Top 10 Real INSIGHTS 2018 Land & Development Conference



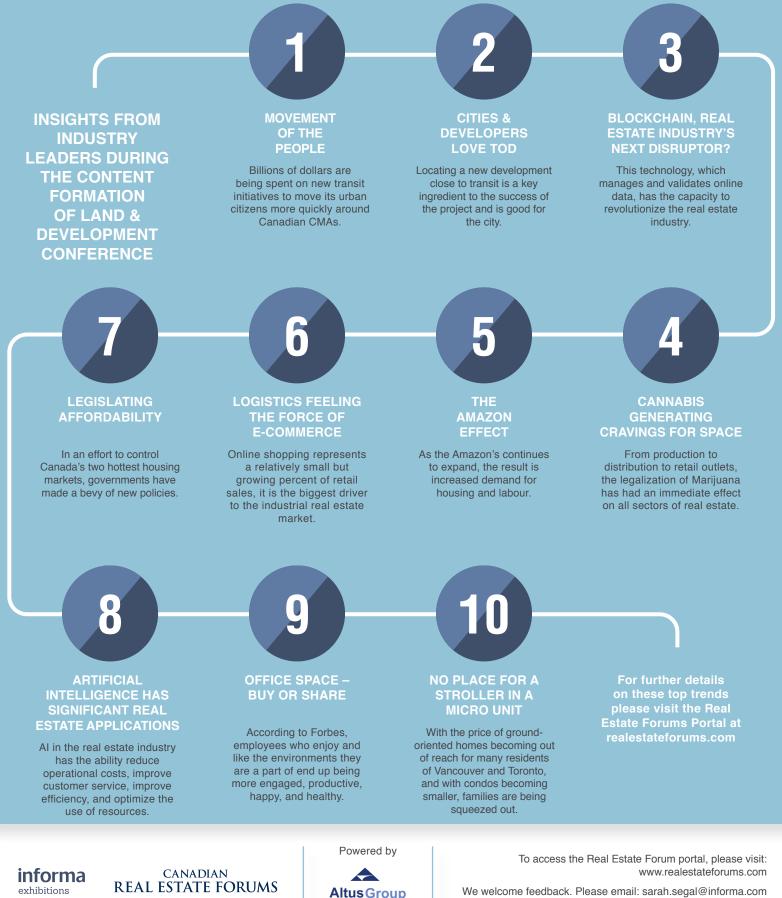


ISSUE 9

TOP 10 | REAL INSIGHTS

2018 Land & **Development Conference**

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We welcome feedback. Please email: sarah.segal@informa.com

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1. MOVEMENT OF THE PEOPLE

Billions of dollars are being spent on new transit initiatives to move its urban citizens more quickly around Canadian CMAs.

- Construction on Phase Two of Translink's 10 year vision for Metro Vancouver is scheduled to start in 2020. Phase Two will include the construction of Surrey-Newton-Guildford Light Rail, construction and extension to the Millennium Line Broadway Extension and an upgrades to the Expo Millennium Lines.
- Edmonton's City Council just approved the Valley Line West LRT route, which will run from Lewis Farms to 102 Street.
- Construction is expected to begin in 2020 on the expansion of the C Train in Calgary. The first stage will be the Green Line, which will be 20 KM and have 14 stations – 4 underground, 8 street-level and 2 elevated.
- Construction couldn't be done fast enough on the Eglinton Crosstown LRT in **Toronto**. This is the largest expansion of the TTC's rapid transit network since the 1960s. The Crosstown LRT will consist of 25 stops stretching across 19 KM of Eglinton Avenue, 10 of which will be underground.
- In the City of Québec, plans were announced for a \$3B expansion to their transit network. One of the main components is the construction of a 23 KM light rail line that will run from Le Gendre via Sainte-Foy West, and Laval University to Louis XIV.
- In Montréal, construction started on the Réseau express métropolitain this month. The \$6.3B REM will have 26 stations and span 67-kilometres. This is the biggest public transit project since the original Metro was constructed.

