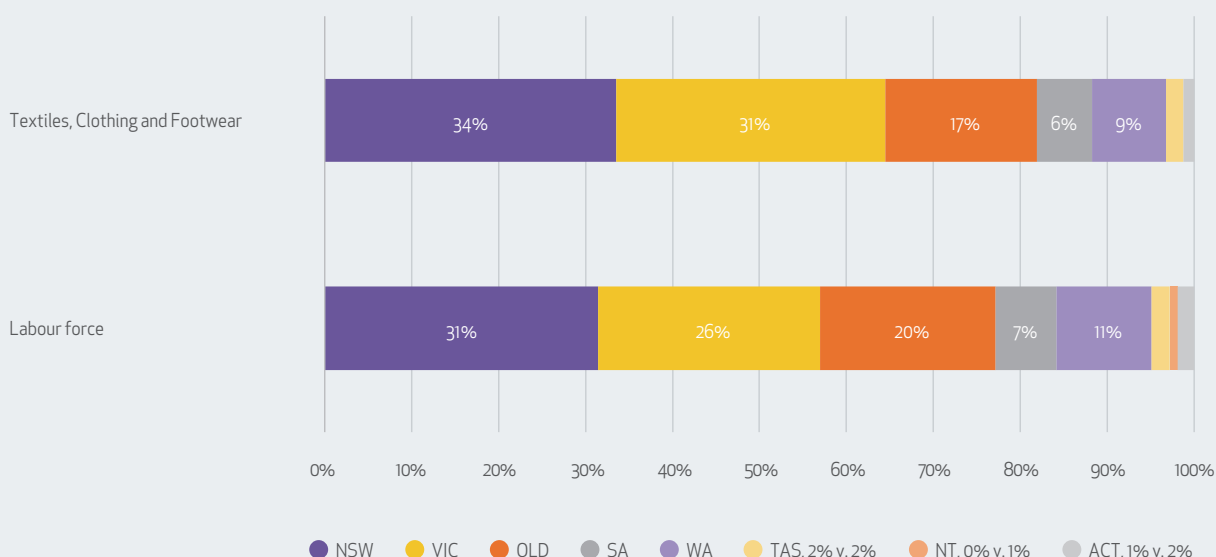
Number of employees in selected industry classes, Census 2006–2016, and five-year change from 2011 to 2016



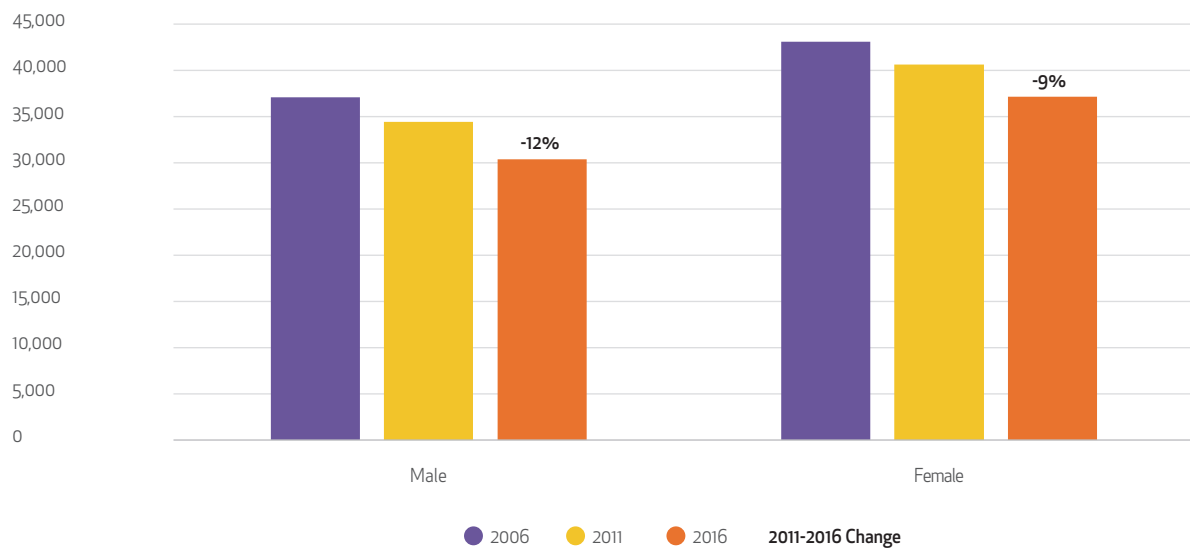
## Total number of employees in selected industry classes by state of usual residence, Census 2006–2016



