



The Heavy News Weekly



Using Augmented Reality for Construction

Written by Erin Green, published on February 10, 2016 for Engineering.com and featured in the CCA Weekly

Virtual reality (VR) has been all the buzz lately, but today's architects and designers shouldn't underestimate the power of augmented reality (AR) in construction.

While virtual reality can help designers visualize a structure to see how everything will look, augmented reality plays a role in helping construction teams in the field understand how various systems and components fit together during production.

The current process for a structure is that it is designed in 3D, transferred to 2D documents and then built in 3D. The transition from 3D to 2D and back again can be quite difficult and prone to error—so what if we could cut this middle step out altogether?

Using AR for Construction

One method to make the actual construction process easier for builders is to have tablets on-site. These tablets use apps to render 3D models so that construction teams can compare the models to blueprints.

In theory, this approach should reduce the need to rely on 2D construction documents, but this often isn't the case in practice. Instead, the display on the tablet still requires interpretation between the model and the actual building site. This human translation can leave teams wondering which line on the blueprint corresponds to which edge in the model.

This is where AR comes in. Instead of generating an entirely virtual environment, AR leverages the real world such as a building site and

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WORKSAFELY MHCA™

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places the building model directly into this site in real time. This allows a user to see exactly how a design fits into the construction site, including how parts and systems that have yet to be constructed will fit in comparison to those which have already been constructed.

Although AR can help users figure out how to correspond 2D elements in a drawing with their 3D and real-world counterparts, the tablet format is somewhat limiting.

Bringing AR On-site

In order to bring AR onto a build site in a more useful way, Bentley Systems created a system with substantial potential.

The original design was rather ad hoc—a bit of a MacGyver job if you will—consisting of an Oculus Rift-style prototype constructed using two wide-field-of-view webcams, an in-house AR application and a bit of hot glue. This application provided additional context for construction teams by creating an interpretation system between 2D documents and 3D models.

When the wearer highlights an entity in the 2D format, the corresponding 3D component is highlighted automatically.

Although this type of component identification promises to be widely useful, it holds specific potential for the small and complex components of MEP systems.

Just imagine being able to put on an AR headset and see exactly which line on a 2D construction document corresponds to a given object, such as a section of pipe in a building information modeling (BIM) model. The team at Bentley even speculated that in the future, workers would be able to see exact location, assembly instructions, part information, warnings and other information associated with BIM projects.

Manitoba Chamber of Commerce: The MBiz Breakfast Series

Business Spotlight on the 2016 Manitoba Provincial Election

February 26th Presented by [6PMarketing Strategies](#)

Canada Inns Polo Park

7:30-9:30 am

Featuring:

Chuck Davidson, President & CEO, Manitoba Chambers of Commerce

Chris Lorenc, President, MHCA

Ron Koslowsky, Manitoba Vice President, Canadian Manufacturers & Exporters

Dave Angus, President & CEO, Winnipeg Chamber of Commerce



Tickets are sold online through the Manitoba Chamber of Commerce Website

<http://www.mbchamber.mb.ca>

If you have any questions about this event contact Stephanie Allen at **204-948-0105**

sallen@mbchamber.mb.ca

You're Invited

Manitoba Heavy Construction Association, Manitoba Construction Sector Council and Manitoba Institute of Trades and Technology (MITT) are pleased to invite you to a showcase of our Heavy Equipment Operator Certificate (HEOC) program.

Please join us on **February 22, 2016** at **10 am** to observe classes, talk to instructors and view our simulators in use by students.

The event will be held on campus at MITT. There will be complimentary refreshments for your convenience.

Industry Introduction to the HEOC program
Feb. 22, 2016 10 am
Manitoba Institute of Trades and Technology
7 Fultz Boulevard, Winnipeg

If you have any questions about this event please
contact Jackie Jones at jackie@mhca.mb.ca



MANITOBA INSTITUTE OF
TRADES AND TECHNOLOGY



HEOC.

Heavy Equipment Operator Certificate

GROWING MANITOBA'S ECONOMY

Pillars in Support of 'Growing Manitoba's Economy'

In today's globally competitive business environment it is imperative that government create a climate that attracts new business and allows existing businesses to grow and thrive. For Manitoba to reach its full potential there are seven key public policy pillars that political parties must address to demonstrate their political commitment to "Growing Manitoba's Economy," in their 2016 Provincial Election platforms.

