



CONSTRUCTION SKILLS SHORTFALLS:

A solution to the construction industry's shortage of skilled workers may be found in proactive programs that combat the demographics of age with the demographics of gender.

THE SITUATION IS NOT IMPROVING

ANIRBAN BASU AND JOSEPH NATARELLI

A perfect storm has conspired to create the workforce circumstances facing the U.S. construction industry today. By last year's final month, contractors collectively reported the existence of 382,000 unfilled job openings in the United States on a seasonally adjusted basis.¹ Just a year earlier, the figure stood below 150,000.²

During the worst of the economic downturn, the number of unfilled construction jobs stood at a minuscule 25,000 nationally.³ In other words, since April 2009, the number of available, unfilled construction jobs has increased by more than 1,400 percent.

At the root of the labor market's inability to provide sufficient numbers of skilled workers has been sheer demographics. For example, the baby boomers grew up during a period of rapid economic growth. The

economic dominance of the United States was largely unrivaled during the three decades following the second World War, a war that destroyed the capacity of other industrialized nations to produce. This growth was associated with new jobs being created in manufacturing, construction, logistics, and other segments using skilled workers. Many of these jobs paid well but did not require any college education. The then surging middle class in the United States was largely built around these industries. Now, the generation that grew up during that period is heading into retirement, resulting in a loss of enormous pools of talent, commitment, and experience.

In contrast to the baby boomers, the incoming workforce grew up during a period of more sporadic growth — one that has emphasized the need for significant educational credentials in order to pursue middle-class status or better. With U.S. manufacturing employment sinking during recent decades and given the sharp downturn in construction employment that occurred roughly a decade ago, many younger workers have eschewed occupations related to goods-producing industries in favor of service

ANIRBAN BASU is the chief construction economist at Marcum LLP and the CEO of the Sage Policy Group.

JOSEPH NATARELLI is Marcum LLP's national construction industry leader and an office managing partner in the firm's New Haven, Connecticut, region.



**OF THE MORE
THAN TEN
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ARE FEMALE.**

jobs in hospitality, health care, professional services, and finance.

There may be cultural aspects to this as well, including a search for greater work-life balance among younger workers, a demonstrated aversion to working outside of an office setting, and a lack of awareness among educators regarding opportunities available in construction.⁴ Due to the elevated focus on test-taking in grade school, curricula have generally removed experiential learning in shop classes and similar settings, resulting in excessively low exposure to the skilled trades.

Evidence of worsening human capital shortfalls is apparent everywhere. The Associated General Contractors (AGC) of America recently released its 2019 Construction Outlook Survey. Roughly 30 percent of survey respondents listed the worker shortage as their top concern, topping other prominent concerns such as tariffs on steel and aluminum and a potential full-blown trade war with China. Despite tariffs and sharp increases in the price of steel and several other construction materials in recent quarters, more than seven times as many respondents indicated that workforce issues trumped rising materials prices as their leading concern.⁵

Remarkably, despite these staffing challenges, the construction industry soldiers forward. Construction put-in-place has generally been on the rise in recent months, including in public segments like transportation, water systems, and public safety.⁶ AGC's survey notes that 79 percent of respondents intend to expand their workforce in the coming year.⁷ This is an indication of not only the strong demand for construction services, but the notion that firms continue to find ways to secure new workers. The continued ability of firms to find new workers is evidenced by the nearly 340,000 net new construction jobs added in the United States between January 2018 and January 2019.⁸

The question is whether these new workers are as productive as the ones who have left the industry. Construction has been notorious in recent decades for its lack of productivity growth, often measured as output per worker per hour. Time will tell whether these new workers are up to the challenge. Many metrics are available,

including those related not only to productivity, but worker safety.

The solution

The solution is women. It is still the case that a vast majority of construction workers are men. The number of female construction workers is scant. In fact, of the more than ten million construction workers in America, fewer than one million are female. Circumstances are even more unbalanced when one considers the number of women working on projects as laborers, where about 1 percent of workers are women.⁹

With its declining and rapidly aging population, Japan finds itself in similar circumstances. In response, Prime Minister Shinzo Abe instituted a program, dubbed "Womenomics," that aimed to bring more women into the workforce.¹⁰ The result has been an increase of women in the nation's construction industry, as well as an accompanying boom in spending on new technology and equipment that has reduced the importance of physical strength alone.¹¹

Similar efforts have begun to emerge in the United States. For example, Nontraditional Employment for Women (NEW) is a "sector-based workforce development program that prepares women for careers in the construction, transportation, energy, and facilities maintenance industries."¹² The New York-based organization offers a two-month apprenticeship program to women who want to enter the construction industry, with many graduates going on to pursue additional apprenticeship training.¹³

In Delaware, the state government has set up a similarly situated program to help usher more women into construction and other industries in which women have been traditionally underrepresented. As indicated by the *Delaware Business Times*, the Delaware Department of Labor developed a Registered Pre-Apprenticeship Program to prepare people for the demands of subsequent apprenticeships.¹⁴ Proactive programs and solutions, such as those created by the Delaware government and NEW, may make it possible to combat the demographics of age with the demographics of gender. ■

NOTES

- ¹ "Job openings: Construction," U.S. Bureau of Labor Statistics. Available at: <https://data.bls.gov/timeseries/JTS2300000JOL>.
- ² *Ibid.*
- ³ *Op. cit.* note 1.
- ⁴ "5 reasons why Millennials are great for the construction industry," Building Design + Construction (March 9, 2017). Available at: <https://www.bdcnetwork.com/blog/5-reasons-why-millennials-are-great-construction-industry>.
- ⁵ "2019 Construction Outlook survey results," The Associated General Contractors of America (Jan 2, 2019) (press release). Available at: <https://www.agc.org/news/2019/01/02/2019-sage-construction-hiring-and-business-outlook-survey>.
- ⁶ "Value of construction put in place at a glance," United States Census Bureau. Available at: <https://www.census.gov/construction/c30/c30index.html>.
- ⁷ *Op. cit.* note 5.
- ⁸ "Employment: Construction," U.S. Bureau of Labor Statistics. Available at: <https://data.bls.gov/timeseries/CES2000000001>.
- ⁹ Ellis, G., "Level the jobsite: Why the world needs more women in construction [infographic]," Construction Productivity Blog (March 5, 2018). Available at: <https://blog.plangrid.com/2018/03/level-the-jobsite-why-the-world-needs-more-women-in-construction-infographic>.
- ¹⁰ Abe, S., Shinzo Abe: Unleashing the power of 'Womonomics,' *The Wall Street Journal* (Sept 25, 2013). Available at: <https://www.wsj.com/articles/shinzo-abe-unleashing-the-power-of-8216womonomics8217-1380149475?tesla=y>.
- ¹¹ Kashima, M., "Executive perspective: 'Womonomics' in Japan," *Thomson Reuters* (Nov 8, 2018). Available at: <https://blogs.thomsonreuters.com/sustainability/2018/11/08/executive-perspective-womonomics-in-japan/>.
- ¹² "About NEW," Nontraditional Employment for Women. Available at: <http://www.new-nyc.org/pages/about.html>.
- ¹³ "'Times are changing:' More women breaking into construction industry," CBS New York (Feb 27, 2019). Available at: <https://newyork.cbslocal.com/2019/02/27/women-in-construction/>.
- ¹⁴ Vuocolo, A., Pre-apprenticeship program opens jobs to underrepresented groups, *Delaware Business Times* (Feb 27, 2019). Available at: <https://www.delawarebusinesstimes.com/delaware-offers-pre-apprenticeship-program-to-underrepresented-groups/>.