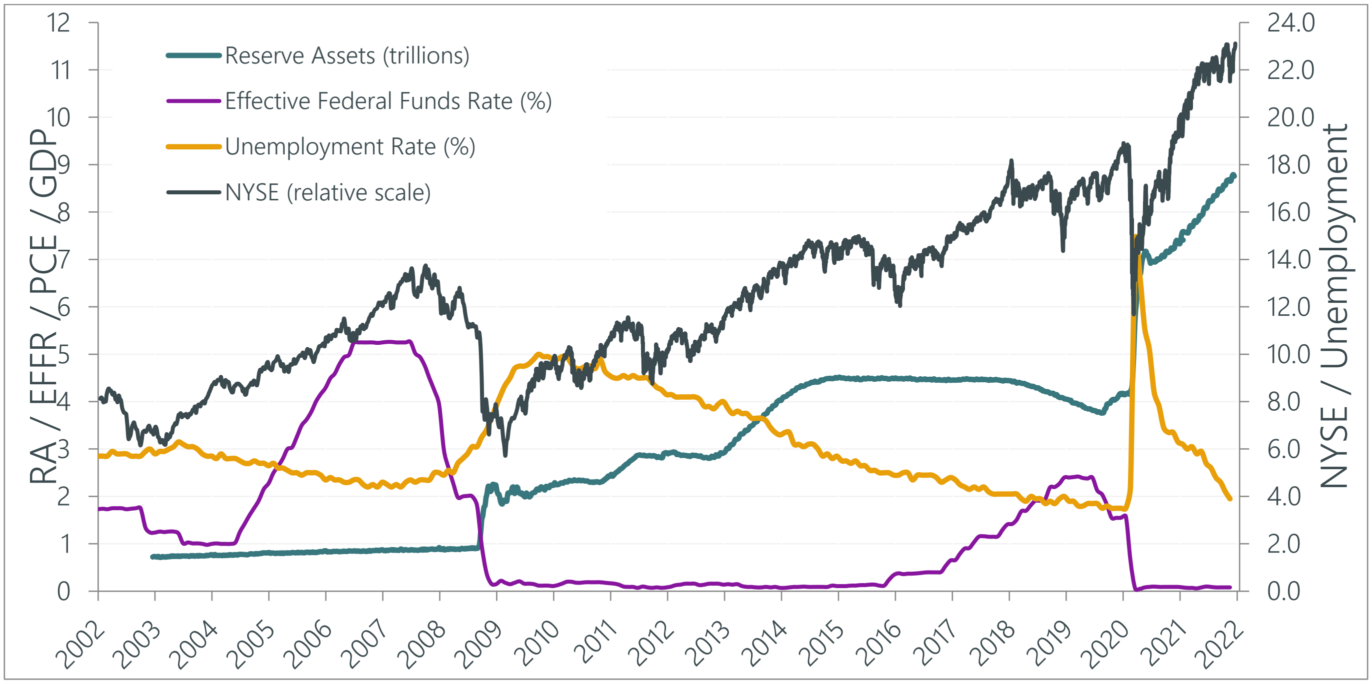
Market Outlook Q4 2021

Vermeulens' Market Reports are based on actual bid prices in the
Institutional-Commercial-Industrial Construction Industry
Forecasts are based on leading indicators, and historical comparative analysis

- Construction Prices rose in Q4 of 2021 at 0.5% per month, with many projects experiencing spikes in various trades of an additional 5% (national average)
- Supply Chain Shortages, labor shortages, and increased backlogs are impacting bottom line construction costs. We recommend carrying bidding contingency in the order of 5% in addition to the 0.5% escalation figures
- Fed Watch: The Federal Reserve has reached another historic turning point and will be tapering quantitative measures and increasing interest rates this year. For more details read our blog, Market Outlook Fed Watch.
- Architectural Billings continued to grow in Q4 despite lower growth in inquiries and contracts
- Construction Dollar Volume: Residential construction continues to boom reaching new highs in Q4; non-residential construction is up 3.1% annually, improving 4.93% in Q4, while infrastructure spending increased 2.93% this quarter. See The Bipartisan Infrastructure Plan and Construction Costs blog for details on the infrastructure program and the effect of overall fiscal measures
- Construction Job Growth: Approximately 101,000 construction jobs were added in Q4, or +1.35%; construction employment is now only 1.15% below pre-pandemic levels
- New York Stock Exchange price index growth moderated but reached new highs; overall the NYSE is up 6% from September 2021
- Growth in Employment: Monthly average job growth through Q4 was 365K with most of the increase in October. December growth cooled as the resurgence of the pandemic slowed growth
- Gross Domestic Product: GDP grew at an annualized rate of 6.72% for Q4 2021
- Commodities continue to put cost pressure on prices across the board
- Personal Consumption Expenditures (PCE) price index increased 4.7% year over year (October 20/ October 21) prompting the Fed to begin to pull back on stimulative monetary measures

Fed Watch

Inflation and employment targets propel monetary policy, and subsequently construction prices. Strong growth, low unemployment, and early signs of underlying inflation are bringing the Fed's plans for asset purchases and interest rates forward by almost one year. As these measures take hold, some dampening of growth will occur over the medium term in the interest rate sensitive construction sector. Market Outlook Fed Watch blog.



