

First Quarter 2023







U.S. Economic Sentiment

Consumer prices rose in November at the slowest 12-month pace since December 2021, closing out a year in which inflation hit the highest level in four decades and challenged the Federal Reserve's ability to keep the U.S. economy on track.¹ @

In fact, just as the U.S. got used to thinking high inflation could be here to stay, signs are emerging that most of the surge through 2021 and the first half of 2022 was actually transitory — as Federal Reserve officials first thought.² @

A growing pessimism is one of the key findings of the fourth semiannual edition of McKinsey's American Opportunity Survey (AOS), which explores in depth Americans' perceptions of the current and future state of the US economy — and their place within it....Unlike previous surveys, the lack of optimism cut across all income levels, genders, and ages, with the sharpest declines among those aged 25 to 34 years old — a group we would expect to be optimistic given they are at the start of their careers and in a relatively jobrich economy.³

Real average hourly earnings for all employees decreased 1.9 percent from November 2021 to November 2022. The change in real average hourly earnings combined with a decrease of 1.1 percent in the

average workweek resulted in a 3.0-percent decrease in real average weekly earnings over this period.⁴ •

Last month, 83% of respondents to the University of Michigan's monthly survey of consumers said it was a bad time to buy (a home) — the highest share in the more than 60 years it has been asking the question.⁵ @

As of July 2022, there were 11.2 million available, unfilled job openings across all industries — nearly two openings for every unemployed person. The need to prove oneself has become less pressing. Instead, a new phenomenon has emerged: "quiet quitting." This occurs when someone does just enough work to retain their position, but no more. According to a recent Gallup survey, nearly half of America's workforce meets the definition of quiet quitting. Not coincidentally, worker productivity has been declining in 2022.6 ©

"2022 was the first time in 11 years that single-family starts declined, falling an estimated 12% to 999,000 units, the NAHB (National Association of Homebuilders) reported. "Our thesis is that recession is underway," (NAHB chief economist Rob) Dietz said...."We've never had a period where home prices have declined and there has not been a recession," he said. "I think the rest of the economy will feel it in 2023 via slowing economic output and rising job losses."

THE MARKET'S MESSAGE

The nation appears to be in somewhat of a funk. Eroding paychecks and an increasing pursuit of greener pastures leave U.S. workers somewhat restless and apprehensive. Persistent inflation has built a society of pessimists. Homeownership, once considered the American dream, is becoming even more elusive. There may be changes afoot, however, as home prices have seen a recent downturn.

- ¹ Guilford, Gwynn, "Inflation Rises at Slowest Pace in Nearly a Year," Wall Street Journal (WSJ), Dec 14, 2021, p. A1.
- ² Ip, Greg, "Why Inflation Has Been Cooling Down," WSJ, Jan 13, 2023, p. A2.
- https://www.mckinsey.com/featured-insights/inflation/inflation-weary-americans-are-increasingly-pessimistic-about-the-economy?stcr=8554 D75940534572B0A58757C19ED151&cid=other-eml-alt-mip-mck&hlkid=5dd4560b432f413e83e357fd3947915a&hctky=12986537&hdpid=95 97ffd9-9a64-4cea-a34f-1fb85db2e70c
- https://www.bls.gov/opub/ted/2022/real-average-hourly-earnings-down-1-9-percent-from-november-2021-to-november-2022.htm
- ⁵ Lahart, Justin, "For Bleak Housing Market, There is Reason to Bet on Recovery," Dec 22, 2022, p. B12.
- 6 https://constructionexec.com/article/job-sight-the-2023-construction-economic-forecast?utm_campaign=4a6d3ee3ea&utm_https://constructionexec.com/article/job-sight-the-2023-construction-economic-forecast?utm_campaign=4a6d3ee3ea&utm_medium=email&utm_source=ce_this_week&utm_content=volume_5_issue_48&utm_term=equipiment_and_fleet&mc_unique_id=81ea690ee4&aid=9238
- https://www.constructiondive.com/news/recession-is-underway-for-home-builders/641708/?utm_source=Sailthru&utm_medium=email&utm_campaign=Issue:%202023-02-01%20Construction%20Dive%20Newsletter%20%5Bissue:47736%5D&utm_term=Construction%20Dive





