

The Construction Blind Spot

Why Australia cannot yet measure how construction uses AI, and what planners and policy makers need instead

Australia has no reliable measure of how its construction industry uses AI. The figures that exist put AI use by construction firms anywhere from 6% to 44%, because they count different firms in different ways, and together they add to the confusion. Without consistent data, governments and industry cannot plan skills, investment or productivity programs around AI. That measurement gap is the construction blind spot.

Dr M. Reza Hosseini The University of Melbourne

Tim Mumford Acciona

Alex Afshar Dolanto

Dr Amir Soroush Victorian Infrastructure Delivery Authority

Belinda Hodgkinson AECOM

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In brief

- **Construction trails other industries wherever a like-for-like comparison exists.** The Australian Bureau of Statistics (ABS) found that 6% of construction businesses used AI in 2024–25, against 12% across all industries. The National AI Centre found fewer than 30% of small and medium construction firms using AI in early 2026, against 43% across all industries. In Anthropic’s data on Australian use of its Claude chatbot, site-based jobs such as trades and labourers rank 21st of 22 job groups.
- **No one can say how far behind.** The share of construction firms reported to use AI ranges from 6% (ABS, all employing businesses) to 44% (KPMG, industry leaders reporting AI “at scale”, with the number of Australian respondents unpublished). The only public data on the jobs Australians use AI for come from one chatbot, Claude, and are sorted using the US government’s occupation list (SOC) rather than Australia’s (ANZSCO).
- **Planners and policy makers are working blind.** No source shows what tradespeople do with AI on site, how much AI is built into estimating, design (BIM) and scheduling software, or how use differs by state or firm size. The conclusion sets out what consistent Australian data would need.

Three ways to measure AI in construction

The Australian sources reviewed here put AI use by construction firms anywhere from 6% to 44%. Much of this confusion comes from mixing three kinds of measure, each with its own meaning of “construction”. We keep them apart and only compare figures from the same source. The numbered sections that follow use the same three headings.

	1. Businesses	2. Conversations	3. Jobs
The question	Does your business use AI?	What do people ask AI to help with?	How much of this job could AI help with?
Sources	ABS; National AI Centre; KPMG	Anthropic Economic Index (Claude chatbot)	Jobs and Skills Australia (JSA)
What is counted	Share of firms that say they use AI	Share of conversations matched to each job	A score from 0 to 1 for each occupation: potential, not actual use
What “construction” means	ABS: the Construction industry (ANZSIC Division E): building; heavy and civil engineering, such as roads and bridges; and construction services such as trades. National AI Centre: firms that say they are in construction (definition not published). KPMG: engineering, construction and real estate leaders.	Jobs in the US Standard Occupational Classification (SOC), not Australia’s list. Its “construction and extraction” group covers site-based jobs such as trades and labourers (plus mining). Architects, engineers and construction managers sit in other groups.	Australian occupations (ANZSCO) that we selected as construction-related, from construction managers, architects and civil engineers to electricians, carpenters and concreters.

1. Businesses: yes, behind. But by how much?

Two surveys compare construction with other industries. The ABS, the official source, found that **6%** of construction businesses used AI in 2024–25, half the rate across all industries (12%); construction ranked 14th of 17 industries. The National AI Centre, which surveys small and medium businesses (up to 500 staff) each month, found that **fewer than 30%** of construction firms used AI in early 2026, against 43% across all industries (Figure 1).

The highest figure comes from KPMG’s survey of 375 engineering, construction and real estate leaders worldwide, run from January to March 2025. KPMG reports that **44%** of its Australian respondents had AI “adopted at scale”, but neither its Australian web page nor its global report says how many respondents were Australian, and there is no all-industry figure to compare it with.

