

# Wanted: Crane Operators

## Nailing down boomer bust is difficult.

In 1979 when he was a journalist writing about cranes, Graham Brent was already hearing about a looming shortage of crane operators. In the ensuing decades, including 25 years at the helm of the National Commission for the Certification of Crane Operators, Brent heard that dire warning time and again.

“You know, it just really doesn’t happen,” said Brent, who for the last two years has been the chief executive officer of the NCCCO Foundation.

Demand for crane operators has always fluctuated, particularly in the U.S., where contractors will hire operators for a big project and then let them go once the work is done. Those operators will find jobs on another project for another large company. So it’s cyclical.

One difference this time is that a \$2 trillion infrastructure plan proposed by President Biden will likely cause “an explosion of activity,” Brent said. “Our demand would then be so much greater that we’d see a shortage.”

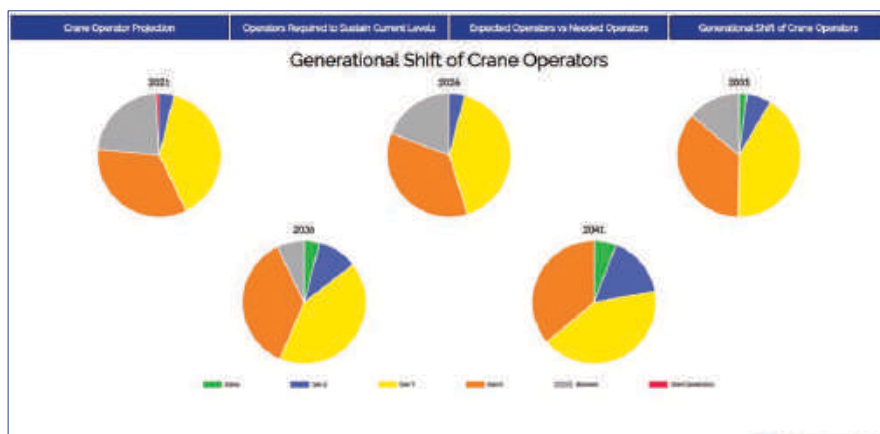
### Solid Numbers Lacking

Exactly how big a shortage is difficult, if not impossible, to pin down.

In the 1970s, the baby boomers were mostly in their 20s and at the start of their careers. As they’ve aged, they’ve become like the proverbial pig in the python, a bulge snaking along the demographic digestive tract. Five decades later in the 2020s, boomer crane operators have reached retirement age. But whether they are actually retiring and in what numbers is again difficult to quantify.

“Honestly, you could almost just put your thumb in the air and come up with a number,” Brent said.

One definitive number he did locate was in a 1996 document from the Occupational Health and Safety Administration. It estimated the U.S. then had more than 250,000 crane operators.



Application created for BC Crane Safety illustrates the expected generational change among crane operators in B.C. from 2021 to 2041.



Graham Brent



Clinton Connell



Lionel Railton



Gerry Wiebe

That same document counted about 125,000 cranes working construction and another 80,000 to 100,000 in general and maritime industries.

The U.S. Bureau of Labor Statistics website, however, reports that there were only 45,700 crane and tower operators in 2019. The BLS projected that the number will only increase by about 2% — 800 more operators — to 46,500 in 2029.

“I will say sorry, that is so wildly off I’m stunned they even bothered to publish it,” Brent said of the BLS figures. “I’ve lost track a little bit of NCCCO’s certification numbers, but when I left there were over 120,000 certified.”

The International Union of Operating Engineers has about 400,000 members in the U.S. and Canada. About 30% of operating engineers are “involved in the hoisting industry,” said Lionel Railton, the union’s director for Canada. Subtract

the 55,000 Canadian members and that gives an estimate of about 100,000 IUEO crane operators in the U.S. If the union represents about half the crane operators in the country — Railton said it’s not lower than 50% in most jurisdictions and up to 90% in some markets — that would peg the total of U.S. crane operators at around 200,000. That’s in a similar ballpark as the 1996 OSHA estimate.

The union has a good handle on the demographics of its membership in large part because it manages its own pension plans, Railton said.

“One gauge that we can clearly monitor is the age of the members and what they do,” Railton said. “So when they’re getting into that retirement window, it helps us in our training budgets.”

It also enables the IUOE to manage the supply of crane operators to meet peak demand, which is why Railton doesn’t see the sky falling yet. “Now, that’s not saying that we’ve managed to

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fill every position,” Railton said. “But to be honest with you, we’ve managed to meet the peak demand.”

## BLS Figures Miss Rental

One reason the BLS number appears so off the mark is that the BLS gets its figures primarily from general contractors, said Jackie Roskos, director of the Specialized Carriers & Rigging Foundation. “It’s not specific to our industry,” she said.

