



Summary of Q4 2021

Material Shortages Continue, Copper Wire Costs Up 147% YoY

- YoY increase in costs of copper wire has overtaken YoY increase in cost of lumber and plywood in US and Canada
- Permit authorizations significantly increased YoY in the Northeast US
- 95% of U.S. surveyed commercial contractors reported experiencing at least one material shortage in Q4-21
- Labor costs continue to grow faster in the U.S. than in Canada, with many key construction labor costs growing by over 4% YoY.



The Big Picture — Copper wire cost grow, while lumber cost decline

From Q3 2021 to Q4 2021, building materials in the U.S., on average, increased by 1.0%. Higher costs of Labor were also noted at 0.9%.

Copper prices continue to increase, however, not as dramatically as seen in Q3 2021. Other primary materials had some growth, offset by a sharp decline in lumber and other building components.

Quarterly Change in Cost (U.S.)	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
1/2" Drywall	-0.60%	0.00%	0.50%	0.20%	0.10%	1.80%	2.20%	5.00%
Asphalt Shingles	0.70%	0.50%	0.50%	0.40%	0.60%	0.90%	3.50%	3.00%
Romex Wire	-1.10%	-0.80%	1.20%	2.40%	5.60%	51.90%	53.70%	2.90%
1/2" Plywood	-1.90%	1.40%	4.70%	27.10%	5.60%	88.80%	-8.30%	-19.60%
2x4 Lumber	1.20%	3.30%	4.60%	35.40%	5.30%	53.90%	-16.10%	-14.90%
R-13 Batt Insulation	1.70%	2.60%	1.80%	1.70%	1.70%	7.50%	0.60%	-0.40%
1/2" Copper Pipe	-0.10%	-0.70%	0.00%	1.00%	3.00%	15.60%	25.20%	14.20%

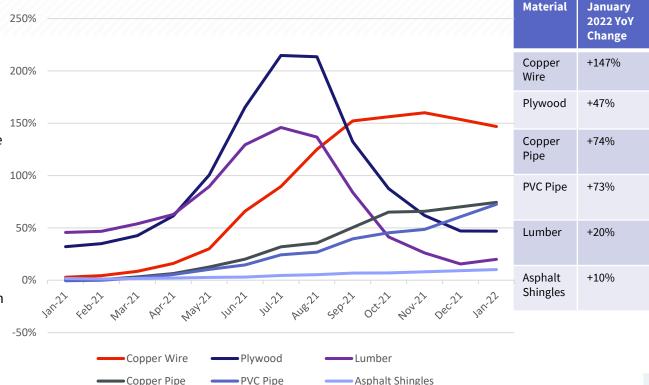
The total reconstruction costs of a structure will not necessarily increase or decrease at the same rate as some material prices fluctuate.



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 January 2022 were more than double what they were in January 2021.

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. Although PVC is a viable alternative to copper, it too has experienced rising prices almost parallel to copper pipes.



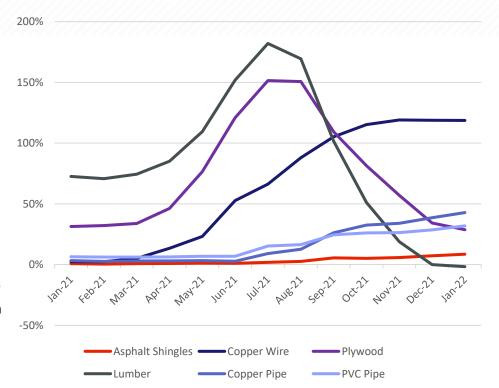


Source: CoreLogic

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 January 2022 were more than double what they were in January 2021.

In contrast to the U.S., the cost for lumber has slightly decreased in Canada by 2%, whereas in the U.S. the cost for lumber is still 20% higher than in January of last year.