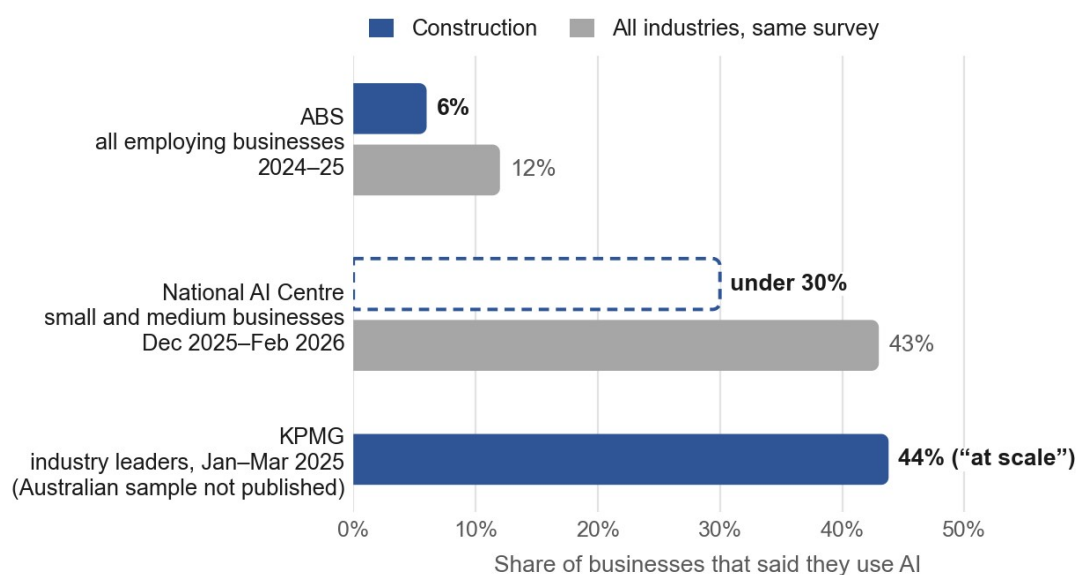


Figure 1. Share of businesses that said they use AI: construction (blue) and all industries in the same survey (grey). The dashed bar marks an upper limit. Sources: ABS (2026); National AI Centre (2026); KPMG (2026).

Why the figures differ

- **Who is asked.** The ABS covers employing businesses of every size, the National AI Centre asks small and medium firms, and KPMG asks company leaders, about half from firms with revenue of US\$1 billion or more. Firm size matters. Small and medium firms employ 86% of Australia’s construction workers (62% in firms with fewer than 20 staff and 24% in firms with 20–199). Yet across all industries the ABS found large businesses (200 or more staff) three times as likely to use AI as small ones: 35% against 11%. No source reports construction by firm size.
- **What counts as use.** “We use AI” can mean one person trying a chatbot or a company-wide system. KPMG asks about AI “at scale”; the ABS and the National AI Centre count any use.
- **How the survey is run.** Even across all industries, the two government surveys differ: 12% (ABS) against 43% (National AI Centre). That gap comes from the surveys, not from construction.
- **What counts as construction.** Only the ABS publishes its definition, which covers civil engineering and infrastructure as well as building.

2. Conversations: what Australians ask Claude

Of the major AI companies, only Anthropic, the developer of the Claude chatbot, publishes what Australians use its tool for, broken down by job. OpenAI (ChatGPT) and Microsoft (Copilot) publish no Australian job-level figures, and Google (Gemini) publishes only Australia's top three job groups, none of them in construction. The data therefore describe one chatbot among several.

Anthropic matches each conversation to the tasks of jobs in the US Standard Occupational Classification (SOC), a list of occupations kept by the US government, not to Australia's ANZSCO. In that list, "construction and extraction" covers site-based jobs such as trades, labourers and plant operators (plus mining). Architects and engineers sit in a separate group, "architecture and engineering", which also includes car, aerospace and computer-hardware engineers. Construction managers sit in "management". The groups cannot simply be added together, because that would count many engineers who have nothing to do with construction. That is why Figure 3 looks at single jobs.

Site-based jobs account for **0.11%** of Australian Claude conversations, 21st of 22 job groups (Figure 2), even though Australia uses Claude more per person than any other country. When these conversations do happen, most are about work: 70%, against 43% of all Australian Claude conversations.