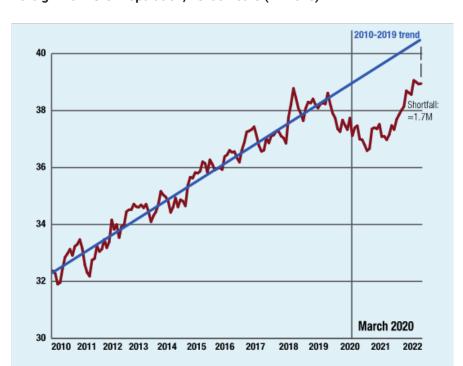


The Labor Shortage

As another year approaches, the construction industry will have to contend with a number of challenges, many of which have been building up over the course of years. At the forefront are structural shortages of trained construction workers, which are the product of Baby Boomer retirements, shifting technologies, a lack of labor-force growth, and the general tendency of younger workers to enter the skilled trades in smaller and smaller numbers.¹ •

More than inflation, more than the supply chain, more than government policies and regulations — labor shortages will be the defining challenge of the construction economy for the foreseeable future. ² **⊙**

"There was a point in time where he who had the people hoped he got the work," said Greg Sizemore, vice president of workforce development, safety, health and environmental for Associated Builders and Contractors. "Now it's he who has the work hopes he can find the people." 3



Foreign-Born U.S. Population, 18-65 Years (Millions) 4 0

Source: U.S. Bureau of Labor Statistics/U.S. Census Bureau, Current Population Survey

- 1 https://basu.substack.com/
- ² Ibid.
- https://www.constructiondive.com/news/hardest-construction-jobs-to-fill-in-2023/638993/?utm_source=Sailthru&utm_medium=email&utm_campaign=Issue:%202023-01-17%20Construction%20Dive%20Newsletter%20%5Bissue:47331%5D&utm_term=Construction%20Dive
- https://constructionexec.com/article/job-sight-the-2023-construction-economic-forecast?utm_campaign=4a6d3ee3ea&utm_medium=email&utm_source=ce_this_week&utm_content=volume_5_issue_48&utm_term=equipiment_and_fleet&mc_unique_id=81ea690ee4&aid=9238







The Labor Shortage (continued)

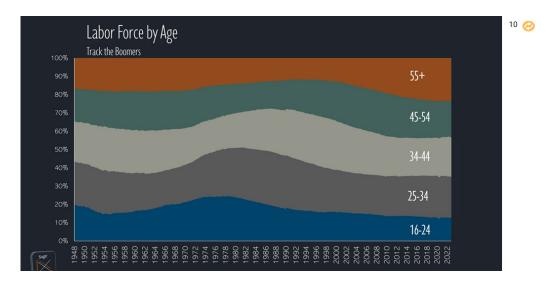
In March 1953, 96.0% of prime age men were employed, the highest level on record. That's down to 85.7% as of November 2022, which means about one in ten fewer prime age men are employed today than seventy years ago. 500 men age men are employed today than seventy years ago. 100 men age men are employed today than seventy years ago. 100 men age men are employed today than seventy years ago. 100 men age men age men are employed today than seventy years ago. 100 men age men ag

If the pandemic convinced a lot of people to retire early, you'd expect to see some uptick in the level of retired workers receiving Social Security (SS) benefits. The data don't show that, and 2020 and 2021 actually saw the smallest increase in retired beneficiaries since the mid-2000s.⁶ •

Fortunately, the Census Bureau's Current Population Survey has some data (that's a pain to access) on retirements, and according to this Federal Reserve paper, "as of October 2022, the retired share of the U.S. population was nearly 1.5 percentage points above its pre-pandemic level...accounting for nearly all of the shortfall in the labor force participation rate." The authors estimate that more than half of that increase is due to "excess retirements," meaning people who normally wouldn't have retired. ⁷ •

