Carbon Arc

The infrastructure for the AI economy

Tech talent demand shifts to engineering and manufacturing

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Tech talent demand shifts to engineering and manufacturing

- **The industrial economy is dominating new job postings, with transport, construction, and manufacturing up by double digits Y/Y.** Computer, math and engineering postings rose 19.6%, but tech postings from Information-sector employers were flat (+0.2%) while rising 34% in construction and 29% in manufacturing.

- **Engineer postings rose 36% Y/Y in 2026, surging to 59% Y/Y in September (86% above the 2025 12-month average**). Computer and math postings rose 16% Y/Y in 2026 but peaked in June at 31% above the monthly average.

- **Postings are rising most for builders of physical products**, up 59% Y/Y for industrial engineers, 56% for aerospace engineers, 41% for computer hardware engineers, and 39% for mechanical engineers. Among advanced manufacturing industries, **aerospace leads SMB headcount gains at +4.1% Y/Y.**

- **Tech postings moved directionally with government contract dollars at the prime defense contractors, up 125% Y/Y at Lockheed Martin, 89% Y/Y at RTX, and 44% at Boeing, but down 8% at General Dynamics.** Contract dollars rose most in aircraft, missile, and instrument categories, the advanced manufacturing categories where tech postings also outperformed.

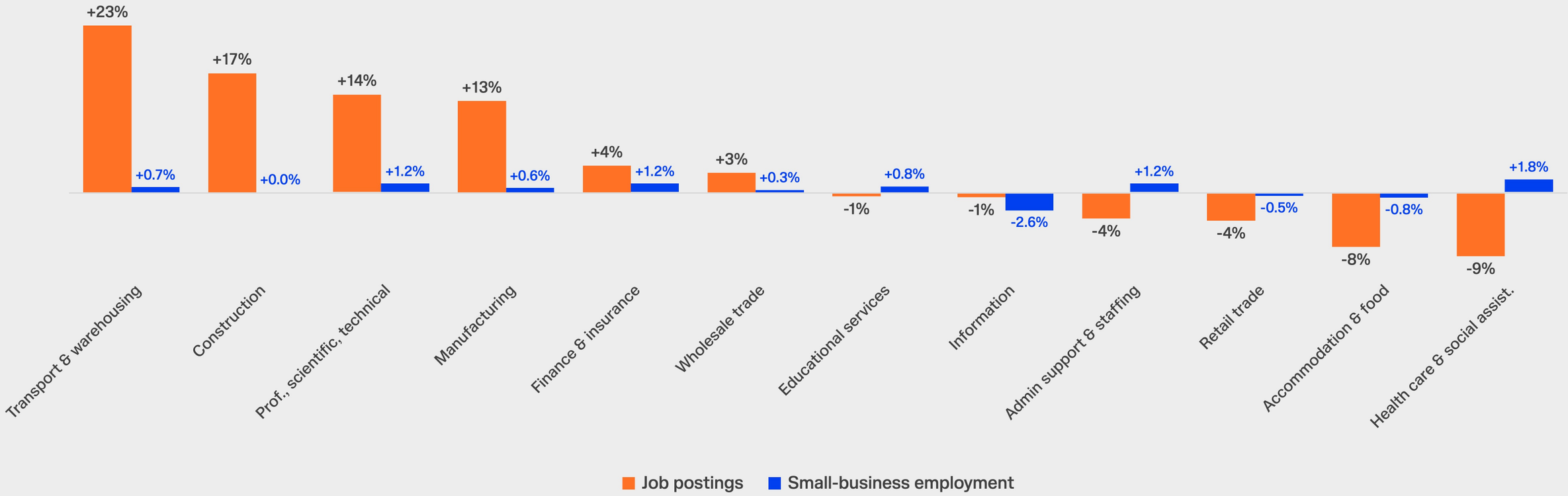
- **Small employers increased tech postings more than larger employers, but the trend is reversed in advanced manufacturing,** where companies with 5,000+ employees increased postings 44% over 2025, vs. 12% growth at the smallest firms. Overall tech posting growth was 33% Y/Y at firms under 50 employees and 12-16% at firms with 500 or more.

- **AI requirements are growing, but remain a minority even in tech,** appearing in 21% of tech postings and 3.6% overall, nearly tripling since January 2025. Coding assistants and agent frameworks are the fastest-rising AI skill requirements.

Industrial economy dominates postings, but health care leads SMB hiring

Industry-classified postings rose just 0.6% in 2026, but the mix rotated: transport, construction, and manufacturing showed double-digit gains while health care, accommodation and food service, and retail fell. Postings swing far more than small-business headcount, which still rises most for health care, the weakest category for postings.