In a study done by CAA in 2017, traffic congestion in Canada costs 11.5M hours and 22M liters of fuel. Smart cars and self-driving cars could do a lot for improving travel times. By communicating with other vehicles, smart phones and smart infrastructure, collisions could be avoided and vehicles could be warned by road obstacles and changing road conditions.

According to Paul Godsmark, chief technology officer with the Canadian Automated Vehicles Centre of Excellence, the technology for implementing smart cars and smart networks has been available for 20 years. He says, "but it's a bit like fax machines: It's not much use unless everyone else has it." It will take a large amount of capital to equip our network of roads with the technology and sensors.

Currently, there are three smart car test areas in Canada – Edmonton, AB; Surrey, BC and Stratford, ON.

2. CITIES & DEVELOPERS LOVE TOD

Locating a new development close to transit is a key ingredient to the success of the project and is good for the city.

In Vancouver, developers are offering to help pay for transit stations that are adjacent to their development projects. Onni offered \$20M to help pay for a new Canada Line station at Cambie & West 57th Avenue. TransLink has not yet approved the station. Cressey & Morguard REIT paid approximately the same amount of money for the Lincoln station of the SkyTrain Millennium Line.

In Toronto, the new Eglinton Crosstown LRT is sparking development in a way that did not occur along the Bloor Danforth Line. Traveling east of Yonge Street there are large development projects slated for Leslie, Don Mills, on both sides of Victoria Park – all along the new LRT route. Development applications have been submitted for sites located at Pharmacy and just past Warden.

There are 129 developments within 500 metres of the LRT proposing more than 25,000 new condos. However, there is very little new office space proposed.

SmartREIT & Centre Court have partnered on a development of Transit City, a 55 storey condo to be located by TTC's new Vaughan Metropolitan Centre subway station. It will be the tallest tower in York Region. The condo will be the first part of the eponymous Transit City development that will include 17M SF of mixed used space and a 9 acre park.

Bombardier is vacating its Downsview manufacturing site leaving a redevelopment opportunity of 375 acres. Proximity to the Sheppard West, Downsview and York U subway stations will make it a prime TOD site.

In Calgary, the city has identified the following areas where TOD is being encouraged through planning policies:

- Anderson Station
- Banff Trail
- 40 Avenue N
- Green Line
- Rundle Station
- · Glenmore Landing

In Richmond, there has been a lot of development along the Canada Line since it opened in 2009. By 2040, Richmond anticipates that an additional 30,000 people will be living along its corridor.

Vancouver is also seeing a lot of development activity along its end of the Canada Line specifically along the Cambie Street Corridor where densification has been mandated by the city. The Canada Line's Marine Drive station connects Marine Gateway, a 820,000 SF mixed use project by PCI Developments.

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3. BLOCKCHAIN, REAL ESTATE INDUSTRY'S NEXT DISRUPTOR?

This technology, which manages and validates online data, has the capacity to revolutionize the real estate industry.

Blockchain is the digital and decentralized ledger system that records all transactions. Instead of a central hub where transactions are stored, servers and hard drives all over the world hold blocks of data. Blockchain uses cryptography to ensure that the data cannot be counterfeited or changed. Miners validate transactions on blockchain networks for rewards paid in cryptocurrencies.

Because blockchain is a distributed database holding a record of all transactions, the need for a central authority is removed.

First used by bitcoin, this technology has many real estate applications.

International Blockchain Real Estate Association (IBREA)

Founded in 2013, IBREA is one of the largest blockchain trade organizations in any sector. It has over 4,400 members and is the leading organization applying the technology to real estate.

Smart contracts

The provisions of an agreement between the two parties are written into lines of code. The monetary component of the contract can be embedded into a smart contract. This reduces the need for intermediaries and permits the transaction to be carried out between anonymous parties. Lease agreements when conducted using a smart contract can be signed and verified directly between the landlord and tenant.

In February, SMARTRealty launched an ICO. SMARTRealty is building a smart contract template and management system that can be used with all common types of real estate transactions. It can also be used with real estate rental and property sales platforms that interact with all the major real estate listing services on the web.