So the workforce is the oldest it's ever been, and even with a rise in excess retirements, the pandemic didn't really change that. As of November 2022, nearly one in five workers was 55+, and there are now more workers 55+ than in any of the other age cohorts shown below. That had never been the case before July 2015.8

The U.S. fertility rate fell to 1.6 births per woman in 2020, the lowest level on record and well below the replacement level of 2.1....The CBO (Congressional Budget Office) projects that births minus deaths will make a negative contribution to U.S. population growth by 2046.⁹ •



Source: U.S. Bureau of Labor Statistics Created by Sage Economics

- https://constructionexec.com/article/job-sight-the-2023-construction-economic-forecast?utm_campaign=4a6d3ee3ea&utm_medium=email&utm_source=ce_this_week&utm_content=volume_5_issue_48&utm_term=equipiment_and_fleet&mc_unique_id=81ea690ee4&aid=9238
- 6 Ibid
- ⁷ Ibid.
- ⁸ Ibid.
- ⁹ Ibid

¹⁰ https://basu.substack.com/p/where-have-all-the-workers-gone?utm_source=substack&publication_id=77114&post_id=92310696&utm_medium=email&utm_content=share&triggerShare=true&isFreemail=true







The Labor Shortage (continued)

Net international migration from 2020 to 2021 added just 247,000 people to the U.S. population, the lowest number in a very long time and a direct result of the pandemic....The point here is that we're not admitting immigrants at a rate that can make up for the workforce cliff that is Baby Boomer retirement. 10 0

Some of the toughest construction jobs to fill 11 @

Job	% contractors having trouble staffing	Mean hourly wage	Mean annual salary	Employment (2021)
Mechanics/Millwrights	87%	\$28.55	\$59,380	483,200
Carpenters	85%	\$26.53	\$55,190	668,060
Plumbers	82%	\$28.79	\$59,880	469,000
Construction managers	81%	\$47.55	\$98,890	478,500
Electricians	79%	\$30.44	\$63,310	650,580

Source: BLS and AGC data

Among the most dangerous professions in the United States based on the risk of fatality - as identified by the Occupational Safety and Health Administration (OSHA) — are construction laborers (39.5 deaths per 100,000 workers), roofers (29.3), electricians (15.9), welders and cutters (12.0), and structural metal workers (64.4).12 0

The number of unemployed jobseekers with construction experience fell by 54,000 (-11%) y/y (year-overyear) to 443,000, and the industry's unemployment rate declined from 5.0% to 4.4% - the lowest December figures in the 22-year history of the series. 13 0

According to Build Your Future, approximately 3 of 10 construction workers will retire by 2026. By the beginning of the next decade, more than 40% of current workers will have disappeared from the industry. 14 @

THE MARKET'S MESSAGE

There is no denying that the workforce is aging. Retirements are up, and migration is down. People are living longer, and birth rates are down. The nature of construction - it is hard and dangerous work - is partially to blame for the unfilled jobs in the industry. Filling the construction pipeline, even at higher pay rates and longer work weeks, will take some creativity.

¹¹ https://www.constructiondive.com/news/hardest-construction-jobs-to-fill-in-2023/638993/?utm_source=Sailthru&utm_medium=email&utm_ $campaign=Issue: \%202023-01-17\%20 Construction \%20 Dive \%20 Newsletter \%20\%5 Bissue: 47331\%5 D\&utm_term=Construction \%20 Dive M20 Dive M20$

¹² https://constructionexec.com/article/job-sight-the-2023-construction-economic-forecast?utm_campaign=4a6d3ee3ea&utm_ medium-email&utm_source-ce_this_week&utm_content=volume_5_issue_48&utm_term=equipiment_and_fleet&mc_unique_ id=81ea690ee4&aid=9238

¹³ Data Digest, Vol. 23, No. 2, Jan 6-13, 2023.

