

# Today's Construction Economy

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## Introduction

*Today's Construction Economy* captures key insight directly from leaders in the construction industry. This newsletter pulls from these observations to determine the market's message.

This quarter's expanded edition focuses on non-residential construction's turbulent recovery over the past three months and identifies forces that will steer the construction economy in the coming months and throughout 2022.

Compromised supply chains and labor availability challenges have driven costs and will continue to do so. Nevertheless, a new Infrastructure bill and sustained industry confidence will likely keep the recovery on track. Our focus continues to be on the primary drivers of selling price to owners.

## First Quarter 2022

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## The U.S. Economic Landscape

The Producer Price Index for final demand rose 9.6 percent for the 12 months ending in November 2021, the largest advance since 12-month data were first calculated in November 2010. [1]

From December 2020 to December 2021, consumer prices for all items rose 7.0 percent, the largest December to December percent change since 1981. [2]

In November 2021, Georgia (2.8 percent), Nebraska (1.8 percent), Oklahoma (2.5 percent), Utah (2.1 percent), and West Virginia (4.0 percent) set all-time low unemployment rates. [3]

U.S. population growth slowed between July 1, 2020, and July 1, 2021 to "0.1%, the lowest rate since the nation's founding," the Census Bureau reported today (Dec 21). 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... Population increased in 33 states and decreased in D.C. and 17 states, "a historically large number of states to lose population." [4]

"It's reasonable that they [recoveries] typically last a good solid few years before they start to really slow down or turn negative, depending on the macroeconomic environment at the time," (senior equity analyst for St. Louis-based financial services firm Edward Jones' Matt) Arnold said. "But this upturn is young, and it's going to get turbocharged by this infrastructure stimulus." [5]

...state finances continue to exceed expectations. Improved collections, now well surpassing pre-COVID results, are allowing states to propose record budgets for FY'22-23," investment analyst Thompson Research Group reported on Thursday (Dec 16). [6]


## THE MARKET'S MESSAGE


*The combination of runaway inflation and extremely low unemployment is touching all aspects of the economy. Recovery from the COVID-related recession is well underway but faces headwinds in the form of rising prices and extremely low unemployment. All sectors of the economy are impacted.*

## SOURCES


- [1] <https://www.bls.gov/opub/ted/2021/compensation-costs-in-private-industry-averaged-37-24-per-hour-worked-in-september-2021.htm>
- [2] <https://www.bls.gov/opub/ted/2022/consumer-price-index-2021-in-review.htm>
- [3] <https://www.bls.gov/opub/ted/2021/5-states-set-all-time-low-unemployment-rates-in-november-2021.htm>
- [4] Data Digest, Vol. 21 No. 47, Dec 16 – 21 2021
- [5] <https://www.constructiondive.com/news/when-will-contractors-see-infrastructure-dollars-construction-engineering/610405/>
- [6] Data Digest, Vol. 22 No. 3, Jan 12 – 18 2022


# Volume, Backlog, and Prices


"Given what's going to take place now with this infrastructure bill and other things, it seems very likely that backlogs are going to be on an upward trajectory for several years," Arnold said. [7] 


Associated Builders and Contractors reports today (Dec 14) that its Construction Backlog Indicator rose to 8.4 months in November, according to an ABC member survey conducted Nov. 19 to Dec. 3. The reading is up 0.3 months from October 2021 and 1.2 months from November 2020. [8] 


"As it turns out, backlog has neatly predicted what's happened with nonresidential construction overall," said Anirban Basu, chief economist for the Associated Builders and Contractors. "It's been a leading economic indicator." [9] 


"Many architects are telling me that they're as busy now as they were pre-pandemic, and they were pretty busy pre-pandemic," Basu says, noting that the Architectural Billings Index has been above the 50-point threshold, which indicates billings growth, for nine straight months. [10] 

The largest amount (of the Infrastructure Investment and Jobs Act, IJJA), \$110 billion, is designated for roads and bridges. That sum is the single largest investment in repairing and reconstructing U.S. bridges since the construction of the interstate highway system, according to a White House press release. [11] 