That is borne out by a deeper dive into the BLS data, which reveals that by BLS count only 1.3% of crane operators (about 600 total) work in rental and leasing. Crane rentals, however, account for a large share of the work done by crane company members of the SC&RA.

“I don’t think that they’ve really captured the type of work that our crane operators are doing,” Roskos said of the BLS data. “Obviously, they’ve tried. But I do think it’s such a specialty niche that it’s kind of lost and not included.”

It’s little wonder then that the SC&R Foundation’s research committee has conducted an internal workforce survey to count the number of crane operators among its member companies. “We have the data set that’s been reviewed by committee members, and it will be going out to our members, probably next month,” Roskos said. Those figures will then be made public.

While Roskos didn’t wish to be presumptuous about what those data would reveal, she did say that it’s broadly known that “a significant shortage” of crane operators and other skilled trades people looms on the horizon.

The Crane Rental Association of Canada is also looking at doing a full industry analysis of the industry’s scope and economic impact. “It’s on my bucket list,” said Claire Bélanger-Parker, the association’s executive administrator.

Bélanger-Parker expects the project to become a major goal now that CRAC’s new board of directors is in place.

“We want to prepare our members for the workforce of the future, as well as make sure our existing leaders in the industry are there to mentor up-and-coming workers, because COVID has forced some people into retirement for health concerns,” Bélanger-Parker said. “Others

may never return to work. And those who will continue working are looking at retirement in the next five years.”

## B.C. Has Solid Data

One jurisdiction that already holds detailed demographic data on crane operators is British Columbia. The B.C. Association for Crane Safety, which oversees crane operator certification in the province, has 9,727 operators holding a least one certification, according to recent figures it shared with *Crane Hot Line*.

Of those, 1,333 are age 60 or older, 1,648 are 50 to 59, and 1,650 are of unknown age. Only 655 are in their 20s.

As with the U.S., however, those figures don’t align with numbers from Statistics Canada, which in 2016 counted 14,955 operators for the entire country.

However, according to the Canadian government’s Job Bank website, the country had 20,200 crane operators in 2018. Their median age was 42 and average retirement age was 64.

In both cases, the figures are wildly out of line with those of B.C., which has about one-seventh of Canada’s population. The Job Bank even says that B.C. has only 2,100 crane operators, less than a quarter of BC Crane Safety’s numbers.

Clinton Connell, executive director of BC Crane Safety, attributed the discrepancy between his association’s figure and those of the Canadian government to how the federal government classifies the occupation. For example, Statistic Canada’s NOC code for crane operator covers operators of large mobile cranes but doesn’t include all the smaller truck-mounted cranes that make up the bulk of B.C.’s credentials.

“It’s honestly overlooking the largest portion of the business, which is the commoditized side of crane operations — all the pickup and deliveries, the taxi service companies, and all the small-to-medium cranes,” Connell said.

After he took over leadership of BC Crane Safety from founding executive director Fraser Cocks last year, Connell decided to revamp the association’s website. He hired industry consultant Gerry Wiebe to do it. Wiebe wanted to make sure that the site appealed to potential crane operators.

“In other words, boomers are leaving,

Generation X and Generation Y are up and coming,” Wiebe said. “We need to make absolutely sure we understand who we’re writing this website for, in terms of the younger membership, and in terms also very specifically, of how we capture and retain Generation Z members. Those are those are the critical up and comers.”

As part of that exercise, Wiebe hired a recent computer science graduate to build an app that would combine BC Crane Safety demographic data with population trends from Statistics Canada to illustrate how the generational makeup of crane operators would change over time.

The app also has a function that enables the user to plug in an average retirement age. It reveals that even with an average retirement age of 65, B.C. would face a shortfall of operators by 2022 because more boomers would be leaving the trade than the 850 new operators certified in a typical year.

“In 2031, we are going to be net 3,891 operators to the negative,” Wiebe said, citing figures the app calculated.

He cautioned that the figures are “directional” and “trending,” not “accountant-grade.” Nevertheless, he added, “If we don’t get going right now, literally five to seven years from now we’re in a world of pain.”

While Wiebe acknowledged that other jurisdictions might analyze the information differently, “The ratios, formulas, and issues we’re uncovering probably exist coast to coast in Canada and probably across the United States, too.”

Connell, however, cautioned against extrapolating the B.C. figures beyond that province. “How crane operators are even classified, period, varies hugely from jurisdiction to jurisdiction,” he said.

Still, Connell also acknowledged what Graham Brent observed back in 1979 — labor shortage worries have dogged the industry for a long time.

“I think there’s a 20-year window where the baby boomers are exiting the workforce,” Connell said. “And we’re probably five, six, or seven years into that already.”

In a future issue, we’ll look at what the crane industry is doing, or failing to do, to ensure that new generations of crane operators fill any voids left by the retiring boomers. ■