Multiple Listing Service (MLS)

Since blockchain is essentially a decentralized database, the potential exists for the MLS system to be replaced by it. Through the validation process of the 'miners', listing data would become more accurate, it would be in real time and it would be de-commoditized.

Land Titles

Many land title offices in Canada and around the world are still paper based. When a property trades, it takes weeks and sometimes months before the transaction is registered on title. In some countries, this process is vulnerable to loss and corruption.

Governments have begun to test the use of blockchain for transferring and tracking property titles and other public records.

Chicago's Cook County registry office is the second largest in the US and in 2016 it started testing blockchain technology. The office began testing blockchain applications of property title transfer and a system for filing liens; compatibility between a blockchain and a traditional, server-based setup; fraudulent use prevention and conveyances of vacant property in Chicago.

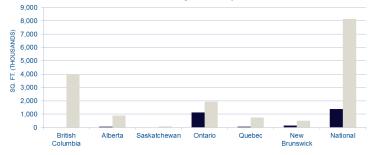
Other pilot projects are taking place in Vermont, Stockholm, Ghana and in the Republic of Georgia.

Blockchain technology is also used as a means of crowd investing in real estate around the world.

According to a Deloitte report, blockchain technology would contain databases of accurate, real time listing, sale and lease information, which would enable better decision-making.

4. CANNABIS GENERATING CRAVINGS FOR SPACE





Source: Altus Group, based on the Management Discussion and Analysis reports of public companies.

From production to distribution to retail outlets, the legalization of Marijuana has had an immediate effect on all sectors of real estate.

In advance of the implementation of the legislation that will make pot legal on July 1, demand for space to accommodate this new industry has been quick to materialize across the country. That said, implementation and impact will vary across Canada based on Provincial and local municipality policies and by-laws.

In Edmonton

- Canopy Growth is retrofitting a 160,000 SF facility in the Morris Industrial Park
- Freedom Cannabis is converting a 125,000 SF facility in Acheson.
- Aurora Cannabis is constructing an 800,000 SF production facility south of the airport.

In the Greater Vancouver Area, Canopy Growth and other cannabis companies are converting and building new greenhouses for commercial marijuana cultivation. These facilities are located on the Agricultural Land Reserve, specifically in Delta, Langley and in Maple Ridge.

In London, Ontario, High Park, a subsidiary of Tilray has bought a 56,000 SF industrial building at 300 Sovereign Road. The building it undergoing a \$10M retrofit for cannabis production. The company is also constructing a \$30M cannabis greenhouse operation near Petrolia, southeast of Sarnia.

In April, Second Cup announced that it has signed an agreement with marijuana clinic operator National Access Cannabis to develop and operate a network of recreational pot stores.

In Alberta, where the retailing of marijuana will be privatized, more than 200 stores are expected to open in the first year.

Ontario's LCBO is expected to open about 30 cannabis shops this year, increasing to 150 by 2020.

Studies by Deloitte, JJL & CIBC World Markets suggest that once legalized, cannabis has the potential to become a significant component of Canada's GDP.



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5. THE AMAZON EFFECT

As the Amazon's continues to expand, the result is increased demand for housing and labour.

Amazon recently announced plans to expand their operations in Vancouver and increase the number of workers to 5,000. It is currently converting the old Canada Post office into a 416,000 SF office tower.

Critics in that market say that Amazon's expansion will put more strain on housing affordability in the city and result in high tech employees being poached from other companies.

In Vancouver, tech workers make over \$50K less than in Seattle according to CBRE's 2017 Scoring Tech Talent report.

Aaron Terrazas, economic research director at Zillow, said that in Seattle, the effect of Amazon was dramatic. He said that the job boom was worth 16% to 17% of the rent growth in recent years. "The good news for Vancouver is that they said they'll hire 3,000 employees by 2022, that's a couple of years worth of planning, you can get ahead of this curve." But in Vancouver where the residential rental vacancy rate is less than 1%, Terrazas said there could still be challenges.

