



All Hands on Deck

HIA's plan to build the workforce to house
all Australians

October 2024

Contents

Executive Summary2

Summary of recommendations4

Introduction5

More construction trades workers needed6

20 years of the HIA Trades Availability Index7

Construction trades workers in residential building9

Boosting the number of apprentices in training 10

The aging trades workforce 12

Making better use of the skilled migration system 14

Summarising the composition of the trades workforce 17

About the Housing Industry Association.....24

Executive Summary

Trade shortages loom as a major threat to the Housing Accord's target of building 1.2 million homes over the next five years. The target equates to an average of 240,000 homes per annum and Australia has only come close to this level of home building on two occasions in the past. The first was in a single year at the peak of the apartment boom of the mid-2010s (232,000 in 2016), and the second was for a single year at the peak of the COVID era cycle (228,000 in 2021).

Adding 240,000 homes per year would be close to meeting the nation's annual demand for new homes and would take pressure off housing costs. However, the question remains whether this level can be reached, and whether it can be sustained without widespread delays, longer build times and without excessive growth in construction costs.

One of most critical questions is whether the industry has the workforce capacity to deliver this number of homes? Unfortunately, we don't.

It is estimated that there are around 277,827 skilled trades workers in the residential building industry spread across the industry's twelve key trade occupations.

The key trade occupations needed to build homes include carpenters, electricians, plumbers, painters, bricklayers, cabinetmakers, plasterers, tilers, concreters, roof tilers, floor finishers, and glaziers.

This workforce completed around 173,000 homes in 2023, during which time industry surveys continually revealed shortages of skilled trades workers even at this much lower volume of home building.

Achieving the level of new home building activity needed to build 1.2 million homes over five years (240,000 homes per annum) equates to a 39 per cent increase from the 2023 level.

To enable the level of home building required to meet the Accord's target without creating acute labour shortages, HIA conservatively estimated that the trades workforce in residential building would need to increase by at least 30 per cent.

A 30 per cent increase in the workforce across these occupations equates to over 83,000 additional trades workers!

Building our domestic workforce always the priority

There are around 114,000 apprentices currently in training across the twelve key trades for residential building. This number is down slightly from the peak in apprentice numbers which occurred following the Boosting Apprentice Commencements program that operated during the period affected by the COVID pandemic.

Creating training opportunities for Australian residents should be the preferred workforce development strategy for policy makers. In recognition of this, housing supply was made a priority within the National Skills Agreement. However, training the number of workers required in the next five years would mean nearly doubling the number of apprentices in training.

Doubling the number of apprentices in training is an implausible proposition. Firstly, there would need to be a huge jump in number of workers willing to take up training in these occupations within the time frame of the Housing Accord. Secondly, there would need to be a commensurate increase in number of employers willing to take on apprentices. Thirdly, the capacity of the VET sector would need to increase rapidly to accommodate the increased student numbers.

Lastly, there is the issue of timing. It typically takes a year or more before apprentices become productive workers, four years to complete their qualification, and even longer to become fully proficient in their trade. Skilled trades workers will be required throughout the full five-year window of the Accord's target, not just in the latter stages.

Skilled migration has a key role to play

Skilled migration is the other lever in the Government's control to address the skill shortages. While the Federal Government included funding to accelerate visa processing for skilled trades workers in this year's Budget, numbers arriving with the skills we need remain inadequate.

Data from the Department of Home Affairs shows that there are just 3,644 workers on temporary skill shortage visas currently in Australia working in these key trade occupations. This equates to only 0.8 per cent of the workforce in these trade occupations. This is small in comparison to other industries and only a share of these migrant workers is likely to be working in residential building.

Different solutions needed for different trade occupations

It is important to recognise that each trade occupation faces its own challenges in growing the workforce. Some trade occupations have more difficulty growing the workforce than others.

Indeed, the workforce in some trade occupations have declined significantly over recent years, while others have managed modest growth.

The big three occupations (carpentry, electrical, and plumbing) account for around 65 per cent of the workforce in the top twelve trade occupations, yet apprentices in these occupations account for around 83 per cent of construction trade apprentices.

Painters, tilers, plasterers, and roof tilers provide a contrast to the big three. Workers in these four occupations account for around 17 per cent of the trade workforce, yet apprentices in these occupations make up just 6 per cent of construction trade apprentices. Apprentices in training account for less than 10 per cent of the workforce in each of these occupations.

Whilst there is demonstrated shortages across all trade categories, what these findings show is that there is a need to consider different solutions for different trade groups and targeted programs to each trade cohort.

An ageing workforce

The aging of the workforce is a problem in some key trades. In these trades, a lack of new entrants over the years has provided a situation where older workers now account for a disproportionately large share of the workforce. Some trade occupations have been topped up by greater numbers of migrant workers, but this is not a long term solution.

The occupations most effected by an aging workforce are bricklaying, floor finishing and plastering. In each of these three occupations, the number of workers declined over the ten years between the 2011 and 2021 national census, and the number of workers in these occupations aged under 25 also declined over this period.

A range of solutions needed

A range of policy responses will be required if the workforce of skilled trades is to grow to a level that will enable the level of home building targeted by the Housing Accord.

It is likely too late to fully eliminate labour constraints as a barrier to achieving the Housing Accord's target of building 1.2 million homes over the next five years. Nevertheless, it is important that governments take action to ensure that this barrier is reduced as quickly as possible.

The housing shortage that is driving up housing costs for Australian households can only be reduced through the efficient delivery of new housing in greater quantities than has been achieved in the past. The workforce of housing industry must grow if this is to occur.

Summary of recommendations

More construction trades workers needed

- The Federal Government partner with industry to deliver a large scale promotion campaign on the benefits of taking up a role in the residential building industry highlighting the job and career opportunities.
- Undertake targeted programs for mature aged workers, women and workers from culturally and linguistically diverse backgrounds to promote construction trade careers and provide appropriate financial and mentoring support that enable these workers to succeed.

Boosting the number of apprentices in training

- Increase and make a long-term commitment to a stable arrangement of apprentice and employer subsidies to encourage more employers to take on apprentices and to support apprentices through their apprenticeships.
- Invest in industry-based mentoring programs to provide support for apprentices that is relevant to their careers and support for employers that is relevant to their business.
- Ensure that financial incentives for apprentices do not interact to erode the benefit of wage progression throughout the apprenticeship.
- Provide apprentices with a \$1,000 tool bonus program starter kit and a \$500 supplement per year of the apprenticeship.

The aging trades workforce

- Provide additional resources for Jobs and Skills Councils to develop comprehensive workforce development campaigns specific to each of the construction trade occupations facing the greatest challenges due to an aging of the workforce. These occupations include bricklayers, plasterers, floor finishers, tilers, glaziers and cabinet makers.
- Campaigns should provide industry based mentoring for new entrants, additional support for experienced trades workers to train new entrants, and support for older workers transitioning out of trade careers to remain in the industry.

Making better use of the skilled migration system

- Support industry to expand recruitment programs in overseas markets.
- Streamline immigration pathways for workers in construction trade occupations.
- Support industry to develop programs to upskill migrant workers in local industry practices to boost industry's confidence in the skilled migration system.
- Develop a construction trade contractor visa that enables skilled migrants to operate as trade contractors.
- Enable overseas students to undertake apprenticeships in construction trades.
- Provide clear pathways to permanent residency for temporary workers in construction trade occupations.

Introduction

Building 1.2 million homes over the next five years will require a considerable increase in the number of skilled trades workers in the residential building industry. It is feasible that the housing industry will require more than 83,000 additional trades workers across the industry's twelve most important trade occupations to achieve this level of construction.

Building 1.2 million homes over five years equates to an average of 240,000 homes per annum. This is a higher level of home building than has ever been achieved in Australia in the past. Furthermore, at the mid-point of 2024 the residential building industry is operating at level that is likely to deliver only 160,000 homes in the current financial year. Reaching the Housing Accord's target will require a level of output that is 50 per cent above the current level.

Australia has come close to reaching an annual total of 240,000 new homes on two occasions in the past. The first was in 2016 at the height of the apartment construction boom in the east coast capital cities (234,000 homes commenced), and the second was in 2021 when the Home Builder incentive scheme and low interest rates stimulated nationwide demand (primarily for detached houses).