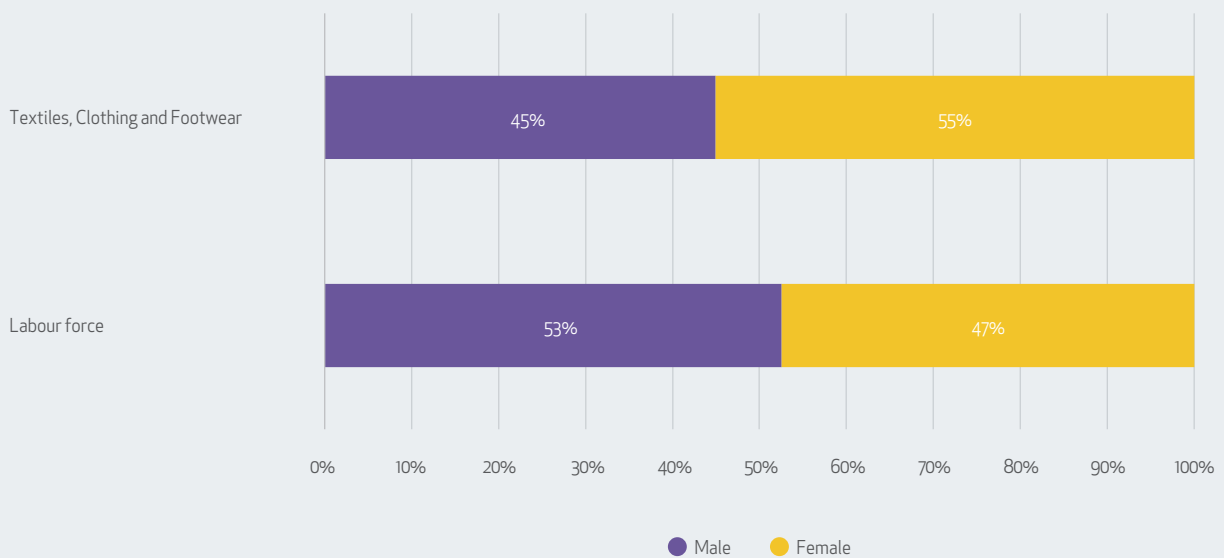
## State of usual residence of employees in selected industry classes versus the overall labour force, Census 2016



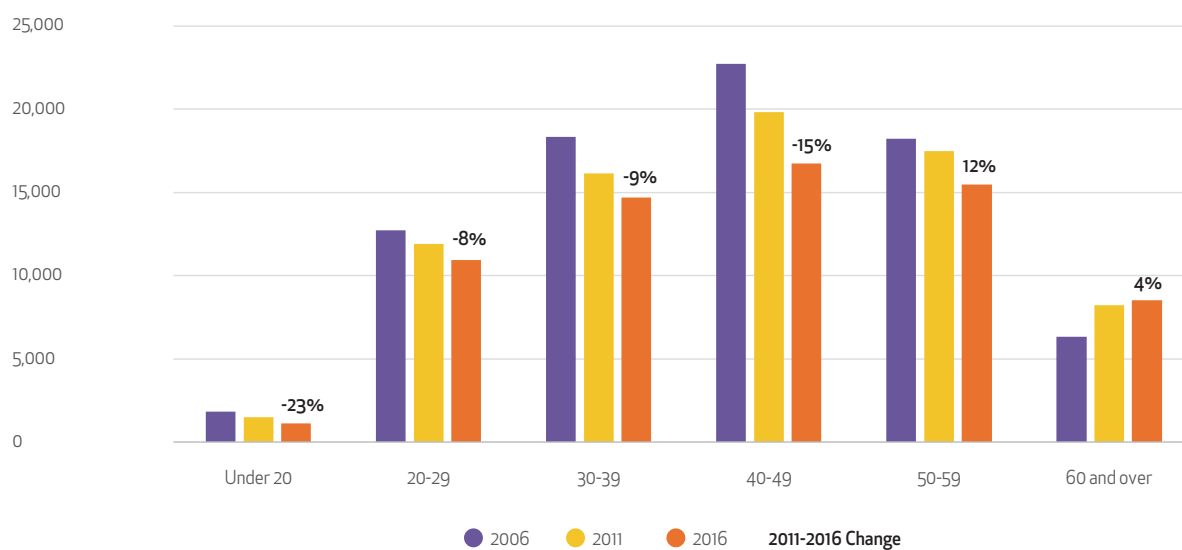
## Total number of employees in selected industry classes by gender, Census 2006–2016