Y/Y change, Jan to Sep 2026, by NAICS 2-digit sector of the posting employer

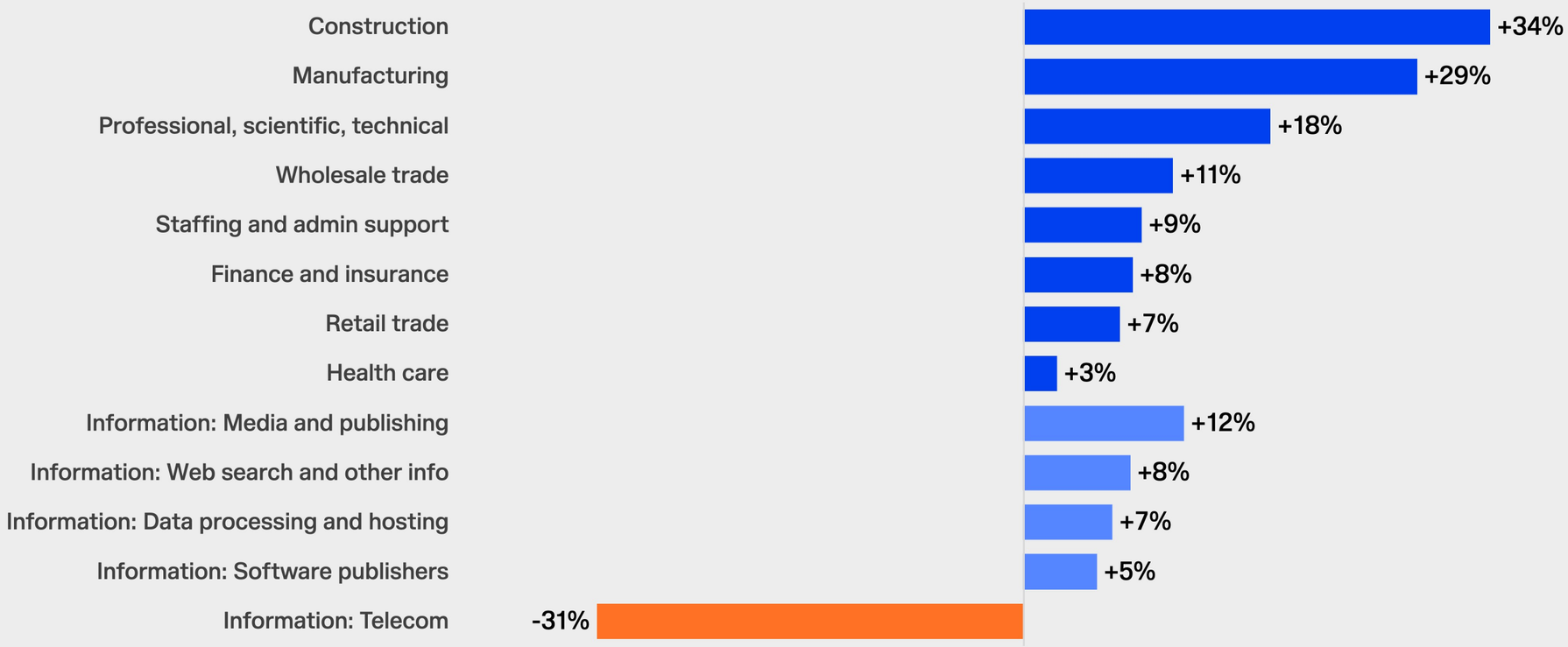


Source: Carbon Arc U.S. Job Postings - CA0097J, Carbon Arc SMB Workforce - CA0055

Construction and manufacturing lead postings for technical roles

Computer, math, and engineering postings grew across every major employer sector except telecom, led by construction (+34%) and manufacturing (+29%). Information-sector employers were flat (+0.2%), driven by telecom carriers cutting tech postings. Search, data, and software companies all increased postings vs. 2025.

Computer, math and engineering postings (SOC 15 + 17), Y/Y change, Jan to Sep 2026, by NAICS-2 sector or Information subsector