During both of these periods there was considerable disruption to the industry due to shortages of skilled labour. The inability of builders to have the required skilled trades workers onsite when scheduled resulted in delays achieving project milestones and rising project costs.

The cost of labour shortages is shouldered by both businesses and home buyers. The community also bears a cost, as higher construction costs ultimately result in fewer homes being built to meet the needs of a growing population which puts pressure on rental and home purchase prices.

The trades workforce available to the residential building industry can be increased through several avenues: firstly, by ensuring that there are training opportunities for people looking to begin a career in the industry; secondly, through skilled migration; and thirdly, by attracting workers from other industries or segments of the construction industry.

This report presents an analysis of the sources of growth for the workforce in the key trade occupations required for residential building and presents an estimate of the number of additional workers in each key trade that would enable the housing industry's output to reach the Housing Accord's target level without causing undue disruption to build times or construction costs.

More construction trades workers needed

It is estimated that there are currently 277,827 skilled trades workers in the residential building industry working in the industry's twelve key trade occupations. These occupations include Carpenter, Electrician, Plumber, Painter, Bricklayer, Cabinetmaker, Plasterer, Tiler, Concreter, Roof Tiler, Floor Finisher, and Glazier.

This workforce completed around 173,000 homes in 2023, during which industry surveys consistently reported shortages of skilled trades workers across the key occupations. Achieving the average annual level of new home completions needed to build 1.2 million homes over five years (240,000 homes per annum) equates to a 39 per cent increase from the 2023 level.

To enable the level of home building required to meet the Accord's target without worsening labour shortages, it is conservatively estimated that the trades workforce in residential building would need to increase by at least 30 per cent.

The table below presents estimates of trades workforce in each key trade occupation currently working in residential building and the additional workers that would be required by a 30 per cent increase.

	Current number of workers	Additional workers required
Carpenter	73,399	22,020
Electrician	57,723	17,317
Plumber	39,663	11,899
Painter	26,774	8,032
Bricklayer	15,059	4,518
Cabinetmaker	14,693	4,408
Plasterer	11,826	3,548
Tiler	11,405	3,421
Concreter	10,421	3,126
Roof Tiler	6,384	1,915
Floor Finisher	6,016	1,805
Glazier	4,465	1,339
Total	277,827	83,348

Source: HIA

It is estimated that the residential building industry will need an additional 83,348 more workers in the top 12 construction trades to achieve meet demand for new home building under the Housing Accord.

This estimate represents the net increase in the workforce that will be required. The number of new additions to the workforce will need to be even greater than this to offset the number of workers leaving the industry through retirement or career change.

Achieving an increase of this magnitude seems implausible as it would require significant reprioritisation of policy objectives. This would be through substantially increasing the number of workers in training, enabling a considerably larger number of migrants with trade skills to work in Australia, and by delaying projects in other segments of the construction industry to free up existing workers.

There must be a concerted effort to attract more workers into the residential building industry. The magnitude of the task ahead was given recognition in early 2024 when the Skills and Workforce Ministerial Council agreed to make housing supply a priority under the National Skills Agreement.

Recommendations:

- The Federal Government partner with industry to deliver a large scale promotion campaign on the benefits of taking up a role in the residential building industry highlighting the job and career opportunities.
- Undertake targeted programs for mature aged workers, women and workers from culturally and linguistically diverse backgrounds to promote construction trade careers and provide appropriate financial and mentoring support that enable these workers to succeed.

20 years of the HIA Trades Availability Index

HIA's quarterly industry survey has tracked the availability of trades workers for twenty years. During this time there have been very few periods where a surplus of trades has been recorded.

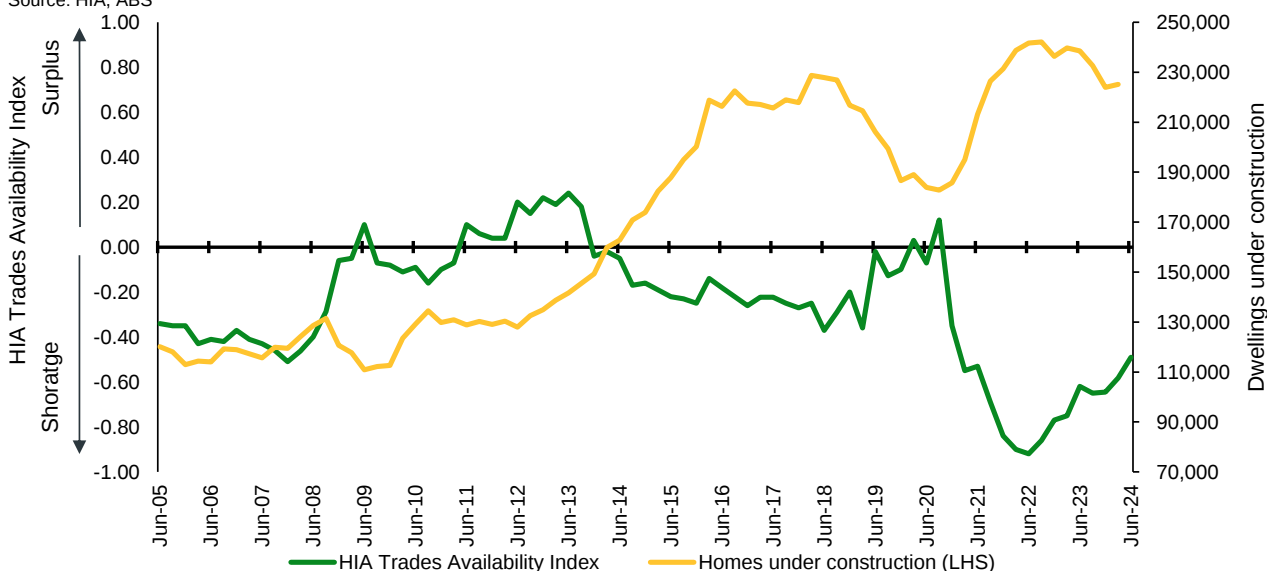
The survey results are used to create an index which quantifies the extent to which the availability of trades workers deviates from balance. An index reading of zero indicates that trades is neither in shortage or surplus, a negative index level indicates a shortage of trades workers, and a positive index level indicates a surplus. An index level further away from zero indicates a more severe shortage/ surplus).

A surplus of trades workers has only been recorded in 13 of the 80 quarterly surveys. Two of these quarters were during 2020 in the early stages of the COVID pandemic and the remainder were during the post-global financial crisis industry downturn between 2012 and 2013 when the annual number of new homes built dropped below 144,000.

There is a robust relationship between the Trades Availability Index and the number of dwellings under construction. The long run relationship implies that shortages of trades workers emerge when there are greater than 160,000 homes under construction.

Trades availability and dwellings under construction

Source: HIA, ABS



HIA's quarterly survey of trades availability has also enabled the calculation of sub-indices tracking trade worker availability in each key trade. The indexes tracking availability of workers in each trade highlight the differing degrees of shortages across each occupation.

The table below shows the number of quarters in which HIA's Trades Availability Survey has identified a labour shortage in each occupation across the 80 quarterly surveys conducted over the last 20 years.

Trade occupation	Quarters in shortage
Bricklaying	78
Ceramic Tiling	77
Roofing	71
Carpentry	65
Plastering	63
Painting	60
Site Preparation	59
Joinery	57
Plumbing	57
Landscaping	51
Electrical	48

Source: HIA

Over the last 20 years, bricklayers have been in the most acute shortage, followed closely by tilers and roofers. The index tracking the availability of bricklayers has reported surplus availability in only two of the 80 surveys conducted over the last 20 years, these occurred during the second half of 2012.

A surplus of tilers has been recorded in just three surveys in the last 20 years while a surplus of roofers has been recorded on nine occasions. The last time that a surplus of tilers was recorded was during the March quarter of 2013, while the last surplus of roofers was recorded in the June quarter of 2013.

At the other end of the spectrum, the index tracking availability of electricians has recorded the most frequent surpluses, followed by landscapers, and plumbers. Surplus availability of electricians has been recorded in 32 of the 80 surveys undertaken over the last 20 years, 29 times for landscapers and 23 times for plumbers.

While trades availability has been gradually improving since late 2022, all trades remain in shortage. This provides for a run of 15 consecutive quarters where all trades have been in shortage. This is the longest enduring period of trades shortages in the index's 20 year history.