Indicator	Effect	Current	Forecast
Consumer Inflation – increasing	*Stimulative*	⬆	⬆
Construction Backlog – increasing	*Stimulative*	⬆	⬆
Nom Interest Rates – stable	*Stimulative*	⬌	⬌
Real Interest Rates – decreasing	*Stimulative*	⬇	⬌
Government Deficits – decreasing	*Moderating*	⬇	⬌
Government Spending – decreasing	*Moderating*	⬇	⬌
Financial Assets – stable	*Stimulative*	⬌	⬌
Real Estate Assets – increasing	*Stimulative*	⬆	⬌
Construction Volume - increasing	*Stimulative*	⬆	⬆
Construction Employment – increasing	*Stimulative*	⬆	⬆

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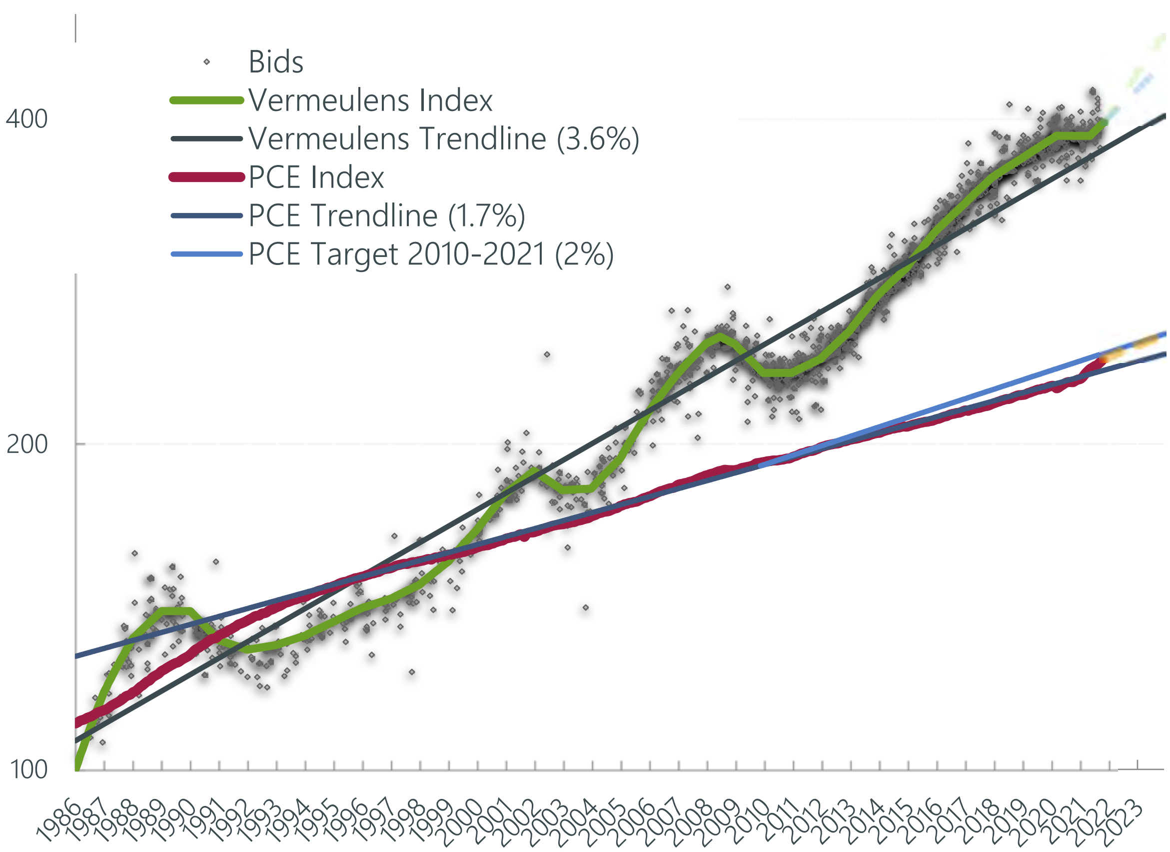
Vermeulens Construction Cost Index

Price increases for Q4 2021 nationally trended towards 0.5% monthly as contractors have been able to rebuild their backlogs and workflow.

For the past 34 years, construction prices trended at a 3.5% annually compounded escalation rate. The rate of escalation seen in construction costs relate to the target of 2% annual inflation for consumer prices and the monetary policy used to achieve this goal. Consumer inflation has increased rapidly to the medium-term target of greater than 2%.

In contrast to previous financial recessions, strong and immediate fiscal and monetary measures countered the collapse in activity at the outset of the pandemic. As many sectors of the economy re-opened, employment and prices stabilized. We are now at the turning point where these measures can be reversed due to the overwhelming strength of major indicators. See The Bipartisan Infrastructure Plan and Construction Costs blog