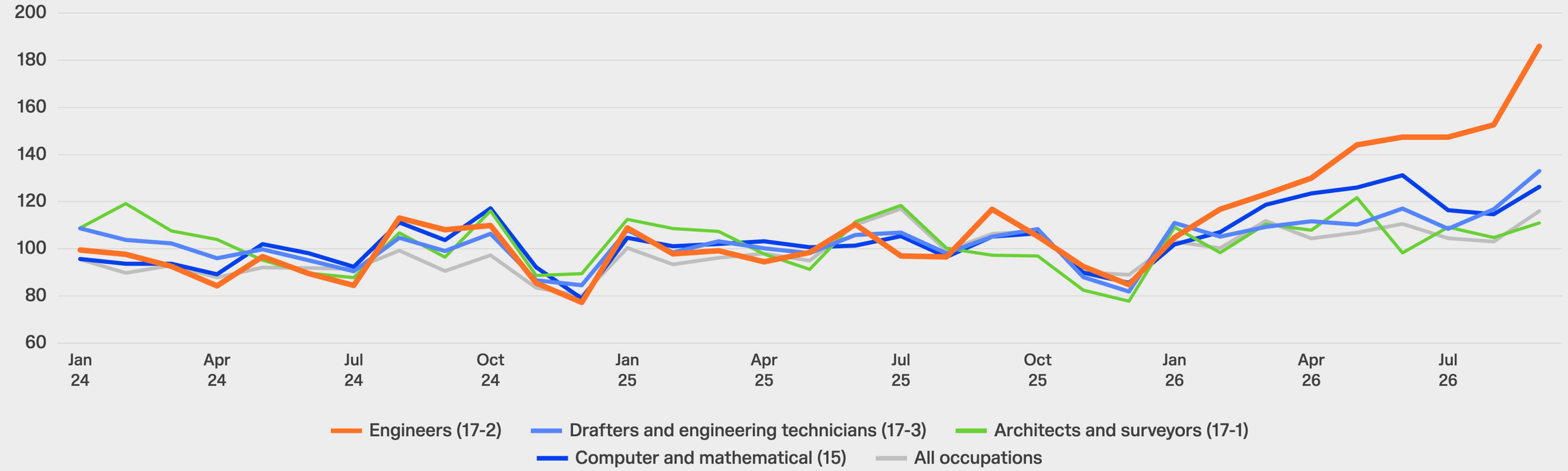


Source: Carbon Arc U.S. Job Postings - CA0097J

Engineering postings surge, separating from computer and math

Splitting Architecture and Engineering (SOC 17) into its three groups, engineer postings rose 36% Y/Y in the first 9 months of 2026 and reached 186 on the index in September. Computer and math postings rose 16% but peaked in June at just 31% above their 2025 average.

Monthly postings index by SOC occupation group, 2025 monthly average = 100

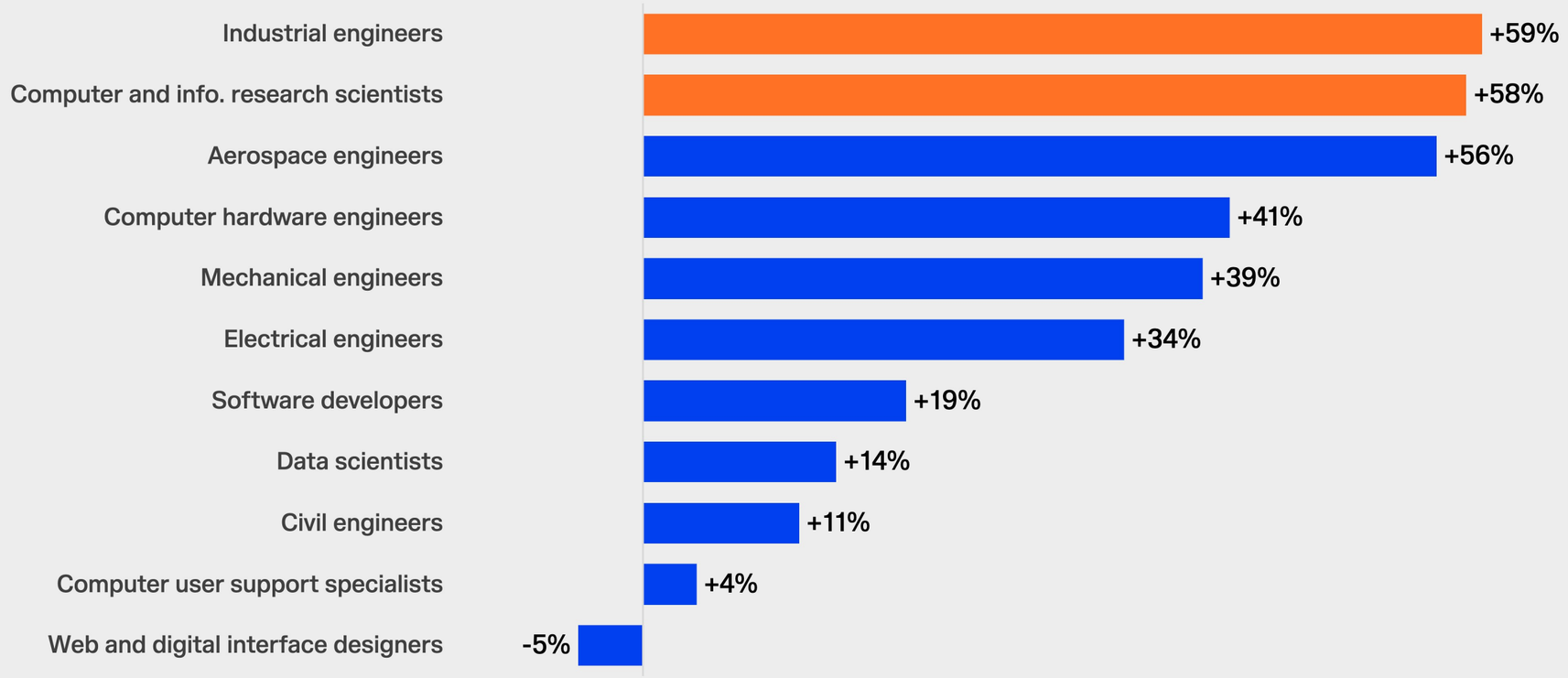


Source: Carbon Arc U.S. Job Postings - CA0097J

Fastest-growing tech and engineering occupations

Engineers who design physical products grew fastest: industrial (+59%), computer hardware (+41%), mechanical (+39%) and electrical (+34%). Computer and information research scientists, the occupation closest to AI model work, rose 58%.