In Q3 2017, Amazon revealed that is had 541,900 employees, up from just over 300,000 in Q3 2016. While 86,000 of their employment growth was due to their acquisition of Whole Foods, they added almost a quarter of a million jobs in one year.

In whichever of the 20 cities that ultimately gets chosen to be the new home of HQ2, it can expect that the housing market will be impacted. "No matter which city is chosen the estimated influx of 50,000 high-paid Amazon workers and 66,250 supplementary workers over a 10-year period will put pressure on local housing markets, driving up rent and home prices," says Apartment List.

According to a report by TorontoRentals.com, Toronto residents can expect to pay an extra \$137 per year in rent if the city becomes home to Amazon HQ2.

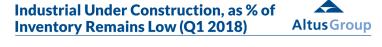
Experts agree that if Big Tech continues moving into Canadian cities, it's likely that we'll see a rise in housing prices and a higher demand for skilled labour than the country may be able to immediately provide.

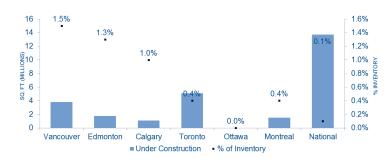
6. LOGISTICS FEELING THE FORCE OF E-COMMERCE



Industrial Vacancy Rates Remain Tight in Toronto and Vancouver Altus Group

Source: Altus Group





Source: Altus Group

Online shopping represents a relatively small but growing percent of retail sales, it is the biggest driver to the industrial real estate market

In a study done by CBC's Marketplace in 2017, while 87% of Canadian shopped online, almost 75% bought no more than one item per month. According to StatsCan, more than 95% of shopping is still down at retail locations.

That said, Absolunet, one of Canada's main e-commerce agencies reported that e-commerce revenue grew 53% during the 2017 holiday season compared to 2016.

In the US, e-commerce represents about 10% of all retail and Amazon is by far the largest player, with an estimated share of 43%.

With Amazon Now offering one and two hour delivery in some cities, there is a greater demand than ever for distribution warehouses located close urban centres.

Prologis, the largest owner of industrial real estate owns 687M SF of warehouse space in 19 countries. Amazon occupies 16M SF of it making Amazon Prologis' biggest tenant.

In the US Between 2013 and 2017, developers added about 848M SF of warehouse space, or more than double the roughly 300M SF built over the five previous years, according to Cushman & Wakefield.

The vacancy rate for industrial space in the US fell to 5.2% in the Q3 2017, the lowest on record, Colliers states in a recent report. The scarcity of 50 to 100 acre tracts close to major highways caused industrial land prices to more than double in a few years. The price of an acre on the outskirts of metro areas was about \$50,000 in 2015 and has since climbed to more than \$100,000, according to CBRE.

A similar squeeze is being felt in Canada. In Vancouver, industrial vacancy rate is less than 2%. Rents have increased by 15% since 2016. In the GTA, vacancy is less than 3% with rents increasing by 7.3% in the last year, according to Cushman & Wakefield. One of the largest lease deals in the GTA in 2017 was the Q4 lease of 770,000 SF on Logistics Dr in Mississauga to online retail giant Wayfair.

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HIGHLIGHT DETAILS



7. LEGISLATING AFFORDABILITY

In an effort to control Canada's two hottest housing markets, governments have made a bevy of new policies.

In February's budget, the BC's NDP provincial government released its 30 point plan to tackle housing affordability. Some of the key points of the plan are:

- Introduce a speculations tax of 0.5% in 2018 increasing to 2.0% in 2019
- · Increase the foreign buyers tax to 20%
- · Increase property transfer taxes from 3% to 5% on houses over \$3M

The Ontario government introduced a 16-point plan last April to tackle affordability. It included a 15% "Non-Resident Speculation Tax" to be implemented in the Greater Golden Horseshoe. The plan also introduced legislation to let Toronto "and potentially other municipalities" introduce vacancy taxes.

Both the NDP and the Liberal policies have incentivized the development of affordable and purpose built rental homes.

