

Quarterly Construction Insights Q4 2021

* The data for this Q4 report is a review of Q3 2021. This naming convention has recently been updated to match the quarter of release.



Material Shortages Continue, Copper Wire Costs Up 156% YoY

- YoY increase in costs of copper wire has overtaken YoY increase in cost of lumber and plywood
- Permit authorizations significantly decreased YoY in the Northeast, while other regions saw increase
- 93% of commercial contractors reported experiencing at least one material shortage in Q3-21
- Labor costs continue to grow faster in the U.S. than in Canada, with many key construction labor costs growing by over 5% YoY.





The Big Picture — Copper wire cost grows significantly, while lumber cost growth slows

In June 2021, costs for lumber, an important component of construction, increased by 129% YoY and 152% YoY in the United States and Canada, respectively. This contributed to an increase in overall reconstruction cost.

Cost growth for copper wire has significantly increased, with October 2021 YoY cost growth in the U.S. at 156%. Prices for copper have climbed significantly due to strong expectation of demand and supply constraints in conjunction with the continuing recovery of the U.S. economy and the new infrastructure bill. Fortunately, copper wire is a significantly lower portion of the overall building cost of a home than lumber.

Recent CoreLogic RCT data indicates that, since last quarter, reconstruction cost has actually *declined* in many U.S. states and Canadian provinces. The national average was a decrease of 0.3% in the U.S. and 0.6% in Canada.

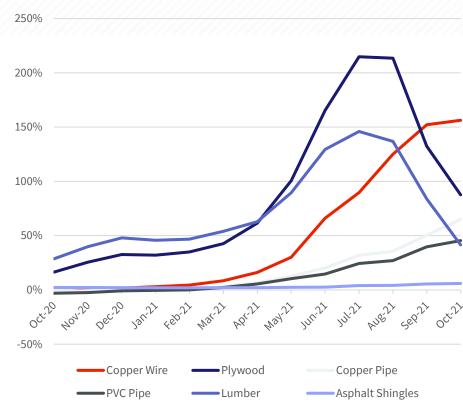


Changes in Individual U.S. Material Costs, YoY

Costs for many individual materials have continued to be significantly higher than at the same time last year.

Costs for copper wire in October 2021 were more than double what they were in October 2020.

Prices for copper have increased significantly due to strong expectation of demand and supply constraints in conjunction with the continuing recovery of the U.S. economy and the new infrastructure bill. While copper pipes have viable alternatives, copper wire does not.



Material	October 2021 YoY Change
Copper Wire	+156%
Plywood	+88%
Copper Pipe	+65%
PVC Pipe	+45%
Lumber	+41%
Asphalt Shingles	+6%

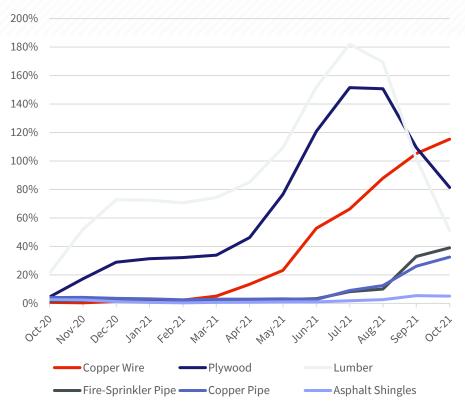


Source: CoreLogic

Changes in Individual CAN Material Cost, YoY

In Canada, costs for many individual materials have also continued to be significantly higher than at the same time last year. Costs for copper wire in October 2021 were more than double what they were in October 2020.

Prices for copper have increased significantly in Canada as well, though less drastically than in the U.S. While copper pipes have viable alternatives, copper wire does not.



