Commentary-Dave Pasolli-Western Wood Truss Association of Alberta

I was recently at a store that had OSB over a broken window and it got me thinking.

With all this discussion regarding professional involvement in sealing designs over the past several months I can't help but think of the famous economic parable from French economist Frederic Bastiat in 1850 known as the Broken Window Fallacy.



Bastiat's original parable of the broken window from "Ce qu'on voit et ce qu'on ne voit pas" (1850):

Have you ever witnessed the anger of the good shopkeeper, James Goodfellow, when his careless son has happened to break a pane of glass? If you have been present at such a scene, you will most assuredly bear witness to the fact that every one of the spectators, were there even thirty of them, by common consent apparently, offered the unfortunate owner this invariable consolation — "It is an ill wind that blows nobody good. Everybody must live, and what would become of the glaziers if panes of glass were never broken?"

Now, this form of condolence contains an entire theory, which it will be well to show up in this simple case, seeing that it is precisely the same as that which, unhappily, regulates the greater part of our economical institutions.

Suppose it cost six francs to repair the damage, and you say that the accident brings six francs to the glazier's trade – that it encourages that trade to the amount of six francs – I grant it; I have not a word to say against it; you reason justly. The glazier comes,

Western Wood Truss March 2023 Association of Alberta

performs his task, receives his six francs, rubs his hands, and, in his heart, blesses the careless child. All this is that which is seen.

But if, on the other hand, you come to the conclusion, as is too often the case, that it is a good thing to break windows, that it causes money to circulate, and that the encouragement of industry in general will be the result of it, you will oblige me to call out, "Stop there! Your theory is confined to that which is seen; it takes no account of that which is not seen."

It is not seen that as our shopkeeper has spent six francs upon one thing, he cannot spend them upon another. It is not seen that if he had not had a window to replace, he would, perhaps, have replaced his old shoes, or added another book to his library. In short, he would have employed his six francs in some way, which this accident has prevented.

Similar to this parable sealing truss designs create jobs for engineers, so that must be good for the economy because these jobs create wealth and therefore, they will put money back into the economy.

But there is an unseen cost to creating these jobs, the money that the builder spends to buy these sealed designs could have been spent on something that is more valuable to their customer. After all they are getting the same trusses whether they are sealed or not.

After spending money to get the designs sealed the builder will have adequate trusses, but if the same trusses did not have the additional cost of getting sealed they would still have an adequate roof, and a little extra profit.

In the parable the neighbor's mistake was that he only saw the job created for the window maker, but he didn't see what was given up in order to create that job. He ignored what economists call opportunity costs. Whenever we use a resource for one purpose like spending money to get truss designs sealed, we have to give up the opportunity to use that resource for any other purpose.

So, in order to know if the use of a resource has created wealth or not we have to compare it with the alternative uses we had to forgo. The opportunity cost of a use of a resource is the value of the next-highest-valued alternative use of that resource.

Most people that read the parable will start out by making the same mistake the neighbor makes. Why is that?

Because a job going to the window maker is an effect that happens, while Goodfellow spending money on something else is something that doesn't happen. The first effect is

seen but the other is never seen. Opportunity costs are something that is hard to see because they never take place.

Bastiat, in his summary of the original broken window parable, said his story "contains an entire theory ... which, unhappily, regulates the greater part of our economical institutions." That was 1850, but it's even more true in 2023 as governments in the Western world attempt to smash the windows of the energy system and replace it with an all-new net-zero energy regime. Don't get me started on that.

The broken window fallacy in such thinking, if I can presume to condense Bastiat, is that the real cost of breaking windows is ignored. The window repair company will make six francs from the repair costs and the new spending will be incorporated into GDP as a source of growth. Missing in that summary is the fact that the shop owner has lost six francs and has nothing to show for it. He has, moreover, lost the opportunity to buy clothing for his kids or to invest in a new lunch counter that would increase his shop's sales and his income.

We always talk about adding value and not just cost. In my opinion sealing truss or joist designs are adding cost, but not much value because the end result is that the builder is getting the same product. Especially when you take into account that the seal on that component is accompanied with a bunch of disclaimers that limit the professional involvement to the component only.

