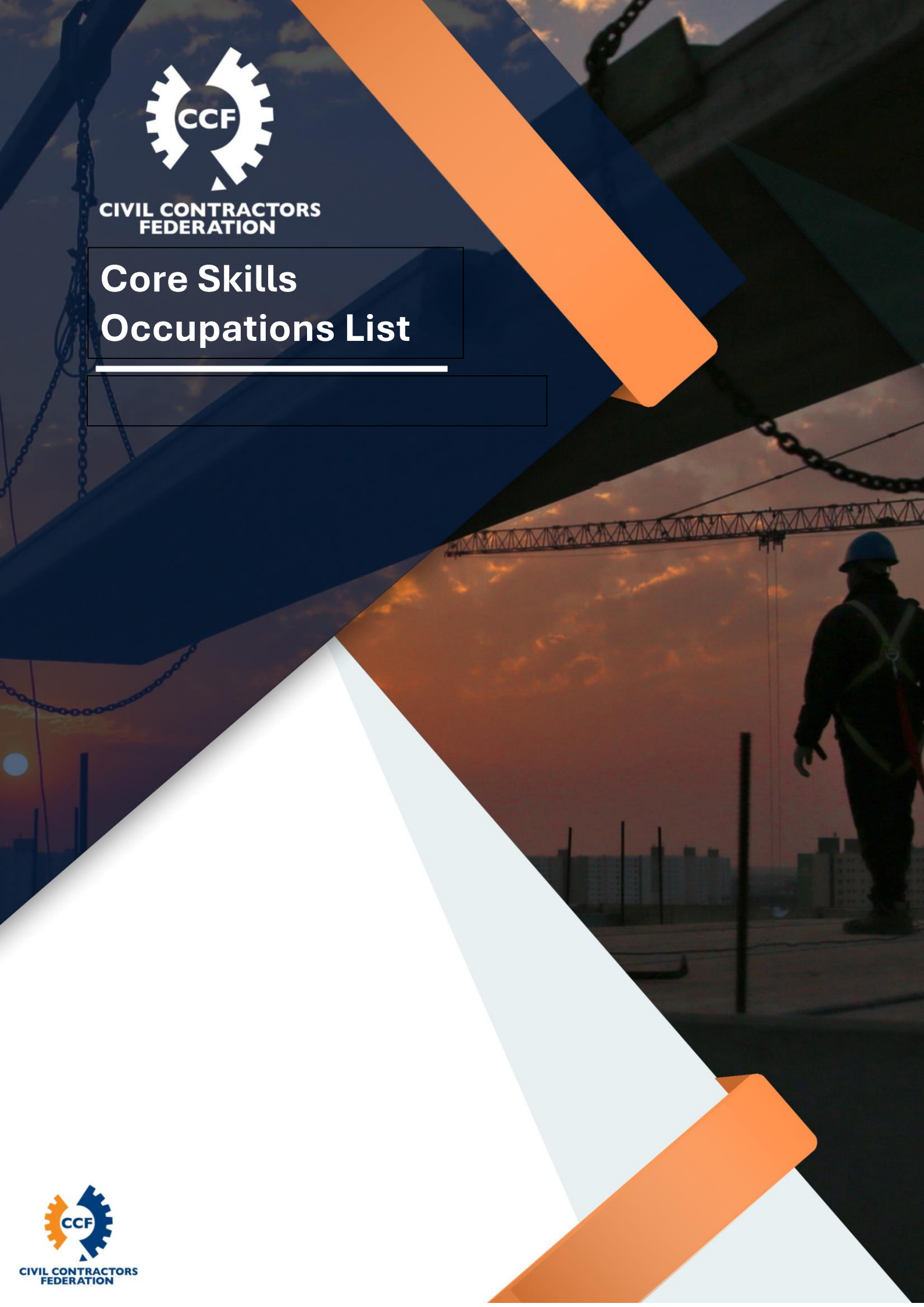
CIVIL CONTRACTORS FEDERATION

Core Skills Occupations List



CIVIL CONTRACTORS FEDERATION

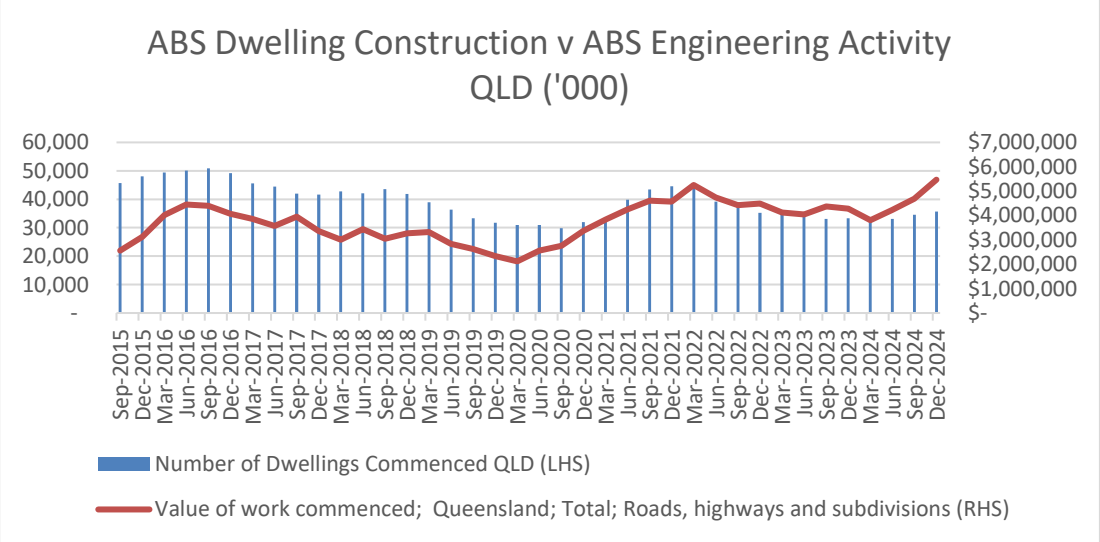
Review of the Core Skills Occupations List (CSOL) Points Test

The Civil Contractors Federation (CCF) is the peak national body for Australia's civil construction industry, representing more than 1,800 businesses across all states and territories. Our members range from small family businesses to major contractors that deliver the infrastructure that underpins communities.

We welcome the opportunity to contribute to the 2025 Core Skills Occupation List (CSOL) consultation. Civil construction occupations must be fully recognised as priority skills if Australia is to meet its commitments in housing, infrastructure and renewable energy. The civil construction workforce is already in shortage and without targeted investment in training as well as apprenticeships, project delays and cost escalations will continue.

Civil Infrastructure is the Foundation of Housing Development

All residential construction is entirely dependent on civil works being completed first. Before a single house can be built, civil contractors must deliver land clearing, site preparation, access roads, drainage, and the installation of utilities such as water, sewerage and electricity. These enabling works are not optional. They are essential prerequisites for housing construction.



As shown above, there is a close correlation between investment in civil infrastructure—particularly roads, bridges, and subdivisions—and housing delivery. Queensland, with Australia's least centralised population, offers a clearer view of this correlation as a greater proportion of infrastructure funding supports regional and peri-urban areas, rather than being concentrated in metropolitan mega-projects as seen in NSW and Victoria.

Australia's housing targets are already slipping and a key factor is that civil capacity has not kept pace. Approved housing developments cannot proceed until the civil infrastructure is in place. In growth corridors around the country there are tens of thousands of lots approved for housing that cannot be built on because the required civil works are not yet delivered. Put simply, not one dollar

can be spent on building homes unless a dollar has been spent on civil works first.

Governments are the Primary Client and Bear the Costs of Shortages

The Commonwealth and state governments are the largest clients of the civil construction industry. More than fifteen per cent of the Commonwealth budget is allocated to infrastructure investment and state governments also commit significant portions of their budgets to roads, rail, water and community assets.