Material	October 2021 YoY Change
Copper Wire	+115%
Plywood	+81%
Lumber	+51%
Fire- Sprinkler Pipe	+39%
Copper Pipe	+33%
Asphalt Shingles	+5%



Source: CoreLogic

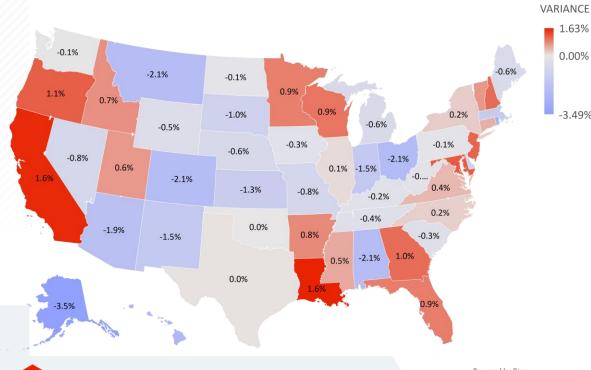
Q3 2021 to Q4 2021 Change in Residential Reconstruction Cost — United States

Changes in costs for materials impacts the final residential reconstruction cost of a property. Over a quarter, costs have changed anywhere from -3.5% to 1.6% in each state. The national average was a change of -0.3%.

1.63%

0.00%

-3.49%



Most Significant Cost Increases

	State	Change
	Louisiana	+1.6%
, -	California	+1.6%
	Maryland	+1.2%

Most Significant Cost Decreases

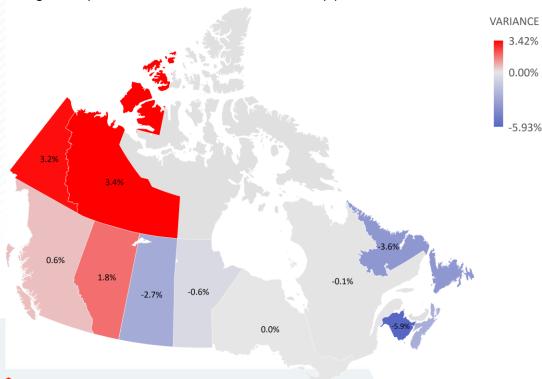
State	Change
Alaska	-3.5%
Rhode Island	-2.7%
Hawaii	-2.3%

Source: CoreLogic RCT

Powered by Bing © GeoNames, Microsoft, TomTom

Q3 2021 to Q4 2021 Change in Residential Reconstruction Cost — Canada

Changes in costs for materials impacts the final residential reconstruction cost of a property. Over a quarter, costs have changed anywhere from -5.9% to 3.4% in every province. The national average was a change of -0.6%.



Most Significant Cost Increases

State	Change
Northwest Territory	+3.4%
Yukon Territory	+3.2%
Alberta	+1.8%

Most Significant Cost Decreases

State	Change
New Brunswick	-5.9%
Newfoundland	-3.7%
Prince Edward Island	-2.8%

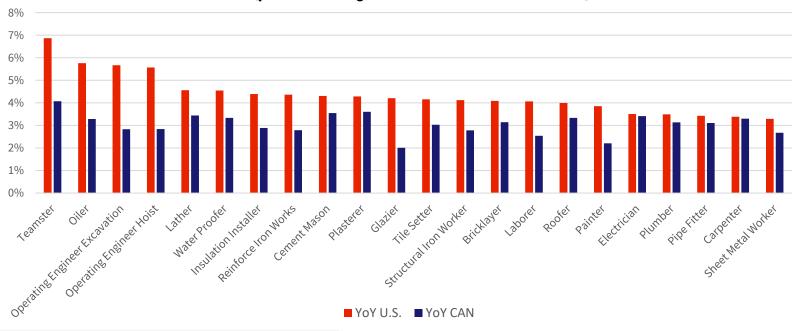
Source: CoreLogic RCT



Labor Costs in the U.S. and Canada Compared

With a continuing shortage of workers for construction, companies are paying higher rates for skilled labor. From October 2020 to October 2021, residential and commercial labor costs in the United States grew significantly with cost growth as high as 7% for teamsters. Labor costs in Canada continue to remain relatively more stable, with cost growth highest for teamsters at 4%.







Source: CoreLogic

U.S. Economic Indicators

The U.S. economy has seen significant disruptions over the course of the pandemic. From Q3 2020 to Q3 2021, U.S. housing prices have skyrocketed – increasing 18.0% for existing stock and 17.1% for new stock. Though unemployment has declined and home sales have increased, housing starts and building permits are lower in Q3 2021 than in Q2 2021.