I. FISCAL COMPETITIVENESS

Manitoba must have an effective and fiscally prudent government committed to creating a competitive tax jurisdiction to attract and retain new investment.

II. VENTURE CAPITAL

Commitment to the creation of an accessible venture capital fund and supportive tax credit policies to leverage investment in the growth of new and existing businesses.

III. GLOBAL TRADE

Commitment to pursuing an expanded global trade profile for Manitoba which derives substantial economic benefit.

IV. INFRASTRUCTURE INVESTMENT

Commitment to a strategic, sustained, disciplined approach to investment in Manitoba's core infrastructure.

V. ABORIGINAL ENGAGEMENT

Commitment to the creation of an Aboriginal Engagement Strategy to ensure inclusion and partnership in economic growth policies.

VI. SKILLED WORKFORCE

Commitment to attracting, educating, training and retaining a skilled, responsive workforce is fundamental to ongoing economic growth.

VII. 'NEW FISCAL DEAL' FOR MUNICIPALITIES

Commitment to address the existing fiscal framework between the province and municipalities to meet the challenges of the future.

CONCLUSION

The above principles are supported and respectfully submitted by the following supporting organizations each of which are committed to pursuing 'Growing Manitoba's Economy,' in the 2016 Provincial Election.

Business Council of Manitoba (BCM)
Canadian Manufacturers and Exporters (CME)
Manitoba Chambers of Commerce (MCC)
Manitoba Heavy Construction Association (MHCA)
Manitoba Home Builders Association (MHBA)
The Winnipeg Chamber of Commerce (WCC)





The Manitoba Heavy Construction Association & the Manitoba Home Builders' Association are pleased to present:

BREAKFAST WITH THE LEADERS SERIES

A series of current and engaging topics connected to the Heavy Construction Industry



Holiday Inn Winnipeg Airport Polo Park
1740 Ellice Ave., Winnipeg, MB

Join us for breakfast and a presentation by



Mr. Brian Pallister
Leader, PC Party
Tuesday, January 19, 2016
King Edward Room **COMPLETED**



Ms. Rana Bokhari
Leader, Liberal Party
Thursday, January 28, 2016
Madison Ballroom **COMPLETED**



Premier Greg Selinger
Leader, NDP
Tuesday, February 23, 2016
Madison Ballroom **UP NEXT**

AREAS OF INTEREST TO BE ADDRESSED IN THE PRESENTATIONS:

- Given the importance of growing Manitoba's economy, the relative priority the leader would place on trade & transportation investments as part of a provincial economic growth strategy, including promoting CentrePort Canada and the Port of Churchill as key Canadian trade gateways and corridors;
- To address obvious investment need, commitment to sustaining and incrementally enhancing the projected levels of strategic investment in Manitoba's core infrastructure through the dedicated 1 per cent of PST revenues;
- Income growth has not kept pace with the cost of housing. Address the rising cost of home ownership and decline in affordability in the Manitoba market, particularly as it impacts young people;
- Projected approaches to balancing the provincial budget;
- Views on renewing the existing provincial revenue sharing and striking a 'New Fiscal Deal' all of Manitoba's municipalities;
- With the growing importance and profile of the New West Partnership an indication to join, or otherwise project Manitoba's global presence and investment promotion.

Doors Open: 7:30 a.m. **Breakfast:** 8:00 a.m. **Presentation:** 8:15 a.m. **Cost:** \$35.00 +GST / person

RSVP: **MHCA** - Brenda Perkins at 204-947-1379 or brenda@mhca.mb.ca
 MHBA - Janet Constable at 204-925-2578 or jconstable@homebuilders.mb.ca

The Breakfast with the Leaders series is sponsored by **Aon Reed Stenhouse Inc.**



Ottawa to increase federal share of infrastructure

Written by Ian Bailey; originally published on the Globe and Mail website on February 11, 2016 and featured in the CCA Weekly



**Canadian
Construction
Association**

Federal Infrastructure Minister Amarjeet Sohi says Ottawa will cover a greater share of infrastructure projects than the conventional three-way split with provinces and cities – a formula he said is unfair to municipal governments that have a limited ability to raise taxes.