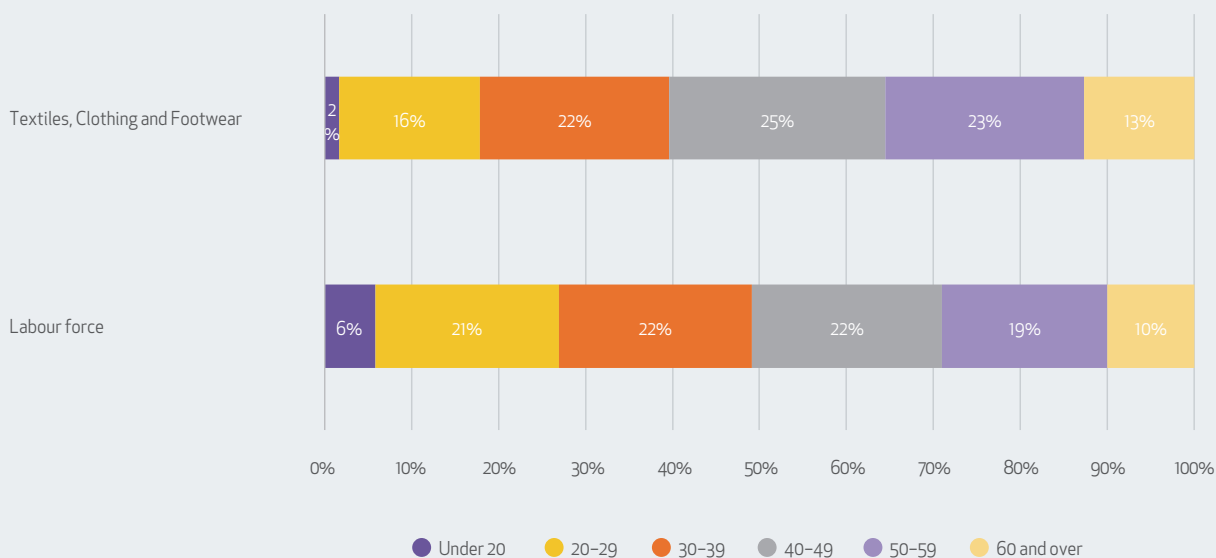
## Gender of employees in selected industry classes versus the overall labour force, Census 2016