Postings Y/Y change, Jan to Sep 2026 vs 2025, detailed SOC occupation

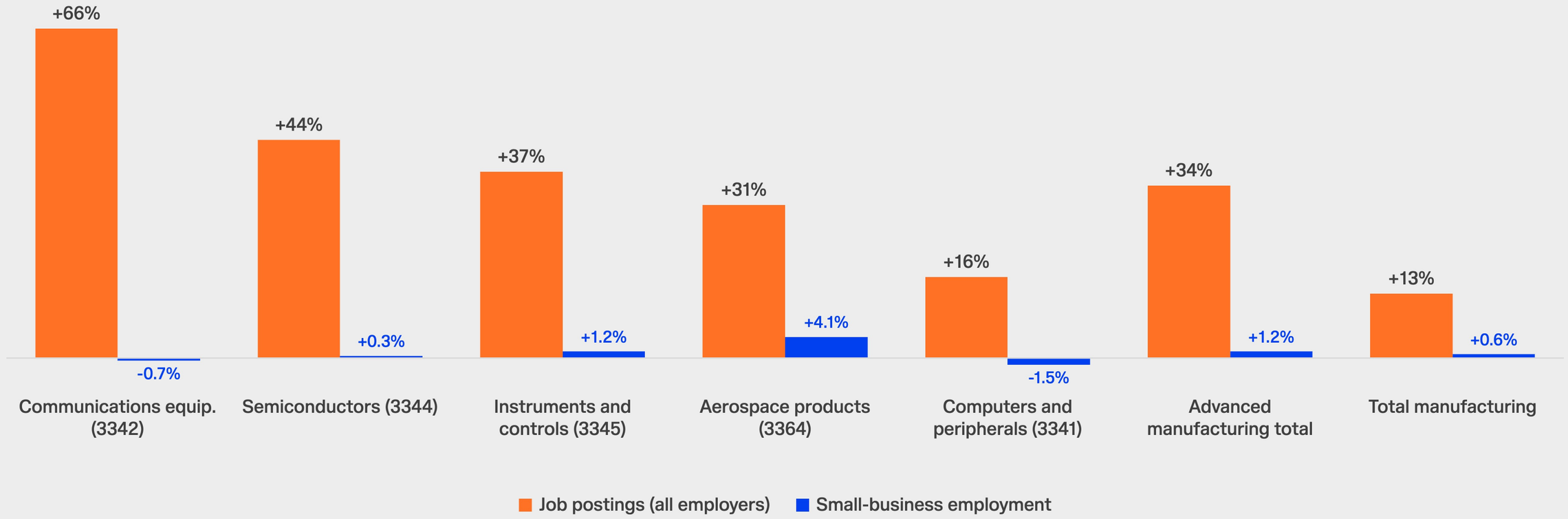


Source: Carbon Arc U.S. Job Postings - CA0097J

Advanced manufacturing postings outpace small-business headcount

Postings in five advanced manufacturing industries rose 34%, while headcount at small and mid-sized firms in the same industries rose 1.2%, above panel-wide growth of +0.8% and manufacturing growth of +0.6%. Aerospace led in small-firm headcount at +4.1%; postings for communications equipment companies rose 66% while headcount fell 0.7%. Total manufacturing postings increased 12.8%, with headcount rising 0.6%.

Y/Y change, Jan to Sep 2026, by NAICS 4-digit industry

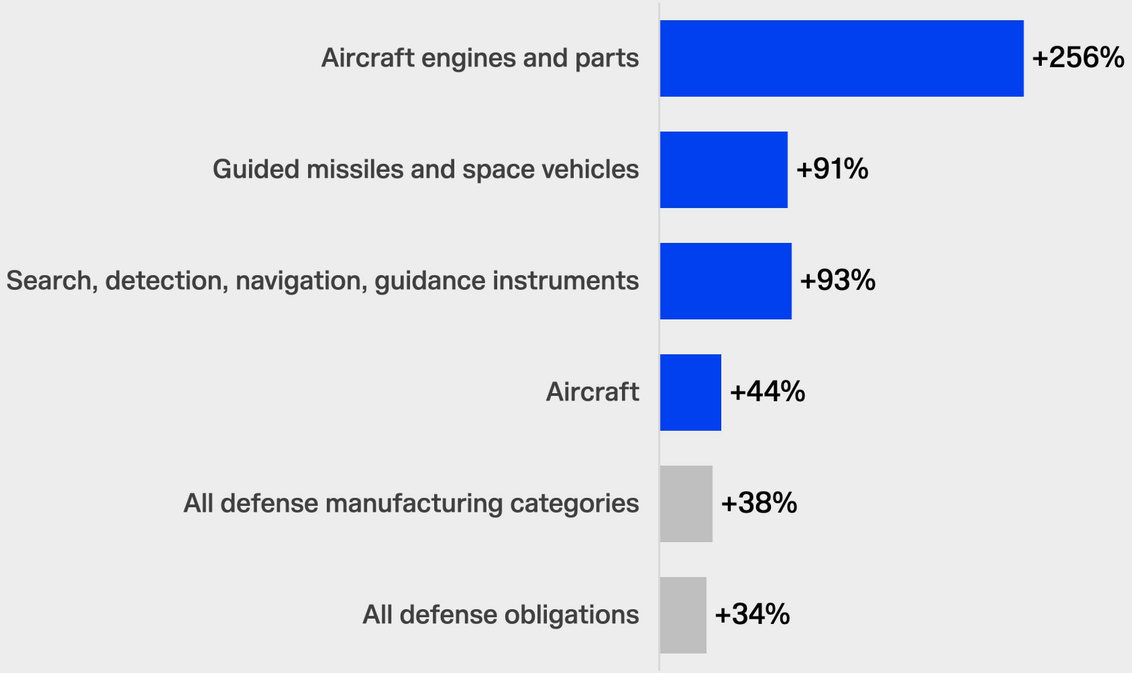


Source: Carbon Arc U.S. Job Postings - CA0097J; Carbon Arc SMB Workforce - CA0055