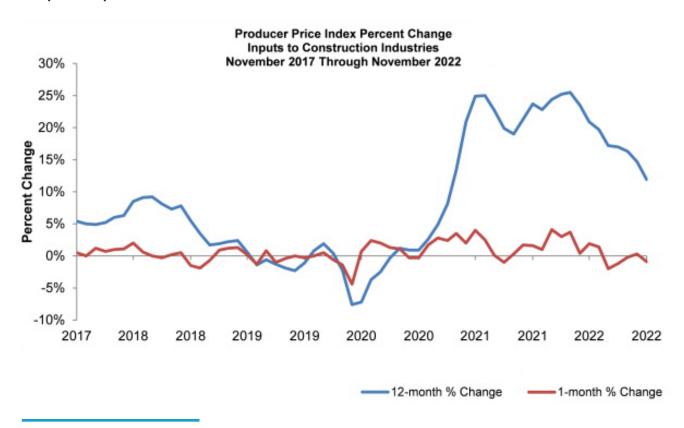
¹⁴ https://constructionexec.com/article/job-sight-the-2023-construction-economic-forecast?utm_campaign=4a6d3ee3ea&utm_ medium-email&utm_source-ce_this_week&utm_content=volume_5_issue_48&utm_term=equipiment_and_fleet&mc_unique_ id=81ea690ee4&aid=9238





Construction Input Price Growth Subsides

The producer price index 1 0



Source: U.S. Bureau of Labor Statistics

The producer price index (PPI) for material and service inputs to new nonresidential construction declined 0.4% for the month. The index rose 10.1% y/y — markedly more than the 7.1% increase in the consumer price index, the most widely watched measure of inflation.² •

Contractors "are anticipating construction support staff wage increases to average 4.5% by year end, up from the 2021 actual increase of 4.4%" and 3.8% in 2020, construction pay consultancy PAS reported on December 27, based on its survey of 209 firms.³ •

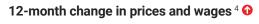
- https://www.abc.org/News-Media/News-Releases/entryid/19725/abc-construction-materials-prices-down-1-in-november-still-up-40-since-february-2020
- ² Data Digest, Vol. 22, No. 41, Dec 7-16, 2022.
- ³ Data Digest, Vol. 23, No. 1, Dec 27, 2022 Jan 5, 2023.





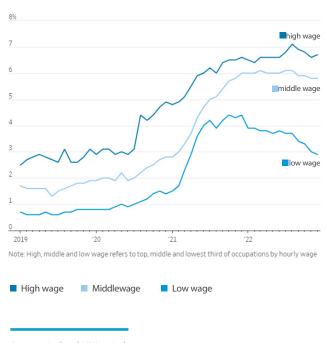


Construction Input Price Growth Subsides (continued)





Share of job postings on Indeed advertising a 'signing bonus' 5 🥝



Source: Indeed Hiring Lab

According to the BLS (Bureau of Labor Statistics), by early 2022, nonsupervisory construction positions were collectively experiencing their fastest rate of wage growth in 40 years....As companies like Walmart and Amazon have dramatically expanded entry-level compensation, construction's compensation advantages have eroded. 6 @

THE MARKET'S MESSAGE

Omair Sharif (core services excluding shelter)

Prices increases for inputs to construction are levelling off or falling in tandem with prices in the general economy, an interesting phenomenon that defies the adage that construction lags the general economy by nine months. While prices are still extremely high by historical standards, the labor market in particular has sharply turned the corner.

- 4 https://www.wsj.com/articles/inflation-is-turning-the-corner-11673546157?mod=Searchresults_pos1&page=1
- https://constructionexec.com/article/job-sight-the-2023-construction-economic-forecast?utm_campaign=4a6d3ee3ea&utm_ medium-email&utm_source-ce_this_week&utm_content=volume_5_issue_48&utm_term=equipiment_and_fleet&mc_unique_ id=81ea690ee4&aid=9238







Volume Going into 2023

Associated Builders and Contractors (ABC) reports today (Dec 13) that its Construction Backlog Indicator increased to 9.2 months in November, according to an ABC member survey conducted November 21 to December 6. The reading is 0.8 months higher than in November 2021....Backlog is now at its highest level since the second quarter of 2019. The increase in backlog observed in November is largely attributed to contractors with under \$30 million in revenue, which now have their highest level of backlog in over three years. ¹ •