If you have an idea for a commentary or would like to submit your own commentary for a future newsletter please let me know at dave@wwta.ab.ca

Economic Update

In Alberta, urban housing starts totaled 2,261 in February 2023, a year-over-year increase of 2.4%. Canadian housing starts increased by 3.5% over the same period. Edmonton was up 6.75%% compared to last January, and Calgary was up 6.82%. Total starts in Alberta were up slightly from 2010 in January of 2023.

Housing Starts Alberta						
	Feb-23	Feb-23	% Change	YTD 2023	YTD 2022	% Change
Alberta	2261	2207	2.45%	4271	3932	8.62%
Edmonton	871	816	6.74%	1439	1725	-16.58%
Calgary	1238	1159	6.82%	2533	1720	47.27%
Red Deer	10	10	0.00%	24	45	-46.67%
Grande Prairie	8	12	-33.33%	11	14	-21.43%
Lethbridge	11	120	-90.83%	24	275	-91.27%
Wood Buffalo	0	0	#DIV/0!	5	3	66.67%
Canada	15993	15443	3.56%	29382	28831	1.91%

Construction Outlook in Alberta Improves to Start the Year

After falling by 3.4% (\$41 million) in December, the seasonally-adjusted value of building permits* issued in Alberta in January rose by 2.1% (\$24.0 million).

A 16% increase (\$60 million) in multi-family dwelling permits and a 142% (\$34 million) rise in industrial permits helped offset a 27% (\$88 million) drop in commercial intentions.

Single-dwelling permit value was up by 0.8% (\$3 million) and institutional projects posted a 33% increase (\$14 million).

A large drop in commercial intentions pushed down total permit value in Calgary by almost 6%.

Stronger residential growth and an uptick in the institutional/governmental category saw Edmonton's monthly permit value rise by just under 3%.

Nationally, permit value in January was down by 4% (\$404 million) with residential intentions off by 6.6% (\$430 million).

<u>Canadian housing market outlook: The bottom of the downturn is in sight - RBC</u>

<u>Thought Leadership</u>

Job Growth Cooled in February

After solid gains in January, employment in both Canada and Alberta barely budged in February.*

Seasonally-adjusted employment in Alberta increased by 0.1% (1,600 positions compared to a gain of 0.9% (20,700) in January..

It was a similar story nationally with employment up by 0.1% (21,800) in February compared to a 0.8% jump (150,000) in January.

The unemployment rate in Alberta ticked down from 6.0% in January to 5.8% in February.

Nationally, the unemployment stayed the same at 5.0%.

With the Bank of Canada looking for signs that its interest hikes are dampening economic growth, today's job numbers are likely weak enough for the Bank to keep the pause button pressed for now.

With that said, it is only one month's worth of data and the national unemployment rate remains very low by historical standards.

Pause Button Pressed

After eight consecutive increases, the Bank of Canada announced it is keeping its trend-setting policy interest rate at 4.5%.

The decision was based on the argument that "the latest data remains in line with the Bank's expectation that CPI inflation will come down to around 3% in the middle of this year."

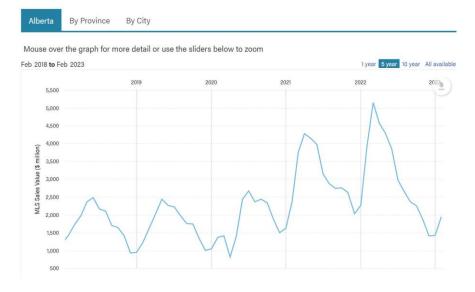
Today's announcement says that the Bank's "Governing Council will continue to assess economic developments and the impact of past interest rate increases, and is prepared to increase the policy rate further if needed to return inflation to the 2% target."

While welcome news for borrowers, concerns have been raised that the Canadian dollar could lose more ground if the U.S. Federal Reserve continues to increase its benchmark rate due to better-than-expected economic data south of the border.

MLS Sales Down in February

The dollar value of homes sold in Alberta through the Multiple Listing Service (MLS) decreased by 50.2% to \$2.0 billion in February 2023 compared to the same time period a year earlier. Nationally, total sales values decreased by 51.3% to \$19.6 billion. Ontario had the largest decrease, down 55.1% to \$9.4 billion.

