

STATE OF THE NATION

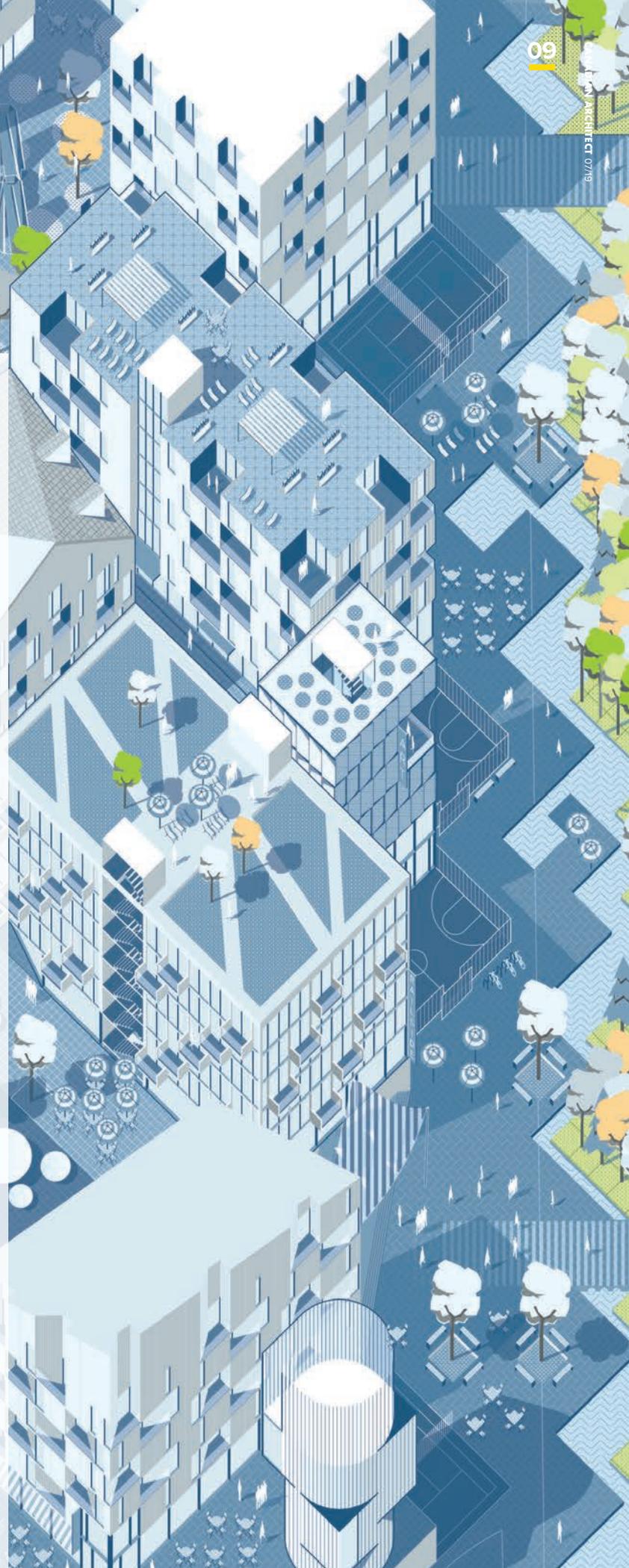
SAFE, STABLE CANADA HAS BEEN A HAVEN FOR GLOBAL CAPITAL IN THE RECENT ERA OF POLITICAL AND FINANCIAL UNCERTAINTY. ITS ECONOMIC PROSPERITY AND CENTRIST POLITICS HAVE ALSO MADE FOR RELATIVELY CONSISTENT INVESTMENT IN PUBLIC INFRASTRUCTURE. THE RESULTS HAVE YIELDED RECORD CONSTRUCTION ACTIVITY, BUT ON THE FLIP SIDE, IT'S ALSO LED TO A CRISIS IN HOUSING AFFORDABILITY IN MANY CITIES. MEANWHILE, THERE ARE REGIONAL CONCERNS TO CONTEND WITH, RANGING FROM THE CRASH IN OIL AND GAS PRICES TO INDIGENOUS RECONCILIATION. THE EFFECTS OF THE CLIMATE EMERGENCY ARE ALSO BEING FELT MORE STRONGLY EACH YEAR, WITH MELTING PERMAFROST IN THE NORTH, FOREST FIRES IN THE WEST, AND FLOODING IN EASTERN CANADA.

How do these trends affect architecture? What is on the minds of architects in different regions of Canada? To find out, Canadian Architect spoke to dozens of architects from coast to coast—to coast. Here's the buzz.

TEXT Elsa Lam

BASED ON INTERVIEWS WITH Andrew Reeves, Anne Cormier, Anne Lissett, Ben Klumper, Bill Semple, Brent Bellamy, Charlene Kovacs, Christine Lolley, Chris Wiebe, Chris Woodford, Cynthia Dovell, Darryl Condon, Derek Kindrachuk, Dustin Couzens, Gavin Affleck, Jack Kobayashi, James Youck, Jeremy Bryant, Jim Anderson, Jim Siemens, Johanna Hurme, John Stephenson, Ksenia Eic, Lawrence Bird, Léo Lejeune, Lindsay Oster, Linus Murphy, Luc Bouliane, Marianne Amodio, Mark Ostry, Maxime Frappier, Monica Adair, Natasha Lebel, Pat Hanson, Peg MacDonald, Randy Cohen, Rayleen Hill, Richard Symonds, Richard Witt, Shafraaz Kaba, Stephen Kopp, Susan Fitzgerald, Ted Watson, Toon Dreessen, and Vivian Manasc

RIGHT The master plan for the Railside development, by 5468796 Architecture in partnership with Scatliff+Miller+Murray, sets a template for the transformation of a 12-acre portion of Winnipeg's Forks district.



BRITISH COLUMBIA

British Columbia is leading the charge on sustainability in Canada. Starting in 2017, the province's Energy Step Code has provided an incremental approach to making buildings net-zero energy ready by 2032. The voluntary policy allows local governments to set incentives and bylaw requirements for builders to meet one or more steps. Forty-two local governments are currently referencing the code.

In coordination with the step code, the City of Vancouver has developed its own zero-emissions energy plan, which aims for all new buildings to be zero emissions by 2030. Since last year, all projects applying for rezoning must be designed to meet Passive House requirements or, for non-residential buildings, LEED Gold BD+C or an alternate set of performance criteria. While it is still in use, most architects in Vancouver consider LEED passé because it does not deliver real-world energy efficiency. The conversation in Vancouver has moved forward to explore more ambitious and impactful sustainability measures, including Passive House, Net Zero Carbon, Life Cycle Assessment and Living Building Challenge.

At a broader level, Vancouver is seeing a demand for sustainability-oriented urban infrastructure, including district energy systems. The regional transit authority is extending an existing SkyTrain line with six new stations. BC Hydro already has one thousand electric vehicle (EV) charging stations in its growing network. In Vancouver and Richmond, among other municipalities, all parking stalls in multi-unit residential buildings must be EV-ready. Incentives to build on transit lines have made transit-oriented developments (TODs) an increasingly common typology.

Beyond the new-build framework, homeowners receive rebates for installing EV charging stations in their homes. They're also encouraged to make energy retrofits because of the province-wide carbon tax, considered the standard bearer for carbon taxation in the Western hemisphere. The tax was implemented in 2008 and is gradually increasing.