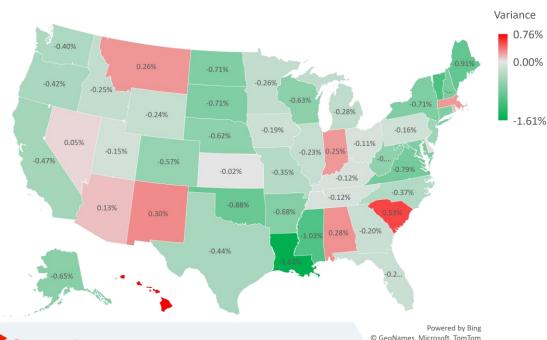
Material	January 2022 YoY Change
Copper Wire	+119%
Plywood	+29%
Lumber	-2%
PVC Pipe	+32%
Copper Pipe	+43%
Asphalt Shingles	+9%



Source: CoreLogic

Q4 2021 to Q1 2022 Change in Residential Reconstruction Cost — United States

Changes in costs for materials impacts the final residential reconstruction cost of a property. Continued stabilization of lumber prices over the second half of 2021 contributed to less variance in reconstruction costs from state to state (between -1.6% to 0.76%, depending on the state) and an overall reduction in the national average costs (-0.35%).



Most Significant Cost Increases

State	Change
Hawaii	+0.8%
South Carolina	+0.5%
New Mexico	+0.3%

Most Significant Cost Decreases

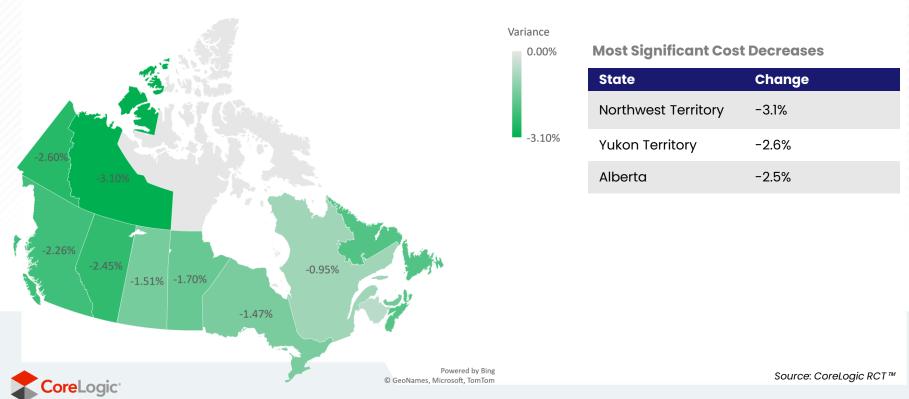
State	Change
Louisiana	-1.6%
Vermont	-1.1%
Mississippi	-1%

Source: CoreLogic RCT™

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Q4 2021 to Q1 2022 Change in Residential Reconstruction Cost — Canada

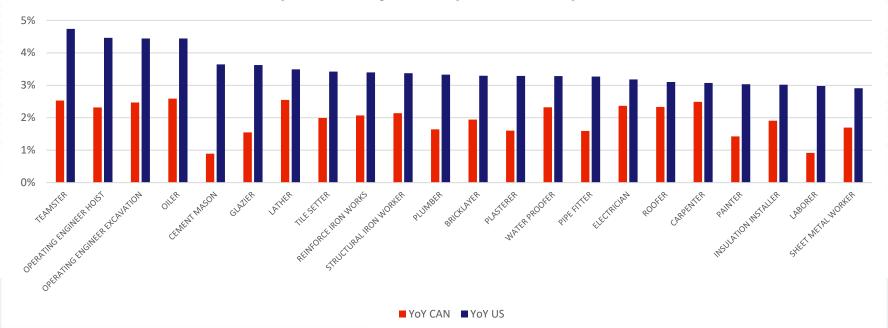
Changes in costs for materials impacts the final residential reconstruction cost of a property. Over a quarter, costs have changed anywhere from -3.1% to -0.6% in every province. The national average was a change of -1.6%.



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 January 2021 to January 2022, residential and commercial labor costs in the United States grew significantly with cost growth as high as 4.7% for teamsters. Labor costs in Canada continue to remain relatively more stable, with cost growth highest for oilers at nearly 3%.