In Alberta every area decreased. Edmonton decreased by 50.0% to \$515.4 million and Calgary decreased by 52.6% to \$1.1 billion.



Looking at the previous graph for the value of homes sold though MLS over the last 5 years I can't help notice the repetitive cycle peaking in the spring and bottoming out at the end of the year.

Alberta Remains Migration Magnet

It was down from the near-record set in the third quarter, but interprovincial migration to Alberta remained high over the last three months of 2022.

On a net basis, Alberta gained 11,534 residents from other parts of Canada in the fourth quarter compared to 19,285 in the third quarter.

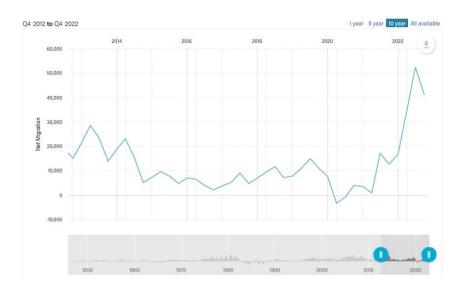
This was the sixth quarter in a row that Alberta gained population from other parts of the country for a total increase of 52,479 residents over this period from interprovincial migration.

Five provinces posted gains from interprovincial migration in the fourth quarter with Alberta adding the most residents. Nova Scotia experienced the second largest net inflow at +1,025.

Ontario was the main source of residents moving to Alberta in the fourth quarter with 4,831 more Ontario residents moving to Alberta than vice versa.

British Columbia was the second largest source with 3,591 more people moving from B.C. to Alberta than the other way around.

Relatively stronger economic performance in Alberta is expected to maintain the positive inflow of interprovincial migrants into the province in 2023.

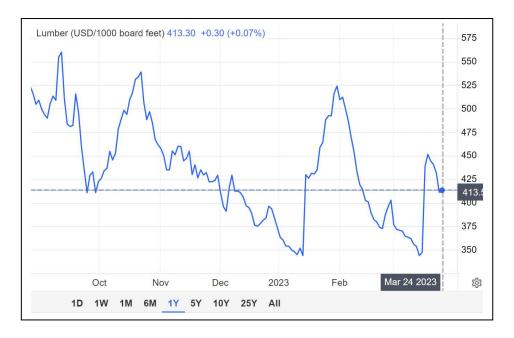


Net Migration in Alberta for the last 10 years

Lumber

Competition for Lumber Sales Drops Prices

Lumber futures were trading around the \$450 per thousand feet mark, supported by tight supplies and signs of a demand recovery. Last year, a sharp drop in prices and sluggish demand forced North American producers to curb output, leaving inventories low and sparking concerns about a supply shortage during the spring and early summer construction season. At the same time, data from the US Census Bureau showed housing starts and building permits jumped 9.8% and 13.8%, respectively, in February. Still, prospects of interest rate hikes continued to depress real estate activity. Stubbornly high inflation and a tight labor market have raised worries that the Federal Reserve will keep rates elevated even after the recent turmoil in the banking sector. The critical building commodity remains roughly 70% off its May 2021 peak of around \$1,700, when supply chain issues compounded strong demand.



Lumber Global Demand

Quality Control

I am continuing to focus on the quality requirements for CSA S349:20. This week we will look at the element for design. I talked about the Q.C. manual in the January newsletter, and last month looked at internal inspections. If you want to go back and review them, they are located on the WWTA-Alberta website in the newsletter section.

Truss Design Drawings

In the past the Alberta Q.C. standard had some questions on truss design drawings, but did not assign any actual scoring to them as we had determined that the score should focus on production. The CSA S349:20 standard however does ask some question on design in element #3. There are only 2 questions, and they account for a maximum of 10% of the total audit score, although they are all or nothing questions, so if something is missing you get zero points.

Questions	Instructions		
Are trusses designed in	The Auditor must be aware of TPIC design		
accordance with the applicable	procedures and limitations.		
TPIC design procedures?	Either all or no points should be awarded.		
(50 points)			
Are the minimum criteria on the	The auditor must be aware of the TPIC minimum		
truss design drawings as per	information required in accordance with TPIC		
TPIC?	Appendix H.		
(50 points)	Either all or no points should be awarded.		

The auditor must determine if trusses are designed in accordance with the applicable TPIC design procedures. Therefore, they must know the applicable building code in effect.