The net reading (from a recent AGC member survey) – or percentage of respondents who expect the available dollar value of new work to expand compared to the percentage who expect it to shrink – is positive for 15 out of 17 categories from AGC's survey. That is a stark turnaround from 2021, where respondents had negative expectations in most sectors. [12] 

Consultancy Rider Levett Bucknall reported on Friday (Jan 7) that as of October 1 its construction cost (bid price) index "increased almost 7.5%, its largest [y/y] increase since the start of the global financial crisis in 2007." [13] 

The monthly and year-over-year (y/y) increase in construction input costs in November exceeded the rise in contractors' bid prices, according to BLS data posted on Tuesday (Jan 11). The producer price index (PPI) for material and service inputs to new nonresidential construction climbed 0.9% for the month and 22.1% y/y, while the PPI for new nonresidential building construction – a measure of the price that contractors say they would bid to build a fixed set of buildings – increased 0.3% from October and 12.4% y/y. [14] 

Nonresidential building starts edged up 0.5% for the month (November) but decreased 3.9% year-to-date, with commercial starts down 6.7% year-to-date, institutional starts down 11%, and industrial (manufacturing) starts up 43%. [15] 

After adjusting for inflation, total volume in 2021 is down -2.5%. Residential volume for 2021 is up +7.4% while Nonresidential Bldgs volume is down -11% and Non-Bldg volume is down -8.1%. [16] 

Spending for 2021, with 11 months actual in year-to-date, is forecast up +7.9%. However, that can be misleading. Residential spending for 2021 is up 22% while Nonresidential Bldgs is down -5% and Non-Bldg is down -1%. [17] 

## THE MARKET'S MESSAGE

*Residential construction continues to outpace non-residential by a large margin. Despite price increases to the inputs to construction and steep selling price increases, non-residential backlog is holding steady and construction leaders are confident it will grow. 2021 non-residential volume is below that for 2020. Higher prices are here to stay, steadily increasing throughout 2022.*

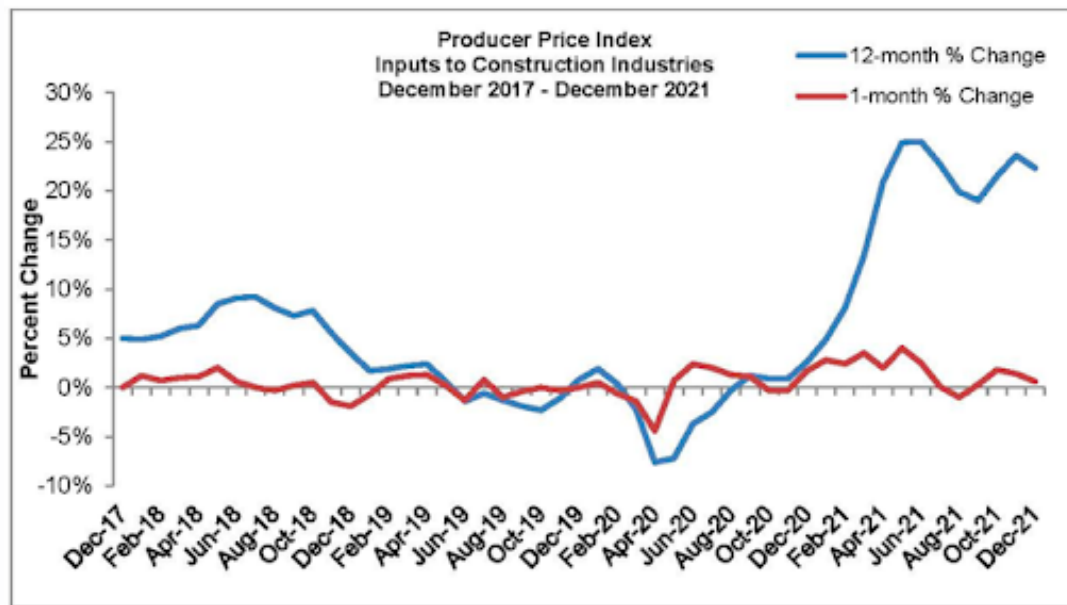
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- [7] <https://www.constructiondive.com/news/public-construction-backlog-pandemic-covid-fluor-granite-wsp-skanska-jacobs/611134/>
- [8] <https://www.abc.org/News-Media/News-Releases/entryid/19148/abc-construction-backlog-and-contractor-confidence-rebound-in-november>
- [9] <https://www.constructiondive.com/news/analysis-charting-backlogs-ups-and-downs-during-the-pandemic/611031/>
- [10] [https://digital.bnppmedia.com/publication/?m=39147&i=732631&p=48&oly\\_enc\\_id=0128A9634190J6E&ver=html5](https://digital.bnppmedia.com/publication/?m=39147&i=732631&p=48&oly_enc_id=0128A9634190J6E&ver=html5)
- [11] <https://www.constructiondive.com/news/7-things-contractors-should-know-about-ijja-bipartisan-infrastructure-act/616917/>
- [12] <https://www.constructiondive.com/news/contractor-optimism-high-entering-2022-per-agc-report/617116/>
- [13] Data Digest, Vol. 22 No. 2, Jan 5 – 11 2022
- [14] Data Digest, Vol. 21 No. 46, Dec 9 – 15 2021
- [15] Data Digest, Vol. 21 No. 46, Dec 9 – 15 2021
- [16] <https://edzarenski.com/>
- [17] <https://edzarenski.com/>