"The rise in backlog is remarkable and unexpected," said ABC's chief economist Anirban Basu. "A number of contractors have been reporting that their backlog has risen rapidly over the past three months, which is counterintuitive given the pervasive view that the broader economy is headed into recession.² •

Nonresidential building and nonbuilding starts fell 25% and 21% respectively in November from the previous month....Nonresidential building and nonbuilding starts jumped 36% and 16% year over year.³ *⊘*

"While it seems unlikely that backlog will hold up in the face of the Federal Reserve's efforts to slow demand, many predicted that backlog would have dipped by now and that has yet to transpire," said Basu. "What's more, many contractors expect sales and staffing levels to climb over the next six months, while profit margins are projected to remain stable." 4

Only 5% of firms reported having worked on new projects funded by the 2021 Infrastructure Investment and Jobs Act, while 6% said they had won bids but have not started work.⁵ @

U.S. population growth between July 1, 2021, and July 1, 2022, rebounded to 0.38% from a record-low 0.16% in the previous 12 months, but growth was limited to fewer states, the Census Bureau reported on Thursday (Jan 22). Population changes over time are a major contributor to demand for numerous types of construction, funding for public construction, and supply of potential construction workers.⁶ •

- https://www.abc.org/News-Media/News-Releases/entryid/19722/commercial-institutional-and-health-care-construction-drive-abcs-backlog-indicator-to-highest-level-since-q2-2019
- ² Basu in https://www.abc.org/News-Media/News-Releases/entryid/19722/commercial-institutional-and-health-care-construction-drive-abcs-backlog-indicator-to-highest-level-since-q2-2019
- https://www.constructiondive.com/news/total-construction-starts-nonresidential-fall-november/639245/?utm_source=Sailthru&utm_medium=email&utm_campaign=Issue:%202022-12-21%20Construction%20Dive%20Newsletter%20%5Bissue:46893%5D&utm_term=Construction%20Dive
- 4 Ibid
- ⁵ Data Digest, Vol. 23, No. 1, Dec 27, 2022 Jan 5, 2023.
- ⁶ Data Digest, Vol. 22, No. 42, Dec 19-23, 2022.





Volume Going into 2023 (continued)

The Architecture Billings Index (ABI) registered a score of 46.6 in November, down from 47.7 in October and the second-straight reading below 50 since January 2021, the American Institute of Architects (AIA) reported on Wednesday (Dec 14)....Any score below 50 means more firms reported decreased billings than increased billings.⁷ •

Compared to 2022, do you expect the available dollar value of projects you compete for in 2023 to be higher/lower/about the same (answer for all market areas in which your business operates): 8 @

Responses: 1,021

Market	Higher	Lower	Same	Net*	2022 Net
Bridge/Highway	50%	9%	41%	42%	57%
Transportation (e.g., transit, rail, airport)	52%	11%	37%	42%	51%
Water/Sewer	48%	11%	41%	38%	50%
Federal (e.g., VA, GSA, USACE, NAVFAC)	49%	11%	40%	37%	37%
Other Healthcare	42%	14%	43%	28%	41%
Power	41%	14%	45%	28%	35%
Hospital	40%	16%	44%	23%	38%
Public Building	39%	16%	44%	23%	20%
K-12 School	37%	20%	43%	16%	19%
Higher Education	36%	20%	44%	16%	16%
Manufacturing	39%	25%	37%	14%	27%
Data Center	35%	22%	43%	12%	-
Warehouse	36%	26%	38%	10%	41%
Other	26%	16%	59%	10%	-
Multifamily Residential	35%	34%	32%	1%	32%
Lodging	28%	32%	39%	-4%	6%
Private Office	22%	43%	35%	-21%	-8%
Retail	22%	44%	34%	-22%	-8%

Overall, contractors expect the value of infrastructure projects to rise, and for lodging, office, and retail to slump in 2023.9 •

Source: Associated General Contractors of America

THE MARKET'S MESSAGE

Although there are some issues, nonresidential construction seems incredibly healthy entering 2023. Backlogs are up, and a majority of firms feel that this year will be at least as good as 2022, with smaller construction firms leading the charge. Inflation and interest rates do not appear to be having much impact on construction momentum.

