Bringing the 15-minute city to life

Like a flash flood that's swamped homes, businesses, and roads, so too has the COVID-19 pandemic upended life as people knew it. As the worst recedes and Canadians become more comfortable returning to activities, it's a good time to reconsider what we want everyday life to look like—and which pandemic-era changes we want to keep.

Foremost among those changes should be the option about where to work. Many employers and employees see the value in allowing remote work arrangements to continue, either entirely or within a hybrid workplace model. And with a tight labour market, this can help set organizations apart from their competition.

Such a shift would not just change the workplace. It would change the places we need and want to go day to day, which would change how we move around. And that would mean the way transportation systems are designed is now out of step with the way we prefer to live, work, and travel.

This presents a unique opportunity: to rethink mobility in Canada's cities, and even the cities themselves. In this moment, we should not only be reconsidering how we move around, but how—and for whom—we design the places where we live.

Cities are going to continue to grow—and to be the focal points of our economy. Deloitte research suggests that by 2030, cities will account for 80% of global GDP, 81% of global consumption, and 75% of global demand for energy. It's critical that we get the growth in Canada right.

An accessible, sustainable, multi-centred approach

Planners talk about a 15-minute city, where critical goods and services are no more than a 15-minute walk or bike ride away from every resident. Instead of a single city centre and the separation of places where people live, work, shop, and play, it envisions a decentralized city where every neighbourhood contains all the basic services for living and working.

This approach is not theoretical. The most famous implementation to date was spearheaded by Anne Hidalgo, mayor of Paris—as explored in our *Urban future with a purpose* report—and similar concepts have emerged in Portland, Melbourne, and Stockholm.

With its focus on dense, transit-oriented development and pedestrianization, it helps to advance environmental protection and sustainability goals by decreasing community emissions and by decentralizing employment—a goal made more attainable by the pandemic-related widespread shift to remote work.

More to the point, the 15-minute city is a livable, human place, with better access to community amenities, commercial services, and support services. It's the kind of place that can attract talent for driving innovation and economic growth.

To get there, we'll need to reimagine our transportation networks: how to integrate our existing mass-transit infrastructure with micromobility solutions like car shares, ride shares, and bike shares to get people to the places they need to go. And how to do that in a way that makes mass-transportation infrastructure newly relevant in an age of remote work while also increasing ridership and financial sustainability for the sector.

"We're going to have to be open to our neighbourhoods evolving and changing and not being set in stone.... I think that's where the rubber is going to hit the road on these challenges, because everyone loves the idea—up in the clouds. But when we actually get down to a neighbourhood change, it's a bit more challenging. As someone who has lived through 17 years of painful public hearings, I think that we as a region need to get better at working our way through that."

Jonathan X. Coté
Mayor, City of New Westminster

The 15-minute city was the subject of a recent discussion at the Greater Vancouver Board of Trade. From that session, three fundamental considerations emerged that are applicable to any municipality in Canada:

1 Consider land use and transportation in tandem

Land use and transportation are intrinsically linked: if transportation defines how people move from place to place, land use defines what those places look like and how people live within them. And in many Canadian cities, an ongoing housing shortage has created an intense demand for residential development.

This demand puts pressure on industrial and agricultural land, so decision-makers find themselves balancing competing priorities. Moreover, people are often less willing to accept industrial land uses near the places they live than residential and commercial ones.

However, the residents of a city need places to work as much as they need places to live, and industrial land generates jobs. In Metro Vancouver, for example, it provides 27% of the jobs in the region—and comprises just 4% of the land base.[1]

A balance must be struck. And the 15-minute city offers a possible solution. Such an approach to urban development brings people out of their homes by creating spaces for citizens to meet, to gather, and to enjoy their neighbourhoods. It brings workplaces and shops closer to home,

allowing people to enjoy life with smaller homes and fewer vehicles. It flips the detached-home, two-car orthodoxy on its head while increasing the livability and affordability of urban centres. Increased density allows more housing demand to be filled within existing residential land. That, in turn, can help reduce pressure on the industrial land that is so critical to a region's economic success. It allows for the coexistence of residential, commercial, and industrial lands in a symbiotic rather than a competitive relationship.

There are also challenges with respect to moving people away from their cars and toward alternative forms of transportation. In areas where residents are used to travelling by car, space on a road given to bicycles or pedestrians is often perceived as being taken away from drivers. And while there is also an ingrained social preference for cars, places that are car-dependent are planned to be that way—so the challenge isn't only about how people feel about their cars, but also that where they live was designed to make cars the most effective way to get around.

These issues can be—and are being—overcome. Ideally, cities and mobility providers would work together to make alternatives to car usage more enticing and to ensure broad and accessible transportation services, with complementary rather than competing services. Instead of bringing people to transit, they would bring transit to people, in thoughtful and site-specific ways.

"If you look around the world where electrification is being done well, you can look to Germany—many of their cities have big fleets that are fully electric. The way they achieved this was collaboration: not just between government and industry, in terms of public places for charging, but also business to business, with infrastructure agreements. For example, if you are a grocery chain and you have a big parking lot, and you see an opportunity to electrify for your own customers, you can also offset some of that cost by getting into collaboration with a company like ours, [which] is looking to charge vehicles in your off-hours overnight."