Construction trades workers in residential building

The construction industry in Australia undertakes a broad range of construction projects, however, residential building accounts for the largest share of industry activity.

National accounts show that construction work for residential building accounted for 51 per cent of Australia's total expenditure on construction over the last five years, with engineering construction work accounting for 26 per cent and work on non-residential buildings accounting for the remaining 23 per cent.

The amount and relative share of construction work undertaken in each segment of the industry change with economic cycles. The skills of many construction trade workers are transferable across a wide range of construction projects.

The degree of transferability of trade skills across each industry segment varies across the trade occupations. For example, the skillset of electricians is in demand across all segments of the construction industry, in contrast demand for roof tilers is almost exclusively in residential building.

Transferability enables skilled workers to move throughout the industry as the sources of demand for skilled workers change.

Each segment of the industry competes to attract the workforce required throughout industry cycles. Competition for skilled trade workers is most acute when all segments of construction are increasing or achieving high levels of output.

Trades workers are engaged in work in a range of ways which differ throughout the industry. Some workers are employed by construction contracting businesses, while others operate as self-employed independent contractors.

Workers engaged by construction contracting businesses typically work on larger value construction projects which are more characteristic of engineering construction, commercial building construction, and can include apartment buildings. It is more common for trades workers in the housing industry to operate as independent contractors.

The number of skilled trades workers in the industry is largely inelastic in response to short term fluctuations in demand throughout economic cycles. The unresponsiveness of supply is due to the time required to train workers, while use of the skilled migration system to fill skills shortages has been minimal.

The labour market for skilled trades workers is competitive. Businesses in the residential building industry are competing with businesses in other segments of the construction industry to attract the trades workers they require. Competition to attract workers is more intense when the aggregate demand for skilled trades workers is increasing.

This is likely to be the situation over the years ahead. The significant pipeline of public sector construction activity set to be underway at the same time as Government seeks to increase the volume of home building to meet the targets set in the Housing Accord will result in a greater aggregate demand for trades workers.

The extent to which governments (federal and state/territory) are actively working to accommodate higher levels of home building over the next five years through improved sequencing of construction projects is difficult to evaluate. However, decisions makers will need to prioritise housing supply if the Accord's target is to be achieved.

Boosting the number of apprentices in training

There are around 114,000 apprentices currently in training across the twelve key trades for residential building. This number is down slightly from the peak in apprentice numbers which occurred following the Boosting Apprentice Commencements program that operated during the period affected by the COVID pandemic.

Creating training opportunities for Australian residents should be the preferred workforce development strategy for policy makers. In recognition of this, housing supply was made a priority within the National Skills Agreement. However, the sheer number of workers required to meet the Housing Accord's target is unlikely to be achieved by training new workers alone.

Firstly, it is unclear whether there are enough workers willing to take up training in these occupations within the time frame of the Housing Accord. Secondly, there would need to be a commensurate number of employers willing to create an employment opportunity for a greater number of apprentices. Thirdly, the VET sector is unlikely to have the ability to scale up the sector's capacity to accommodate an increase in student numbers of this scale.

While additional workers are required across all key trade occupations in residential building, there are a range of challenges in attracting and training new workers in each occupation.

	Apprenitces in training	Apprentice share of workforce
Electrician	41,537	32.4%
Carpenter	35,111	33.5%
Plumber	21,086	27.6%
Cabinetmaker	4,966	22.0%
Painter	3,036	7.4%
Bricklayer	2,306	13.8%
Plasterer	1,662	9.1%
Tiler	1,417	8.1%
Glazier	1,086	12.6%
Floor Finisher	913	11.4%
Roof Tiler	550	8.6%
Concreter	499	1.7%
Total	114,169	23.9%

Source: HIA

The big three occupations (carpentry, electrical, and plumbing) account for around 65 per cent of the workforce in the top twelve trade occupations, yet apprentices in these occupations account for around 83 per cent of construction trade apprentices. Furthermore, the number of workers in training in each of these occupations account for around a third of the total work force in each.

This suggests that attracting workers to these occupations and providing training opportunities may be less problematic than in other construction trade occupations albeit there is still demonstrated shortages across these trades that will only become more pronounced in the years to come.

It is possible that electrical and plumbing qualifications hold greater appeal to due to the close nexus between the qualification and the requirements of licencing authorities. Licencing requirements creates an additional barrier to entry into these occupations and contributes to a perception that these are qualifications more valuable or more desirable to attain.

The carpentry qualification may also hold strong appeal as it provides foundational skills for workers in the construction industry, the occupation encompasses a wide range of specialisations, and a carpentry apprenticeship is a common entry pathway for those who wish to undertake further study to facilitate career progression, including becoming a licenced builder.

Painters, tilers, plasterers, bricklayers and roof tilers provide a contrast to the big three. Workers in these five occupations account for around 17 per cent of the trades workforce, yet apprentices in these occupations make up just 6 per cent of construction trade apprentices. Apprentices in training account for less than 10 per cent of the workforce in each of these occupations.

The disparity in apprentice participation across the key residential building trades suggests that occupation specific factors may be playing a significant role in apprentice participation rates. Identifying and addressing

the occupation specific barriers to apprentice participation in trades with low participation may be beneficial boosting the workforce capacity in these key occupations.

The apprenticeship training model has broad support within the industry, however, the experience of engaging with the apprenticeship system is a source of frustration for many participants including apprentices, employers and VET providers.

It is acknowledged that a review of the Australian Apprenticeship Incentive System has recently been undertaken. It will be very important that any reforms arising from the review result in a system which is more attractive to prospective apprentices and employers.

Recommendations

- Increase and make a long-term commitment to a stable arrangement of apprentice and employer subsidies to encourage more employers to take on apprentices and to support apprentices through their apprenticeships.
- Invest in industry-based mentoring programs to provide support for apprentices that is relevant to their careers and support for employers that is relevant to their business.
- Ensure that financial incentives for apprentices do not interact to erode the benefit of wage progression throughout the apprenticeship.
- Provide apprentices with a \$1,000 tool bonus program starter kit and a \$500 supplement per year of the apprenticeship.

The aging trades workforce

The workforce in several construction trade occupations have an older age profile, whereby older workers make up a greater share of the occupation's workforce. In these occupations, retirements over the years ahead are likely to account for a larger share of the workforce. A large number of workers exiting the industry will offset a large share of the new entrants. This dynamic will make achieving a net growth in the workforce more challenging.

The occupations most effected by an aging workforce are bricklaying, floor finishing and plastering. In each of these three occupations, the number of workers declined over the ten years between the 2011 and 2021 national census, and the number of workers in these occupations aged under 25 also declined over this period.

Plasterers:

- The workforce of plasterers declined by 11 per cent between the 2011 and 2021 census,
- The number of plasters aged under 25 declined by 40 per cent over the decade;
- Young workers in plastering declined from a 19 per cent share of the workforce in 2011 to just 13 per cent in 2021.

Bricklayers:

- The workforce of bricklayers declined be 13 per cent over the decade to 2021;
- The number of bricklayers aged under 25 declined by 34 per cent over the decade;
- Young bricklayers accounted for just 16 per cent of the workforce in 2021, down from 21 per cent in 2011.

Floor Finishers:

- The number floor finishers declined by 8 per cent between 2011 and 2021;
- The number of floor finishes aged under 25 declined by 22 per cent over this time frame;
- The share of floor finishers who are aged under 25 declined from 17 per cent in 2011 to 14 per cent in 2021.

A second group of trade occupations are also facing challenges, although they are less at risk than the three mentioned above. These occupations achieved growth in the workforce over the decade but saw the number of younger workers decline. This group includes glaziers, tilers, cabinet makers and painters.

The number of glaziers aged under 25 declined by 16 per cent, the number of young tilers declined by 13 per cent, the number of young cabinet makers declined by 11 per cent and the number of young painters declined by 8 per cent.

Despite the decline in younger workers entering the glazing, painting and tiling trade over the decade to 2021 the total number of workers in these occupations increased. Immigration data suggests that these occupations attracted a proportionately greater share of migrant workers in trade occupations. Tiling stands out amongst these occupations as a large number of migrant workers contributed to a 21 per cent increase in the workforce between 2011 and 2021.