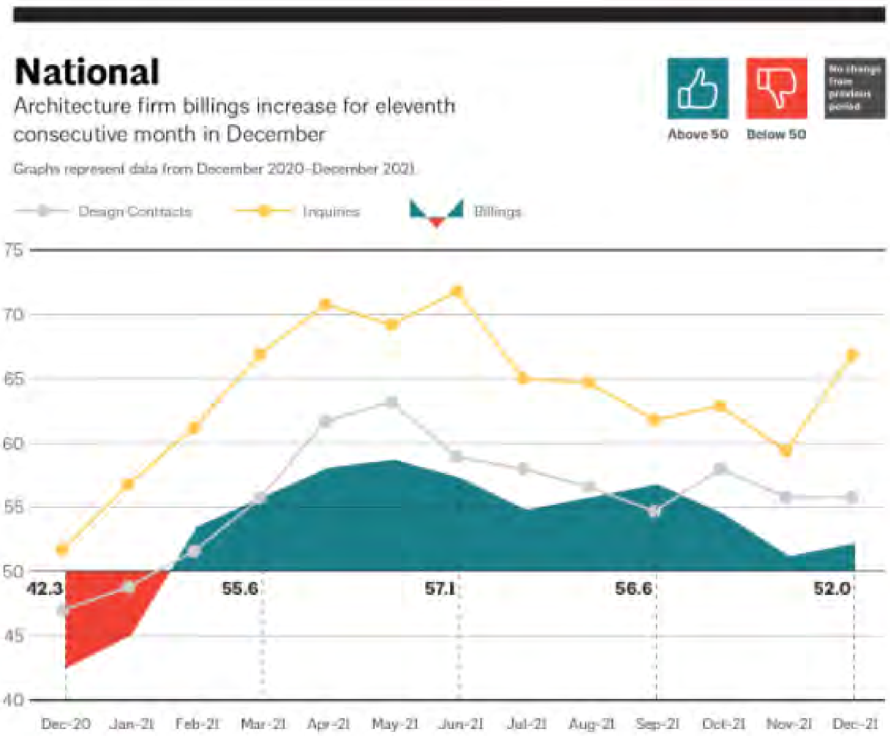
The chart below illustrates bid prices for non-residential construction projects relative to the Construction Trendline (1986 = 100) of 3.46% and the 2% Personal Consumption Expenditures Index Trendline. Strength in the construction sector point to medium term cost increases of 0.5% per month, and a continuing increase in the long term Vermeulens Trendline toward 4%.

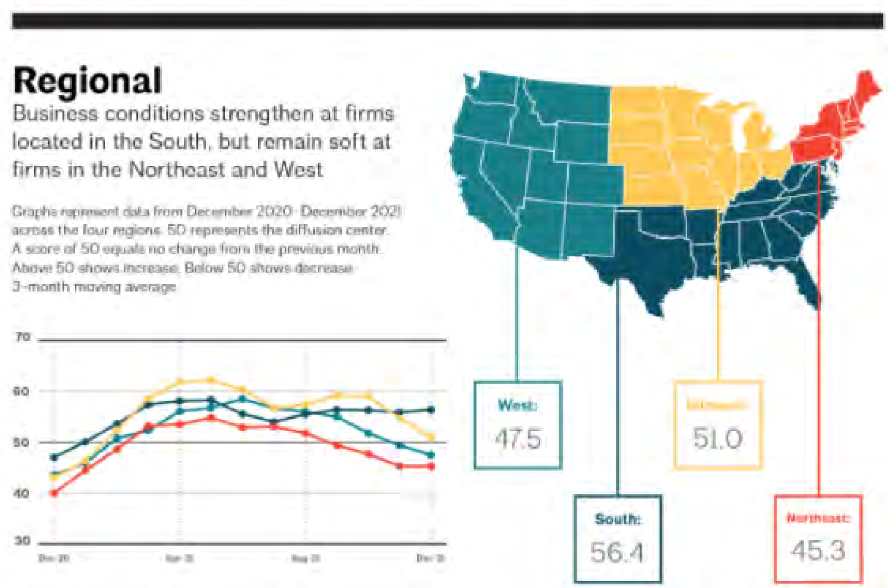


AIA Billings

Architectural billings are a leading indicator for future construction volume. A score greater than 50 indicates growth. Design fee billings typically indicate construction volume 9 - 12 months in advance.

Architectural Billings continue with positive growth but the pace of growth continued to moderate from its peak in the summer. Firm billings have now shifted closer to the pace of growth seen in previous recovery periods. https://www.aia.org/pages/6462667-