The sustainability push in construction is also tied to the province's strong forestry industry. British Columbia's Wood First program, initiated in 2009, requires provincially funded projects to use wood as a primary construction material. (Quebec has a similar strategy, in which wood solutions are preferred even if they have a cost premium of up to five percent.) B.C. was the first province to permit six-storey wood frame residential buildings, and this spring has moved to allow 12-storey mass timber buildings, a year ahead of a similar anticipated change in the National Building Code.

Meanwhile, several tall wood projects have already been completed after being presented as alternative solutions for compliance with code. The most notable is the 18-storey Brock Commons student residence for the University of British Columbia, led by Acton Ostry Architects. Its modest appearance is intentional: the building was designed with an economic, encapsulated mass timber hybrid structure that may be easily replicated by commercial developers. Still, says Mark Ostry, there remains a premium to building in mass timber. This barrier may



HCMA

soften with Kattera's massive CLT factory in nearby Spokane, Washington, beginning production soon, and Kalesnikoff Lumber planning to build a plant in the Kootenays.

In comparison to the private market, public projects have a clear sustainability mandate, says Darryl Condon of HCMA—and architects are pushing the envelope further. “As a firm, we’ve recognized that environmental and social sustainability are intertwined,” he says. “There’s not a triple bottom line, but a spectrum of impact. How do we adapt to the effects of climate change and the need for resilience? It requires a broader range of thinking.”

On the whole, British Columbian firms are busy and thriving. But in the realm of high-profile projects, they are starting to come under pressure from outside competition. In Vancouver, there is an influx of European and Asian firms doing major projects—from Herzog & de Meuron's proposal for the new Vancouver Art Gallery, to towers led by BIG, Kengo Kuma, Büro Ole Scheeren and Shigeru Ban. “It’s shaking things up, and on the other hand, local architects are being challenged to push higher,” says Condon.

And then there's the elephant in the room: affordability. It's a pervasive, dominant topic that affects decisions at many levels, especially around Vancouver's city planning policies. The city's long approvals process is one barrier. “Permitting is especially challenging for afford-



ACTON OSTRY ARCHITECTS

ABOVE LEFT HCMA's Clayton Community Centre in Surrey is on-track to be the first facility of its kind to achieve Passive House certification in North America, and Canada's largest Passive House facility to date. **ABOVE RIGHT** To revitalize Vancouver's Jewish Community Centre, Acton Ostry Architects is constructing a new centre on an existing parking lot. The current complex will then be demolished to make way for non-market housing.

able housing," says Charlene Kovacs of VIA Architecture, who notes that the level of required detail, energy considerations, and the consultations process are impacting the length of time it takes to get a project green-lighted. These delays have material consequences: the construction market is so active that trades are driving costs up, and by the time projects are approved, they may no longer be financially viable. The process can be so problematic that some developers and architects are seeking work in jurisdictions outside of the city.

With a recent change in mayor, there is anticipation building around a new city planning process that is set to unfold in the coming years. But it's not clear yet what the tenor of the new city council will be. In the meanwhile, says Condon, "architects need to be strong advocates for the potential of the city."

Meanwhile, innovative approaches to creating affordable housing are already emerging. BC Housing has launched an initiative called HousingHub, geared towards creating home rental and ownership opportunities for middle-income earners. One of its first projects is a partnership with the United Church to build rental housing and new church facilities on four of the Church's existing sites. In a similar vein, Acton Ostry recently completed a rezoning for redevelopment of the city's Jewish Community Centre as a stacked, nine-storey facility on a former parking lot; the existing centre will make way for

34,600-square-metres of below-market and market rental housing. It's a strategy that other institutions—including Vancouver's public and Catholic school boards—are considering as a way to renew their facilities, which were built in the post-war period. "More and more of these institutions are facing the end-of-life of their existing facilities, and they have extra land to leverage to replace them, while providing much-needed affordable housing," says Mark Ostry.

Affordability-centred residences—including typologies such as laneway infill, co-housing, and multi-generational homes—are at the centre of architects Marianne Amodio and Harley Grusko's portfolio. Working in the so-called "missing middle" between single-family homes and high-rises, Amodio and Grusko have been active in researching the fine details of densification: the psychology of social density, and how spatial design affects interpersonal relationships. "We look at overarching principles, such as the appropriate cluster size that catalyzes community. Through-units are important, as is widening corridors for space beyond the fire exit requirements, for small coffee tables and locking bikes," says Amodio.

Fortunately, it seems that the dialogue around density is shifting. "For a long time in Vancouver, there was a lot of opposition to densification, but that is starting to change," says Amodio. "A lot of that was about people not being heard. Now, instead of saying 'we don't want it', they're saying 'bring us into the conversation.'"

ALBERTA

Alberta's economy follows a boom-and-bust cycle, tracking energy prices. The crash of the oil market has been devastating for the private sector as well as the province's coffers—and this has hit architecture firms in turn. “Calgary has been decimated in the last four years,” says Linus Murphy of S2 Architecture. “I think it's going to get worse before it gets better.”

In the private sector, Calgary currently has a 27% office vacancy rate—higher than it was during the recession of the 1980s. Fees have been driven down by firms competing for the remaining work. In the public sector, the province has continued with deficit spending, but in an erratic manner. Some major public projects that started before the downturn have been completed, such as the University of Lethbridge's \$220-million expansion, by KPMB and Stantec Architecture, but others have been holding at the tender stage until funding becomes available. One major project, the \$590-million Alberta Health Services super lab in Edmonton, was under construction, but the work was abruptly suspended after the government changeover in April. Other projects seem to be stuck at the study phase.

Several very large-scale projects have been pushing through—the \$1.4-billion Calgary Cancer Centre (by Stantec in collaboration with DIALOG), for instance, and the \$500-million BMO conference centre expansion (by Stantec, S2 Architecture, and Populous). But, according to Murphy, there has been a notable disappearance of mid-sized pro-

jects. As a result, a few firms lucky enough to land the mega-projects have prospered, while others have not.

The mood is somewhat more positive in Edmonton. Cynthia Dovell of AVID Architecture says that there has been a steady supply of small projects, which have allowed her to build up from a solo practice to a five-person firm over the past few years. “Edmonton could support many more small firms,” she says. Vivian Manasc's firm, Manasc Isaac, has also grown over the past few years, working mostly in Alberta and in the North.

The organizational structures created by Alberta architects offer positive lessons for the rest of Canada. It's one of only two provinces (along with Quebec) which splits the regulation of architecture and advocacy for the business interests of architects into separate mandates. The advocacy body, the Consulting Architects of Alberta (CAA), is made up of 38 member firms who represent 80% of Alberta architects.

The CAA has been at the forefront of negotiating for fairer contracts and procurement methods. It has been working with government and major institutions to adjust standard contracts, so that architects aren't being asked to assume undue liability or give up copyright, for instance. Recently, it worked with Alberta Infrastructure to release two pilot qualifications-based selection projects. The City of Calgary has also been using qualifications-based selection. “They're on their third RFP with this model, and we're quite optimistic about the opportunity for credentials and experience to drive team selections—not low fees,” says Léo Lejeune of Stantec's Calgary office. “This should result in better and better design in our community.”

The flagship of design-first procurement in Alberta is the City of Edmonton. Under City Architect Carol Belanger, Edmonton has developed a QBS-based system that pegs payment to the CAA fee schedule, taking fees out of the equation for selection. The city also maintains a standing offer list of emerging firms for smaller city projects, and held an open, anonymous design competition for a series of park pavilions.