Demographic developments in the workforce of carpenters, electricians and plumbers present a distinct contrast to those mentioned above. The plumbing workforce grew by 20 per cent between 2011 and 2021, including a 17 per cent increase in the workforce aged under 25.

The carpentry workforce increased by 15 per cent in decade to 2021 including a 21 per cent increase in workers aged under 25. The number of electricians increased by 19 per cent between the 2011 and 2021 census, although the workforce aged under 25 increased by a more modest 3 per cent.

While these three trades recorded a reasonably strong increase in numbers, the share of the workforce aged under 25 in each occupation still posted a small decline over the decade.

The aging workforce presents a significant challenge for the construction industry. Having too few younger workers entering the industry risks a hollowing out of the workforce in these key occupations when older workers exit the industry.

The decline in the share of workers aged under 25 over the last decade was evident across all key trade occupations, which suggests that all trade occupations are at risk of hollowing out. However, the fact that the total number of plasterers, bricklayers and floor finishers declined over the last decade suggests that the workforce has already begun hollowing out.

Recommendations

- Provide additional resources for Jobs and Skills Councils to develop comprehensive workforce development campaigns specific to each of the construction trade occupations facing the greatest challenges due to an aging of the workforce. These occupations include bricklayers, plasterers, floor finishers, tilers, glaziers and cabinet makers.
- Campaigns should provide industry based mentoring for new entrants, additional support for experienced trades workers to train new entrants, and support for older workers transitioning out of trade careers to remain in the industry.

Making better use of the skilled migration system

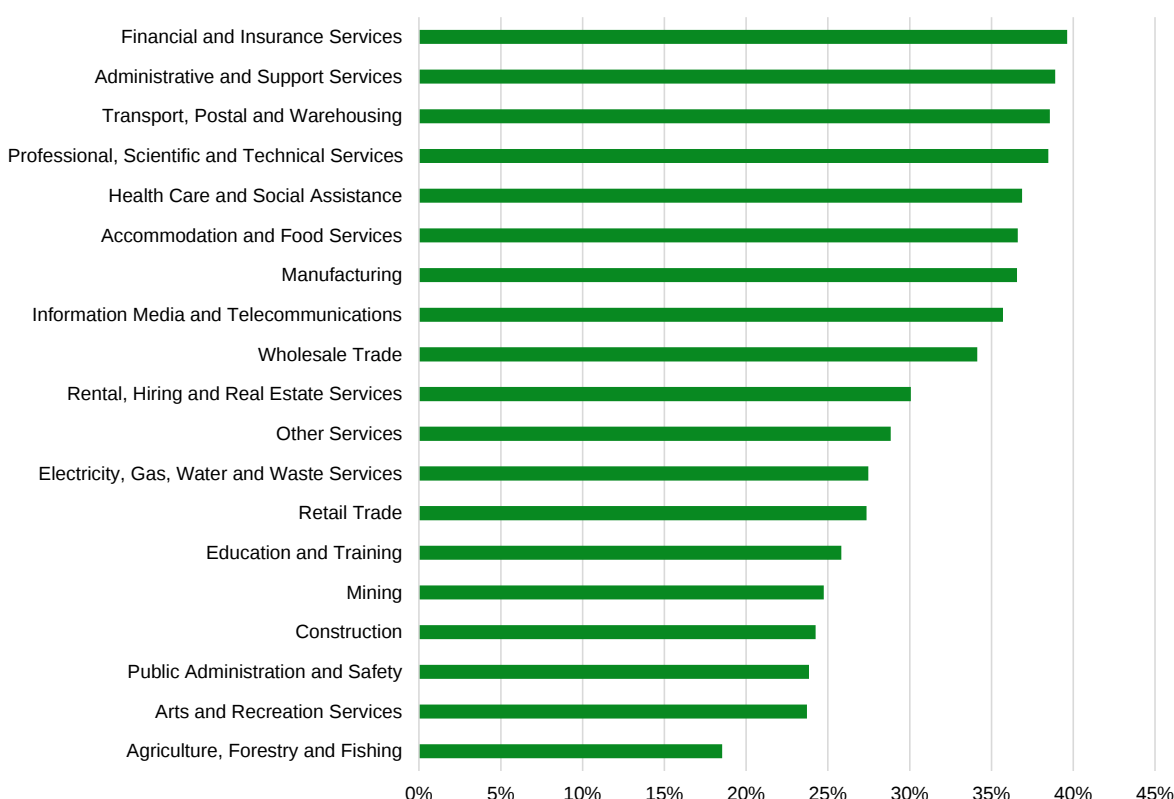
The migration system makes it more difficult for people in trade occupations to migrate to Australia when compared to other occupations. Consequently, many businesses in the building industry do not consider skilled migration to be a viable way to address skill shortages.

Census data shows that only 24.2 per cent of workers in the Australian construction industry are migrants, this ranks 16th out of the Australia's 19 major industry sectors. The construction industry is well short of the national average of 32 per cent. The finance and insurance services sector has Australia's largest share of migrant workers at 39.6 per cent.

This outcome reflects a bias within the migration system which favours workers with tertiary qualifications over trade qualifications. In context of the role that the shortage of skilled trade workers has played in supplying too few homes to meet the needs of the population it is appropriate to evaluate whether these policy settings are appropriate.

Share of Industry Workforce Who Migrated to Australia

Source: ABS, HIA



Migrant workforce

The construction industry has not attracted a proportionate share of the migrant workers who come to Australia. The construction industry accounts for 9 per cent of Australia's total workforce, yet only 6.4 per cent of those who migrated to Australia over the last decade are working in the industry. This 2.6 percentage point gap ranks as third largest amongst the 19 major industry sectors, only the public administration and education and training sectors have a lower share of migrant workers.

According to the latest Census around 13 per cent of Australia's workforce are non-citizens but the share in the construction industry falls short of the average. Only 11 per cent of the construction workforce are non-citizens, and only 10 per cent of workers in the 12 most important trade occupations for residential building are non-citizens.

The workforce of the accommodation and food services sector has the largest share of workers who are non-citizens with 22 per cent, followed by the administrative and support services workforce with 20 per cent. The public administration and safety sector and education and training sector have the lowest share of non-citizens in their workforce with 5.3 per cent and 8.6 per cent, respectively.

Share of industry workforce who are non-citizens

Accommodation and Food Services	21.7%
Administrative and Support Services	20.4%
Transport, Postal and Warehousing	16.8%
Manufacturing	15.2%
Professional, Scientific and Technical Services	15.1%
Wholesale Trade	13.7%
Financial and Insurance Services	13.4%
Health Care and Social Assistance	13.4%
Information Media and Telecommunications	12.8%
Other Services	12.3%
Retail Trade	12.1%
Rental, Hiring and Real Estate Services	11.3%
Construction	11.2%
Agriculture, Forestry and Fishing	11.1%
Mining	10.0%
Electricity, Gas, Water and Waste Services	9.8%
Arts and Recreation Services	9.5%
Education and Training	8.6%
Public Administration and Safety	5.3%

Source: HIA, ABS Census 2021

Temporary Skill Shortage visa holders

Workers in the 12 key trades required for residential building accounted for just 3.6 per cent of Temporary Skill Shortage (TSS) visas granted in the year to June 2024. Furthermore, it is important to note that these workers are working across commercial and other types of construction, not exclusively residential.

The temporary skilled worker visa system was designed to be a demand-driven system that enabled industry to address short term labour shortages when they arise, operating on the assumption that long term labour needs will be met through training of local workers. Despite the persistent shortage of workers and inadequate number of workers being trained, there are still very few construction trades workers on temporary skilled worker visas in Australia.

The number of construction trades workers coming into Australia on TSS visas is very low in comparison to other industries. For example, chefs accounted for 4.4 per cent of TSS visas granted to over this period and cooks accounted for a further 1.3 per cent of TSS visas granted. The number of TSS visas granted chefs alone is considerably larger than the combined total of all TSS visas granted to workers in all the key trade occupations required for residential building.

The migrant construction trades workers on TSS visas account for a very small share of the industry's workforce. Visas granted over 2023-24 financial year equate to just 0.4 per cent of workers in the key trades required for residential building. In contrast, visas granted for Chefs and Cooks in this period equate to around 1.5 per cent of the workforce in those occupations. The construction industry would need six times the number of TSS visas granted for workers in the key residential trades to reach the same share of the workforce as chefs and cooks.