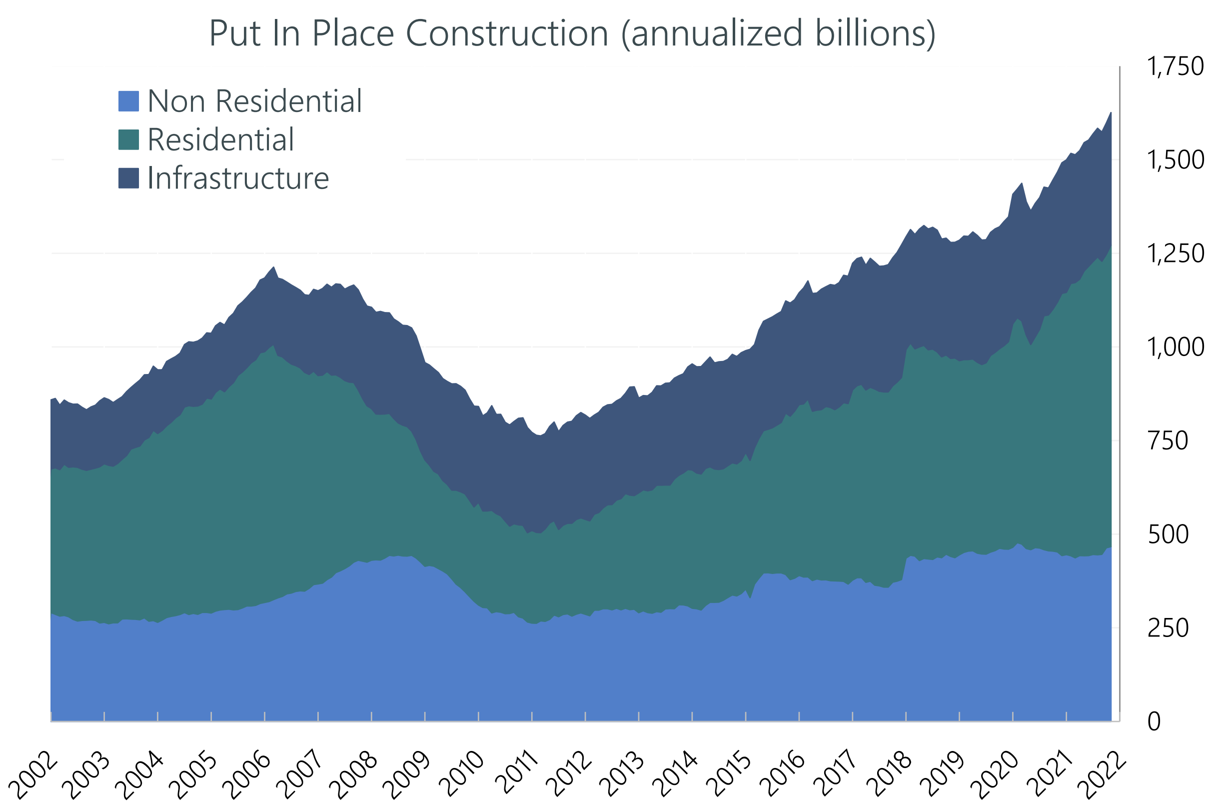
Put In Place Construction

Construction dollar volume grew in Q4, posting a 9.9% year over year increase (November 20-November 21). Construction dollar volume is the main driver of construction prices.

Residential dollar volume continued its explosive growth, improving year over year by 20.7% (November 20-November 21).

Non-Residential spending is up 3.1% year over year (November 20-November 21). Improved backlogs, attrition, and shortages are driving price increases in this sector.

Infrastructure spending increased since Q3 2021, with a 1.9% year over year change (November 20-November 21). Due to federal programs, infrastructure spending is expected to increase by $50 billion per year over the next 10 years, approximately 10% of this sector. See The Bipartisan Infrastructure Plan and Construction Costs blog for more specifics of the program.