Defense contract dollars confirm the demand

Defense contract obligations (including Coast Guard) reached $191B in Jan to Jun 2026, up 34% from 2025 and 42% from 2024, vs. +1.5% growth for the rest of the federal government since 2024. Dollars rose fastest in aircraft, missile and instrument categories, the same industries where job postings jumped. Among the largest contractors shown, contract dollars and tech postings moved in the same direction.

Defense contract obligations (Defense Department and Coast Guard), Y/Y change, Jan to Jun 2026



Five largest prime contractors plus two defense-tech firms

Company	Obligations Jan to Jun 2025	Obligations Jan to Jun 2026	Tech Postings Y/Y
RTX	$6.8B	$20.6B	+89%
Lockheed Martin	$19.4B	$25.6B	+125%
Boeing	$6.3B	$9.8B	+44%
Northrop Grumman	$6.1B	$7.8B	+6%
General Dynamics	$17.9B	$15.9B	-8%
SpaceX	$0.3B	$4.4B	+55%
Anduril Industries	$0.07B	$0.60B	+92%

Source: Carbon Arc Global Government Contracts - CA0069G; Carbon Arc U.S. Job Postings - CA0097J

Channel experts: defense demand is outrunning supply

Semiconductor distributors and reps selling into defense and industrial manufacturers describe accelerating military demand and component lead times that have roughly doubled. A C-suite executive at a semiconductor rep firm describes holding back on hiring with uncertainty on how long the cycle lasts. Supply constraints and AI uncertainty are possible explanations for postings running far ahead of small-business headcount.

Defense demand keeps accelerating

“the mil-aero business just continues to grow and there's demand there and I'm struggling to meet some of that demand too.”

C-suite, semiconductor rep, US Southeast, Oct 2026

“Whether we have backlog from the government or the prime yet to buy this product, we're putting it on our nickel and we're going to go buy a year out.”

C-suite, semiconductor rep, US Southeast, Oct 2026

“probably 80% plus is going to aerospace and defense related customers, primes, et cetera.”

C-suite, mil-aero distributor, global, Aug 2026

Parts shortages limit production

“we expect maybe if it's not great, it's like an 18- to 24-week lead time, but right now those things are like 40, 50 weeks plus”

Senior executive, component distributor, global, Oct 2026

“we've got a project that we're going to sideline for a few months”

Senior executive, component distributor, global, Aug 2026, relaying customer conversations

Small suppliers: positioning, not hiring

“it's going to be lower cost systems, but much higher volume.”

C-suite, semiconductor rep, US Southeast, Oct 2026, on defense procurement

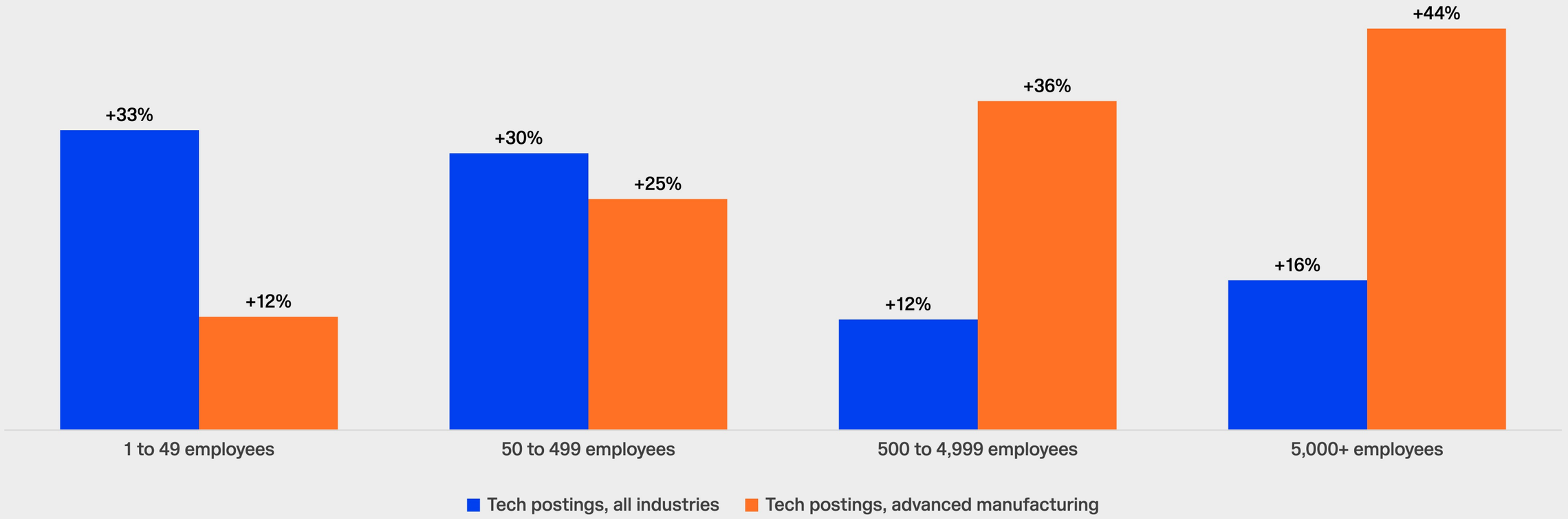
“we're not adding staff, we're not spending capital, we're being very conservative with our money”