Another Alberta innovation worth watching is Athabasca University. The institution started as a traditional campus-based university in 1970, but then pivoted to offering distance education courses, and now is at the forefront of online learning. Its purview includes architecture:





DIALOG / STANTEC

OPPOSITE Modern Office for Design + Architecture's scheme for the headquarters of Calgary-based robotics company ATTAbotics takes on a wedge shape that responds to flight-path height restrictions and maximizes southern light for employees. **ABOVE** DIALOG and Stantec are leading the design of the Calgary Cancer Centre, which is anticipated to open in 2023.

for the past few years, it's provided the academic courses for the RAIC Syllabus program. While the RAIC offers face-to-face studios for Syllabus students in major cities across Canada, Athabasca provides virtual design studios as part of its Bachelor of Science in Architecture. Although the idea of virtual studio courses rankles many professionals, Cynthia Dovell, who teaches in the online program, says that it is one way of encouraging people from a greater diversity of economic backgrounds to enter the profession. "Students in the Athabasca program often have financial challenges in going to a traditional school, because they need to work at the same time, and can't move cities," she says. With the almost complete replacement of drafting boards with laptops at offices and architecture schools, it's increasingly plausible that online learning will be important in the future of design education.

On the sustainability front, Alberta never adopted the 2015 National Energy Code for Buildings, but recently leapfrogged to adopt the 2017 version, making it the first province to do so. When Alberta had a carbon tax, there were budgets allocated to photovoltaics on buildings as well, notes Vivian Manasc, although she adds, "now that our carbon tax has been repealed, it will be interesting to see whether these strategies will still work."

There are other bright spots. There seems to be plenty of work in rural Alberta, in the form of a patchwork of small projects. And although Alberta has a younger population compared to other provinces, the private sector is looking to bring progressive care and seniors' facilities to market. The City of Calgary has supported the development of creative mixed-use facilities—for instance, combining a fire hall station or local library with affordable housing—pushing

the envelope on pairing different typologies. Edmonton's recent Missing Middle competition solicited design-led proposals for developing affordable housing on five city-owned lots.

Dustin Couzens of Calgary-based Modern Office for Design + Architecture compares Calgary to Detroit: the economic downturn, he says, has forced individuals who were laid off to reinvent themselves and their industries. For instance, robotics technology startup ATTAbotics, founded by unemployed engineers, has quickly scaled up to a 200-person company. Modern Office completed an interior retrofit for the company, and now they've been commissioned to design a new standalone building. "Calgary on the whole has a conservative outlook on architecture," says Couzens. "Thankfully, we're finding individuals who are interested in looking for solutions that are out of the box."

The slowdown has also led some architects to reinvent themselves. Shafraaz Kaba, formerly a partner at Manasc Isaac, recently founded a design consultancy called ASK for a Better World, which trains designers, constructors and clients on net-zero energy building techniques and processes. "Cities like Edmonton are making bold climate plans, but it takes all hands on deck to get people to a space where they can think that net-zero energy or zero-carbon buildings are possible," he says. "I hope I can help energize our industry about how architects can make a difference in our built environment."

Adds Ben Klumper of Modern Office, "An economic slowdown affords an opportunity to take stock and appreciate what good design can do in city-building. I hope we can come out of this with an attitude of going beyond asking 'what's the fastest and cheapest way to build?', and instead asking 'what's the best way to do this?'"

SASKATCHEWAN

Ten years ago, the thriving market in oil, gas and potash led to a “Saskaboom,” which brought along plenty of work for architects. The economy has declined significantly since then. But with relatively few architects in the province—about 110 in all—there is still enough work to go around. “Firms seem to be adapting to the new normal, where the work is slow but steady,” says James Youck of Regina-based P3Architecture Partnership (P3A).

For a small community of practice, Saskatchewan architects are behind some impressively progressive ideas. Indigeneity has been a topic of conversation in the provincial association’s last three annual conferences. It’s a pressing matter in a province where sixteen percent of the population identifies as Aboriginal. The Gordon Oakes Red Bear Student Centre at the University of Saskatchewan in Saskatoon, designed by Douglas Cardinal to provide resources to Indigenous students and opened in 2016, occupies a prime spot on the main academic quadrangle. Moreover, “firms are looking at how truth and reconciliation can affect not just aesthetics, but the process by which projects are delivered,” says Youck.

“How do you work in that space of reconciliation, without being yourself Indigenous?” asks Jim Siemens of Oxbow Architecture, who is also the current SAA president. The answer: very carefully. “There are many practitioners here carrying on and striving to do just that,” he says.

One manifestation of this approach might be seen at the *māṃawēyatīn* centre in Regina, by P3A. Indigenous community members were engaged as part of an in-depth local consultation process. Named with a Cree word meaning “let’s all be together,” the building is a shared use facility, jointly funded by the city, the library, and the local school board. It includes a high school, daycare, community policing centre, and recreational complex, among other functions. But instead of each group having its own entrance and perhaps sharing hallways, the centre is more deeply integrated—at the programming level as well as from a service and delivery perspective. “70 percent of the Centre’s spaces are shared between groups, while only 30 percent of the space is dedicated to a single group,” says James Youck.

There has also been an ongoing discussion with the University of Saskatchewan about starting a school of architecture; Indigenous placemaking could well be one focus of such an institution. But the process has stalled out, and a timeline for reviving it isn’t clear.

Still, local architects feel that having an architecture school would give a significant boost to the design culture of the province. A can-do attitude, grounded in the region’s pioneer history, can sometimes result in a good-enough mentality among clients, says Youck. “If all you need is a roof over your head, you may feel a pre-engineered building is enough—why would you look to push a design further?” Adds Derek Kindrachuk, of Saskatoon’s Kindrachuk Agrey Architecture, “A school of architecture would be huge for our city and province—it would go a long ways in fostering appreciation for what architecture can be.”



KINDRACHUK AGREY

In the meanwhile, local firms are working in increments to demonstrate architecture’s potential for creating transformative private and public places. The residential component of Oxbow’s practice, for instance, stemmed in part from a commission for a Kinsmen lottery house, to be raffled off for the charity. “People in Saskatoon love touring lottery homes,” says Jim Siemens, describing how as a Friday night excursion, a couple might opt to visit an open house at a lottery home, rather than going to the movies. In contrast to the typical suburban houses offered as prizes by the charity, Oxbow worked on an urban infill site to create a modern house that respected traditional massing and alignments.

The result has garnered many positive reactions. “People innately understand architecture,” says Siemens, “In some way, things like lottery houses give them access to that.”

Regional building typologies are also at the heart of a project by Kindrachuk Agrey which is bound to have instant, intuitive appeal. They’re designing an aging-in-place wellness community modelled on the De Hogeweyk dementia care village in the Netherlands. The forward-thinking environment located in the Village at Crossmount will support residents in a safe, non-institutional environment that includes outdoor plazas and a grocery store, library, restaurant, theatre and other amenities, including a daycare supporting intergenerational care. Residents will have private bedrooms in small-scale group homes, with like-minded peers. “There will be all the things you need to carry on with regular daily activities, supported by caregivers,” says Derek Kindrachuk. “There’s nothing like this around in North America.”

The Dutch complex on which De Hogeweyk at Crossmount is based opened in 2009 and has seen residents with advanced dementia who are more active and at ease than at typical nursing homes. The founders of De Hogeweyk have endorsed the Saskatchewan project and are supporting its development team.

At a larger scale, the recently opened Remai Modern gallery, designed by KPMB Architects, provides an important civic space for Saskatoon. There is discussion over new central libraries in Regina and Saskatoon. A convention centre and downtown arena may also be in the works for Saskatoon, when funding becomes available.