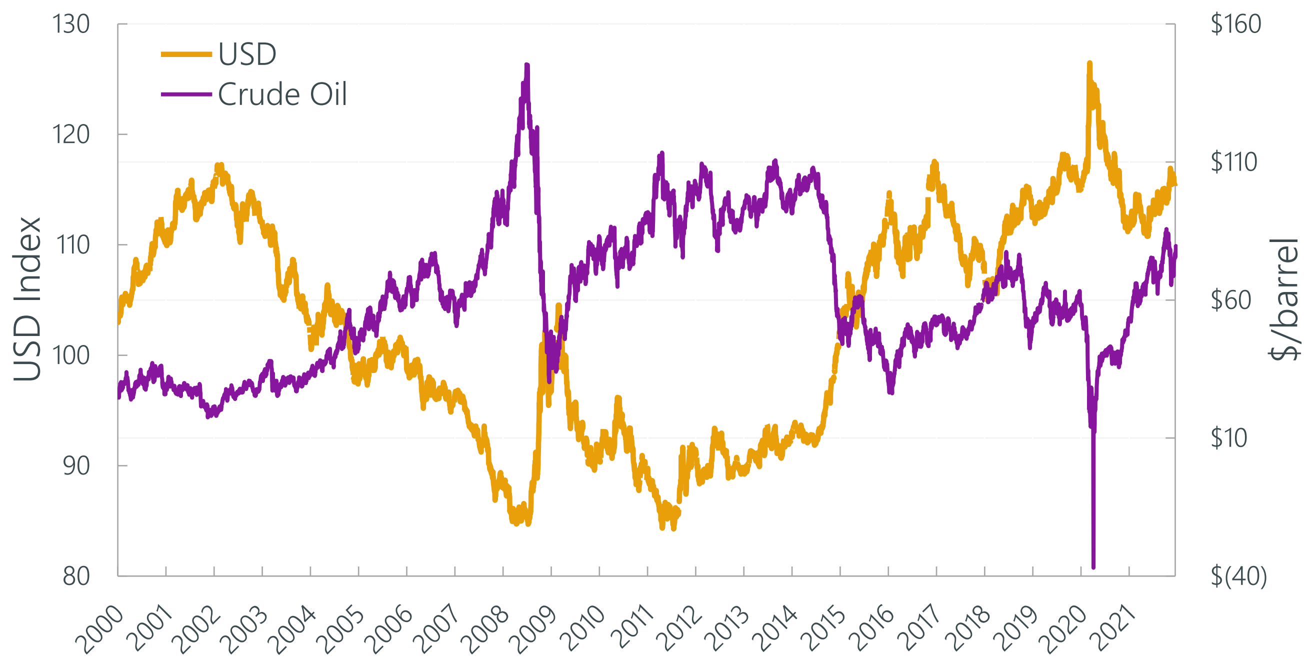


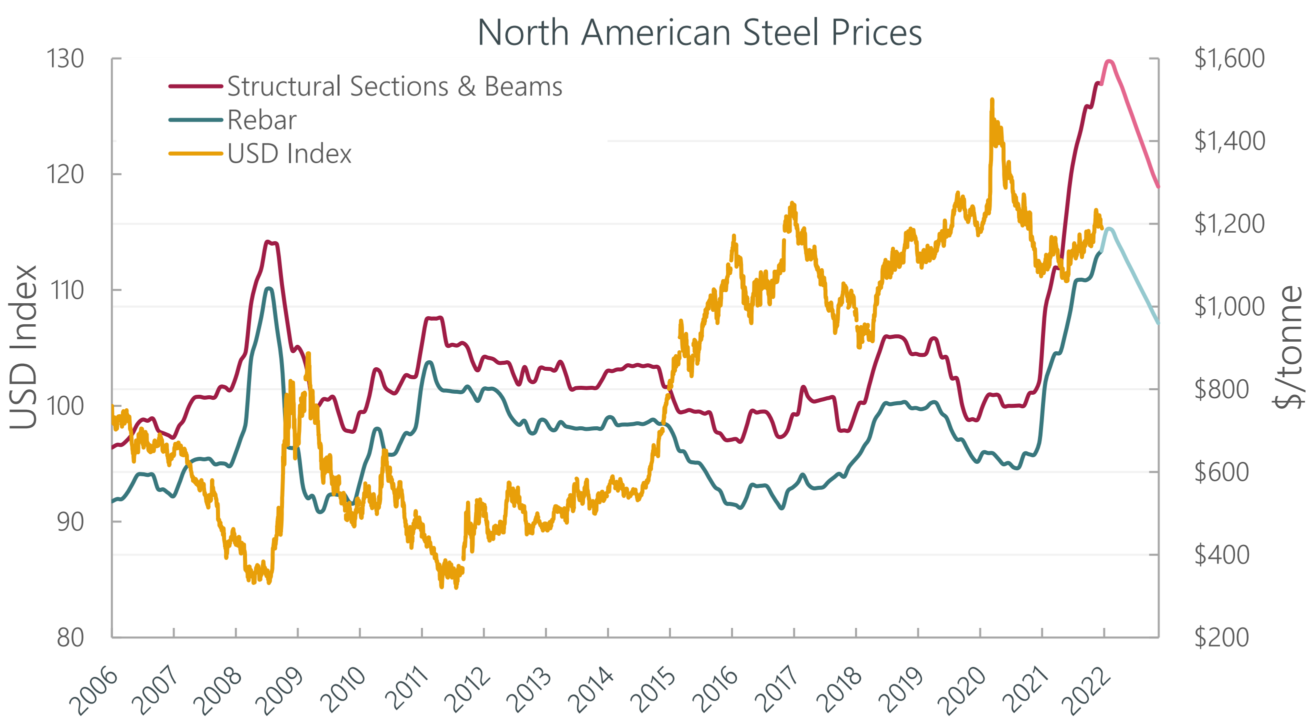
https://www.census.gov/construction/c30/c30index.html

Commodity Prices

Crude Oil reached $75.33 per barrel at the end of December 2021. Prices increased relatively throughout the quarter, peaking at $85.64 on October 26th.

Structural Steel prices through Q4 increased from Q3 2021 levels. Structural sections and beams increased by 3.71% and rebar is up by 6.67% since September 2021. Steel futures indicate a gradual return in prices by 2022.