C-suite, semiconductor rep, US Southeast, Oct 2026, on its own firm

Small employers are posting more for tech roles

Across all industries, tech postings rose 33% at companies under 50 employees and 30% at companies with 50 to 499, versus 12% to 16% at larger companies. Advanced manufacturing runs the other way: tech postings grew fastest at the largest employers, +44% Y/Y for companies with 5,000+ employees, and just 12% Y/Y at their smaller competitors.

Tech postings (SOC 15 + 17), Y/Y change, Jan to Sep 2026, by employer headcount



Source: Carbon Arc U.S. Job Postings - CA0097J; Carbon Arc Job Movements - CA0053

Defense, federal contractors, and consulting firms lead tech postings

Tech postings tracked overall postings growth closely at many firms, but grew faster than overall postings at Lockheed Martin, RTX, and L3Harris, consistent with defense contract growth in aerospace and technology development.

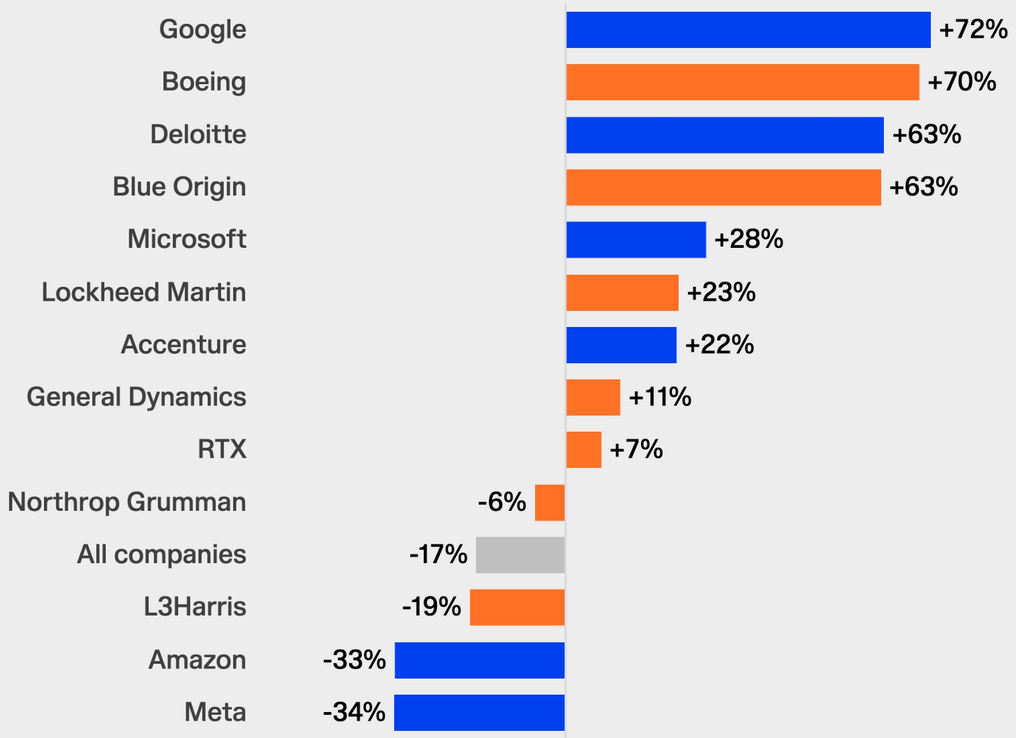
Company	Industry (NAICS 4)	Tech Postings 2025	Tech Postings 2026	Tech Y/Y	All Postings Y/Y
Accenture	Computer systems design	14.2k	35.1k	+146%	+144%
Lockheed Martin	Aerospace products	9.2k	20.7k	+125%	+82%
Jacobs Solutions	Engineering services	3.5k	12.2k	+248%	+228%
RTX	Instruments and controls	8.8k	16.5k	+89%	+60%
L3Harris Technologies	Communications equipment	4.1k	11.1k	+170%	+106%
Maximus	Consulting / federal services	2.1k	8.8k	+319%	+315%
Deloitte	Consulting	6.0k	12.7k	+112%	+118%
Google	Web search and information	11.0k	17.0k	+55%	+55%
Concentrix	Consulting / customer experience	5.8k	0.6k	-90%	-72%
Lumen Technologies	Telecom	13.9k	8.9k	-36%	-35%
Meta	Web search and information	8.3k	3.6k	-57%	-50%
Black & Veatch	Engineering services	6.2k	2.2k	-65%	-62%

Source: Carbon Arc U.S. Job Postings - CA0097J

Job movements confirm the aerospace and consulting shift

Tracking new tech starts (engineering and IT functions) at large companies in 1H26 vs. 1H25, starts at Google, Boeing, Deloitte and Blue Origin rose 60-72% against a 17% decline for all companies. Starts at Meta and Amazon fell by about a third, directionally in-line with Meta's 57% drop in tech postings.