The auditor is to randomly select 3 jobs and review the truss placement plan and the truss design drawings. The jobs should be from different designers and types of jobs if possible. For example, if the manufacturer builds floor trusses the auditor should select a floor truss job, or if they produce commercial jobs the auditor should select a commercial job.

The auditor will check to ensure that loads look appropriate for the type of job and that the layout is accurate.

The auditor must review the jobs to ensure that the minimum information is included on the truss drawings and layouts as per TPIC Appendix H.

The following is Appendix H from TPIC 2019, It should be pretty easy to meet this requirement if you are using a plate company's proprietary software.

TPIC Appendix H

H.1 General

Truss Design Drawings shall include, but not limited to, the information specified below:

- (1) Building code, CSA and TPIC Standard to which the drawing complies to.
- (2) Slope or depth, span and spacing.
- (3) Location of all joints and support locations.
- (4) Input and required bearing widths.
- (5) Software version number.
- (6) Specified loads, as applicable, shall include:
 - a. Top chord variable loads (including snow, live loads).
 - b. Top chord dead load.
 - c. Bottom chord live load due to limited accessibility.
 - d. Bottom chord dead load.
 - e. Wind loads
 - f. Other lateral loads, including drag strut loads.
 - g. Statement of whether special loading requirements have been checked including but not limited to unbalanced loading, minimum concentrated loads, etc.
 - h. All additional loads and their points of application as applicable.
- (7) Adjustments to wood member and metal connector plate design value for conditions of use.
- (8) Adjustments made to material strength due to load sharing.
- (9) Connection requirements for truss ply to ply.
- (10) Maximum factored reaction force and direction, including maximum factored uplift reaction forces where applicable.
- (11) Maximum CSI on top chord, bottom chord and webs.
- (12) Maximum unfactored reaction force and direction for each load type.
- (13) Metal connector plate type, manufacturer, size, and thickness or gauge, and the dimensioned location of each metal connector plate except where symmetrically located relative to the joint interface.
- (14) Size, species and grade for each wood member.
- (15) Calculated maximum vertical and horizontal deflection for variable load and total load as applicable.
- (16) Maximum axial tension and compression forces in the Truss members.
- (17) Fabrication Tolerance used per Appendix G.
- (18) Required Permanent Individual Truss Member Restraint location shall be shown for lateral bracing. Fastening of the lateral brace, T/I-brace, scab brace, L-brace shall be specified.
- (19) Drawing identification.
- (20) Design equation used for combined bending and compression member design.
- (21) Output error messages when design exceeds limits

Next month we are going to focus on Element #4 Handling and Storage.

Health and Safety Toolbox

At the time I am writing this newsletter it is National Impaired Driving Prevention Week, so I thought I would focus on this as spring is in the air and it will soon be in golf season. As we emerge from the pandemic lockdown many people feel the need to get back to socializing with their friends and customers.

This is a good topic to bring up at a Health and Safety Toolbox meeting just to remind your employees of their responsibilities, as well as the employers' obligations.

Remember being impaired is not limited to drinking and driving.

Drug-impaired driving

Impaired driving, whether by alcohol or drugs, continues to kill or injure more Canadians than any other crime. It also remains the single most important factor contributing to serious road crashes. Furthermore, recent statistics show that the number of police reported drug-impaired driving (DID) incidents have increased by 43% from 2019 to 2020.

Illegal drugs, cannabis, over-the-counter and prescription medications can all impact your judgement, coordination, and reaction time behind the wheel.

Alcohol-impaired driving

Crashes involving alcohol and/or drugs are a leading criminal cause of death in Canada. It's important to know that even one drink of alcohol can reduce your reaction time, blur or double your vision, impair your reflexes, and alter your attention span.

Fatigued driving

Fatigued driving is the dangerous combination of driving and sleepiness or fatigue. At 100 km/h, a driver can travel 150 metres in only six seconds. This means that a driver's eyes need to be closed for only three or four seconds before they could face disastrous consequences.

Distracted driving

Driver distraction is a factor in about 4 million motor vehicle crashes in North America each year. It is estimated that drivers look at, but fail to see, up to 50% of the information in their driving environment when using their phones.