# Materials and Supply Chains

In an effort to further their objectives of timeliness and budget certainty, an increasing number of owners are allowing contractors to purchase materials up front and establish material costs at a known price point. [18] ↻

“Optimistic expectations are a testament to how strong deal flow remains in stimulus-driven America,” said Basu. “The infrastructure package passed in November is another reason for optimism, particularly for contractors who work in segments like roads and bridges, water and sewer and mass transit. It is likely that industry circumstances will improve further in 2022, especially if supply chain disruptions and input shortages become less severe, which many economists anticipate by the second half of next year.” [19] ↑



Source: U.S. Bureau of Labor Statistics

[20] ↑

Among the other implications of materials price increases is the redesign of projects to substitute for expensive inputs, such as steel. Not only does this put pressure on architects and engineers to identify alternative designs and materials, but it also means that contractors may end up working with inputs with which they are less familiar. [21] ↑

Price movements for construction inputs have become variable, in contrast to the across-the-board increases earlier in the year. [22] ↻

Basu noted that “Many people are now suggesting these supply chain disruptions will last into 2023.” [23] ↑

## THE MARKET'S MESSAGE

*The industry is adapting to the reality of inefficient supply chains and higher prices. Innovative companies are discovering solutions. While prices and availability will slowly improve, it may take most of 2022 until efficiencies are recovered.*

## SOURCES

[18] <https://constructionexec.com/article/regaining-predictability-by-planning-for-price-fluctuations-in-construction-materials?>

[19] <https://www.abc.org/News-Media/News-Releases/entryid/19148/abc-construction-backlog-and-contractor-confidence-rebound-in-november>

[20] <https://www.abc.org/News-Media/News-Releases/entryid/19191/monthly-construction-input-prices-increase-in-december-says-abc>

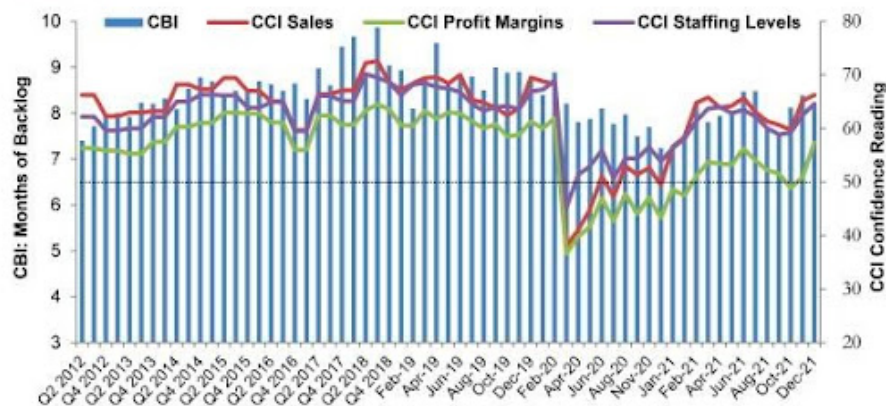
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[22] Data Digest, Vol. 21 No. 45, Nov 22 – Dec 2 2021