When the civil workforce is not available, project delivery is delayed and costs rise. Government, as the primary client, bears this cost directly. Delays in large public projects increase the final price paid by taxpayers, reduce the productivity benefits of infrastructure, and constrain delivery capacity across the economy.

Infrastructure Australia has warned that the skills shortfall in construction is so severe that it threatens delivery of the national pipeline. This includes $230 billion worth of planned works. When governments are investing at this scale, it is essential that skills investment matches the level of financial investment. Without the skills to deliver projects, government commitments cannot be met and public money is wasted.

Civil Construction as the Enabler of Other Priority Industries

Civil construction does not operate in isolation. It is the foundation that enables other industries and projects that are already recognised as national priorities.

Renewable energy projects cannot commence electrical installation until civil works are completed. Wind farms require roads, foundations and drainage before turbines can be installed. Solar farms require cleared and prepared land, trenching and access tracks. Transmission lines depend on civil crews to prepare foundations and access corridors.

Housing construction is entirely dependent on civil works. Subdivisions cannot progress and houses cannot be built until the land is prepared, utilities are connected and roads are built.

Transport and water projects are themselves delivered by the civil sector. Roads, bridges, rail lines, pipelines, dams and sewerage systems are all core civil assets. They are also critical enablers for the wider economy including agriculture, manufacturing and services.

Environmental and natural disasters, are increasing in frequency and severity due to climate change, placing growing pressure on Australia's civil infrastructure to protect communities as well as enable growth. With disaster costs projected to reach $39 billion annually by 2050 , the need to embed resilience into infrastructure planning and skilling is urgent. Civil contractors play a critical role in delivering solutions—like flood-proof roads and bushfire buffers—but this requires coordinated planning, long-term funding, and streamlined approvals. Building disaster-resilient infrastructure is not optional; it is a national economic priority.

Defence infrastructure investment from the Australian Government of tens of billions of dollars into

critical defence infrastructure across the country is underway. From ports and airfields to base redevelopments and logistics hubs—as part of the Defence Strategic Review (DSR) and broader force posture changes the civil workforce is critical. These projects are not simply capital works; they are essential enablers of sovereign capability, regional deterrence, and alliance cooperation. In this context, the CCF strongly argues that these nation-defining projects must be led by Australian civil contractors with proven local experience, domestic capital, and an active investment in Australia's training and skills system. While the presence of international firms brings valuable competition, Australia cannot afford to rely on foreign entities for the delivery of infrastructure that underpins our sovereign defence capability.

Case Studies of Skills Shortages

The impacts of civil skills shortages are already visible.

Shortages persist across all major occupational groups, and for the first time, trades workers are forecast to be in higher shortage than engineers. With 64% of new infrastructure workers expected to come from Vocational Education and Training (VET) pathways, the importance of a robust, responsive skills system is clearer than ever. Higher education and migration are expected to contribute 25% and 10% of workforce supply, respectively—but those inputs alone won't solve the problem.

What once seemed like distant projections have now materialised as tangible roadblocks on projects across the country. The Inland Rail project—touted as a transformative freight link connecting Melbourne to Brisbane—is perhaps the most high-profile example of what happens when policy, investment and workforce capacity fall out of step. By 2050, Inland Rail is expected to carry approximately 66 per cent domestic consumer goods, largely between Melbourne and Brisbane, but also between Brisbane, Adelaide and Perth, but it is coming at a cost.

The Australian Rail Track Corporation estimate of the cost of the Inland Rail project has increased by an astonishing amount when compared to 2020. The estimated cost went from $4.3billion to 9.9billion , then from $16.4 billion in 2020 up to about $31 billion in 2023 and now set to exceed $40billion.The 2023 independent review into Inland Rail did not mince words: workforce constraints were identified as a significant impediment to the project's delivery. Costs have blown out. Deadlines have slipped.

In Queensland, labour shortages are threatening delivery of the Cross River Rail project and infrastructure required for the 2032 Brisbane Olympic Games. These nationally significant projects are facing risks to cost and schedule because there are not enough skilled civil workers available. These examples show that skills shortages are not theoretical. They are already causing delays and cost increases on major projects. Without intervention these problems will worsen as more projects come online.