## Total number of employees in selected industry classes by age, Census 2006–2016

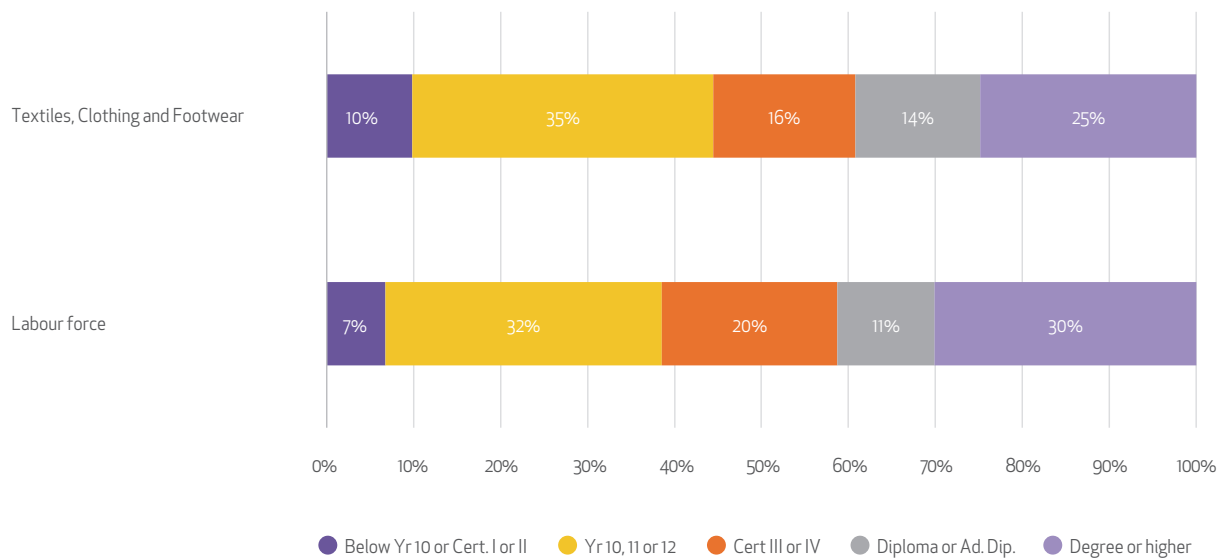


## Age of employees in selected industry classes versus the overall labour force, Census 2016



## Highest educational attainment of employees in selected industry classes versus the overall labour force, Census 2016

excludes those whose educational attainment was not stated or not applicable

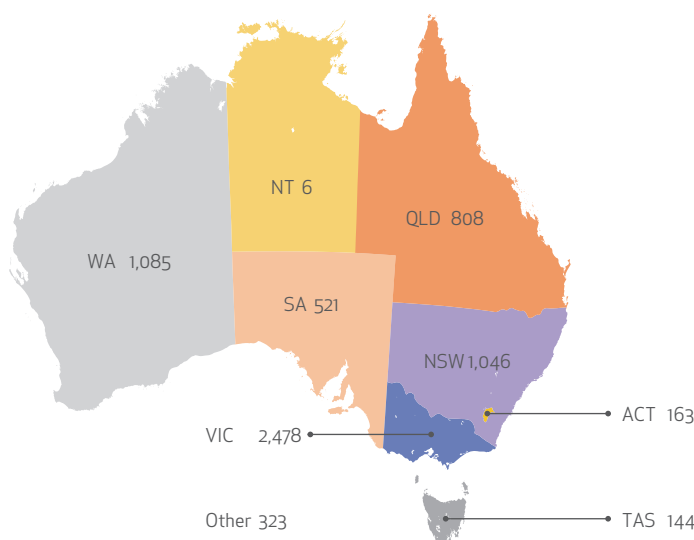


Source: Australian Bureau of Statistics (ABS) Census of Population and Housing: 2016 Census – Employment, Income and Education; 2011 Census – Employment, Income and Unpaid Work; 2006 Census – Labour Force. Data extracted using TableBuilder.