The approach was warmly welcomed by Vancouver Mayor Gregor Robertson, who has had a prominent working relationship with Prime Minister Justin Trudeau and also a leadership role in the Federation of Canadian Municipalities representing big-city mayors.

Vancouver is among the cities lining up for billions in funding promised by the Liberals during last fall's federal election campaign.

Mr. Sohi has been musing about the possibility of changing the government's standard one-third contribution for several weeks, but firmed up his commitment in a question-and-answer session Thursday, after a speech to the Vancouver Board of Trade.

"We will be looking for a different formula," he said. "We don't know what that is going to be yet because we want to do it in consultation with [municipalities]."

He said Ottawa will definitely be looking at a greater role for the federal government. However, he also suggested such change may not come in the first phase of federal infrastructure funding.

The government has committed to spending \$60-billion on infrastructure over the next decade, with \$20-billion each focused on public transit, green infrastructure and social infrastructure.

Mr. Sohi was introduced at the board-of-trade event by Mr. Robertson, who is looking for federal support for, among other things, affordable housing and a major east-west subway he has made a priority item of his political agenda.

Mr. Sohi repeated Ottawa's support for the subway project on Thursday as well as for a light-rail system in Surrey, but details of those commitments remain to be outlined.

Mr. Robertson said changing the status quo is an issue of fairness for municipalities, which lack the fiscal resources of the province or federal government.

"I am very encouraged to hear the minister and federal government say they're looking at changing the formula to a fair funding formula that recognizes the per cent of tax revenue collected by each level," Mr. Robertson said in an interview after Mr. Sohi's remarks.

Mr. Robertson estimated that cities collect about 10 per cent of tax revenue, behind 50 per cent for Ottawa and 40 per cent for provinces.

He said a "fair funding formula" would allow greater movement on such transit projects as the Broadway subway.

Last year, voters in a regional plebiscite rejected a proposal for a new Vancouver-area sales tax to help raise additional funds for transit expansion, including the Broadway subway.

On another issue, Mr. Sohi was non-committal about reports that the federal government is talking to some of Canada's largest pension funds about investing in the government's infrastructure agenda.

He said his department will be exploring how to engage the private sector to support infrastructure, but he said there have been no discussions around pension funds.

He declined to elaborate on his thinking about the idea despite reports that his department has had discussions with various institutional investors.

"We don't have any plan at this time," he said.

Employers - Report Your Payroll Soon!

As an employer, it's important to submit accurate payroll information in a timely manner. The WCB uses your estimate of payroll to determine your premium.

With the deadline of February 29 fast approaching, report your payroll the easy way using our online system! You can also complete and submit your payroll using our annual payroll form.

Assessment Services - Here to Help!

The Assessment Services Department (or ASD) of the Workers Compensation Board is responsible for calculating and collecting premiums from Manitoba's employers to cover the cost of workplace injuries. Learn about Coverage, Classifications, Reporting Payroll, Employer Audits and more.

From registering your business to reporting your payroll and paying your premium, ASD is here to help you and your business!

What is a Return to Work Program for Employers?

A Return to Work (RTW) program is based on the philosophy that many employees can safely perform meaningful and safe work as part of their recovery process. Ideally a RTW program will be developed cooperatively with workers, their union (when applicable), the employer, the worker's healthcare provider, and when required, the WCB.

Having a well developed RTW program in a workplace is a proactive approach to helping injured workers stay at work or return to healthy and meaningful employment as soon as possible following a workplace injury.

Learn more about your role and how the WCB can help. Visit <http://www.wcb.mb.ca/return-to-work-information-for-employers>

WCB Toolkit for Newcomers to Manitoba

The WCB has recently updated its information toolkit designed specifically for newcomers to Manitoba. The toolkit, which features a PowerPoint presentation, fact sheet for learners and instructor's guide, is intended to help teach newcomers to Manitoba about their workers compensation rights and responsibilities and workplace safety and health.

The toolkit can be found online and contains a wealth of information at your fingertips!