- ⁷ Data Digest, Vol. 22, No. 41, Dec 7-16, 2022.
- https://www.constructiondive.com/news/supply-chain-chaos-recession-top-concerns-for-contractors-2023/639914/?utm_source=Sailthru&utm_medium=email&utm_campaign=lssue:%202023-01-09%20Construction%20Dive%20Newsletter%20%5Bissue:47162%5D&utm_term=Construction%20Dive
- 9 Ibid
- ¹⁰ Data Digest, Vol. 22, No. 40, Dec 2-6, 2022.

[&]quot;CBRE's Industrial [warehouse] Occupier Survey found that 64% overall and 81% of third-party logistics companies [3PLs] responding plan to expand their real estate footprint over the course of the next three years, in spite of economic uncertainty," the commercial real-estate firm reported on November 9.10 ?

^{*}Net equals difference between number of "Higher" and "Lower" responses as percent of total.







Forecasts

(ABC's chief economist Anirban) Basu forecasts:1 @

- 1. Rising wages as employers compete for workers.
- More efforts to automate, and more things like self-scan that aren't automation (despite being frequently cited as automation, self-scan is just making customers do what employees previously did).
- 3. Difficulty funding Social Security due to an inverted population pyramid.
- 4. Slower economic growth.

A majority of voters think the economy will be in worse shape in 2023 than it is now and roughly two-thirds say the nation's economic trajectory is headed in the wrong direction, the latest *Wall Street Journal* poll shows.² •

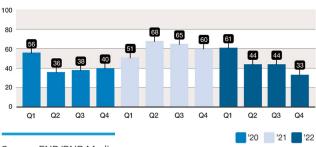
The housing market isn't about to put in a banner year like it did in 2021, but it could look a lot better at the end of 2023 than it does now.³ ©

The Federal Reserve expected 2021's inflation surge to be transitory. It wasn't....Top Wall Street analysts predicted markets would have a so-so year. They didn't....If there is a lesson to be taken away from the past 12 months, some investors and analysts say it is this: Be prepared for more surprises.⁴ ©

The Dodge Momentum Index rose 6.6% in December from November and 40% y/y, Dodge Construction

Network reported on Monday (Jan 9). The index "is a monthly measure of the initial report for nonresidential building projects in planning, shown to lead construction spending for nonresidential buildings by a full year." §

Quarterly Cost Report Confidence Index⁶



Source: ENR/BNP Media

Top executives in much of the world are preparing for an economic downturn that is shorter and milder than usual, so they are focused on weathering the slowdown without widespread job cuts, a new survey found.⁷ •

Contractors are generally optimistic about the outlook for nonresidential and multifamily construction in 2023, but optimism is less widespread than a year ago, based on the 2023 AGC-Sage Construction Hiring and Business Outlook Survey, which AGC released on Wednesday.8 ©

THE MARKET'S MESSAGE

The general economy will slow in 2023, but construction will keep moving forward. While contractors are much more optimistic than the general public, it will be hard to beat 2022's nonresidential construction performance. Almost no one expects that to happen since slowdowns will catch construction but not stop it.

- ¹ https://basu.substack.com/
- ² McCormick, John, "Survey Reveals Pessimism About Economy in 2023," WSJ, Dec 17, 2022, p. A2.
- ³ Lahart, Justin, "For Bleak Housing Market, There is Reason to Bet on Recovery," WSJ, Dec 22, 2022, p. B12.
- ⁴ Otani, Akane, "Fed Flopped in Trying to Predict 2022," WSJ, Dec 27, 2022, p. B10.
- ⁵ Data Digest, Vol. 23, No. 2, Jan 6-13, 2023.
- https://www.enr.com/articles/55639-4q-cost-report-manufacturing-infrastructure-work-leads-as-year-ends?oly_enc_id=0128A9634190J6E
- ⁷ Francis, Theo, "Short U.S. Recession Is Expected by CEOs," WSJ, Jan 13, 2023, p. B1.
- ⁸ Data Digest, Vol. 23, No. 1, Dec 27, 2022 Jan 5, 2023.



First Quarter 2023