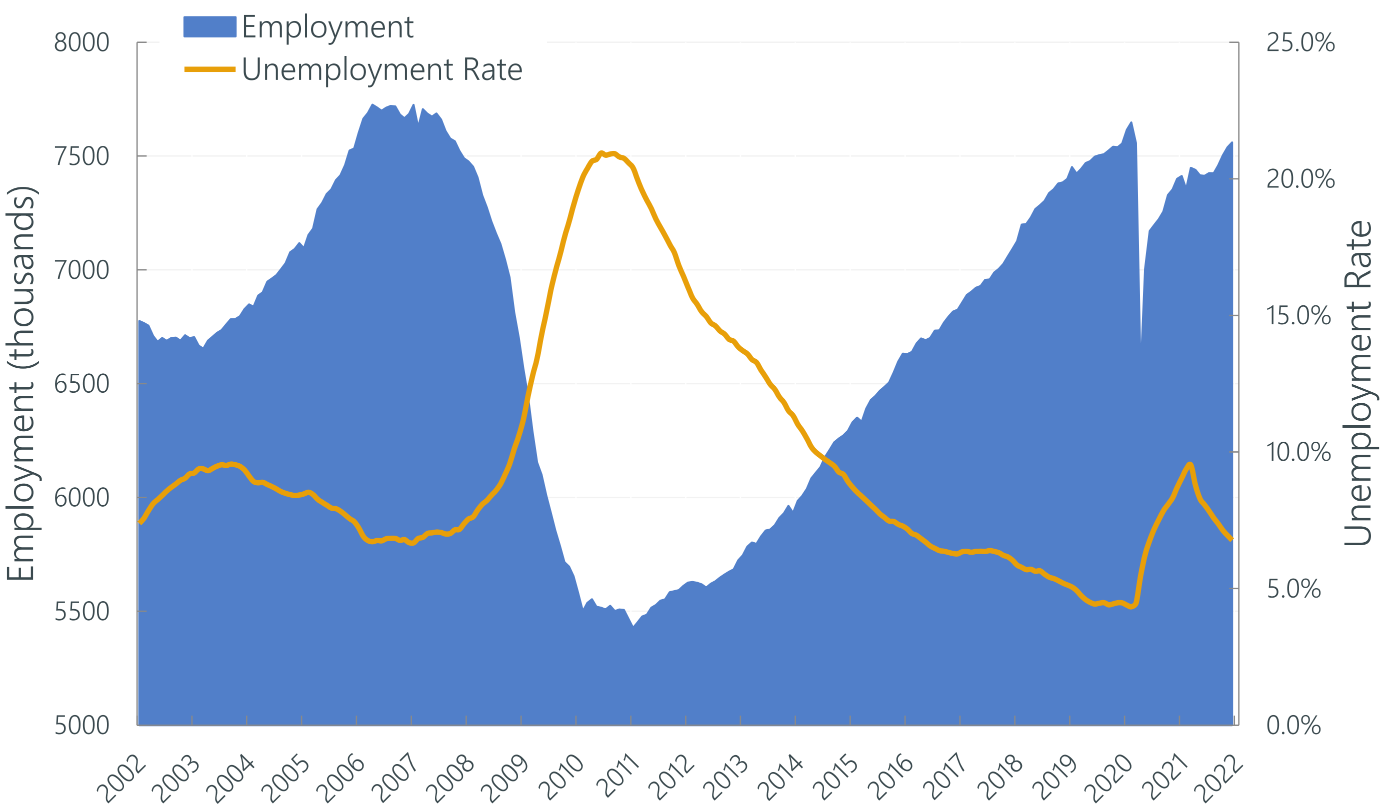




Construction Labor Market

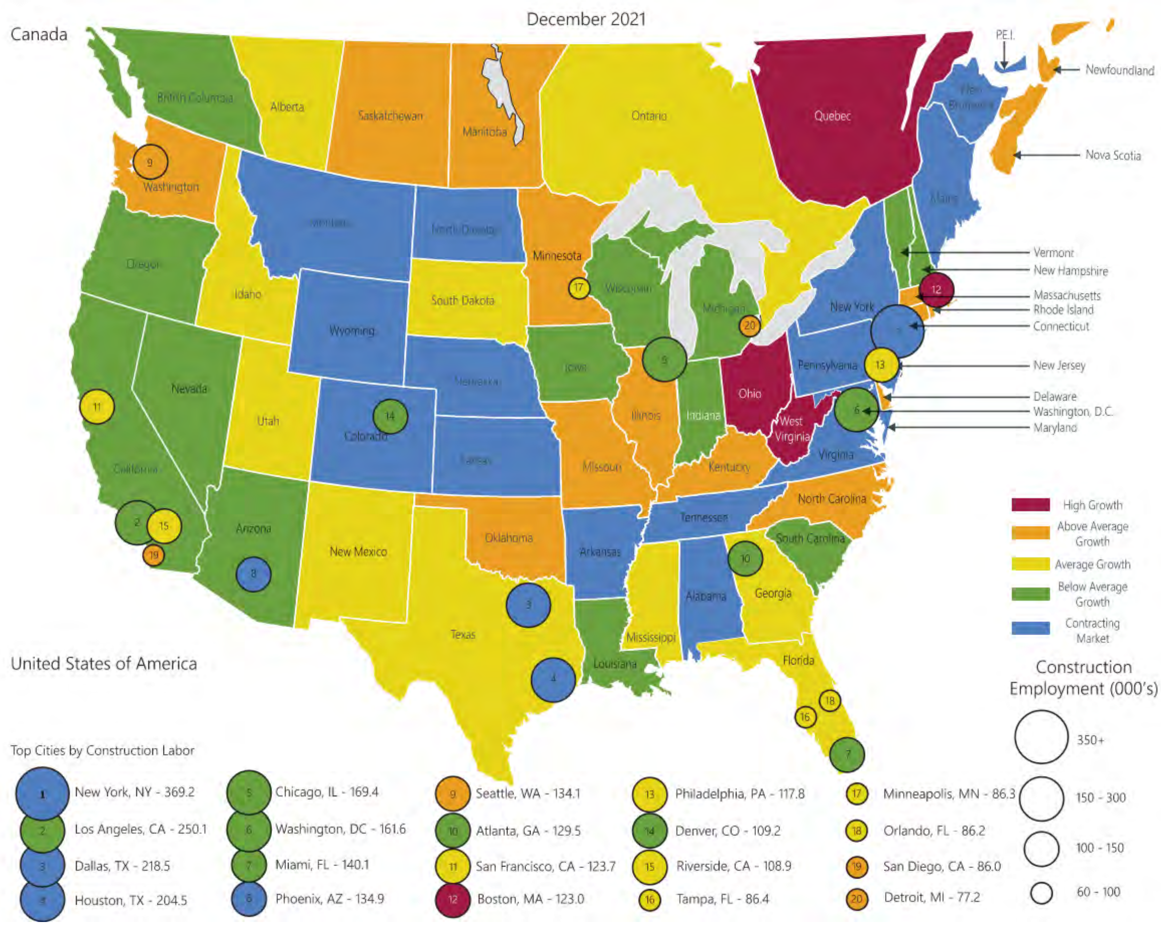
Construction Unemployment at the end of Q4 sits at 6.5%, down from 7.4% at the end of Q3, reflecting a lack of increase in labor supply.

Construction Job Growth was 101,000 or 1.35%, this quarter. Wage and profit increases in the sector, driven by residential volumes, will draw new entrants, as well as restructuring from other sectors of the economy. Labor shortages are likely due to the uncertainties of the continuing pandemic, particularly for families with school age children.



Construction Labor Force Growth Rate

Construction Labor Force Growth Rate is calculated by the current 12-month average in construction employment relative to previous 12 month average in construction employment.