# Appendix D: Training Package Enrolment Data

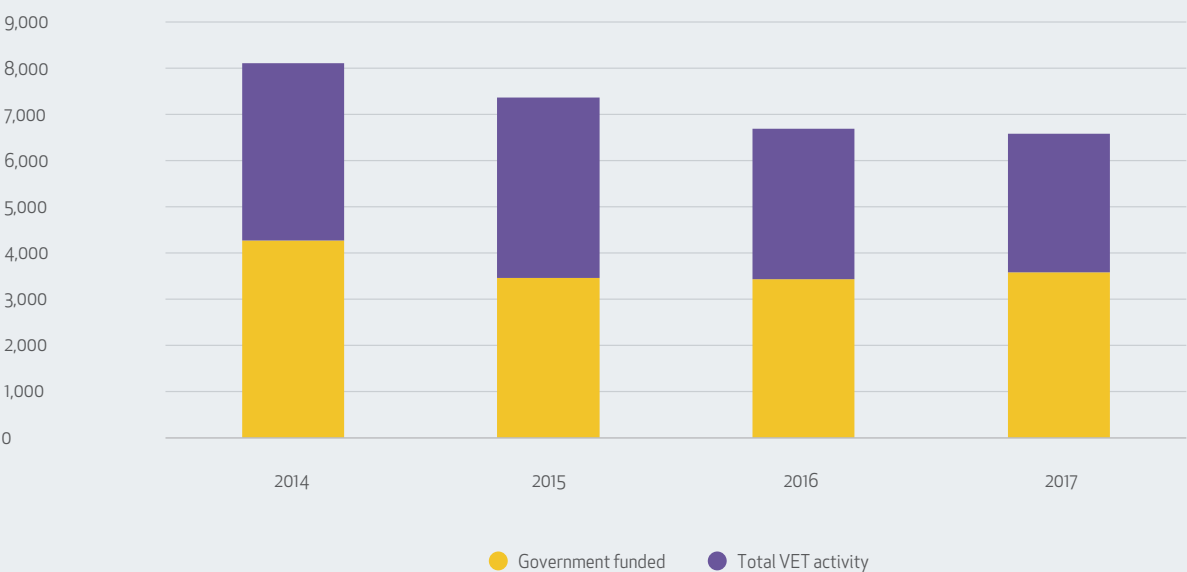
Program enrolments in MST Textiles, Clothing and Footwear qualifications by state/territory of student residence

2017 Total VET Activity



## Total program enrolments in MST Textiles, Clothing and Footwear qualifications

2014–2017 Total VET Activity



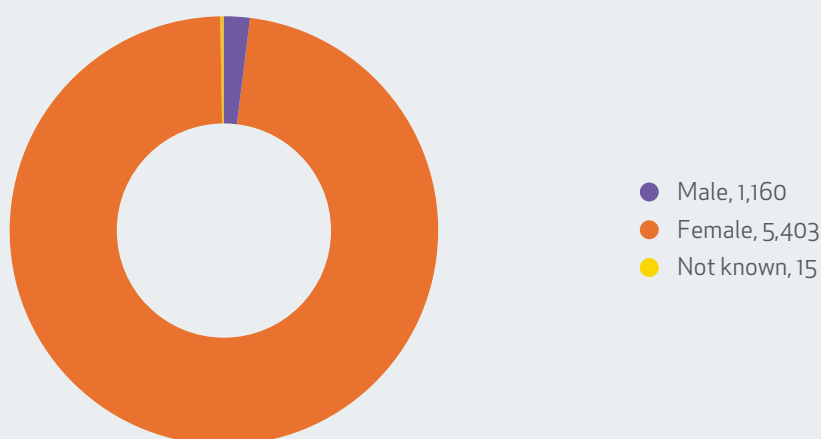
## Proportion of program enrolments in MST Textiles, Clothing and Footwear qualifications by training provider type

2014–2017 Total VET Activity

Training provider type	2014	2015	2016	2017
TAFE	4,526	4,492	3,957	4,200
Private training provider	2,211	2,069	1,910	1,527
University	267	279	328	462
Enterprise provider	44	95	154	160
School	1,013	394	304	234
Community education provider	38	28	39	-