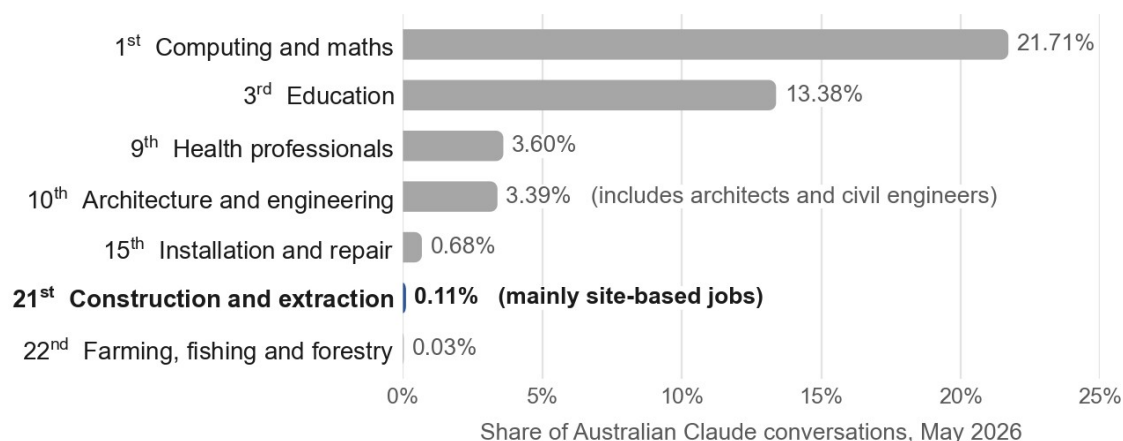


Figure 2. Seven of the 22 job groups in Australian Claude conversations, May 2026, with their rank. Each percentage is the share of all Australian Claude conversations that Anthropic matched to tasks in that job group; the 22 groups add up to 100%. Source: Anthropic Economic Index, release of 26 June 2026 (Claude app and Cowork).

Which construction jobs show up?

At the level of single jobs, five professional roles appear, each at 0.04–0.06% of conversations: civil engineering technicians, surveyors, civil engineers, architects and drafters (Figure 3). That is similar to familiar jobs such as primary school teachers (0.07%) and car mechanics (0.03%). The only trade-based jobs that appear are carpenters (0.03%), site supervisors and solar panel installers (0.02% each). Electricians, plumbers, bricklayers, roofers, building inspectors and construction managers have too few conversations to be reported.