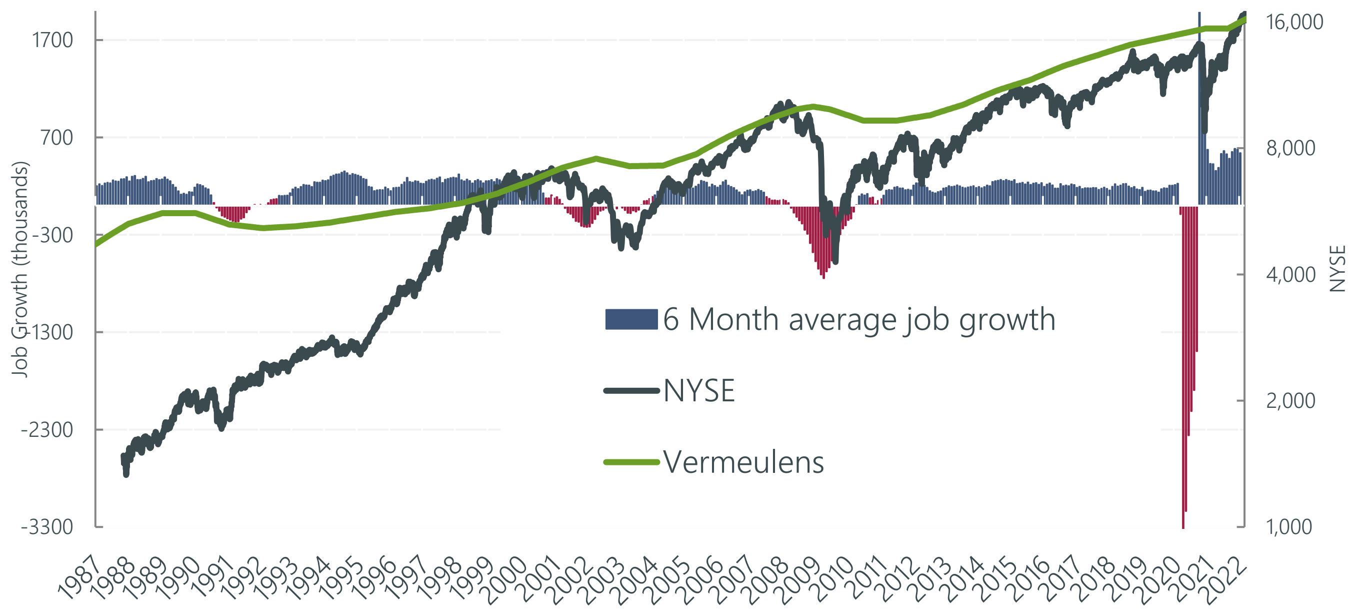


Annual Growth	Forecast
High	7% - 9%
Above Average	5% - 7%
Average	4% - 5%
Below Average	3% - 4%
Contracting Market	TBD

Total Jobs and Market Performance

Total Jobs in the US economy during Q4 2021 saw an average monthly increase of 365,000 jobs. October had the highest growth (+648K jobs) in Q4. The rest of the quarter saw moderate growth, ending with 199,000 jobs added in the month of December, likely due to the resurgence of the pandemic.

The chart below removes short-term fluctuations in job growth by looking at a 6-month moving average. The size of the labor force grew at 100,000 per month due to population increase. Sustained periods of recession, where job creation remains below 100,000 jobs per month, has accompanied dips in construction prices as illustrated by the red bars below.

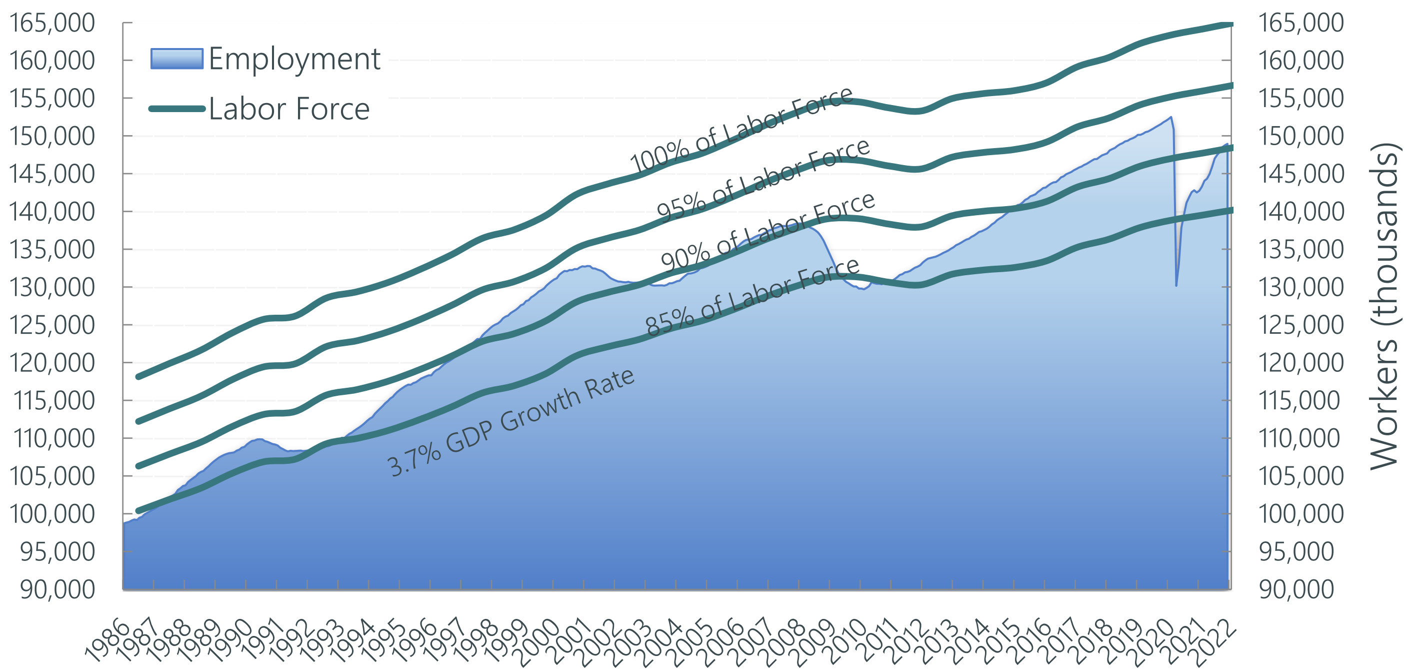


https://data.bls.gov/timeseries/CES0000000001

Employment Percentage of Total Workforce

Total Employment as a percentage of total workforce continued its recovery reaching more than 90% at the end of Q4 2021.