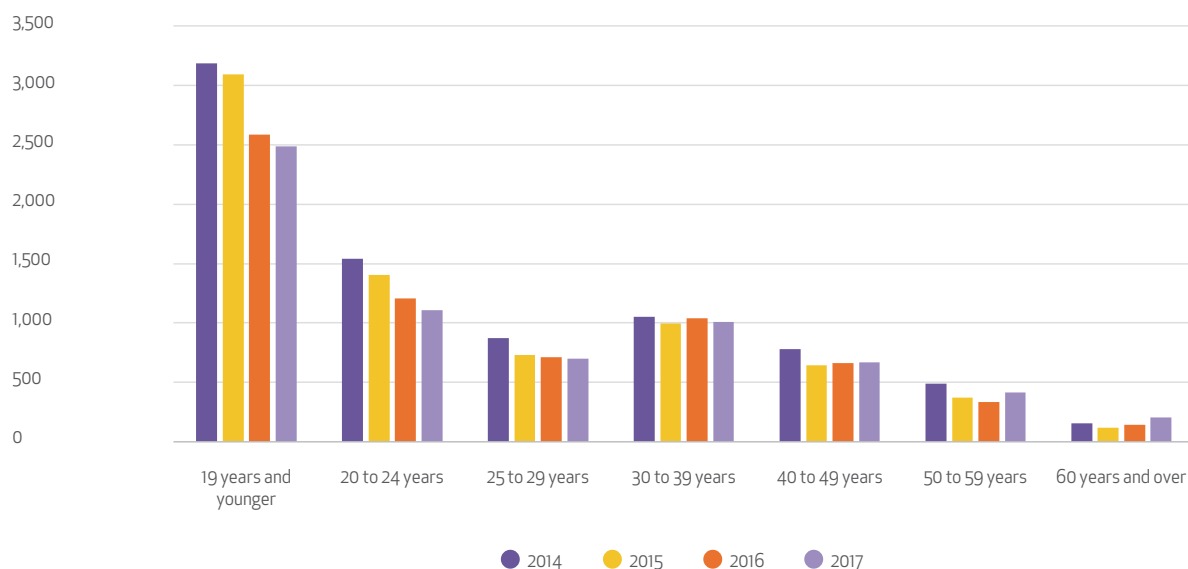
## Program enrolments in MST Textiles, Clothing and Footwear qualifications by gender

2017 Total VET Activity



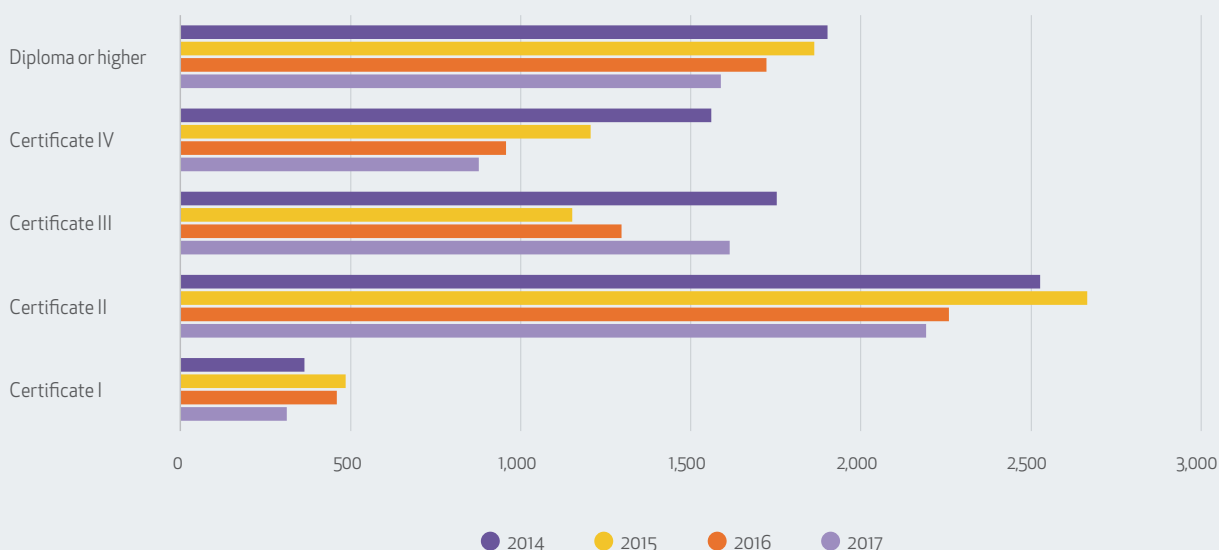
## Program enrolments in MST Textiles, Clothing and Footwear qualifications by age group