Remember to abstain from using your phone to text or dial while driving or at a red light, or face serious consequences.

For more information MADD Canada has a good publication for employers called "Keeping Good Company: An Employer's Guide to Understanding and Avoiding Alcohol Liability."

Employers Brochure 2006 (madd.ca)

Being a good host means ensuring that your employees, colleagues, friends, and clients have both an enjoyable and safe time at your events. Moreover, the steps you take to avoid alcohol-related injuries and deaths will, of necessity, reduce your risks of civil liability. While there are no 100% guarantees, your exposure to alcohol-related liability is largely in your own hands.

The Alberta Government has a new format OHS eNews you can subscribe to with all kinds of good material at: https://ohs-pubstore.labour.alberta.ca/

News and Events

WWTA Annual Conference and AGM

Invitations have been sent out for our Annual Conference and General Meeting that is going to be held this year in Canmore on June 8th. The invitation is also on www.wwta.ab.ca under the events tab.

Key Dates:

April 14th

We are planning a golf outing on Friday June 9th, the morning after the meeting at Brewster's Golf at Kananaskis Ranch. If you would like to participate please fill out the form on the 2nd page of the registration with the names of the participants and e-mail it to me before April 14th.

There is a limited number of tee times available, and I have to confirm the number of golfers with the course by this date. We will be on the hook for the full cost of each player if we book more tee times than we actually need as part of a group booking. If you register and do not show up your company will be invoiced for that amount.

The cost of golf is \$104 pp + tax and golfers will pay the course directly before teeing off.



Brewster's Golf at Kananaskis Ranch

May 5th Guest rooms must be booked prior to May 5th with the hotel through the link https://book.passkey.com/go/WesternWoodTruss. As we are required to guarantee a minimum number of rooms we have limited the quantity, so do not wait until the last minute as the reserved block of rooms may be fully booked. There is a cancellation policy when you book your room.

May 5th is also when I want your registration form sent to me so that I make arrangements with the hotel. If you want to attend the meeting only there is no charge, but if you wish to stay for dinner there is a cost of \$150 per person that will be invoiced.

If you are a preferred supplier that would like to sponsor wine for dinner please indicate that on your registration form.

Hiking with Jerry Cvach

For those of you that would like to go a hike with Jerry Cvach we will be arranging a moderate hike for the morning of June 9th. There will be no charge for the hike, but please indicate that you are interested on the registration form.

As we are trying to have more of a destination meeting this year we would encourage you to bring your significant other this year.

STANDATA Update

I was going to call this the STANDATA STRUGGLE but I though that using SS would not be politically correct.

The Builders Sub-council met again March 11th and decided to form a working group chaired by Keith Jansen from Lincolnberg Homes who we have been working with since this all started.

The WWTA arranged a virtual call with Keith on March 15th to answer any questions he had, again emphasizing the problems associated with sealing layouts for metal-plate-connected trusses and joist runs that may not fall within manufacturer's CCMC evaluations.

It appears that there may be some movement on APEGA's original position that software is a tool that should only be used by a registered professional.

It also appears that Alberta Municipal Affairs is not going to rush something into place without support from the Builder's Sub-council and the WWTA will continue to work towards a solution with Keith and their working group.

CWTA Benefits Program

Benefit Partners a division of People Corporation who are responsible for the Big Company Advantage employee benefits program for members wish to announce their new strategic partnership with Schooley Mitchell!

Introducing an innovative, two-pronged cost savings program for members!

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The Western Wood Truss Association would like to welcome a new component manufacturer to the group.



KILRICH BUILDING CENTRES
30 DENVER ROAD, WHITEHORSE, YT
Y1A 5S7
OFFICE (867) 668-5958 FAX (867) 6683682
www.kilrich.ca

Contact: Kathryn MacDonald

After a break during the pandemic the WWTA is also please to announce that Timber-Tech Truss Inc. has also re-joined the association. On behalf of the Board of Directors and the members welcome back, and we look forward to your participation moving the industry forward.



WWTA Online Training

If you have not yet taken a look at the WWTA online training program I would encourage you to, as no doubt you will be hiring new workers in the near future and it is a good method to get them productive earlier and safer. If you want an overview of the program go to the WWTA website at: http://www.wwta.ab.ca/truss-training-online.html