Policy Manual Update

The Policy and Procedures Manual provides policy information for workers and employers covered by workers compensation, as well as for other interested parties who want to understand the policy positions adopted by the Board of Directors.

To view the manual online, visit: <http://www.wcb.mb.ca/policy-manual>

Take our Website Survey - Enter to Win an iPad!

Tell us what you think of our website and you could win an iPad!

The survey should take no more than 10 minutes so let us know how you feel about the website. We welcome your feedback and are always looking at ways to improve the user experience!



**TO REGISTER,
PLEASE CONTACT:**
Sarah Higgins
sarah@mhca.mb.ca

Training Schedule

February

COR™ Leadership in Safety Excellence, Swan River, MB	Feb. 22-23	Westwood Inn
COR™ Principles of Health & Safety Management, Swan River, MB	Feb. 24	Westwood Inn
COR™ Auditor, Swan River, MB	Feb. 25-26	Westwood Inn
COR™ Leadership in Safety Excellence, Roblin, MB	Feb. 22-23	Municipality of Roblin
COR™ Principles of Health & Safety Management, Roblin, MB	Feb. 24	Municipality of Roblin
COR™ Auditor, Roblin, MB	Feb. 25-26	Municipality of Roblin

March

COR™ Leadership in Safety Excellence	Feb. 29 - March 1	MHCA Office
COR™ Principles of Health & Safety Management	March 2	MHCA Office
COR™ Auditor	March 3 - 4	MHCA Office
Train the Trainer	March 14 - 15	MHCA Office
Flagperson (1/2 day AM)	March 16	MHCA Office
Committee/Representative Training (1/2 day PM)	March 16	MHCA Office
Excavating and Trenching (1/2 day AM)	March 18	MHCA Office
Traffic Control Coordinator	March 21 - 22	MHCA Office
*Planning Work (1/2 day AM)	March 24	MHCA Office
*Document Use - Reading & Translating (1/2 day PM)	March 24	MHCA Office

April

Flagperson (1/2 Day PM)	April 18	MHCA Office
Comittee/Representative Training (1/2 Day PM)	April 18	MHCA Office
WCB Basics	April 19	MHCA Office
WCB Return To Work Basics	April 20	MHCA Office
*Environmental Practices (1/2 Day AM)	April 21	MHCA Office
*Effective Meetings (1/2 Day PM)	April 21	MHCA Office
COR™ Leadership in Safety Excellence	Apr. 25 - 26	MHCA Office
COR™ Principles of Health & Safety Management	Apr. 27	MHCA Office
COR™ Auditor	Apr. 28 - 29	MHCA Office

May

COR™ Leadership in Safety Excellence	May 16 -17	MHCA Office
COR™ Principles of Health & Safety Management	May. 18	MHCA Office
COR™ Auditor	May 19 - 20	MHCA Office
Flagperson (1/2 Day AM)	May. 24	MHCA Office
Committee/Representative Training (1/2 Day PM)	May. 24	MHCA Office
Traffic Control Coordinator	May 25 - 26	MHCA Office
Excavation & Trenching (1/2 Day AM)	May. 27	MHCA Office
Train the Trainer	May 30 - 31	MHCA Office

*Leadership Certificate Program/Gold Seal

MHCA Welcomes New Members

The Manitoba Heavy Construction Association is proud to welcome **Yorkton Plumbing & Heating Ltd.** as a member.

Yorkton Plumbing & Heating are a residential and commercial plumbing and heating company that provide numerous services and employ approximately 50 Certified and Apprentice Journeymen Plumbers, Refrigeration and sheet metal workers. They have done Mechanical and HVAC work on commercial project such as schools, trade centres, restaurants and more in the Saskatchewan territory. For more information about **Yorkton Plumbing & Heating Ltd** contact:

Justin Yawney

Box 20034 Hwy 9 North

Yorkton, Saskatchewan S3N 0Y6

Ph: 1-306-782-4588

Fax: 1-306-782-4589

justiny@yorktonph.com

www.yorktonplumbingandheating.com



The Manitoba Heavy Construction Association is proud to welcome **Miller Paving Limited** as a member.