Perhaps the most frequented public space in the province is a building that’s not architecturally distinguished: the new stadium in Regina. The immensely popular Roughriders are known for their loud, proud and loyal fan base. Siemens wonders if it might be possible to cultivate a similar sentiment for the province’s arts and architecture. “If we were that proud of our symphony, our gallery, imagine the increased impact that the arts and design could have in our community.”



MANITOBA

Over the past two decades, Winnipeg has gone through a cultural and commercial renaissance, with residents returning to live and work in the urban core, and a revaluation of the city's historic Exchange District. As a result, a number of high-profile projects are in design or underway downtown.

Here, as in other cities, firms from outside the city are often taking the lead role, as in the redevelopment of the Market Lands by Daoust Le-stage, the Winnipeg Art Gallery's Inuit Art Centre addition by Michael Maltzan with Cibinel, and True North Square by Perkins+Will with Architecture49. It's a trend that is a challenge for local firms. "Clients are more often looking for firms to have a significant number of very similar buildings in their portfolio, which often means partnering with a firm that specializes in each building type. This is even beginning to creep into smaller, less specialized projects," says Brent Bellamy of Number TEN Architectural Group. "The opportunity for a local architect to design a significant project in their own city is diminishing."

On the other hand, an approach centred on Winnipeg firms prevails at the Railside at The Forks residential development. Previously a surface parking lot, the twelve-acre property sits between the central train station and the Museum for Human Rights. The development has been masterplanned by 5468796 Architecture in partnership with Scatliff+Miller+Murray, and the individual mixed-use buildings are being developed and designed by a variety of local firms. (The land will remain under the ownership of The Forks.) Over the next 15 to 20 years, the area is expected to take shape as a pedestrian-centric zone with mid-rise, medium-density buildings and closely spaced storefronts at ground level. "It will be unlike any development Winnipeg has seen in its history—focusing on human scale, eschewing the automobile, clustering around public plazas, and striving to create a richly diverse community in the heart of the city," says Chris Wiebe of AtLRG, which is designing one of Railside's mixed-use projects.

In a way, the village-feel of Railside will echo the social tightness of Winnipeg's design community. Architects and allied design professionals have made tremendous efforts to nurture a local design culture, often on tiny budgets. The city boasts two significant architectural organizations—StorefrontMB and the Winnipeg Architecture Foundation—both of which maintain an impressive output of public events, advocacy efforts and publications. Yearly highlights in the design calendar include the Architecture and Design Film Festival, Winnipeg Design Festival and Table for 1200.

Architects are also active in tactical urbanism projects. Last summer, BridgmanCollaborative built a pop-up public toilet pavilion, addressing the need for accessible washrooms downtown. It remains in use, relocating from one part of the downtown to another, carrying with it its message about social inclusion. The annual Warming Huts and Cool Gardens competitions have yielded a wealth of installations, several of which have been grounds for serious research into materials, fabrication techniques and form-making.



PATRICIA HOLDSWORTH



CANDACE EPP

TOP De Hogeweyk at Crossmount is an aging-in-place community near Saskatoon being designed by Kindrachuk Agrey Architecture. **MIDDLE** P3A's māmawēyatitān centre in Regina is a mixed-use facility that shares space, programming, and services between community partners. **BOTTOM** A contemporary infill residence in Saskatoon was designed by Oxbow Architecture for the 2018 Kinsmen Home Lottery.

The energy from these discussions, however, often remains within the urban bubble. One of the biggest current challenges, says architect Lawrence Bird of pico ARCHITECTURE, is “convincing the general population—rather than an informed group of designers, journalists, and some business people—that design is worth spending money on, especially design of public spaces and places.” He says that the divide was laid bare in the plebiscite over revamping the iconic intersection of Portage and Main. As part of the municipal election ballot last October, Winnipeggers weighed in on a proposal to reopen the intersection, which has been closed to pedestrian traffic since 1979. The design community actively promoted the reopening as an important part of revitalizing downtown. But 65 percent of voters, a group that included suburban as well as urban residents, turned it down.

“Decision makers tend to believe that the core areas have received enough help, and shouldn’t receive assistance anymore,” says Johanna Hurme of 5468796, who chaired the Winnipeg Chamber of Commerce in 2018. The situation is exacerbated by the city’s relatively low land values, which make suburban development attractive. “What’s frustrating is that we’re not looking at the larger city issues—for instance, the city is still approving greenfield developments. On the macro scale, we just keep doing the wrong thing.”

Still, private development is a busy sector, and the City of Winnipeg is preparing new guidelines for infill development. “Architects, owners, and developers all want clearer rules, or at least a clearer process, for gaining approval for these projects,” says Chris Wiebe of AtLRG. “Quite often these projects involve rezoning, conditional use, and multiple variance applications—which tend to snowball when pushing the boundaries of design possibilities. A lot of time and money can be spent proposing a design that can be suddenly denied in the late stages of the approval process.”

Another frustration has been the province’s fiscal austerity measures, which have, in the three years of the current regime, resulted in a sharp decline in funding for new projects and delays to many projects that were already underway. “Firms that work in the institutional and educational sectors have been impacted,” says Brent Bellamy. On the other hand, some significant projects have been spurred by federal investment, including infrastructural work and post-secondary projects, such as expansions at Red River College’s Notre Dame and Exchange District campuses.

When the opportunity arises, firms are doing their best to act nimbly and add value to projects. The residential market is shifting from condos to rentals, meaning a longer-term investment for developers—incen-tivizing them to invest in good design. Educational buildings also provide the opportunity to raise the awareness of design in the general community: the Red River Innovation Centre (Diamond Schmitt and Number TEN Architectural Group), for instance, will feature sleek, large-panelled building-integrated photovoltaics on its façades.

In tandem with a raised awareness of design, architects are aiming to put sustainability on the public agenda. Lindsay Oster of Prairie Archi-



tects says she hopes for a time when, in Manitoba, “social and environmental sustainability, liveability and human health will no longer compete with short-sighted budgets.” She envisages a future where “long-term operational savings, life-cycle analysis, resiliency, community health and prosperity, and circular economies will become the metrics of success and the baseline for our discussions. It won’t be a question about whether or not we are making something ‘green’, rather about making it better and improving the everyday quality of life for people.”

“Relevance is an important discussion in local circles. How do we retain our ability to be agents of change and innovation?” asks Bellamy. “What can we do as architects to raise the value of design with clients and policy makers, increasing the demand for quality architecture to be a vital component of realizing overall project goals?”

Located at the geographic mid-point of Canada, Winnipeg seems well-positioned to ask these questions—and cities bigger and smaller are watching to see the answers that emerge.





AtLRG

LEFT Facing Winnipeg's Old Market Square, AtLRG is designing a mixed-use building with a restaurant below and residential units above. **BOTTOM LEFT** David Penner and H5 Architecture's Windsor Park Library exemplifies a sensitive approach to building in existing communities. **BELOW; TOP TO BOTTOM** The downtown Richardson Innovation Centre is designed by Number TEN Architectural Group; the same firm worked in association with pico ARCHITECTURE (formerly Ager Little Architects) on Red River College's Skilled Trades and Technology Centre.



NUMBER TEN ARCHITECTURAL GROUP



NUMBER TEN ARCHITECTURAL GROUP

ONTARIO

Procurement is a big issue for architects across the country, including for Ontario architects who work in the institutional sector. Public-private partnerships—a model that made its Canadian debut in Ontario—are still being used to deliver major healthcare, justice and transit projects across the province. The auditor general of Ontario, among others, has called into question the value of this procurement model, determining that it costs more and takes longer than projects that are directly government-funded. From the perspective of architects involved, design quality is notoriously difficult to maintain under the pressure to minimize costs.