Corel ogic

ECONOMIC INDICATORS

	Q2 2021	Q3 2021
Housing Starts*	1,588	1,566
Building Permits*	1,670	1,647
Home Sales* New Existing	6,571 737 5833	6,795 738 6,057
Unemployment	5.9%	5.1%
Consumer Confidence	122.1	116.5
30-Year Fixed Mortgage Rate	3.0%	2.9%
	Q3 2020	Q3 2021
Home Price YOY Change New (%) Existing (%)	3.4% 6.6%	17.1% 18.0%

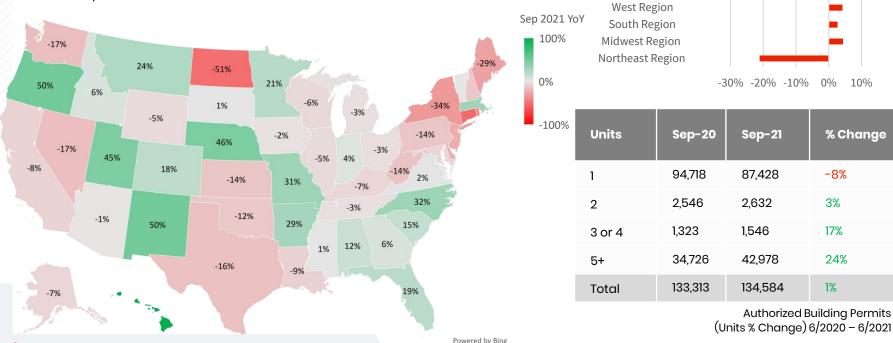
Data may be revise

Sources: U.S. Bureau of the Census, National Association of Realtors, U.S. Bureau of Labor Statistics, The Conference Board, Freddie Mac, CoreLogic

Proprietary | © 2021 CoreLogic, Inc. All rights reserved. CORELOGIC and the CoreLogic logo are trademarks of CoreLogic, Inc. and/or its subsidiaries.

Changes in Permit Authorizations

Construction permits are a leading indicator. Because permits are required before construction can begin, they may be an indicator that builders are moving forward with projects. U.S. permit authorizations in September 2021 were at 1% total growth when compared to September 2020. All regions have seen an increase in permit authorizations besides the Northeast, which has seen a decline of 21%. Nationally, single unit housing permits have seen a decline, while other unit sizes, notably 5+ units, have seen an increase.



© GeoNames, Microsoft, TomTom

Proprietary | © 2021 CoreLogic, Inc. All rights reserved. CORELOGIC and the CoreLogic logo are trademarks of CoreLogic, Inc. and/or its subsidiaries.

Source: U.S. Census Bureau

Construction Job Growth in the U.S.

Construction employment totaled 7,447,000 in September, up 34,000 from June. Employment in construction was up by 191,000 jobs since September 2020.

Total U.S. Construction Employment in September 2021	Highest GROWTH
7,447,000	Idaho 9%
34,000 qtr/qtr	Utah 8%
191,000 yr/yr	South Dakota

Highest GROWTH*	Largest DECLINE*	
ldaho	Louisiana	
9%	-16%	
Utah	Wyoming	
8%	-16%	
South Dakota	New York	
8%	-12%	

Source: U.S. Bureau of Labor Statistics

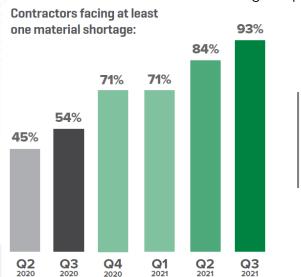
*Total percent gain or loss over last 19 months.

Source: Associated General Contractors of America



Construction Confidence in the U.S.

In Q3 2021, the USG Corporation and U.S. Chamber of Commerce stated the Commercial Construction Index increased one point from 65 in Q2 to 66. Surveys indicate that 60% of contractors are experiencing project delays due to COVID-19, down from 72% in Q2. 93% of contractors are experiencing at least one material shortage, up from 84% in Q2. 98% of contractors say that material cost fluctuations have a moderate to high impact on their business.



Contractors reporting high difficulty finding skilled workers: **55%** 45% 45% 42% **Q4 Q1** Q₂ Q3 2021 2021

Products of most concern to contractors who report impacts from cost fluctuations:



45% say wood/lumber



44% say steel



17% say copper

92%

of contractors
report moderate
to high levels of
difficulty finding
skilled workers

42%

of contractors having difficulty finding workers report turning down work due to skilled labor shortages