New US tech starts, Y/Y change, Jan to Jun 2026 vs Jan to Jun 2025

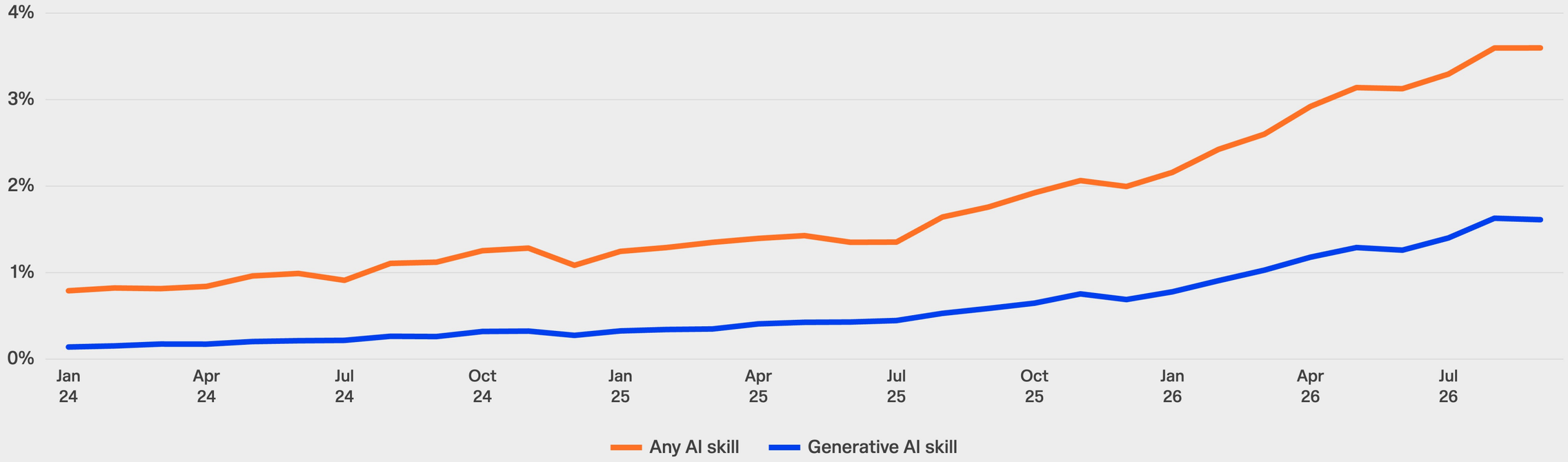


Source: Carbon Arc Job Movements - CA0053

AI skill requirements have nearly tripled since January 2025

The share of postings listing an AI skill rose from 1.24% in January 2025 to 3.59% in September 2026, and postings listing generative AI skills rose five-fold to 1.61%. Tech roles lead: 21% of computer and math postings now ask for an AI skill, up from 13%.

Share of postings listing an AI skill, by month posted



Source: Carbon Arc U.S. Job Postings - CA0097J

Within tech postings, named AI tools and agent skills rise fastest

Breaking the AI trend into specific skills, the biggest gains are named coding assistants and the frameworks for building AI agents. Older skills such as Hadoop and jQuery lost about half their share of tech postings.

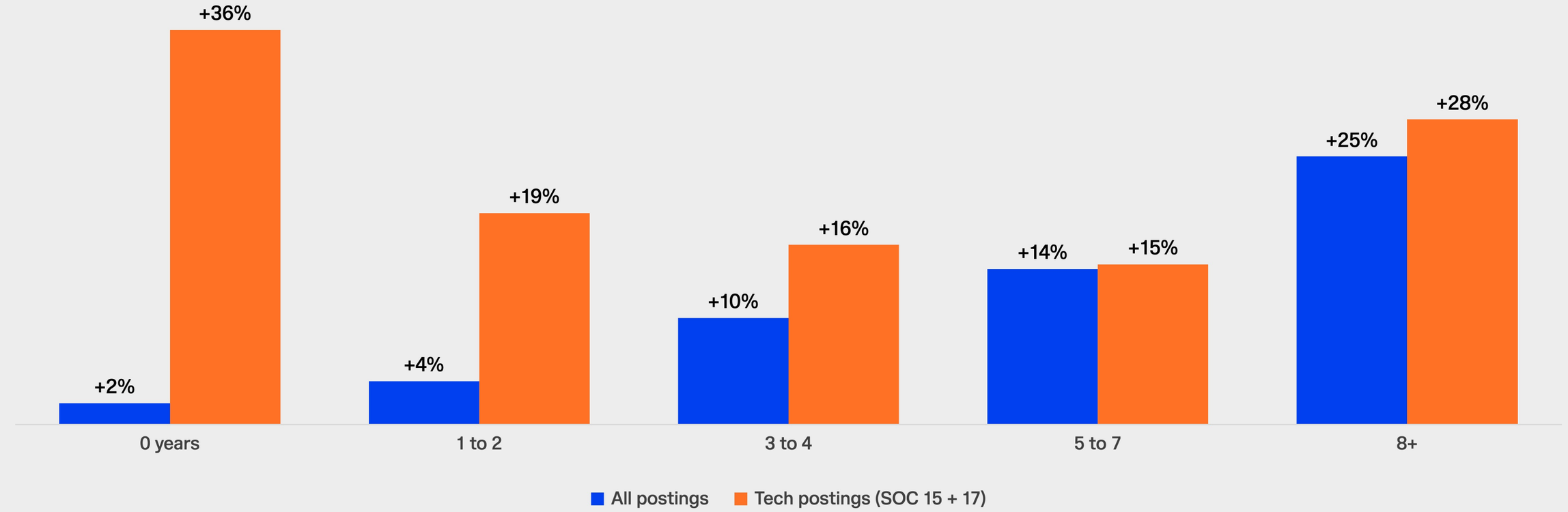
Skill	Share of Tech Postings 2025	Share of Tech Postings 2026	Relative Change
Claude Code	0.02%	0.69%	34x
Model Context Protocol (MCP)	0.03%	0.30%	8x
Agentic Systems	0.06%	0.48%	7x
Claude AI	0.13%	1.01%	7x
GitHub Copilot	0.10%	0.76%	7x
Agentic AI	0.30%	1.85%	5x
Responsible AI	0.24%	1.24%	4.6x
AI Agents	0.34%	1.72%	4.5x
Google Gemini	0.13%	0.53%	3.5x
Apache Hadoop	1.09%	0.67%	0.5x
jQuery	0.72%	0.43%	0.5x