2014–2017 Total VET Activity



## Program enrolments by qualification level in MST Textiles, Clothing and Footwear qualifications

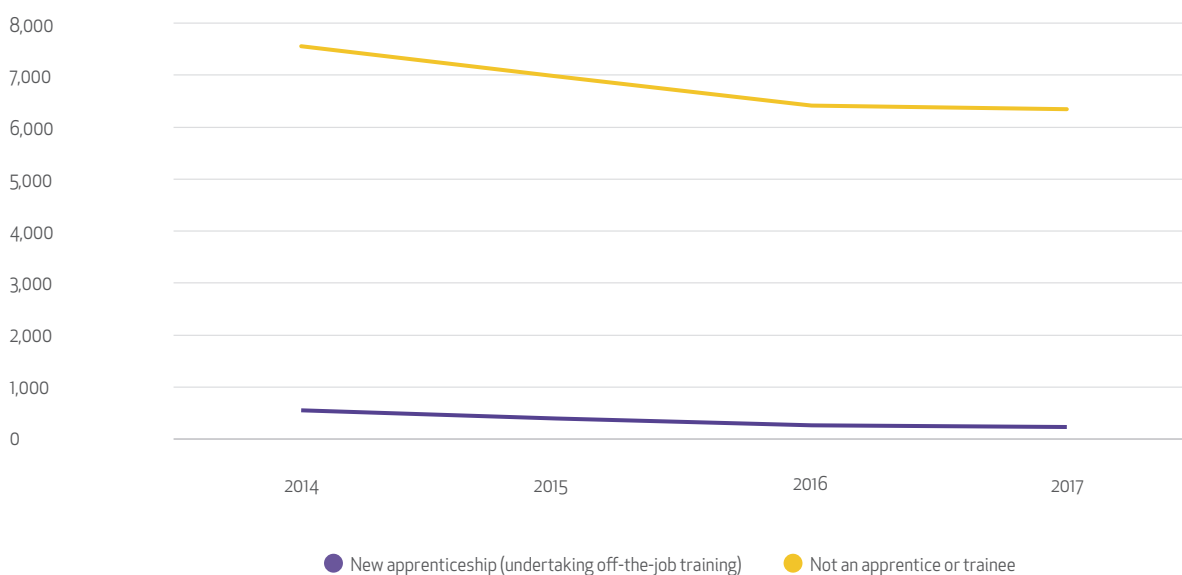
2014–2017 Total VET Activity





## Program enrolments in MST Textiles, Clothing and Footwear qualifications by apprentice/trainee undertaking off-the-job training

2014–2017 Total VET Activity



Source: All data in this appendix was extracted from VOCSTATS on 15/08/2018 by IBSA Manufacturing who take responsibility that the information extracted is appropriate for its intended use.

VOCSTATS data are 'randomly' adjusted by small amounts by a data perturbation tool to avoid the release of confidential data. Hence numbers are only approximate. The perturbation impact is negligible for most practical purposes. The effect can be significant and must be considered when interpreting small numbers.

# Appendix E:

## Training Package Qualifications

The table below lists each of the current TCF qualifications and the number of RTOs with those qualifications on scope. This data is current at 16 November 2018, per the listing on the National Register of VET available at [www.training.gov.au](http://www.training.gov.au).

Qualification name	No. of RTOs on scope	Delivery issues (if known)
Certificate I in Textiles Clothing and Footwear	11	This qualification will be discontinued when the LMT TP is transitioned.
Certificate II in Cotton Ginning	1	Available in New South Wales only
Certificate III in Cotton Ginning	1	Available in New South Wales and Queensland
Certificate III in Engineering - TCF Mechanic	1	
Certificate III in Digitising and Computerised Embroidery	2	This qualification is discontinued and incorporated into MST30816
Certificate IV in Cotton Ginning	0	Not currently available with any RTO
Certificate IV in Laundry Operations and Supervision	1	This qualification is currently being reviewed
Certificate IV in Supply and Fitting of Pre-manufactured Medical Grade Footwear	0	Not currently available with any RTO
Diploma of Medical Grade Footwear	0	Not currently available with any RTO
Diploma of Textile Technology and Production Management	0	Not currently available with any RTO
Advanced Diploma of Medical Grade Footwear	0	Not currently available with any RTO
Certificate II in TCF Production Support	2	
Certificate II in TCF Production Operations	3	Available in New South Wales, Victoria and Western Australia only
Certificate II in Leather Production	1	Available in Queensland only, TAFE New South Wales plan to offer in 2019
Certificate II in Laundry Operations	7	
Certificate II in TCF Services and Repair	0	Not currently available with any RTO
Certificate II in Applied Fashion Design and Technology	34	
Certificate III in Clothing and Textile Production	7	