Miller Paving Limited is a leader in developing pavement preservation and rehabilitation technologies in Canada. They continue to offer many cold technologies to both rehabilitate and preserve pavements, including Cold In-Place Recycling, Expanded Asphalt, Full Depth Reclamation, Micro and Slurry Surfacing, Reinforced Seal Coats, Fog Seal, and Granular Sealing. For more information about **Miller Paving Limited** contact:

Henry Groves

1803 Hekla Ave

Winnipeg, MB R2R 0K3

Ph: 204-925-9603

Fax: 204-979-0767

henry.groves@millergroup.ca

www.millergroup.ca



EXPO SOUTH

April 5 & 6, 2016

Victoria Inn & Conference Centre, Winnipeg, MB

Join Us If You:

- Want to strengthen your leadership skills within your organization
- Want a designation such as Gold Seal or National Construction Safety Officer
- Want to make important contacts within the construction industry

Registration options include:

Two-Day

One-Day and

(NEW!) Half-Day Courses

Visit www.mhca.mb.ca by

March 18, 2016 to sign up!





Snowmobile Safety

Snowmobiling is a sport enjoying immense popularity. There are currently over 700,000 registered snowmobiles in Canada and over 161,000 km of snowmobile trails.

Snowmobilers should follow these snowmobiling safety tips to ensure a safe and happy snowmobiling season:

Before you Set Out:

- Check local weather information
- Inform others of your destination and estimated arrival time.
- Inspect your snowmobile for mechanical integrity.
- Wear suitable clothing to prevent hypothermia – remember that children are particularly susceptible to the cold.
- Carry first aid and survival kits.

On The Trail:

- Ride within your capabilities.
- Use snowmobile trails whenever and wherever practical.
- Stay on the right side of the trail.
- Reduce speed in unfamiliar territory.
- Exercise care when crossing roadways and railway tracks.
- Use hand signals to inform oncoming riders (see right).

At Night:

- Slow down! Your headlight limits how far ahead you can see. The slower you are travelling, the less distance you need to stop.
- Avoid driving along road shoulders where lights from either snowmobiles or vehicles can cause confusion.

Over Lakes and Rivers:

- Be aware of ice conditions and, if in doubt, check with local authorities or your local club.
- Wear flotation-type clothing.

NEVER:

- Drive a snowmobile if you are impaired by alcohol or drugs
- Ride on railway tracks.
- Ride alone.
- Leave children unsupervised with “kiddie” snowmobiles.
- Leave young children alone in cutters
- Travel with babies.

NATIONALLY APPROVED SNOWMOBILE HAND SIGNALS





Where in the World is America Shopping?

By Peter G Hall, Vice President and Chief Economist

If there's a global crisis in the works, somebody didn't tell US consumers. Oh, the media has tried, but it seems even that persuasive voice can't buck fundamentals. Low gasoline prices have suppressed overall sales, but peel away that effect and control for other volatile categories, and January sales put first-quarter consumer spending on track for a 4 per cent gain. At the same time, December was revised up. Put that together with a housing sector that's on the up and up and an industrial sector that's running thin on capacity, and the world's top economy isn't looking so bad. Throw in a strong US dollar, and it's clear that this situation is boosting US imports from the rest of the world. So, where in the world is America shopping these days?

US imports were on a roll a year ago. Annualized growth was 10 per cent to close off 2014, and 7 per cent more was added in the first three months of 2015. From there, things decelerated, but the good news was that those surges in activity were sustained. Things tailed off at the end of last year, along with disappointing GDP growth. But the recent resumption of spending growth strongly suggests an upside that is being discounted by many market mavens on account of the financial market turbulence that has gripped the world in the opening weeks of 2016.

Most economy-watchers acknowledge US strength, albeit to different degrees. The most pessimistic forecaster sees 1.8 per cent growth this year, but the consensus is calling for 2.2 per cent growth. Consumption is out ahead of this, and business investment, at 4 per cent by 2017, is the growth leader. If there's a lament in this positive story it's that the rest of the world isn't catching on. Can we expect it to? That's where US imports come in: if American growth is having any effect on the rest of the world, then it should be evident in the trade statistics.