Within the key construction trade occupations, some have higher rates of skilled migration while others have very little. The lowest rate of TSS visa holders is in electrical and plumbing, where local licencing requirements present additional barriers for migrant workers. At the other end of the spectrum, glaziers painters and tilers have a higher proportion of TSS visa holders. It is noteworthy that painters and tilers are also the occupations with relatively low numbers of apprentices in training.

Australia is competing in global market to attract skilled workers to fill labour shortages and boost national productivity. With many countries facing shortages of skilled trades workers, employers are confronted with a challenging environment when going to market to recruit workers to Australia.

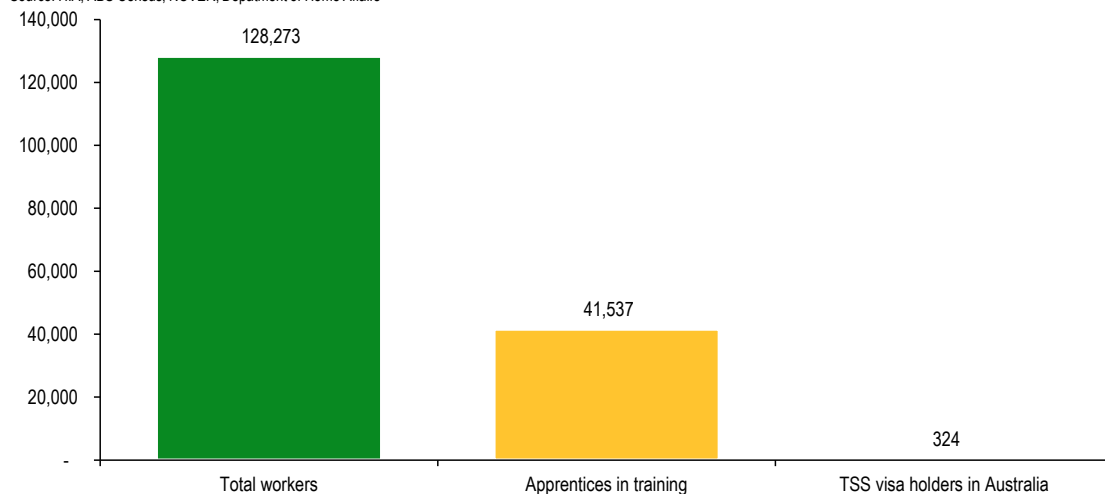
Recommendations:

- Support industry to expand recruitment programs in overseas markets.
- Streamline immigration pathways for workers in construction trade occupations.
- Support industry to develop programs to upskill migrant workers in local industry practices to boost industry's confidence in the skilled migration system
- Develop a construction trade contractor visa that enables skilled migrants to operate as trade contractors.
- Enable overseas students to undertake apprenticeships in construction trades.
- Provide clear pathways to permanent residency for temporary workers in construction trade occupations.

Summarising the composition of the trades workforce

Composition of Workforce: Electrician

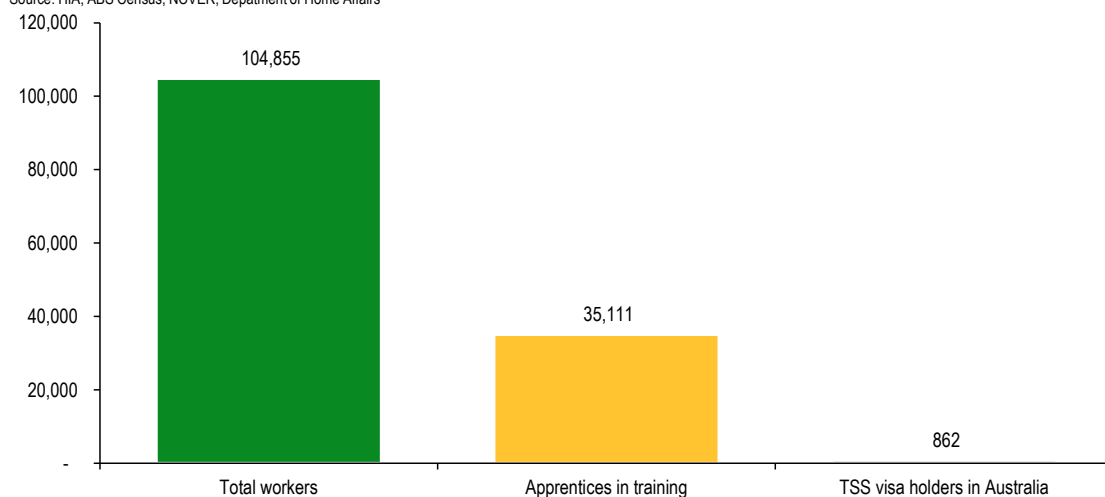
Source: HIA, ABS Census, NCVER, Department of Home Affairs



- Electricians have the largest workforce within the key construction trades and achieved one of the highest rates of growth between the 2011 and 2021 census (equivalent to 1.8 per cent per annum).
- The workforce aged under 25 grew by 3 per cent over the 2011-2021 decade, while still positive this is considerably smaller than growth in younger workers in the plumbing and carpentry trades.
- Apprentice electricians account for the second largest share of the workforce compared with other trades.
- There are very few electricians with Temporary Skill Shortage visas in Australia, the lowest uptake of skilled migration across the key construction trades.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 17,317 electricians.

Composition of Workforce: Carpenter

Source: HIA, ABS Census, NCVER, Department of Home Affairs

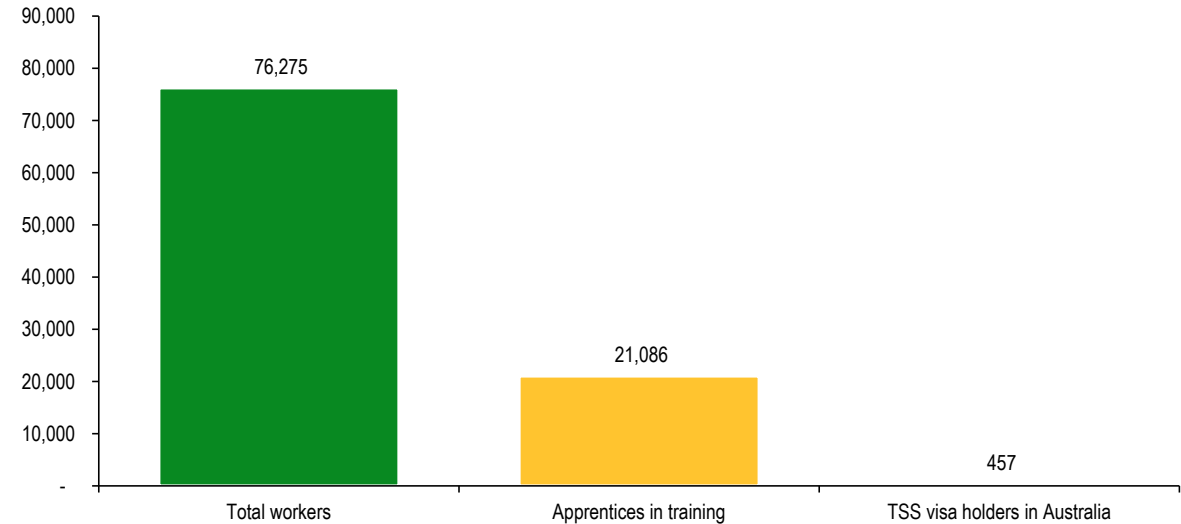


- Carpenters (including joiners) are the second largest trade occupation, and the workforce achieved relatively strong growth of 15 per cent over the last decade (1.4 per cent per annum).
- The workforce of carpenters aged under 25 grew by 12 percent over the decade. While this was reasonably strong growth it still resulted in the under 25 cohort accounting for a smaller share of the workforce.
- Carpentry apprentices account for a larger share of the workforce than in any of the other key construction trades.

- Migrant carpenters account for the largest number of Temporary Skill Shortage visa holders in the key construction trades (862), however this is a very small share of the carpentry workforce.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 22,020 carpenters.