[23] 2021 Q3 to Q4 Construction Costs and Projected market Escalation Study, [www.cove.tools](http://www.cove.tools), p. 7

# Construction Industry Confidence and Forecasts

 ABC Construction Backlog Indicator & Construction Confidence Index, 2012-Dec. 2021



©Associated Builders and Contractors, Construction Backlog Indicator, Construction Confidence Index [24] ↑

The Federal Reserve has pivoted to a regime emphasizing inflation containment, which will also help to suppress inflationary pressures at some point in 2022. For these and other reasons, confidence among ABC members has continued to inch upward, according to ABC’s Construction Confidence Index.” [25] ↑

2021 was a banner year for the Dodge Momentum Index – despite the lingering risks of COVID-19 and low demand for some types of nonresidential buildings. Throughout the year, the overall Momentum Index increased 23%, the strongest annual gain since 2005. [26] ↑

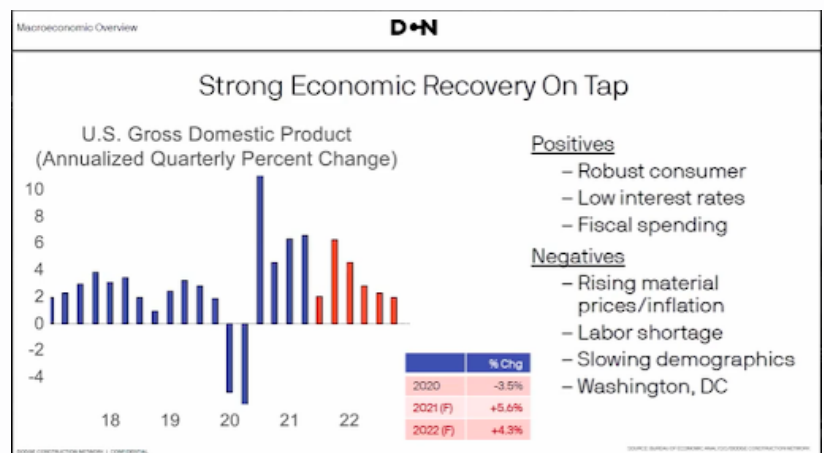
The bottom line is that the issues construction has seen either during or because of the pandemic will continue into the new year, but contractors’ confidence isn’t withering. [27] ↻

Both (AGC President Steve) Sandherr and AGC Chief Economist Ken Simonson said it’s vital that the appropriation funds from the IIJA (Infrastructure Investment and Jobs Act) become available soon, in order for that optimism to be fulfilled. [28] ↻

Nonresidential Bldgs starting backlog for 2022 is still down -14% from the start of 2020 and Non-Building backlog is now -17% lower than the start of 2020. That could weigh on spending for several years. [29] ↓

(Ed Zarenski, a leading construction economic analyst, cites these) current and predicted inflation rates: [30]

- 2020 Residential 5%, Nonres Bldgs 4.8%, Nonbldg Infra Avg 4.5%
- 2021 Residential 14.2%, Nonres Bldgs 6.8%, Nonbldg Infra Avg 7.8%
- 2022 Residential 7%, Nonres Bldgs 4.5%, Nonbldg Infra Avg 3.7%
- There is greater chance for rates to move up than down. ↑



[31] ↑

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- [24] <https://www.abc.org/News-Media/News-Releases/entryid/19179/abc-s-construction-backlog-slips-in-december-contractor-confidence-continues-to-improve>  
 [25] <https://www.abc.org/News-Media/News-Releases/entryid/19191/monthly-construction-input-prices-increase-in-december-says-abc>  
 [26] Data Digest, Vol. 22 No. 2, Jan 5 – 11 2022  
 [27] <https://www.constructiondive.com/news/contractor-optimism-high-entering-2022-per-agc-report/617116/>  
 [28] <https://www.constructiondive.com/news/contractor-optimism-high-entering-2022-per-agc-report/617116/>  
 [29] <https://edzarenski.com/>  
 [30] <https://edzarenski.com/>  
 [31] Branch, Richard, “Outlook 2022,” Dodge Construction Network, 3 Nov 2022