As a third example, the West Gate Tunnel project involves the construction of twin tunnels beneath Yarraville, linking the West Gate Freeway to the Maribyrnong River. It comprises:

- A 4km outbound tunnel
- A 2.8km inbound (city-bound) tunnel

Originally estimated at $6.7 billion, the project is now forecast to cost $10 billion, with a cost blowout of between $1.9 billion and $3.3 billion. This increase is largely attributed to ongoing disputes concerning contaminated soil and earthworks disposal at the site.

The project, initially scheduled for earlier completion, is now expected to be finished in 2025, representing a minimum two-year delay. Some project sources suggest the total cost overrun could climb to $5 billion.

Large projects frequently incur schedule delays and cost overruns, indicating efficiency challenges in project planning and execution. This trend is evident in both public and private infrastructure ventures and suggests significant room for productivity improvement in project delivery processes with access to skills impacting this situation.

Building the Civil Workforce through Apprenticeships and Training

The most effective long-term solution is to invest in domestic skills development. This requires reform and greater support for civil apprenticeships and training pathways.

Civil occupations such as plant operators, pipe layers, concreters and road workers are highly skilled and require Certificate III qualifications. Yet because of outdated classifications these roles have often been excluded from training incentives and apprenticeship support. This must be corrected.
The Commonwealth should ensure that civil apprenticeships are eligible for the same incentive payments and subsidies as other trades. Employers who take on apprentices in civil occupations should have access to wage subsidies and support programs.

Apprentices themselves should have access to financial incentives and cost-of-living support to improve completion rates.

Pilot programs in some states have already shown success. For example, targeted wage subsidies and employer grants for civil apprentices have delivered strong pipelines of skilled workers for government and private projects. These initiatives should be scaled nationally.

Fee-free training places should also be prioritised for civil construction qualifications in high demand, such as Certificate III in Civil Construction, Plant Operations, Road Construction and Pipe Laying.
A national campaign to promote civil apprenticeships would also help attract a wider range of people into the industry, including women, school leavers and under-represented groups.
By reforming incentives, funding more training places and promoting civil

Heavy and civil engineering construction, which includes roads, rail, utilities and other major works, generated approximately $122 billion in income during 2023–24.

Civil construction is therefore a cornerstone of the national economy and is essential to the delivery of roads, bridges, water and sewerage systems, energy networks and housing-enabling infrastructure. It forms the foundation of every housing project by providing the subdivision site works, roads, sewerage and water supply that make new housing possible.

National pipeline and economic context

All levels of government are ramping up infrastructure spending, making civil skills even more critical. The Australian Infrastructure Audit and Plan identify infrastructure investment as a driver of productivity and liveability, and current major projects are immense. Infrastructure Australia's Market Capacity reports indicate the five-year public infrastructure pipeline is on the order of $213–230 billion.

Transport is the largest share ($126 billion, or about 59% of the pipeline) but investment in buildings and utilities (including energy and water projects) is growing. Over the past year governments have actively managed demand by smoothing pipelines, yet heavy engineering projects (roads, rail, dams, energy transmission) remain in high demand. In particular, utility projects – largely renewable energy and transmission lines – increased by $6 billion on last year's outlook. Infrastructure Australia notes this growth in energy-sector works is "driven by the renewable energy transition," as Australia shifts to net zero.

Renewable energy infrastructure is accelerating: ABS data show commencements of utility-scale renewable generation jumped to $8.4 billion in 2023–24 (with $11.0 billion of work done). Infrastructure Australia forecasts a *six-fold increase* in renewable projects over the next five years to support net-zero targets. Meeting this surge in renewable and social infrastructure will rely on civil construction skills – for example, building foundations for wind turbines, solar farms, transmission lines, roads and bridges to connect new communities, and water and sewage systems for urban growth.