Composition of Workforce: Plumber

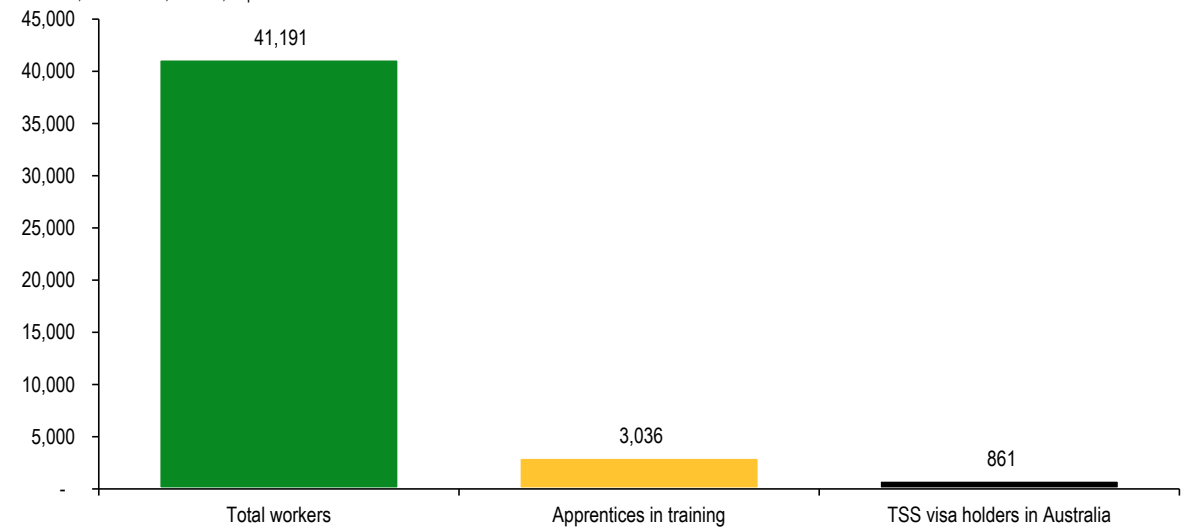
Source: HIA, ABS Census, NCVER, Department of Home Affairs



- The workforce of plumbers achieved the second strongest growth between the 2011 and 2021 census, equivalent to annual growth of 1.8 per cent.
- The workforce of plumbers aged under 25 recoded growth of 17 per cent over the 2011-2021 decade, which was the strongest growth across the 12 key trades.
- Apprentice plumbers account for the third highest share of the occupation’s workforce, ranking behind carpentry and electricians.
- There are only 457 migrant plumbers on Temporary Skill Shortage visas in Australia, which is a very small share of the workforce.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 11,899 plumbers.

Composition of Workforce: Painter

Source: HIA, ABS Census, NCVER, Department of Home Affairs

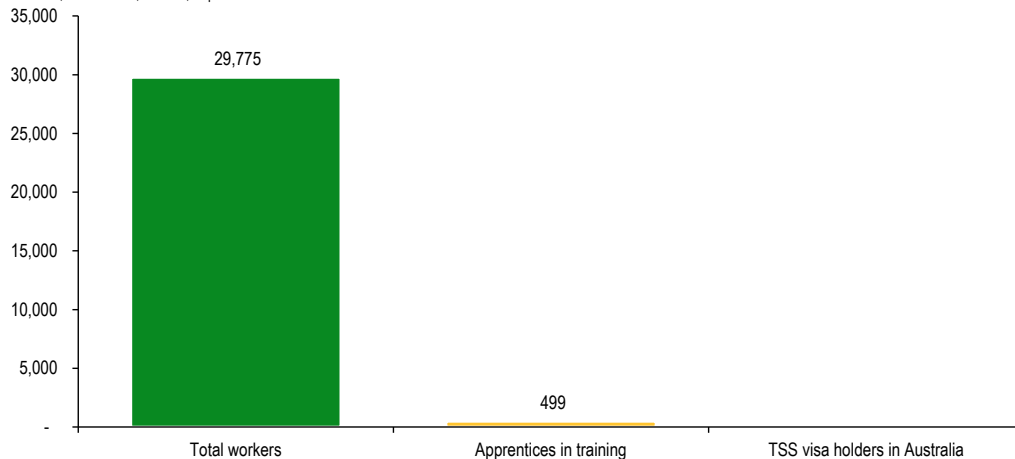


- The workforce of painters grew modestly over the decade between the 2011 and 2021 censuses, with 3 per cent growth over the decade which is equivalent to only 0.4 per cent per year.

- The number of painters aged under 25 declined by 8 per cent over the 2011-2021 decade, and accordingly the younger cohort account for a smaller share of the occupation's workforce.
- There are very few apprentices undertaking apprenticeships in painting trades. Painting apprentices account for the smallest share of the occupation's workforce when compared to the other key trades.
- Painters on Temporary Skill Shortage visas account for the second largest share of the workforce when compared to other trades.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 8,032 painters.

Composition of Workforce: Concreter

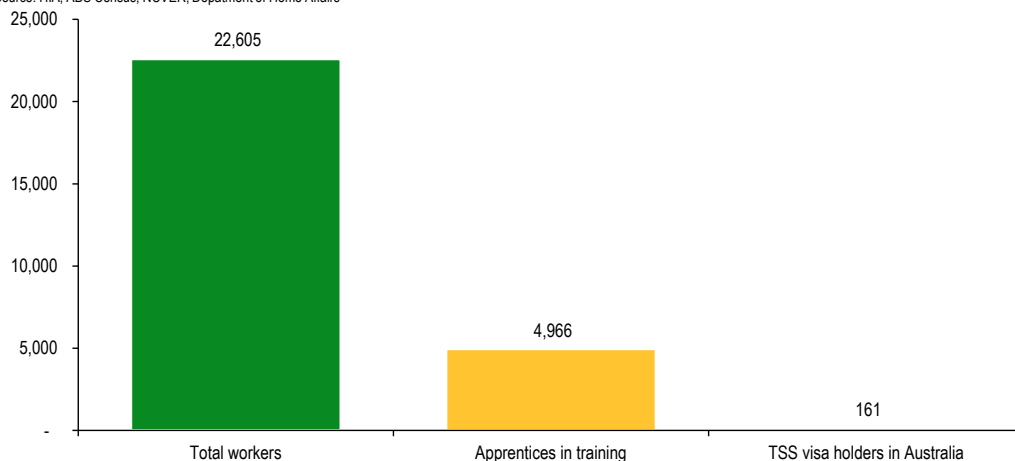
Source: HIA, ABS Census, NCVER, Department of Home Affairs



- The workforce of concreters recorded reasonably strong growth of 12 per cent between 2011 and 2021. This included the under 25 cohort growing by 10 per cent.
- The concreting occupation is unique amongst the other key trades in this report as it is not included in the ANZSCO classification system at skill level three alongside other key trades, rather it is included at skill level five alongside labouring occupations. This classification impacts arrangements for funding of training and eligibility for skilled migration.
- Given that concreting is not classified as a trade occupation there are very few apprentices undertaking a qualification specific to concreting. It is likely that apprentices working in concreting are undertaking the carpentry qualification which includes training in formwork.
- The concreting occupation has not been on the list of occupations eligible for Temporary Skill Shortage visas.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 3,126 concreters.

Composition of Workforce: Cabinetmaker

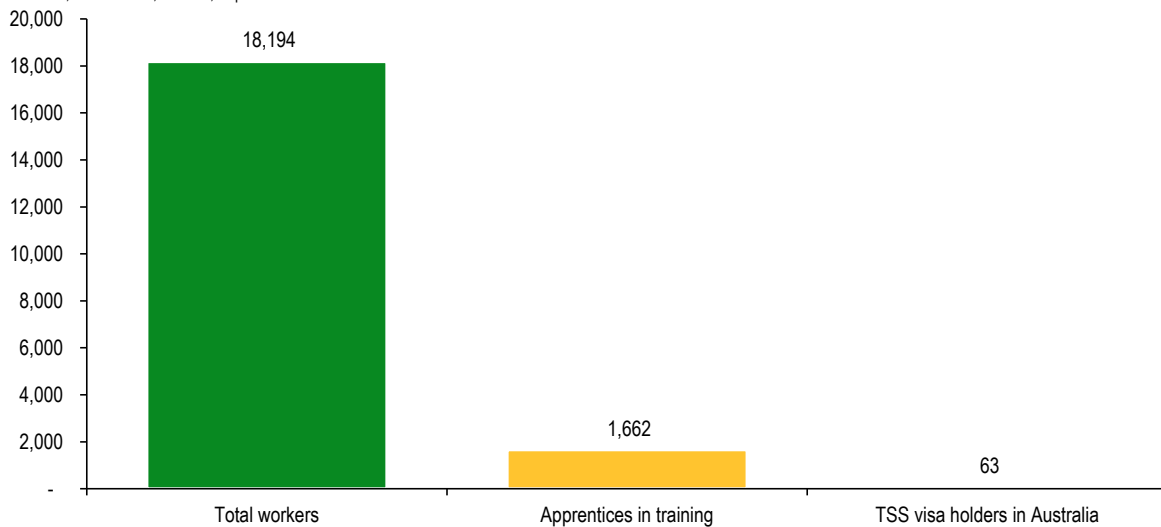
Source: HIA, ABS Census, NCVER, Department of Home Affairs