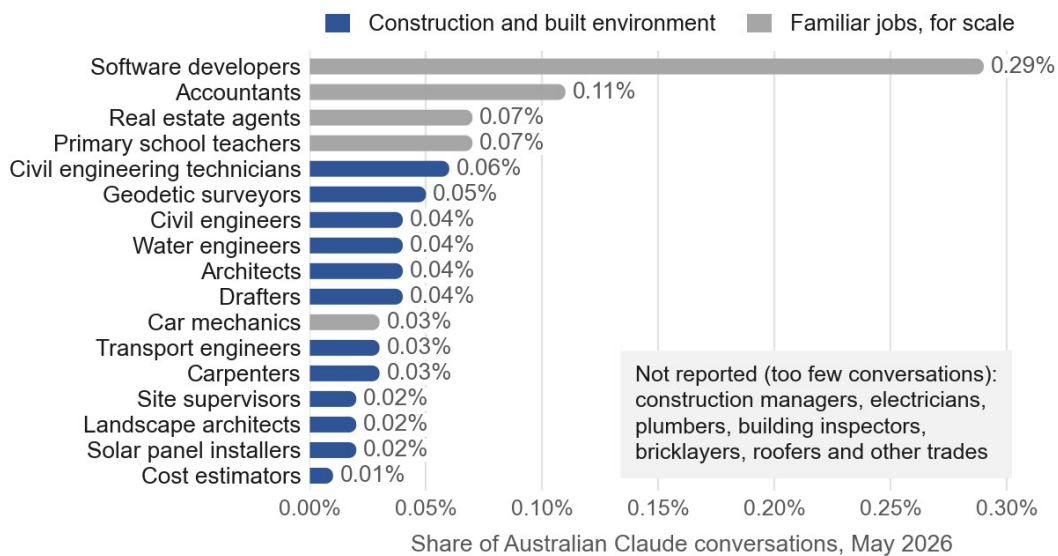


Figure 3. Construction and built-environment jobs in Australian Claude conversations, May 2026, with familiar jobs for scale. Each percentage is the share of all Australian Claude conversations that Anthropic matched to that job. Source: Anthropic Economic Index.

3. Jobs: where AI could help

Jobs and Skills Australia (JSA), the federal government's workforce agency, has estimated how exposed each Australian occupation is to generative AI. It scored each of an occupation's tasks from 0 to 1 on how much generative AI could assist with it, and combined these into a score for the occupation. A score of 1 would mean AI could help with all of a job's tasks; 0 would mean it could help with none. The scores measure potential, not actual use.

Across Australia's 357 occupation groups, the median score is 0.65: half of all occupations score higher and half lower (Figure 4). Construction's professional roles score above the median: surveyors 0.76, civil engineers 0.74, architects 0.72 and construction managers 0.70. Most trades score below it: carpenters 0.60, plumbers 0.59 and electricians 0.57. Building labourers score lowest, at 0.35. JSA also rates trade tasks among the least likely for AI to carry out on its own (0.10–0.19 on its separate automation score, against a median of 0.33).