Meanwhile, the requirements for the RFPs through which most projects are procured are stringent about previous experience, making it nearly impossible for small and even mid-sized firms to break into new markets. The situation is made even more difficult when local firms are competing against the large portfolios of national-scale firms (all of which have a Toronto presence). RFPs are demanding an increasing number of specialists, cutting into the architect's bottom line. There's a standing concern about larger firms coming in low on fees, as a business strategy to build up new areas of work.

"Design fees are so little in comparison to the life-cycle costs of a project," says Ted Watson of MJMA. "It's far better to seek out fees that are based on an awareness and capability to deliver on longer-term values."

For Ottawa architect and former OAA president Toon Dreessen, standing offer lists with crown corporations also seem to be unfair, rewarding firms who submit unreasonably low hourly rates as the basis of selection, and municipal sector procurement remains a challenge. Much of the work that is distributed from federal, provincial and municipal governments is relatively small in scale, but uses the same top-heavy RFP process as larger projects. The level of effort required to issue, manage and respond to a conventional RFP is enormous for both client and architect—often vastly out of proportion to the value of the contract.

These procurement processes are especially problematic in small- to mid-sized cities. Says former OAA president John Stephenson of Form Studio, "The biggest challenge we all face—but it's especially acute in remote centres such as Thunder Bay—is a procurement process that is biased in favour of the very large practices and those who are prepared to participate in a fee lottery in order to get work. A procurement model that has been inspired by a political desire to avoid risk and an attitude that equates best value with lowest price is stifling innovation. It's punishing small firms who can't afford to compete on this level and who don't have the required deep portfolios of project-specific experience." (Outside of Ontario, the situation is particularly tough in small centres in British Columbia, Alberta, and Saskatchewan, where the New West Partnership Trade Agreement means that most public construction projects above a \$200K threshold—or \$100K for provincial projects—must be put out to tender across all three provinces.)

Conversations around procurement may be starting to change in Ottawa, partly from public concern over the bare-bones design of the

city's new LRT stations. The \$2.1-billion line, which is set to open more than a year behind schedule this summer, was procured through a P3 process; the same procurement model was used for the \$4.66-billion second phase, which was approved this spring in an expedited manner that left little time for public consultation.

"I hope that the conversations around procurement will have an effect and result in a rethink," says Toon Dreessen. "Public Services and Procurement Canada has already started slowly moving in this direction, but it's tough when the test projects are at the \$150-million scale."

The OAA has been active in advocating for quality-based selection, which it argues is fully compatible with the province's broader public service procurement directive for government-funded projects. The education sector is leading on this front: the University of Toronto is shortlisting in a way that prioritizes design excellence, and its affiliated Trinity College recently put out an RFP based on the RAIC fee guidelines. "In the last year or two, we've seen more flexibility in the evaluation process in certain RFPs," says Natasha Lebel of Toronto's Lebel & Bouliane, who notes that, in some cases, lowest price is no longer the inevitable determining factor. "The public sector is very concerned about getting terrible buildings."

Post-secondary institutions are also taking a leadership role in sustainability. The University of Toronto and George Brown College each have design underway for a mass timber academic facility. A Vancouver-Toronto partnership is behind both buildings: U of T's Academic Wood Tower is being designed by Patkau Architects with MJMA, while George Brown's Arbour is by Moriyama & Teshima with Acton Ostry. Several mass timber office buildings are also in the works, in both Toronto and Ottawa—the first of these across the finish line will be Quadrangle's soon-to-open 80 Atlantic, in Toronto's Liberty Village. "Toronto is now seeing opportunity to lead the way in mass timber and sustainability, and to match contributions from the West Coast to lead the world in this realm," says Ted Watson.

The provincial government that came into power last fall, led by Doug Ford, is anticipated to have impacts in several spheres. There are concerns that post-secondary institutions across the province may start to put projects on hold, in the wake of provincial funding cuts announced in the April budget. One area that's already being affected is student centres. These projects are usually decided by referendum and funded through student levies, but students can now choose to opt out from these fees. The government is also pushing through changes to the heritage act, opening up the iconic Ontario Place for redevelopment, and restoring the Ontario Municipal Board, a provincially appointed tribunal for resolving municipal planning disputes. These changes may be encouraging for accelerating development, but have been seemingly made in haste with little stakeholder consultation.

In contrast, the federal government has been quietly unfolding a progressive series of architectural projects over the past years. The redevelopment of Ottawa's Parliamentary Precinct has resulted in several major adaptive reuse projects, and the upcoming restoration of the Centre Block will be the country's largest heritage conservation project. The government has also declared its intention to have a carbon-neutral building portfolio by 2030. Pilot projects in this effort include deep retrofits of the Arthur Meighen Building in Toronto (led by DIALOG), Les Terrasses de la Chaudière in Gatineau (Provencher Roy and NORR), and the West Memorial Building in Ottawa (Moriyama & Teshima with Kasian).

"A zero-carbon retrofit isn't easy to achieve in the federal government office environment, with issues around security," says Jim Anderson of DIALOG. "It will strongly influence things if they can stick with that mandate. If government work space is leading-edge, everyone's got to keep up."