## (Basu's) Forecasts for 2022

- Inflation stickier than many had anticipated – interest rates still remain low and will climb only gradually in 2022;
- Infrastructure package is a big deal;
- Household savings remain strong;
- Business investment is picking up, in large measure because of skills/labor shortages;
- Public construction segments – homerun – same with fulfillment & data centers;
- 3-4% GDP growth, 3-4% inflation – that's the prediction;
- Omicron? [32] ↑

The value of non-residential building projects continues to move in a sawtooth pattern, alternating between a month of gains followed by a loss. Since the pandemic began, nonresidential building projects entering planning have been more volatile than in past cycles, likely driven by increased challenges from higher prices and lack of labor. Despite these issues and a lack of underlying demand for some building types such as offices and hotels, the Momentum Index remains near a 14-year high. Compared to November 2020, the Momentum Index was 44% higher in November 2021. [33] ↑

Infrastructure is forecast to be the fastest-growing sector for construction with an annual average growth rate of 5.1% globally during the period from 2020 to 2025, driven by unprecedented levels of government stimulus, including the \$1.2 trillion infrastructure act in the U.S. [34] ↑

Total volume for 2022 is forecast down -2.5%. After adjusting for inflation, Residential volume for 2022 is forecast down -1%. Nonresidential Bldgs volume is also forecast down -1% and Non-Bldg volume is forecast down -7%. [35] ↻

“It’s getting better out there,” said ABC Chief Economist Anirban Basu. “While the outlook for construction remains imperfect, extraordinarily low interest rates have created enough appetite for deal-making to push backlog higher and persuade the average contractor that sales, employment and profit margins will climb over the next six months. [36] ↑

A 2022-2026 Market Analysis from the American Road and Transportation Builders Association (ARTBA) indicates that transportation construction market activity will grow 5% in 2022, due to work beginning on IJJA-supported projects, as well as an improving economy. **ARTBA expects the biggest growth to be in these sectors:** [37] ↻

- Amtrak and Class 1 rail work (+17%)
- Bridge and tunnel construction (+9%)
- Port and waterway projects (+6%)
- Highways and streets (+5%)
- Airports (+3%)

The infrastructure act, which mentions PPPs (public-private partnerships) 42 times, will likely popularize this type of procurement method further. Many types of initiatives listed in the act contain grantee selection criteria that consider non-federal contributions to a project, including those from public-private partnerships. [38] ↻

## THE MARKET'S MESSAGE

*Although there are conflicting messages, construction leaders are generally confident of continued recovery in 2022. Several policies emerging in 2022 bode well for construction confidence. Infrastructure will finally get its day, predicted to be up significantly thanks largely to the \$1.2 trillion Infrastructure Investment and Jobs Act. High materials pricing and supply chain issues along with labor availability will prevail through 2022. Growth will be steady but not as strong as the 2021 recovery.*

## SOURCES

[32] <https://www.abc.org/News-Media/News-Releases/entryid/19148/abc-construction-backlog-and-contractor-confidence-rebound-in-november>

[33] Data Digest, Vol. 21 No. 45, Nov 22 – Dec 2 2021

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# Labor Challenges


Part of the challenge of delivering projects is that finding labor to complete the work, especially for specialized jobs, could be difficult, leading to slower construction timelines. [39] 


This shortage of workers will most likely lead to much higher labor costs just as these infrastructure projects begin to break ground, industry experts told Construction Dive. Joe Natarelli, national leader of Marcum's Construction Services practice, predicts wages will go up "significantly." [40] 


In November 2021, the number of total separations increased to 6.3 million, up 382,000 from the previous month. Total separations increased in accommodation and food services but decreased in federal government. The number of quits increased 370,000 over the month to 4.5 million, the highest level ever recorded since these data were first produced in December 2000. [41] 


With slow population growth, the industry won't be able to count on the same pool of workers, (AGC Chief Economist Ken) Simonson said, which means firms will need to reach out to even more women and minorities. [42] 