Major public investment is on a massive scale. The Federal Budget continues substantial infrastructure funding: for example, $16.5 billion was allocated in 2024–25 alone for new and existing projects, on top of a $120 billion Infrastructure Investment Program spanning multiple years. State budgets also commit billions to road and water projects (e.g. NSW's Infrastructure Strategy, WA's Perth Metronet). ABS data highlight that even subcontracted "construction services" (core trades) earned $276 billion in 2023–24, supporting the main works.

Housing demand and infrastructure bottlenecks

Australia's population and housing needs continue to grow, adding pressure on civil infrastructure. Greater Sydney, for instance, is projected to absorb two-thirds of the city's population growth, yet many approved developments sit unfinished. Local government analyses reveal that in Greater Sydney over 75,000 dwellings have development approvals but remain unbuilt.

The chief cause is not a lack of approvals or finance, but rising construction costs, supply-chain

disruptions and particularly *labour shortages*.

Delays in enabling infrastructure – water, sewer, roads, electricity – are stalling projects. Analysts at UNSW Business School note that *"delays in infrastructure projects are stalling"* planned housing, even where rezoning and approvals are in place. In Western Sydney's growth areas, essential works (roads, water mains, power connections) have lagged, causing developers to defer stages of projects. For example, one council estimated developers held off completing 20,000 lots because *"there's no water and electricity in place"*.[i]

These regional case studies illustrate the broader point: civil works are prerequisites for housing supply. If civil trades and trades training are not supported, governments' housing targets risk going unmet.

Workforce shortages and capacity constraints

All evidence points to ongoing shortages of civil construction workers and apprentices. Infrastructure Australia's 2024 Market Capacity Report estimates only about 204,000 workers were engaged in infrastructure work as of late 2024.

Even though projected shortages (relative to demand) have eased slightly due to governments smoothing pipelines, significant gaps remain. IA projected a shortage of 197,000 infrastructure workers at that time.

Shortages persist across all disciplines – engineers, project managers and trades. Notably, civil and structural trades are in particularly high demand: IA forecasts civil and general construction labour shortages peaking at tens of thousands through 2026.

The June 2025 NCVER report found trade apprenticeship commencements fell 5.4% in the year to Dec 2024, even as employment in trades grew. Within construction trades, commencements were down 11.9%, a drop of 2,805 new trainees.

Concurrently, many apprentices dropped out: the total number of apprentices in training nationally declined by about 3% to 120,881 by Sep 2023, even though construction remains the largest employer of apprentices. Completion rates have not kept pace either – NCVER reported that construction trade completions rose somewhat in late 2024 (as existing cohorts finally finished), but these were not enough to offset the shrinking intake.
Industry bodies highlight this problem.

The bottom line is clear: unless apprenticeship starts and completions are significantly boosted, the pipeline of skilled civil workers will run dry. This jeopardizes not only transportation projects but also utilities, housing and renewable energy works. Federal and state governments have introduced new incentives (for example, state-level apprenticeship bonuses and the Commonwealth's Key Apprenticeships Program), but gaps remain.

Pathway to Civil Construction Leading Hand

The Civil Construction Leading Hand role does not exist in isolation. It is the next step in a progression

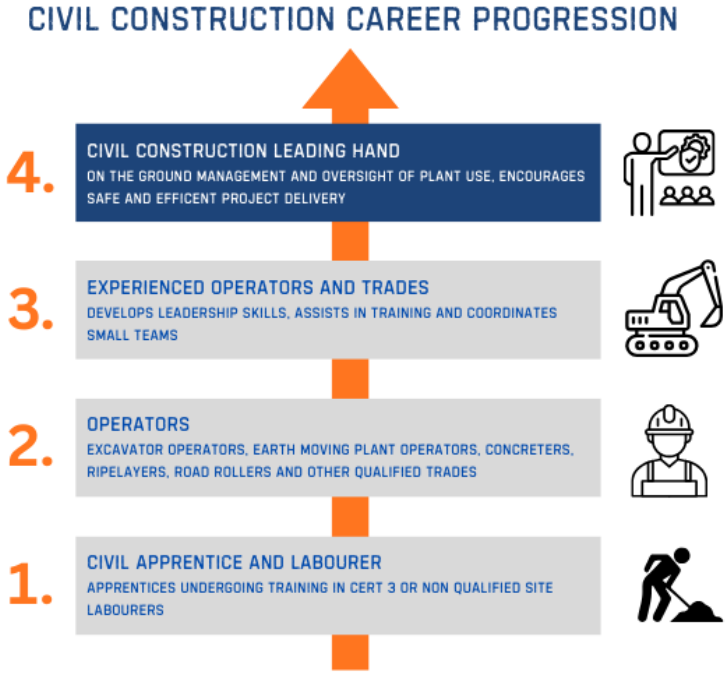
that begins with entry-level training and hands-on site experience. The pathway typically looks like this:

- **Civil Construction Apprentice or Trainee** – entry point through Certificate III qualifications in civil construction streams such as plant operations, pipelaying or concreting.
- **Skilled Civil Operator or Tradesperson** – includes occupations such as Excavator Operator, Earthmoving Plant Operator, Mobile Plant Operator, Concreter, Pipelayer and Road Construction Worker. These roles build technical skills, site knowledge and safety expertise.
- **Experienced Operator or Senior Tradesperson** – develops leadership skills on the job, often mentoring juniors and coordinating small teams.
- **Civil Construction Leading Hand** – promoted from the ranks of skilled civil workers, providing on-the-ground management, coordinating crews, overseeing plant use, and ensuring safe and efficient delivery of works.

This progression shows that Leading Hands are overwhelmingly promoted from other civil occupations.

They rely on years of site experience and technical mastery. Without a healthy pipeline of apprentices, operators and tradespeople, the industry cannot produce enough Leading Hands to meet demand.

Recognising the supervisory role is important, but unless the feeder occupations are also included in the Core Skills Occupation List, the workforce pathway is broken.



Recommendations: training support and collaboration

To address these challenges, the focus must be on domestic training and workforce development – not migration. Apprenticeships and related vocational pathways should be made more attractive and accessible. Key measures include:

- **Expand apprenticeships and incentive funding to Civil.** Subsidies and completion bonuses for apprentices in civil occupations. For example, raise wage subsidies or allow higher reimbursements for employers taking on civil apprentices. Ensure programs like the Key Apprenticeships and state incentives explicitly cover all civil-related trades and labourers (road workers, utilities technicians, earthmovers, etc.). Evidence shows apprenticeships are the main source of new skilled entrants: IA

projects roughly 64% of infrastructure workers will come via VET Strengthening this pipeline is critical.

- **Boost VET delivery and capacity.** Provide additional funding for TAFE and RTOs to expand civil trades training (including pre-apprenticeships), and invest in modern training facilities (e.g. labs and simulators for civil engineering). Encourage uptake by promoting civil careers in schools and careers guidance – for example, increase trades awareness programs like those in WA's Skills Plan. Career advisors, parents and students should be informed about the high demand for civil skills and strong job outcomes.
- **Plan with state-federal coordination.** Infrastructure planning and skills policy must be aligned. Governments should collaborate on forecasting regional skill needs (for example, mapping how a new project will draw labour).

In summary, the civil construction sector is fundamental to housing, transport and energy goals. The evidence and industry voices make clear that Australia cannot achieve its infrastructure and housing plans without a strong domestic training response. Declining apprentice numbers and aging crews must be urgently reversed by scaling up VET investment and incentives. If government prioritises civil construction skills – through targeted training support, incentives for apprentices, and cross-government workforce planning – it will protect its infrastructure projects and housing targets.

The time for that investment is now, to ensure projects are built on time and to budget, and that essential infrastructure truly underpins Australia's economic recovery and transition.

About the Civil Contractors Federation

The Civil Contractors Federation is the peak national representative body for the civil construction industry in Australia, providing on behalf of our members and industry a clear, unified and strong voice on the critical issues affecting the sector.