gh3*



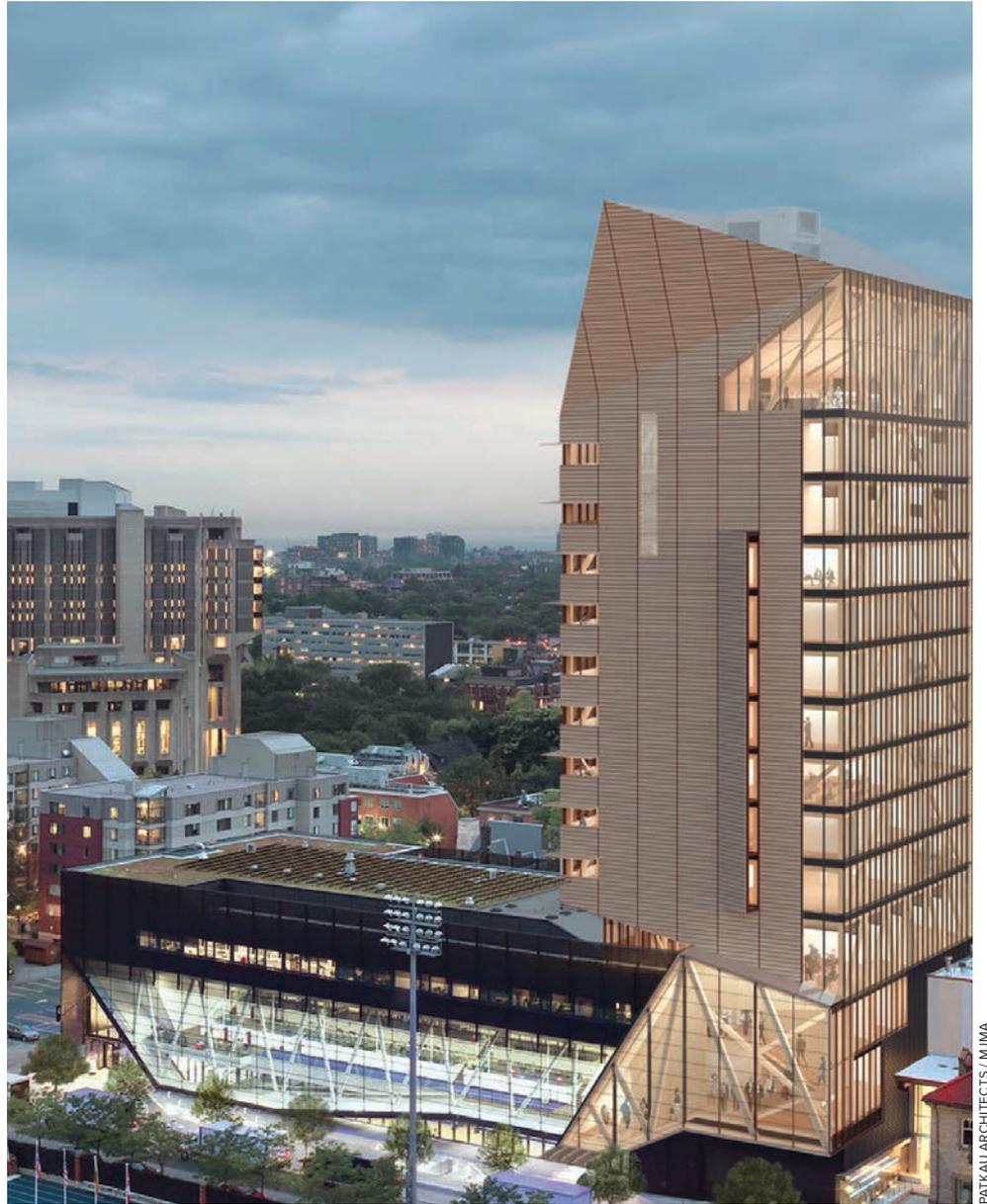
DIALOG

At a municipal level, for Toronto-area residents, a pressing issue is the price of housing—although prices have yet to reach the stratospheric heights of Vancouver. One strategy that the City is taking to address affordability is through encouraging gentle density. "We have looser rules on secondary suites, and now we have laneway housing. The trend is to densify within the existing housing fabric," says Christine Lolley, of sustainable housing firm Solares Architecture. Lolley says her firm has seen an uptick on inquiries about laneway housing in particular, although the program parameters are very strict, and have yet to be tested with built projects.

The condo towers rising throughout Toronto's downtown core are also much-needed contributors to housing. Typically, they're all-glass highrises, and criticism has been aimed at their cheap construction and poor energy performance. This is starting to change. The towers are subject to the Toronto Green Standard, which sets tiered requirements for new private and city-owned developments. The standard aims to bring new construction to near-net-zero emissions by 2030, and is part of a plan to reduce the city's greenhouse gas emissions by 80% by 2050, compared to 1990 levels. The ratcheting up of the standard is affecting developers, comments architect Pat Hanson of gh3*, who



ABOVE Located at 2450 Victoria Park, a mixed-use residential complex designed by gh3* exemplifies the fast-paced development that continues in Toronto. **LEFT** DIALOG is leading a net-zero-carbon retrofit of the federal Arthur Meighen Building in Toronto. **RIGHT** A 14-storey mass timber and concrete hybrid tower, designed by Patkau Architects and MJMA, will be a striking addition to the University of Toronto's downtown campus. The academic building adjoins the Goldring Centre for High Performance Sport, which was designed by the same duo of architecture firms.



PATKAU ARCHITECTS / MJMA

notes that the glass towers being completed today would no longer be possible under the most recent version of the standard.

Ultimately, innovative approaches may be needed to address the housing need in Toronto, speculates Richard Witt of Quadrangle. In the past five years, 80,805 new dwellings were added to Toronto, while the population grew by 116,511 residents. One in three residents spend more than a third of their before-tax income on shelter, and some 97,000 households are on a waiting list for social housing. “The only way [to meet demand] is to spread construction out to other areas,” says Witt, who imagines prefabricated building modules being completed in factories in outlying areas, and being brought into the city to be stacked together.

Similar to Vancouver, Toronto is seeing an influx of international architects designing marquis developments—from Chicago’s Jeanne Gang to Copenhagen’s 3XN. “Firms like BIG bring a business approach that proves the value of architecture is possible,” says Andrew Reeves of Linebox, which has offices in Toronto, Ottawa and Montreal. Led by Bjarke Ingels, the Danish firm BIG is working with Allied Properties to build the Habitat-67-inspired KING Toronto development. “With one big punch, the bar is raised, and for other developers,

it’s a proof-of-concept that investing in design pays off,” says Reeves.

Easily the most bold—and controversial—development in Toronto at present is Sidewalk Toronto, a dozen-building proposal for the waterfront Quayside lands by Sidewalk Labs, a sister company of Google. Local firms have been involved in pieces of the project—Lebel & Bouliane designed Sidewalk’s Toronto offices and community engagement space, gh3* created a prototype interior for the timber towers, PARTISANS developed a deployable ETFE building raincoat that can latch on to façades. But the higher-profile pieces of the design—the actual towers, which are intended to be built of modular mass timber—are currently in the hands of Katerra-partnered Michael Green Architects, Snøhetta, and Thomas Heatherwick.

In any case, it’s up in the air whether the project will move forward. Data privacy concerns are circling around Sidewalk’s smart city proposal. And it seems the company is vying to extend its development to the Portlands—a 715-acre waterfront area that is currently undergoing a \$1.25-billion flood protection project. When completed in 2023, the work will unlock the site as Canada’s most valuable development zone—with an accompanying wealth of opportunity for architects.

QUEBEC

“It’s busier than I’ve ever seen it,” says Gavin Affleck of Montreal’s Affleck de la Riva architects, who has practiced for 30 years. “Students and graduates are basically hired instantly,” says Anne Cormier, of Atelier Big City. Every firm in Quebec seems to agree: work is plentiful. Architects are comparing the current boom to the build-up of Montreal in the pivotal decade of the 1960s.

This winter, Montreal’s real estate sector overtook Vancouver as the second largest market in the country after Toronto. In the past year, housing has shown strong price growth, a period when prices in other cities softened. And the city still has “a lot of catching up to do,” says Gavin Affleck: there are many empty downtown lots that remain from the 1980s and 90s, when recessions and the threat of separation from Canada put the province in an economic rut.

The boom is also affecting heritage buildings, which are being restored and converted to new uses. The biggest of these is the multi-building Royal Victoria Hospital site, which flanks the southern edge of Mount Royal. The site sat in limbo for several years, but McGill University is now planning to convert the former hospital’s main building, a heritage structure dating back to 1893, into campus teaching and research spaces. In Old Montreal, the million-square-foot Gare Viger, Montreal’s original train station, is being converted into a mixed-use development by Provencher_Roy.

Good times come with challenges, and the biggest is a shortage of skilled intermediate and senior-level staff. It’s a generational challenge faced by firms across Canada, but on that is perhaps particularly acute in *la belle province* because of the language barrier—architects need to pass a French competency test to transfer their credentials to Quebec, slowing movement from other provinces.

The cities may also be underprepared for the current sudden growth. Maxime-Alexis Frappier of ACDF, who also works in Vancouver, says that Montreal lacks the tall-building regulations of the West Coast. “We are going to face challenges about the residential densification downtown,” he says. “Vancouver has strong criteria to protect the public realm; in Montreal, they have allowed us to go higher to have a greater density, but the projects still have large floorplates and a high podium.” Nonetheless, some private sector actors have taken the lead in delivering quality architecture. “Developers are understanding that good design can sell well,” he says.

On the public side, Quebec’s competition system has long been the envy of architects in the rest of Canada: a way to ensure quality architecture, and for young firms to land major projects based solely on their design chops. All provincially subsidized cultural spaces with a construction budget above \$5-million must be procured through competitions, and municipalities can opt to use the competition system for other buildings, a choice frequently made by the City of Montreal. And indeed, many of Quebec’s best-known firms—including Montreal’s Atelier TAG and Atelier Big City—came to prominence through design competitions for theatres, libraries, and other publicly funded facilities.