President Joe Biden signed the Infrastructure Investment and Jobs Act into law in November, spurring a once-in-a-generation influx of \$1.2 trillion in new spending — \$550 billion of which was earmarked for infrastructure itself... The industry, which was already in dire need of workers, will now see an increase in demand for jobs across more work sites. As a result, wages are likely to increase for skilled workers who will have more options, and the demand-supply ratio could worsen. [43] 

"It has become almost impossible for contractors to navigate the quagmire of regulations governing COVID-19 and vaccines," Trent Cotney, CEO of Cotney Attorneys and Consultants, told Construction Dive in early December. "The uncertainty has left many contractors to do little or nothing in the form of preparation because it is unclear what current regulations will remain after judicial scrutiny." [44] 

In addition, construction managers find themselves between a rock and a hard place as they try to facilitate the discussion between their workers who want an inoculated workforce and those opposed to vaccines. [45] 

When implementing the work, government agencies must prioritize high labor standards, including paying prevailing wages and offering the chance to join a union. Project labor agreements, which establish the terms and conditions of work on a specific jobsite and end when the project is completed, are expected to grow in use under the (Infrastructure Investment and Jobs Act) law. [46] 

"If we see long-term sustainable funding, that would and should aid in our efforts to recruit people in the industry," Sandherr said. "If we can demonstrate to them there is funding in the future, their jobs won't be in jeopardy." [47] 

Nonresidential construction employment — building, specialty trades, and heavy and civil engineering construction — increased for the third-straight month (November), by 20,800, following gains of 34,600 in October and 32,700 in September. But nonresidential employment remains 209,000 (-4.5%) below the February 2020 level. [48] 

## SOURCES

[39] <https://www.constructiondive.com/news/when-will-contractors-see-infrastructure-dollars-construction-engineering/610405/?>

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[47] <https://www.constructiondive.com/news/contractor-optimism-high-entering-2022-per-agc-report/617116/?>

[48] Data Digest, Vol. 21 No. 46, Nov 22 – Dec 2 2021

The record high for the openings rate and record low for the layoffs rate strongly imply that the meager rate of hiring reflects an inability to find qualified candidates, not diminishing demand. Quits totaled 188,000, a jump of 56,000 (42%) y/y, with a quit rate of 2.5%, the second-highest October quits rate in series history. [49] ↑

The COVID-19 vaccination rate among construction workers in the four weeks through November 28 – December 4 was 57.0%, compared to 82.8% for other occupations, according to the construction safety and health research organization CPWR. [50] ↑

Nonresidential employment remains 169,000 (-3.6%) below the February 2020 level. Nonresidential employment has regained only 74% of the jobs it lost between February and April 2020, compared to 84% for total nonfarm payroll employment and 117% for residential construction. [51] ↻

The huge decrease in the number of unemployed workers – more than twice the 160,000 job increase in construction employment y/y – suggests construction workers are either finding jobs in other sectors or dropping out of the workforce, at least temporarily. [52] ↑

(Job) Openings jumped 32% y/y, and the number and rate of openings rate were the highest for any month in the 21-year history of the series, an indication of the difficulty contractors are having in filling positions. [53] ↑

In a hopeful sign for construction employment, “education for the skilled trades appears to be returning to fashion, according to enrollment trends, survey data and other signals,” The Hechinger Report, a national nonprofit newsroom focused on education, reported on Friday. [54] ↻

## THE MARKET'S MESSAGE

*Despite increasing wages and plenty of work, non-residential construction labor is not meeting current and projected demand. Lost workers from the COVID-related recession are not returning to construction. Confusing vaccine rules and the industry's aversion to vaccinations in general are compounding the problem.*

## FINAL THOUGHTS

*Demand for non-residential construction is high, but owners have been hesitant. It is now clear that waiting will only bring higher prices and risks of labor and materials shortages. The industry is confident that 2022 – and especially 2023 – will be good years for contractors, but there are very few indicators pointing to lower costs. Owners have the funding but should prepare for higher selling prices.*

## SOURCES

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[50] Data Digest, Vol. 21 No. 46, Nov 22 – Dec 2 2021

[51] Data Digest, Vol. 22 No. 2, Jan 5 – 11 2022

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