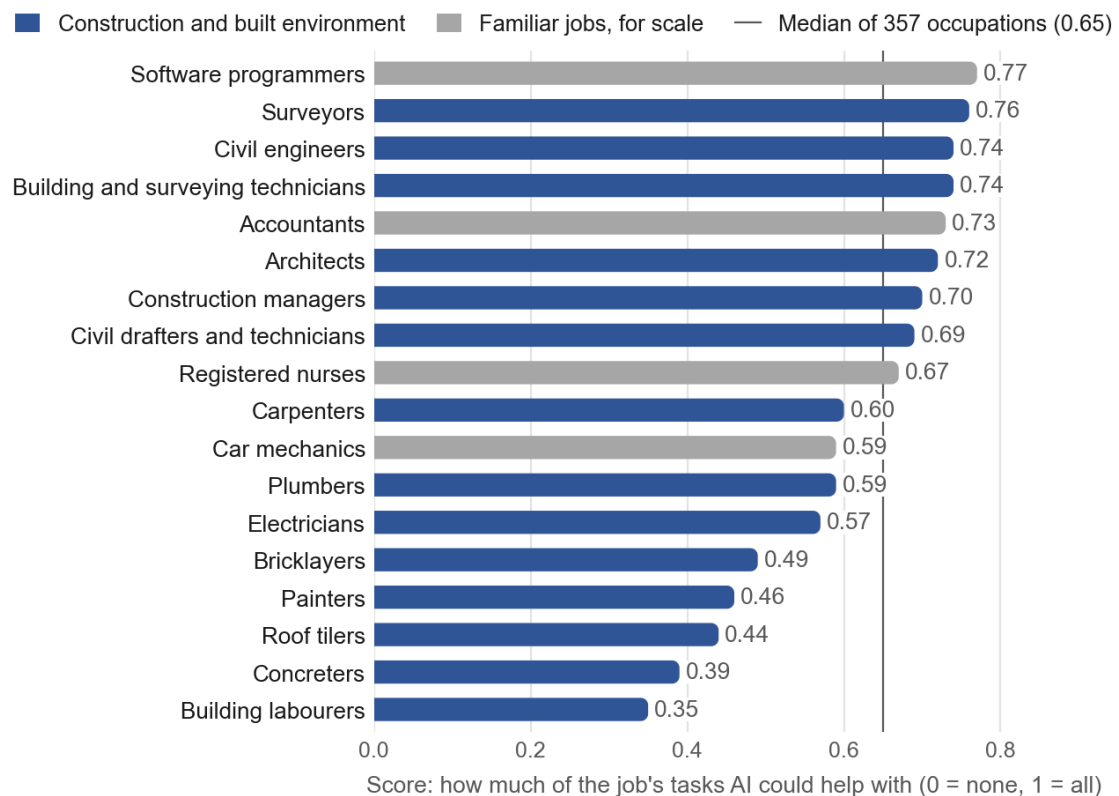


Figure 4. Jobs and Skills Australia's score for how much of each occupation's tasks generative AI could help with, from 0 (none) to 1 (all). The vertical line is the median of 357 occupations. Source: Jobs and Skills Australia, *Our Gen AI Transition* (2025).

The conversation data and the JSA scores show a broadly similar pattern, with professionals above trades, although their classifications and measures differ and cannot be matched directly.

Conclusion: closing the blind spot

1. **The direction is consistent.** Where a like-for-like comparison exists, construction is lower: in both the ABS and National AI Centre surveys, and among Claude's job groups. KPMG has no comparison group, and JSA rates construction professionals above the median and trades below it.
2. **The size is unknown.** Estimates run from 6% to 44% of construction firms, depending on who is asked and how. The only job-level data come from one chatbot, sorted using the US occupation list (SOC).
3. **The trades, the states and construction software are invisible.** No source shows what tradespeople do with AI on site, or how much AI is built into estimating, BIM and scheduling software. None reports construction by state: Anthropic publishes no state figure for site-based jobs, and we found no state-level construction figures in the business surveys.

Australian construction appears to lag in measured AI use. The data cannot say by how much, or what the trades are doing with it.

What consistent data would need

Planning for AI in construction needs a small set of agreed measures that every survey uses in the same way:

1. **One definition of construction.** Report businesses by the three ANZSIC subdivisions: building construction; heavy and civil engineering construction; and construction services, such as trades. Report workers by Australian occupation (ANZSCO), separating managers, professionals, trades and labourers.
2. **One definition of AI use.** Ask separately about (a) staff using general AI tools such as chatbots, (b) AI built into construction software for estimating, scheduling, design (BIM) or safety, and (c) AI used across the firm's core processes. Ask how often (for example, in the past four weeks) and for which tasks.
3. **Breakdowns that match decisions.** Report construction by firm size (sole traders, fewer than 20, 20–199, and 200 or more staff) and by state, because small and medium firms employ most construction workers and infrastructure pipelines are planned state by state.
4. **Ask workers as well as owners.** Owners can report what their business has adopted. Only workers, including subcontractors, can report what happens on site.
5. **Publish sample sizes and margins of error** for every construction figure, and withhold figures from samples too small to be reliable.
6. **Repeat the same questions on a fixed schedule**, such as every year, so that change can be tracked.
7. **Ask AI companies to publish Australian figures** by Australian occupation and industry, by state, and including business and software (API) use, not only chat.

Why it matters for policy

With consistent data, governments could direct AI training in apprenticeships and vocational education to the trades and tasks where it helps. They could also test whether productivity programs change practice on site, and track progress on housing and infrastructure delivery. As a major construction client, government could also ask for simple AI-use reporting on large public projects, building evidence without a new survey.

Until then, firms should treat headline figures with care and measure their own use. That means asking staff and subcontractors which AI tools they use and for which tasks, and tracking time saved, errors and rework in supervised trials.

HOW TO READ THE NUMBERS

- We only compare figures from the same source. Business, conversation and job figures are never set against each other.
- Claude's figures describe one chatbot and show what conversations were about, not who was asking. Figures that round to zero or are not published are very small, not necessarily zero.
- Anthropic publishes figures for software that connects to Claude directly (its API) only for the world as a whole, so they cannot be used for Australia.
- No source measures AI built into construction software, such as estimating, BIM or scheduling tools.

Sources

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