- The workforce of cabinetmakers grew modestly over decade from 2011 to 2021, with growth of 5 per cent across the decade equivalent to 0.5 per cent per year. However, the number of workers aged under 25 in this occupation declined by 11 per cent during this ten year period.
- The nature of a cabinetmaking apprenticeship differs to most other occupations covered in this report as much of the work is undertaken in a manufacturing environment rather than onsite.
- Relative to the size of the workforce of cabinetmakers, the number of apprentices in training is reasonably strong. Apprentice participation in cabinetmaking ranks fourth behind carpentry, electricians and plumbers.
- The number of migrant workers on Temporary Skill Shortage visas in this occupation relative to the size the workforce is above the average for the trades covered in this report.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 4,408 cabinetmakers.

Composition of Workforce: Plasterer

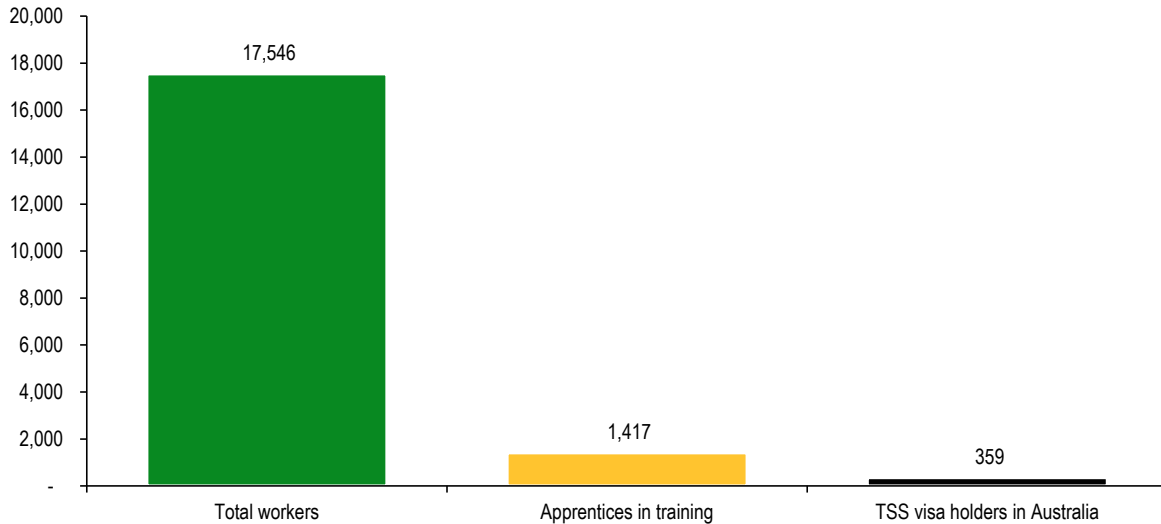
Source: HIA, ABS Census, NCVER, Department of Home Affairs



- The workforce of plasterers declined by 11 per cent between the 2011 and 2021 census. Critically, this decline included a 40 per cent decline in the number of plasterers aged under 25.
- The number of apprentices in training is very low relative to the size of the workforce in this occupation.
- The number of Temporary Skill Shortage visa holders working as plasterers is very low relative to the size of the workforce in this occupation.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 3,584 plasterers.

Composition of Workforce: Tiler

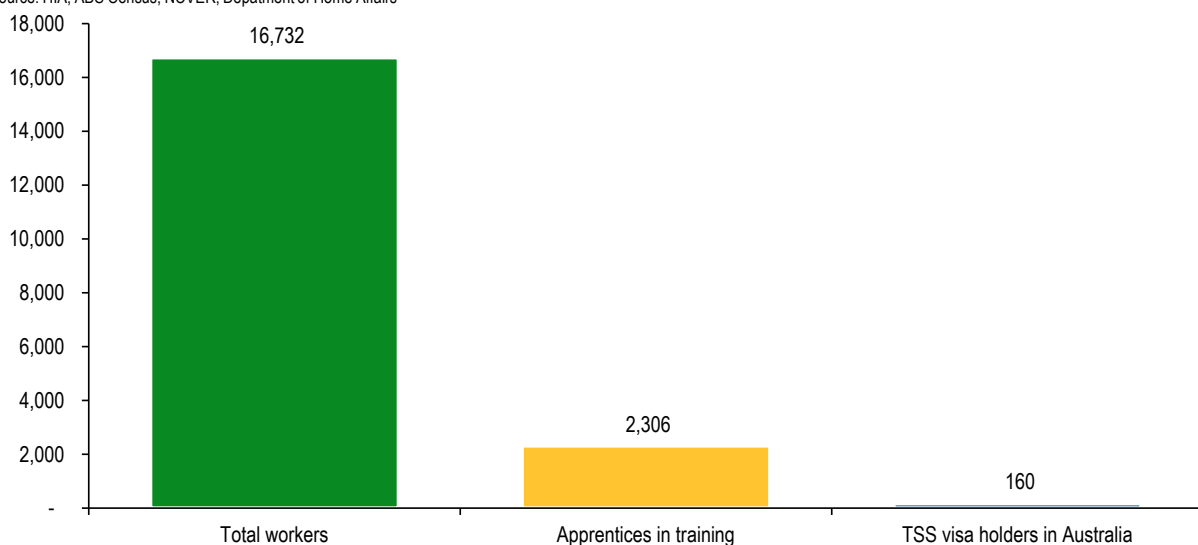
Source: HIA, ABS Census, NCVER, Department of Home Affairs



- The workforce of tilers recorded the strongest growth between 2011 and 2021 when compared to the other trade occupations covered in this report. This growth was driven by a particularly large increase in migrants working in this occupation, of which only a small share are TSS visa holders.
- The workforce of tilers grew by 21 per cent over the decade to 2021, equivalent to annual growth of 1.9 per cent.
- Despite strong growth in the workforce overall, the number of workers aged under 25 declined by 13 per cent over this 10 year period.
- The number of apprentice tilers is very low compared to the size of the workforce, ranking as the second lowest share when compared to the other key occupations.
- While still a small percentage of the workforce, the number of tilers on TSS visas is relatively high compared to the other trade occupations in this report.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 3,421 tilers.

Composition of Workforce: Bricklayer

Source: HIA, ABS Census, NCVER, Department of Home Affairs

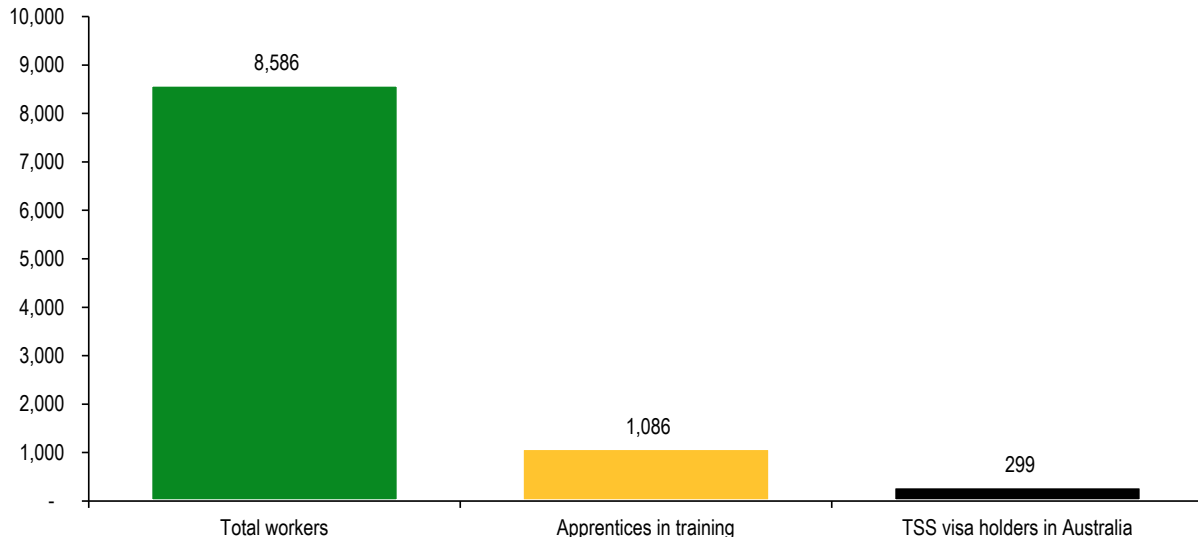


- The workforce of bricklayers recorded a decline of 13 per cent between 2011 and 2021, the largest decline of all occupations in this report.
- It is concerning that the decline in the workforce was driven by a substantial 34 per cent decline in the number of bricklayers aged under 25.