Last year, the Ontario decided to replace the OMB with the Local Planning Appeal Tribunal to deal with development proposal appeals. The new system put more gives more weight to the decisions made by local councils and cannot make planning decisions itself.

OFSI's new stress test for uninsured mortgages came into effect in January affecting the national housing market.

Added to these policy initiatives, the Bank of Canada raised its overnight lending rate three times since last summer with more increases on the horizon.

The volatility in the GTA housing markets suggests that these policies are having some effect. And while the prices of homes have flattened in Vancouver and dropped in Toronto in Q1 2018, the price of condos continues to rise. In April, the REBGV reported that the average price of an apartment condo sold in the GVA reached \$701,000 representing a 23.7% increase from April 2017. TREB reports that in Q1 2018 the price of condos in the GTA sold on their MLS system increased by 9% from Q1 2017 to \$533,447.

Part of this may be due to policy and psychology with consumers hesitating purchases due to the uncertainty of the new government policies, the prices and demand may start to recover in the second half of 2018.

8. ARTIFICIAL INTELLIGENCE HAS SIGNIFICANT REAL ESTATE APPLICATIONS

Al in the real estate industry has the ability reduce operational costs, improve customer service, improve efficiency, and optimize the use of resources.

Customer Service

Many businesses are capitalizing on chatbots to improve customer engagement — particularly outside of normal business hours or to handle frequently asked questions that don't require human input. Chatbots can also collect information from prospective renters, saving time for real estate employees and allowing potential tenants to provide the data at times that are most convenient.

Construction Automation

A new crop of tools known as proptech are being developed to help builders automate the material purchasing process that allow them to acquire the best materials at the best price from the best suppliers.

Property Management

Artificial intelligence can be used in property management to monitor and predict when critical maintenance systems are ready for replacement. The technology monitors rental trends in specific geographical areas and raise tenant rents automatically when leases expire.

Zenplace is developing a chatbot through Amazon's Echo that allows renters to pay their rent, place service requests and make other demands that would usually fall on the shoulders of a property manager.

In December 2016, Wynn Hotels announced that they would put an Amazon Echo in every one of their hotel rooms, using Alexa to improve their hospitality experience. Alexa will let guests control room lights, room temperature, drapery, and the television using voice commands.

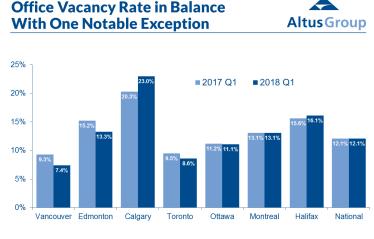
REX Real Estate Exchange is using AI to sell housing instead of brokers. REX uses SEO and SEM (search engine marketing) to reach qualified buyers directly instead of just using MLS. By using artificial intelligence REX directly targets buyers and then remarkets your home to them as they travel around the web. REX uses robots at open houses to answer questions from potential buyers. The company charges 2% commission fee. In December 2017 it listed its 500th home.

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9. OFFICE SPACE - BUY OR SHARE



Source: Altus Group

New Office Construction, as % of Inventory



Source: Altus Group

According to Forbes, employees who enjoy and like the environments they are a part of end up being more engaged, productive, happy, and healthy.

Office Vacancy in Toronto's downtown core has decreased to 3.5% according the Altus Group. Approximately 5.7M SF is under construction and no new space will be ready for occupancy ready until 2020.

The preference for tenants is to remain in urban areas close to public transit, restaurants and other amenities. As rental rates increase and the choice for alternative space remains low, the suburban market will likely see increased office activity.

At 2.4% vacancy, downtown Vancouver is one of the tightest office market in North America. There is approximately 2.1M SF under construction however, not a lot of space is scheduled to be completed before 2021.