The chart below shows total employment as a percentage of the US workforce. The Federal Reserve will accommodate growth to maximize employment. Both the size of the labor force and participation rates are at play, as we have seen in recent months, where labor force growth has not kept pace with employment opportunities, resulting in shortages. See our [Market Outlook Fed Watch blog](#) for more analysis of employment and labor force factors.



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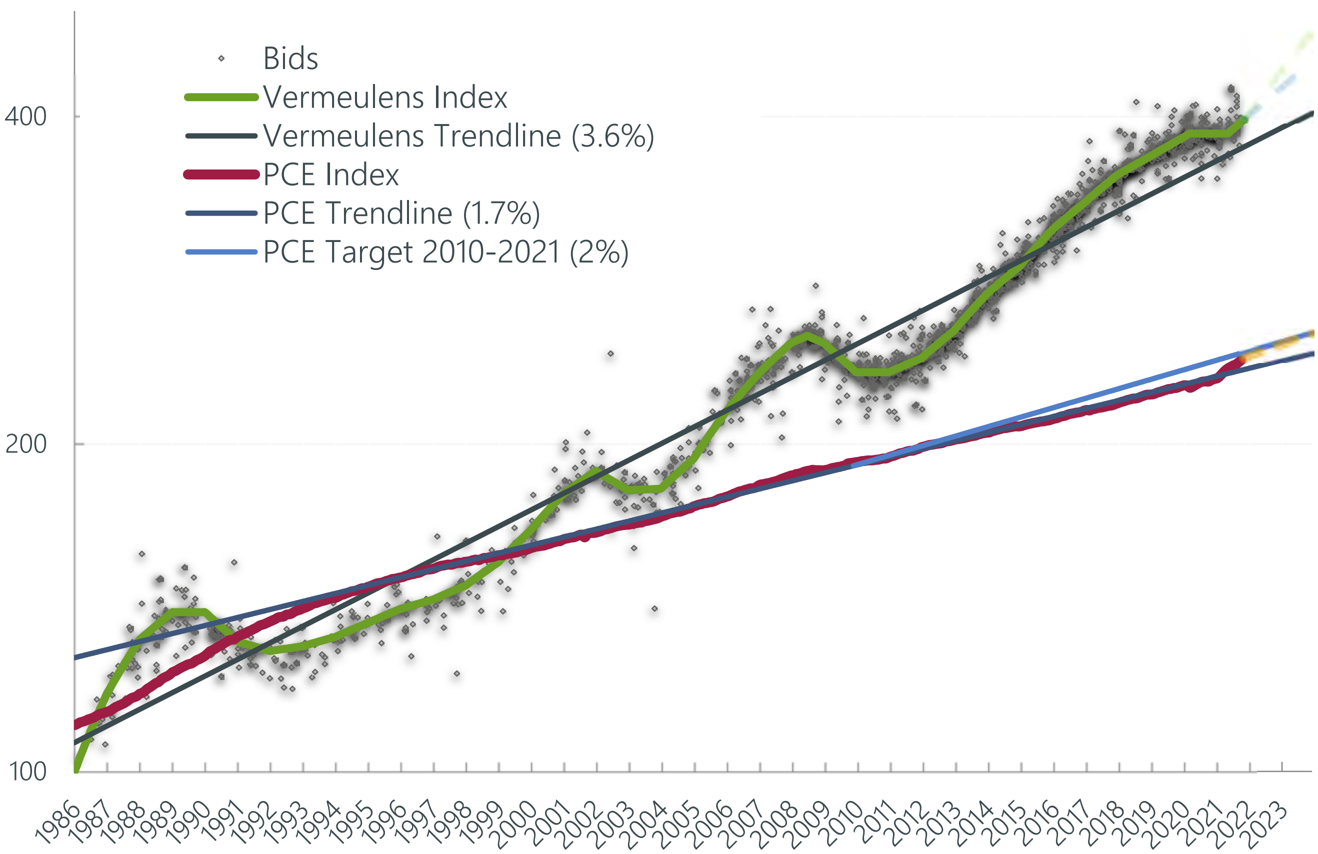
Forecast - National Trend

Construction prices rose at 0.5% per month through Q4. Contractor backlogs fell through Q4 as confidence declined with the resurgence of the pandemic. Monetary policy, shortages, and improving pandemic forecasts point to continued construction price escalation of 6% per year over the medium term.

The Federal Reserves "new normal" has raised inflation above the recent trend of 1.5%. Medium term inflation could exceed 2.5% for a 3 - 5 year period in order to re-establish the 2% long term target.



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Need any help with your projects,

Want to set up a presentation to your group,

Would like to meet to see how we can help your team, and expand our business together,

Are looking for company information,

Please contact: Marisol Serrao, Director of Administrationat at 617 263 8879 or mserrao@vermeulens.com.