- The absence of younger workers has driven up the average age of the bricklayer workforce. The share of bricklayers aged over 50 increased from 25 per cent in 2011 to 28 per cent in 2021.
- There are a small number of migrant bricklayers in Australia on TSS visas. The number of TSS visa holders relative to the size of the local bricklayer workforce is slightly higher than some of the other occupations in this report.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 4,518 bricklayers.

Composition of Workforce: Glazier

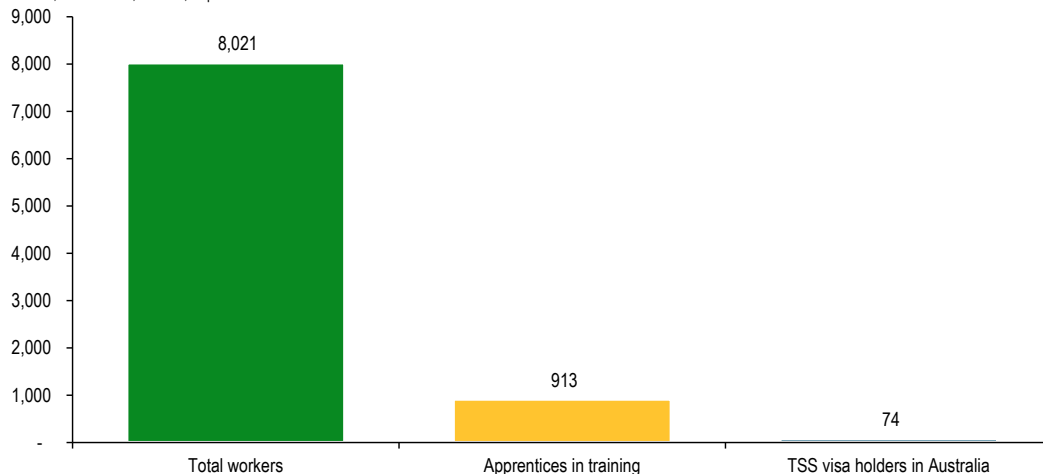
Source: HIA, ABS Census, NCVER, Department of Home Affairs



- Relative to the size of the domestic workforce of glaziers, this occupation has the largest share of TSS visa holders.
- The workforce of glaziers grew modestly over the decade to 2021, with an increase of 5 per cent over this period.
- Despite growth in the total workforce of glaziers, the number of workers aged under 25 declined by 16 per cent of this 10 year period.
- The share of the workforce aged under 25 declined from 20 per cent in 2011 to just 15 per cent in 2021.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 1,339 glaziers.

Composition of Workforce: Floor Finisher

Source: HIA, ABS Census, NCVER, Department of Home Affairs

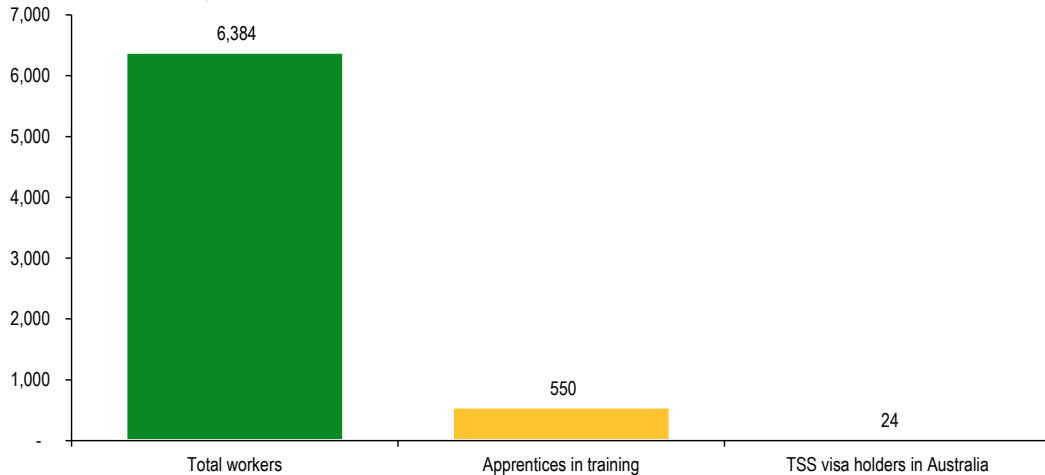


- Between 2011 and 2021 the number of floor finishers declined by 8 per cent, this was the third poorest performing occupation amongst the twelve trades covered in this report.

- The decline in the workforce over the decade to 2021 included a 22 per cent decline in the workforce aged under 25.
- There are a small number of migrant workers on TSS visas working as floor finishers, which relative to the size of the workforce is on par with the average across the trades covered in this report.
- Relative to the size of the floor finisher workforce, the number of apprentices in training is quite small.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 1,805 floor finishers.

Composition of Workforce: Roof Tiler

Source: HIA, ABS Census, NCVET, Department of Home Affairs



- While the workforce of roof tilers is small in comparison to the other trade occupations on this list, the vast majority of work done by this workforce is in residential building.
- The workforce of roof tilers grew by just 2 per cent over the decade to 2021, equivalent to growth of just 0.2 per cent per annum.
- The workforce of roof tilers has the youngest age profile across the occupations covered in this report with 28.3 per cent of workers aged under 25 (narrowly ahead of carpenters with 27.7). The physical nature of work and agility required to perform this occupation results in workers leaving at a younger age than other trades.
- Despite the younger age profile, the workforce of roof tilers aged under 25 declined very slightly (-0.2 per cent) over the ten year period to 2021.
- Relative to the size of the workforce of roof tilers in training is small, ranking fourth smallest of the trades covered by this report.
- There are very few skilled migrants with TSS visas working as roof tilers.
- This report identifies that to achieve the Housing Accord target there needs to be an additional 1,915 roof tilers.

About the Housing Industry Association

The Housing Industry Association (HIA) is Australia's only national industry association representing the interests of the residential building industry.

As the voice of the residential building industry, HIA represents a membership of 60,000 across Australia. Our members are involved in delivering on average more than 170,000 new homes each year through the construction of new housing estates, detached homes, low & medium-density housing developments, apartment buildings and completing renovations on Australia's 10 million existing homes.

HIA members comprise a diverse mix of companies, including large builders delivering thousands of new homes a year through to small and medium home builders delivering one or more custom built homes a year, building product manufacturers and suppliers, and businesses providing professional and allied services.

The residential building industry is one of Australia's most dynamic, innovative and efficient service industries and is a key driver of the Australian economy. The residential building industry has a wide reach into the manufacturing, supply and retail sectors.

Contributing over \$100 billion per annum and accounting for 5.8 per cent of Gross Domestic Product, the residential building industry employs over one million people, representing tens of thousands of small businesses and over 200,000 sub-contractors reliant on the industry for their livelihood.

The association operates offices in 22 centres around the nation providing a wide range of advocacy, business support services and products for members, including legal, technical, planning, workplace health and safety and business compliance advice, along with training services, contracts and stationery, industry awards for excellence, and member only discounts on goods and services.

**You're in
good hands**

If you would like to know more about HIA
contact us on **1300 650 620** or visit **hia.com.au**