In both of these markets, office condos have started to gain traction. Low interest rates, and low vacancy are two of the main drivers of this market. These office condo projects are currently under construction:

- · Fifty Nine Hayden Cresford 8 storeys at Yonge & Bloor
- Yonge Park Plaza The Gupta Group, 7 storeys at Yonge & York Mills, 250,000 SF
- 130 QQE Daniels, 280,000 SF
- 135 Yorkville Camrost-Feldman, 11 storeys, 50,000s SF
- The Offices at Burrard Place Reliance / Jim Pattison Developments, 1281 Hornby St, 99,000 SF office podium
- · Bosa Waterfront Centre Bosa, 320 Granville St, 355,000 SF
- · Kings Crossing Cressey, Yaletown, 74,000 SF
- Lark Group City Centre 3, Surrey, 108,500 SF

The shared workspace niche continues to go. Tenants are not just start-ups.

WeWork, The New York-based company aims to occupy at least 20 different locations in Toronto by 2020, up from three now, Dave McLaughlin, general manager for the Northeast at WeWork said in a phone interview last week. WeWork opened its first locations in the city last year, both of which were 98 per cent occupied within the first month. A third location was announced in January.

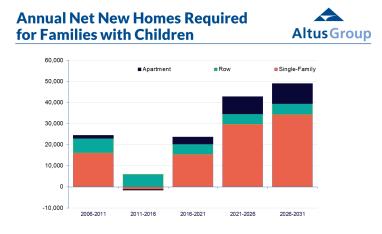
Spaces, an Amsterdam-based shared space company is set to open 3 locations in Vancouver in 2018 - in Gastown, Granville and Mt. Pleasant, totaling 145,000 SF.

In the last couple of years, tech companies such as Verizon, IBM and Microsoft have been partnering with coworking spaces so that they can keep up with the newest innovations, be connected with top talent and stay ahead of any developments that could disrupt their industry. At the end of 2016 Microsoft 300 of their sales people access to WeWork locations in NYC. Their desire was to "tap into the startup culture in a more flexible coworking office arrangement".

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10. NO PLACE FOR A STROLLER IN A MICRO UNIT



Source: Altus Group and Statistics Canada

With the price of ground-oriented homes becoming out of reach for many residents of Vancouver and Toronto, and with condos becoming smaller, families are being squeezed out.

TREB numbers for the month of April indicated that the average price of a detached home in the 416 was over \$1.3M and \$601,211 for condominium apartments. The Real Estate Board of Greater Vancouver indicated that the average prices were \$1.6M and \$701,000 for a detached home and a condominium apartment, respectively, for the same time period.

In an attempt to make development more family friendly, the City of Toronto released a report in 2017 entitled: "Growing Up: Planning for Children in New Vertical Communities. The study produced draft guidelines to direct ways that new development can support larger households within the unit, the building and in the neighbourhood.

The report called for 2 and 3 bedroom units to be grouped together on the lower floors and the building guidelines specify that these larger units should comprise at least 25% of all units. The guidelines further specify that 10% of units should be three bedrooms and 15%, two bedrooms. However, the size of the units was not specified.

Ryerson's City Building Institute is researching the impact changing demographics will have on the condo supply. In their report "Bedrooms in the Sky" released in November 2017, they state that as the millennial cohort age, they will be looking to upsize from their smaller spaces as they start to have families. In the next 10 years, it is expected that the 35 to 44 age bracket will grow by 207,000 residents. Residents in the over 65 age bracket will grow by 484,000 and will be looking to downsize from their detached homes. The report calls for a change in the type of housing that is developed to keep up with demographic shifts and calls for more low rise buildings with larger units.

Some developers have started developing projects that are more family focused.

Last fall, Devron Developments started construction on the Vanguard, a 25-storey condo in Thornhill almost entirely made up of 2, 3 & 4 bedroom units. The building will also contain a large communal children's playroom and a 7,000 SF terrace, as well as an adjacent half-acre park.

Capital Developments has partnered with Metropia to build E2 at Yonge & Eglinton. Scheduled for occupancy in 2021, 75% of the 440 will be two bedrooms and 11% will be three bedrooms. Most will have two bathrooms. The building will be equipped with a children's play area and will have a privately owned, publicly accessible park.





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