Our 1800 members who range from tier 1, 2, 3, SMEs and one person ABN holders, are responsible for the construction and maintenance of Australia's civil infrastructure.

CCF members are responsible for the construction and maintenance of Australia's infrastructure, including road construction, plant operation, pipeline construction, trenchless technology, bridge construction, rail construction, utilities and tunnelling.

Members also play a vital role in the residential and commercial construction industry by providing earthmoving and land development services including the provision of power, water, communications and gas.

[redacted]

[i] https://www.businessthink.unsw.edu.au/articles/western-sydney-infrastructure-housing-supply-growth#:~:text=Instead%2C%20it%E2%80%99s%20the%20absence%20of,in%20place%2C%20and%20there%27s%20no

Appendix A

Core Skills List Time Series 2021-2024

Core Skills Occupations List Occupation | No Shortage | Shortage | Civil Apprenticeship

Occupation	NAT Shortage Rating	NSW Shortage Rating	VIC Shortage Rating	QLD Shortage Rating	SA Shortage Rating	WA Shortage Rating	TAS Shortage Rating	NT Shortage Rating	ACT Shortage Rating	
Civil Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Civil Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Civil Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Civil Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Geotechnical Engineer	Shortage	Shortage	Shortage	Shortage	No Shortage	No Shortage	No Shortage	Shortage	No Shortage	2024
Geotechnical Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Geotechnical Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Geotechnical Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Quantity Surveyor	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Quantity Surveyor	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Quantity Surveyor	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Quantity Surveyor	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Structural Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Structural Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Structural Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Structural Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Transport Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	No Shortage	Shortage	2024
Transport Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Transport Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Transport Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Production or Plant Engineer	Shortage	Regional Short	Shortage	Shortage	Shortage	Shortage	Shortage	No Shortage	Shortage	2024
Production or Plant Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Production or Plant Engineer	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Production or Plant Engineer	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	2021
Construction Estimator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Construction Estimator	Shortage	Shortage	Shortage	Regional Short	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Construction Estimator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Construction Estimator	No Shortage	No Shortage	No Shortage	Shortage	No Shortage	No Shortage	Shortage	No Shortage	No Shortage	2021
Civil Engineering Draftsperson	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Civil Engineering Draftsperson	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Civil Engineering Draftsperson	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Civil Engineering Draftsperson	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Civil Engineering Technician	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Civil Engineering Technician	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Civil Engineering Technician	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Civil Engineering Technician	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Technicians and Trades Workers nec	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Technicians and Trades Workers nec	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Technicians and Trades Workers nec	Shortage	Shortage	Shortage	Shortage	Shortage	No Shortage	Shortage	Shortage	Shortage	2022
Crane, Hoist or Lift Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Crane, Hoist or Lift Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Crane, Hoist or Lift Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Crane, Hoist or Lift Operator	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	2021
Driller	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Driller	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Driller	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Driller	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	2021
Earthmoving Plant Operator (General)	No Shortage	Shortage	No Shortage	No Shortage	No Shortage	Shortage	No Shortage	Shortage	No Shortage	2024
Earthmoving Plant Operator (General)	Shortage	Shortage	No Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Earthmoving Plant Operator (General)	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2022
Earthmoving Plant Operator (General)	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Backhoe Operator	No Shortage	Shortage	No Shortage	No Shortage	No Shortage	No Shortage	No Shortage	Shortage	No Shortage	2024
Backhoe Operator	No Shortage	Shortage	No Shortage	No Shortage	Shortage	No Shortage	No Shortage	No Shortage	No Shortage	2023
Backhoe Operator	Shortage	Shortage	Shortage	Shortage	Shortage	No Shortage	Shortage	Shortage	Shortage	2022
Backhoe Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Bulldozer Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Bulldozer Operator	Shortage	Shortage	No Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023
Bulldozer Operator	Shortage	Shortage	Shortage	Shortage	Shortage	No Shortage	Shortage	Shortage	Shortage	2022
Bulldozer Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2021
Excavator Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2024
Excavator Operator	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	Shortage	2023