Labor Cost Change by Occupation (percent change, January 2021 to January 2022)





Source: CoreLogic

U.S. Economic Indicators

The U.S. economy has seen significant disruptions over the course of the pandemic. From Q4 2020 to Q4 2021, U.S. housing prices have skyrocketed — increasing 18% for existing stock and 19% for new stock. However, unemployment has declined, and home sales, housing starts, and building construction permits have all increased.

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ECONOMIC INDICATORS

	Q3 2021	Q4 2021
Housing Starts*	1,562	1,644
Building Permits*	1,646	1,752
Home Sales* New Existing	6,756 699 6,057	7,062 728 6,333
Unemployment	5.1%	4%
Consumer Confidence	116.7	112.9
30-Year Fixed Mortgage Rate	2.9%	3%
	Q4 2020	Q4 2021
Home Price YOY Change New (%) Existing (%)	5.5% 8.9%	19% 18%

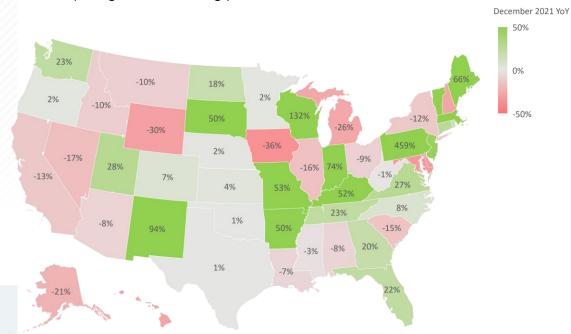
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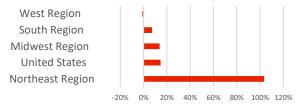
Sources: U.S. Bureau of the Census, National Association of Realtors, U.S. Bureau of Labor Statistics, The Conference Board, Freddie Mac, CoreLogic

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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 December 2021 were at 13% total growth when compared to December 2020. All regions have seen an increase in permit authorizations besides the West. Nationally, single unit housing permits have seen a decline of 9% while other unit sizes have seen an increase.





	Units	Dec-20	Dec-21	% Change
	1	88,538	81,348	-9%
	2	2,096	3,008	30%
	3 or 4	1,435	2,186	34%
	5+	41,531	66,608	38%
	Total	133,313	134,584	13%

Authorized Building Permits (Units % Change) 12/2020 - 12/2021

Source: U.S. Census Bureau



Construction Job Growth in the U.S.

Construction employment totaled 7,560,000 in December 2021, up 101,000 jobs since September 2021. Employment in construction was up by 160,000 jobs since December 2020.

Total U.S. Construction Employment in December 2021	Highest GRO	
7,560,000	South Dake	
101,000 qtr/qtr	Idaho 9%	
160,000 yr/yr	Utah 7%	

Highest GROWTH*	Largest DECLINE*
South Dakota	Louisiana
11%	-15%
Idaba	Whoming
Idaho 9%	Wyoming -13%
	1070
Utah	New York
7%	-10%

Source: U.S. Bureau of Labor Statistics

*Total percent gain or loss since February 2020.

Source: Associated General Contractors of America



Commercial Construction Confidence in the U.S.

The Q4-21 U.S. Chamber of Commerce Commercial Construction Index indicates that in Q4 2021 66% of contractors experienced project delays due to COVID-19, up from 60% in Q3 2021. 95% of contractors experienced at least one material shortage, up from 93% in Q3. 97% of contractors said that material cost fluctuations had a moderate to high impact on their business.

Contractors' top reported material shortages:



27% say stee



19% say roofing materials



17% say wood/lumber

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



43% say stee



31% say wood/lumber



19% say roofing materials

Contractors' Top Concerns Due to COVID-19 in Q4:



60% say less availability of building products.



52% say an increase in worker shortages.



35% say worker health and safety concerns.



30% say more project shutdowns/delays.



19% say fewer projects.

Sources: USG Corporation and U.S Chamber of Commerce





CoreLogic tracks construction costs for commercial, residential and agricultural construction of all types by researching a basket of goods (labor and materials) all around the United States and Canada. This research is conducted monthly, which allows us to monitor fluctuations to commonly used materials.

For more information, please call:

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