In recent years, the system has been subtly changing. Adversity to risk, and particularly the threat of cost overruns, have led municipalities to tighten competition requirements. Many competitions now come with detailed technical and functional programs at the outset, tight budgets, and requirements for the applicant to have at least a decade of experience in practice as well as a certain number of completed projects of the same type. As a result, fewer firms are able to compete—and those that do succeed tend to get pigeon-holed in sectors based on their previous experience.

Still, says Gavin Affleck of Affleck de la Riva, the process is ultimately continuing to succeed in delivering quality work. “If you get shortlisted, you’ve really worked hard on your conceptual approach,” he says—a phase that often gets short shrift with the compressed timelines of private sector projects. Several upcoming projects awarded through competitions have won Canadian Architect Awards for design-stage work: these include Pelletier de Fontenay, Kuehn Malvazzi, and Jodoin Lamarre Pratte’s Insectarium in Montreal, KANVA’s renovation of the nearby Biodome, Atelier TAG and Architecture49’s installation of an observation belvedere in the lantern of Mount Royal’s Oratoire Saint-Joseph, and Saucier + Perrotte and GLCRM’s Gabrielle-Roy Library addition in Quebec City.

Perhaps equally important, the competition system has helped sustain a small-firm culture in Quebec. While many engineering firms merged in the 1990s, the typical Quebec firm is still a small to mid-sized enterprise—“an artisanal production,” as Affleck puts it.

This has been healthy for an architecture community that is active, in many ways, in creating its own fortune. Lobbying efforts, led by OAQ president Nathalie Dion, are advancing a provincial architecture strategy, which would further solidify architecture’s importance to Quebec culture. Architect Pierre Thibault was one of the champions of the grassroots Lab-École campaign to improve the design, food, and opportunities for physical activity in Quebec’s public schools. As part of the program, competitions are starting soon for renovations of several schools—and the rules have been opened up so that younger architects will have an opportunity to get in the game.



ADRIEN WILLIAMS



ADRIEN WILLIAMS



STÉPHANIE BRÜGGER

TOP LEFT The design of Rigaud City Hall, by Affleck de la Riva architectes, alludes to the archetype of the classical temple, whose form is associated with the birth of democracy. **TOP RIGHT** ACDF Architecture's Hotel Monville in downtown Montreal takes on a clean, modernist aesthetic, inside and out. **ABOVE** Designed by Birtz Bastien Beaudoin Laforest Architectes (Groupe Provencher_Roy), the École Baril school addition integrates with the restored and renovated original 1910 building, which had been slated for demolition.

ATLANTIC

The postcard view of Canada's Atlantic coast is dotted with small, colourful clapboard houses sitting by the ocean. But in some parts of the Atlantic, that's starting to change, with a growing appetite for contemporary design, and a contingent of architects ready to deliver it.

"When the Halifax Central Library opened, it changed many people's perceptions about what a modern building could bring to the city," says Rayleen Hill, of RHAD Architects. The opening of the library in 2014 coincided with a real estate boom in the city: construction has been on the rise, with a record number of housing starts in 2018.

There's a sense of economic optimism that's unusual for the fiscally conservative city. It's anchored, perhaps, in the thriving Irving shipyard, which secured a \$25-billion package for building federal combat vessels in 2011, and earlier this year was part of a team selected to design and construct another \$60 billion of military ships.

"When I first arrived in Halifax 25 years ago, there were massive parking lots in the city," recalls Susan Fitzgerald, of FBM Architecture & Interior Design. "Now, new communities are being created on those sites."

One of the most visible development projects is Queen's Marque, a set of residential midrises on the downtown waterfront by MacKay-Lyons Sweetapple and FBM that includes public areas. There's also anticipation building around the municipality's plan to replace the Cogswell Interchange—a concrete snarl that caps the north end of downtown—with a pedestrian-oriented district centred on parks, plazas and a transit hub.

Affordability is increasingly an issue, and developers are responding in projects such as Midtown North, which includes a significant component of below-market-value rentals. The five-acre parcel, designed by FBM, weaves together a mix of building types and scales, and includes a plaza for weekend markets. RHAD is designing a 30-unit affordable housing project in Bridgewater, a community just outside the city that recently won a \$5-million pot in the federal Smart Cities Challenge. Bridgewater's proposal intends to lift residents out of energy poverty, including through providing better housing that reduces energy expenses.

The Nova Scotia coast is also upgrading its tourism infrastructure, in both public venues and private enterprises. Among the rising stars are the globally acclaimed Cabot Links and Cabot Cliffs golf courses, which have transformed the landscape and economy of a former mining community. FBM has contributed handsome structures to each.

A side-effect of tourism is an uptick in residential projects. "We've seen a lot of clients from overseas or out west who have become enamoured with the Nova Scotian landscape and have purchased waterfront properties around the province," says Rayleen Hill. "Some lived or went to university here, others have vacationed here, and now want to build a summer home where they can eventually retire."

In neighbouring New Brunswick, there is a similar boom in the vacation home market—even though the provincial government is in a non-building phase of austerity. "We recently did an audit of our commissions, and found 85 percent of our clients are from out-of-province," says Stephen Kopp of Saint John-based Acre Architects, a draw that



he attributes in part to the attractiveness of the Bay of Fundy coastline. Kopp also notes that there has been a drift of people from the suburbs back into the city core. In line with the trend, one of their current projects is a six-storey, Passive House-standard multi-unit residential build. "This will be a big statement locally to show how high sustainability standards and high design ambitions can work together," he says.

Throughout the Atlantic coast, climate change has been palpable: there's been major flooding in New Brunswick, Arctic sea ice blowing down the coast of Newfoundland, and invasive species like European Green Crab coming up regularly in fishing nets. Perhaps as a result, private house clients, universities and specific municipalities seem interested in building with sustainability in mind. But government policy and regulations have to catch up.

The potential exists for the buildings sector to make a significant impact: the relatively moderate climate of Newfoundland, for instance, means that geothermal fields are remarkably effective. "You can run almost 100 percent of a building's heating and cooling on geothermal," says Jeremy Bryant of St. John's-based Lat49, who notes a short payback time of five to six years.

Of the Atlantic provinces, Newfoundland's economy is struggling the most, as it continues to recover from the fallout of the oil and gas price crash several years ago. The capital-poor provincial government has relied on P3s as a way to finance major projects, including the \$120-million Corner Brook hospital, a mental health facility in St. John's, and a number of long-term care facilities.

"We've done several long-term care homes in the past, but now, we don't even get looked at unless we're linked to an outside firm," says Richard Symonds of Lat49, who is concerned that the province lacks understanding of the full implications of using this type of procurement. With only 35 local members across Newfoundland and Labrador, notes Symonds, the architecture community has little influence with government officials. The situation may be somewhat different in the Maritime provinces. Says Susan Fitzgerald of Halifax-based FBM, "I actually see a growing desire to work with local firms with their deep local knowledge—especially as Atlantic archi-



DOUBLESAP PHOTOGRAPHY



FBM ARCHITECTURE & INTERIOR DESIGN

fects receive more press and win national and international accolades.”

Still, Newfoundland and Labrador’s architects do what they can, particularly in advocating for architecture. The developments at Fogo Island continue to have a positive impact for design culture, with the international draw of the Fogo Island Inn bringing attention to the transformative potential of architecture. With the help of Canada Council grants, the Newfoundland and Labrador Association of Architects runs an annual architecture week and hosts lectures throughout the year.