Overall numbers are being suppressed by poor showings on the energy front. Normally this would be a key signal of weakness: a faltering industrial production machine that needs less energy imports from the rest of the world. This time around, it's reflecting crashing world energy prices and much higher US domestic production. Look at the rest of imports, and the story is much brighter. In December, food and beverage imports were up 5.7 per cent year-on-year in inflation-adjusted terms. Auto sector imports posted an 8.8 per cent gain. Imports of consumer and other goods are volatile, but ended the year up 2.5 per cent.

These numbers are impressive, flying in the face of general impressions. So, who is benefiting? Last week's commentary put Canada way up on the list. It doesn't look that way in the US numbers, until the energy numbers are stripped out. A key gainer is the auto sector, and consumer goods are on a great roll, too. We're not the only ones in this predicament: Mexico is seeing its numbers do the same. Pan across the pond, and Western Europe has its own positive story to tell. Things are on the up-and-up in Germany after a choppy start to last year. France is on the same general trajectory. Italy's growth run seems even more entrenched, and Ireland is on a tear. Not all are on the same path, but it's just possible that imports by the US are part of the reason the EU has been collectively growing its GDP ahead of long-term average growth for five successive quarters.

US imports from Asia are not as impressive. The appetite for Chinese goods has waned lately – but that could be a function of the relatively strong Renminbi. In contrast, imports from Japan are up smartly. The intake from Singapore – a bellwether of regional trade – is showing a decent increase lately, and Malaysia is registering a similar pattern.

Overall performance of US imports is far from convincing, and is muddied by the influence of the energy sector. But there is enough in there to suggest that US strength is spreading, and will continue to do so if overall growth heads up this year.

The bottom line? America is still displaying strong domestic demand growth. This is stoking import demand from the rest of the world, and is being further encouraged by a strong greenback. Spreading is happening, and long may it continue.

Job Posting

Position: Inside Sales Representative

Company: **Inland Aggregates**

Region: Canada

Location: Winnipeg, MB

Summary:

Reporting to the Transportation Supervisor, this position is responsible for accurate, timely, and cost effective dispatching of deliveries throughout the Winnipeg area, order processing and customer service/sales support, along with identifying customers who present potential growth opportunities.

Responsibilities:

- Management and trouble-shooting of remote scaling/ticketing processes
- Receiving and processing aggregate delivery orders
- Interacting with customers to investigate and resolve issues and complaints
- Providing support to depot scale and administrative staff
- Advising customers regarding product and delivery options
- Liaising with trucking contractors for efficient scheduling of aggregate orders and to ensure on-time delivery
- Skills and Qualifications Knowledge of aggregate materials, aggregate properties, and/or concrete products or other related construction industry experience
- Post-secondary education in business or technical field, or equivalent industry experience
- Strong problem-solving and decision-making skills
- Ability to multi-task in a face-paced environment
- Organizational skills with a keen eye for detail
- Proven relationship management and customer service skills
- Advanced proficiency in MS Office applications
- Inside sales and/or dispatch experience is an asset

Application process

Employees can apply or refer an external candidate by going to: <http://careers.lehighhanson.com/apply-canada/>.

(Please click on the box that says "I'm currently a Lehigh Hanson employee" when applying)

Internal applications must be received by: **February 22, 2016**

Any additional questions can be directed to:

Erin Laturnas, Recruiter

780-420-2552

Erin.laturnas@lehighhanson.com

LEHIGH
HEIDELBERGCEMENT Group

INLAND
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Pitblado^{LAW}

We know construction.

PROUD SUPPORTER OF MHCA

pitblado.com



For Sale

2 – 2010 CAT 140M All Wheel Drive Grader Units

Both Units have approximately 7,000 hours each.

All Maintenance records are available for inspection. Units come with or without Capital I Snow Wing.

Priced for quick sale – must be sold by **February 25th, 2016**

Price per unit including snow wing = **\$166,900.00** OBO

Price per unit without snow wing = **\$154,000.00** OBO

These units are in excellent condition and have been well maintained by the municipality.

For further information contact:

Larry Driedger, Chief Administrative Officer

Rural Municipality of Morris

Email – larry@rmofmorris.ca

Phone – 204-746-7300



Stay Connected >>> mhca.mb.ca