Qualification name	No. of RTOs on scope	Delivery issues (if known)
Certificate III in Manufactured Textile Products	2	
Certificate III in Millinery	4	Available in New South Wales, Victoria and Queensland only
Certificate III in Footwear	1	Available in Queensland only
Certificate III in Leather Production	0	Not currently available with any RTO
Certificate III in Laundry Operations	6	
Certificate III in Dry Cleaning Operations	2	Not currently delivered anywhere
Certificate III in Applied Fashion Design and Technology	20	
Certificate IV in Textile Design, Development and Production	3	Available in Victoria only
Certificate IV in Clothing Production	4	
Certificate IV in Custom-Made Footwear	2	Only delivered in Victoria
Certificate IV in Millinery	3	Available in New South Wales, Victoria and South Australia only
Certificate IV in Applied Fashion Design and Merchandising	15	
Diploma of Applied Fashion Design and Merchandising	23	
Diploma of Textile Design and Development	4	Available in New South Wales and Victoria only New South Wales TAFE plan not to offer in 2019
Advanced Diploma of Applied Fashion Design and Merchandising	16	
Advanced Diploma of Textile Design and Development	2	Available in Victoria only

Source: Training.gov.au. RTOs approved to deliver this qualification. Accessed 28 August 2018.

# Appendix F: Consultation List

The 2019 Skills Forecast and Proposed Schedule of Work 2019–2023 builds on the consultations undertaken as part of the 2018 return. Feedback on industry imperatives were also captured as part of training package development projects undertaken throughout 2018.

More specifically, key individual industry and group stakeholders, identified by the Textiles, Clothing and Footwear IRC, were consulted during the development of the Industry Skills Forecast. See the consultation list below.

Feedback was gathered via the following methods:

- forums, meetings and focus groups –in person and via webinar
- interviews and one-on-one consultations – via phone/teleconference and/or face-to-face
- nationwide and organisation-specific surveys or questionnaires.

## Consultation List

### Organisation

A&B Canvas	Monster Alphabets
Abacus Shade Structures	Morley's Canvas
Adelaide Fashion Festival	Manufacturing Skills Australia NSW ITAB
Apparel and Textiles Industry Group	Nans Tarps
Australian Apprenticeships and Traineeships Information Service (AATIS)	National Training Services
Australian Fashion Council	North Metropolitan TAFE
Australian Fashion Labels	QMI Solutions
Australian National College	R.M. Williams
Canvas Barn Marine Trimming	Remi Lane Designs
CE Bartletts	RMIT University
Chisholm Institute	Silver Fleece
Department for Industry and Skills, SA	Skills Point Creative & Design Ideation, TAFE NSW
Department of Training and Workforce Development, WA	South Metropolitan TAFE
Department of Employment, Small Business and Training, QLD	Specialised Textiles Association
Department of Industry, NSW	Speqs
FFTI Training Council	Star BD Accounting and Consultancy Services
Gale Pacific	State Training Authority – NT
Holmesglen Institute	TAFE NSW
Impact Trim	TAFE QLD
Industry Skills Advisory Council, NT	TAFE SA
Kangan Institute	Technical Fabric Services
Kent Saddlery	Three Bears
Manufacturing and Engineering Skills Advisory Body Inc.	Wendy Makin Bridal Designs
Megan Salmon	Westfield Carousel
MGDS P/L	