As in Saskatchewan, there’s the sense that a local design school would be of help in bolstering the status of architecture in the province—perhaps an outpost of Dalhousie University’s School of Architecture. Architect Chris Woodford, of Newfoundland-based Woodford Sheppard, says that design throughout the Atlantic would also be well-served by closer links between the architects in its different provinces. “It’s cheaper for me to fly to London, England, than to St. John, New Brunswick,” he says. “There’s good design happening in various pockets in the region, but it’s difficult for me to even see architectural work designed by my peers in other Atlantic provinces. It’s also difficult to collaborate and to work in different cities, because of the physical obstacles of getting around.”

Regional connections may be strengthened by the advent of Building Equality in Architecture Atlantic (BEAA), an offshoot of Toronto-based organization BEAT, which supports diversity in the profession. With the launch of a PEI chapter in June, BEAA now has a presence in each of the Atlantic provinces. This fall, they’re planning a regional retreat in New Brunswick, and hoping to make it an annual event.

“Despite our small number of registered architects in Atlantic Canada—and with even fewer women architects—there is a palpable feeling of growth and progress with the launch of BEAA,” says Monica Adair of Acre Architects, who spearheaded the initiative. “A shared dedication to the larger mission of helping shape our profession to be more diverse is resulting in a more connected ecosystem. This is vital especially for the smaller provinces, where the architect is not always top of mind, and where we must together address our value in society.”

It may be just the kind of energy that’s needed to build a stronger culture of architecture within the region.



ACRE ARCHITECTS

TOP LEFT Located on Cape Breton, Abacus House was designed by RHAD Architects to reference the typology of local barns. **TOP RIGHT** FBM Architecture & Interior Design’s plan for Halifax’s Midtown North comprises a mix of six commercial and residential buildings. **ABOVE** Acre Architects is designing The Wellington, a mixed-income, Passive House-standard multi-unit residential building in Saint John. The massing and pops of colour reflect the legacy of the three houses that previously occupied the site.

THE NORTH

The Indigenous population is Canada's fastest growing demographic, with some 1.6 million Indigenous people in the 2016 census, and an anticipated growth to over 2.5 million by 2038. Statistics Canada says that two factors have contributed to this explosion: high fertility rates, but also a greater confidence that is causing more people to identify themselves as First Nations, Métis, or Inuit on the census.

What's indisputable is that it's a demographic in need of better architecture, starting from the basic level of housing. One in five Indigenous people lived in a dwelling in need of major repair in 2016, including nearly a third of Inuit living in Inuit Nunangat and almost half of Status First Nations people living on reserves. Close to one fifth of the Indigenous population lived in crowded housing, with a shortfall of bedrooms.

Jack Kobayashi, of Whitehorse-based Kobayashi + Zedda Architects, notes that the housing sector in Northern Canada has been extremely busy in the past five years. "At this time, we are designing residential projects that comprise the entire continuum of housing, including homeless shelters, tiny homes, rental apartments, market condos, seniors' housing and extended care facilities," says Kobayashi. To address the severe shortage of housing in Whitehorse, the firm has also developed its own construction arm, 360 Design Build, which has completed several projects, including, most recently, a 14-unit building with micro-sized apartments.

Funding for the majority of Northern projects ultimately comes from federal coffers. "While much of the federal subsidies have been devolved over the years through local government, First Nation governments and First Nation Development Corporations, all paths lead back to the Federal Government," says Kobayashi. Unfortunately, Ottawa's schedules don't always align with the realities of Northern living. "The North operates on annual government funding milestones that revolve around a March 31st year-end. Many projects start and stop on that milestone date," he says. "This arbitrary date does not align well with the short construction season."

Architect Bill Semple of NORDEC consulting and design echoes the need for reality checks. "There's never enough money, and never enough housing getting built. Every year, the backlog gets bigger," he says. Often, funding is year-to-year, or over a couple of years at most. The lack of long-term funding makes it difficult to build capacity and to plan longer-term strategies.

On the positive side, there seems to be a willingness to develop improved processes. "The conversations between communities and the federal government is much more open now than before," says Semple. Adds Kobayashi, "Projects coming out of the efforts of First Nation Development Corporations have been consistently rewarding. The Development Corporations operate at arms-length to the First Nations they represent, and are sufficiently nimble in their risk-taking and decision-making ability to become very good clients of architecture in the North."

A variety of community-centred approaches are seen in the work of Yellowknife-based Taylor Architecture Group. For the Hamlet Office and Community Hall at Kugaaruk, the firm focused on using as much



local labour as possible. "We did this by interviewing community members interested in working on the project, acquiring their contact information and skill levels, and then including that in the project's specifications," says Ksenia Eic of Taylor Architecture Group. Forty-five percent of the project was constructed by locals. Wood construction was also chosen, in order to use construction equipment already available in the community. "Usually people shy away from using local labour, as they think it will increase the cost, but the amazing thing is that the building tender price ended up being under the budget price—which is very unusual for the North."

There is opportunity in the North for young architects intrepid enough to move there. Eic completed her student thesis looking at First Nations housing in her home province of New Brunswick, then decided to join Taylor Architectural Group as a way to pursue her interests. "Even as an intern architect, you really get thrown into the middle of things, with a variety of experiences," she says, recalling how she was exposed to the firm's highly varied work, from offices and schools, to community centres and arenas. "People think that you can only go to Vancouver or Toronto to find work, but you're more likely to find an interesting experience by going somewhere more remote."

All this is happening in the shadow of the significant impacts of the climate crisis: the Arctic is warming almost three times as fast as the rest of the world. "Since my arrival in Yukon, the average annual temperature in some northern communities with permafrost has increased by as much as 4.8 degrees," says Kobayashi. Thawing permafrost threatens northern infrastructure, since the foundations of many buildings are dependent upon maintaining permafrost in its frozen state. (Buildings are typically raised to allow cold air to circulate over the ground.) "Much of the permafrost in Yukon is just below zero degrees Celsius, and therefore very susceptible to even slight increases in warming temperatures," says Kobayashi.



ANDREW LATREILLE



CHRISTOPHER OLAND

While there is a small contingent of registered architects in the North, some firms from southern cities have developed a long history of working with Indigenous communities, among them, Edmonton-based Manasc Isaac. “We are working more than ever with First Nations, and are developing deeper and more enduring relationships with the many First Nations and Métis communities that we work with,” says Vivian Manasc, whose current work includes a number of First Nations schools in Alberta and gathering centres at Métis Crossing (Alberta), Salt River (Northwest Territories), and Kwanlin Dün (Yukon). “Our approach is informed as much as possible by Indigenous ways of being and knowing and of relationships with the land.”

Conversations with Indigenous clients have the potential to do more than meet the challenge of providing adequate housing, as immense as that goal may already be. “First Nations have a close relationship with the land, they understand how it has inherent richness, they have spent countless generations living on it,” says Semple. “To address climate change, the very attitude they have to the land is what we need to cultivate—there is much to learn from them. It is my belief that reconciliation will be finally happening when we’re actually having two-way conversations, where we are learning from each other.” ◀▲



HORPONA



HORPONA

TOP LEFT Kobayashi + Zedda Architects designed the 17-unit Inuvik Singles complex to meet the needs of a growing demographic in the community. **TOP RIGHT** Local artist Alina Tungilik’s work was integrated into the Kugaaruk Hamlet Office and Community Hall, designed by Taylor Architecture Group. **RIGHT** For the Lutsel K’e Dene School, Taylor Architecture Group provided maximum transparency to connect classrooms with the outdoors and with the corridors, building trust with the community and combatting feelings of claustrophobia.