Source: Carbon Arc U.S. Job Postings - CA0097J

Overall postings shift senior, but tech roles buck the trend

Across all postings listing experience requirements, roles requiring 8+ years of experience grew 24.5% while roles requiring no experience grew 1.9%. In tech roles, no-experience postings grew 36%, faster than any other band.

Postings Y/Y change by minimum years of experience required, Jan to Sep 2026

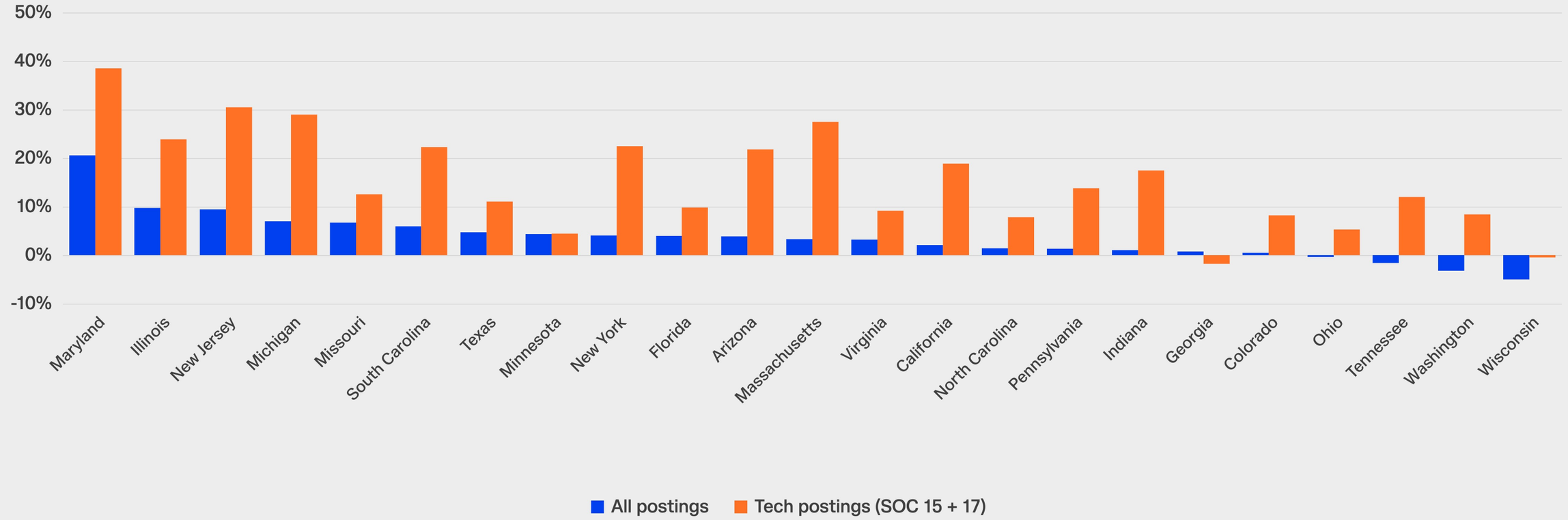


Source: Carbon Arc U.S. Job Postings - CA0097J

Maryland, Illinois, and New Jersey lead state posting growth

Postings for jobs in Maryland rose 21% and its tech postings 39%, the fastest of any state with 500k+ postings, consistent with defense and federal contractor demand. Tech postings rose faster than total postings in every state shown except Georgia, and grew even where total postings fell (Ohio, Tennessee, Washington).

Postings Y/Y change, Jan to Sep 2026, states with 500k+ postings



Source: Carbon Arc U.S. Job Postings - CA0097J