Grant Stockwell
Senior Vice President and Chief Mobility Officer, BCAA

No single alternative mode of transit will work everywhere. In a municipality that's unlikely to see widespread adoption of a bike-share program, for example, other forms of micromobility may be a fit. Perhaps it's a car-share program, or a ride-share program, or simply walking. Planners should consider every option as a tool in their toolbox, ready to be used to make transit that's not based on private car ownership more attractive to people and fit the places they live.

Transit is also a critical consideration when new housing is built. Focusing new development near reliable, accessible public transit options gives its future residents the opportunity to choose to go car-free. This is in keeping with market demand: people want to live near transit—and are willing to pay for it. According to Deloitte research, properties within 750 metres of major transportation infrastructure are about 22% more valuable than equivalent properties farther from transit. The increased cost of such homes is more than offset by reduced dependency on private vehicle ownership.

Finally, when considering how to improve mobility, it's important to recognize that retrofitting existing neighbourhoods is much more complex than building new ones. To start with, there are more technical challenges. For example, many older buildings don't have the infrastructure in place to charge shared electric vehicles. There are also social challenges in an established neighbourhood that don't exist in new developments. For example, local residents who are comfortable with their existing transportation routines may not readily see the value in new systems and transit options.

To move toward a sustainable 15-minute city, municipalities, transit systems, and private-sector mobility providers must work together—not only to overcome challenges, but also to help turn those challenges into opportunities for getting there.

2 Collaborate to solve the last-mile problem

Mass transit is a cost-effective and efficient way to transport large numbers of people but, by its very nature, cannot bring a person door to door. That last stretch, from a mass-transit node to a rider's doorstep, is the last-mile problem. It's a tricky one, too, as there's no single solution that will work in every neighbourhood.

However, a collaborative approach between government and private-sector micromobility providers can help make multimodal transportation available to all. Upon leaving mass transit, one person might opt to use a bike-share service, another may choose to use an e-scooter, and yet another a ride-hailing service like Uber or a car-share service. While the choice will depend on the preferences of the user, their route, and their destination, all the solutions offer an opportunity to move away from single-occupancy cars.
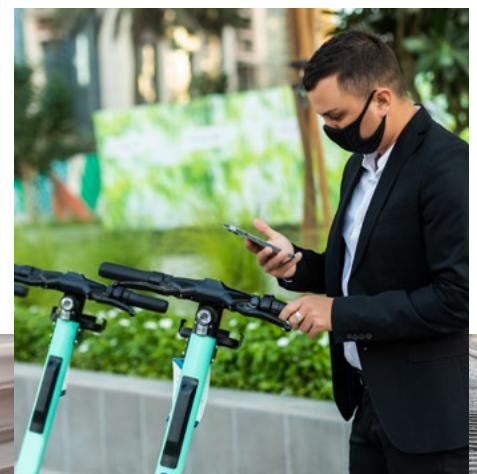
"How do we balance that need for supply to be put in the right places? If we try to keep building supply in areas that are in the middle of nowhere, just because it's easy, that's not going to take us anywhere. But the reality is, when we'd start building or retrofitting our existing areas that are attractive, it's just more difficult, because we have more regulations and more variables that we have to balance."

Rafael Villarreal
Division Manager, Transportation
City of Surrey

One way this collaboration might come to life is through a mobility-as-a-service (MaaS) platform. MaaS allows dynamic trip planning (and payment) across all modes—public and private—on a single platform or application. It's easy to see its appeal: solving the last-mile problem by seamlessly integrating mass transit with micromobility solutions to allow single, continuous trips that are convenient for travellers.

This model is already in place in Helsinki, where residents have been able since 2016 to use an app called Whim to plan and pay for all modes of public and private transportation in the Finnish city. Replicating it elsewhere will require robust collaboration between government, transit agencies, and micromobility providers.

The European Union offers another approach. In keeping with its established data strategy, it securely shares mobility data generated by cities in a privacy-protecting manner. These "data spaces"—where all public and private stakeholders intentionally share their data—can inform mobility providers of all types and sizes of citizen movement around the city, inspire new services, and foster more effective transportation networks.

A similarly bold approach in Canada could help to jump-start last-mile mobility—and innovation.

"If you have a community that doesn't have a great cycling network, it doesn't make sense to put all your eggs in the basket of a bike share, because people won't feel safe, and then the service will eventually disappear because it's not financially viable. But what may work very well is something like microtransit. We have to think about the tools that we have, what are the solutions, and what are we ready for? And, at a later stage, when more of the relevant infrastructure is built out, then you can shift."

Sandra Phillips
Shared Mobility Architect, Founder and CEO, movmi

3 Keep people at the centre

It's easy for transportation planners to check that cars, bikes, or buses can complete their trips safely without permanent obstruction. But there's so much more to it. What the planners of the 15-minute city need to ask is: where is the *person* going and how can transportation facilitate their journey?

What this means for government is to help lead the change in how places and streets are built—not for cars, but for people. It means shifting the planners' perspective. The focus must be placed firmly on people: what they want, where they want to go and why, and how best to get them there.

And there's an equally important lesson for the private sector: people won't adopt products or services if companies don't understand their needs and work to foster a trusting relationship. A car-share project in Switzerland that floundered because of opposition from parents illustrates this neatly. In an effort to make micromobility more accessible to families, the program had added car seats, but the pilot was a failure. Why? Because parents already had their own car seats, and they trusted those seats to keep their children safe.

Putting people at the centre of every aspect of the 15-minute city is the right thing to do for everyone involved. It should shape all public- and private-sector decisions, policies, and projects, from concept through to realization.

Our urban future

Cities are the most sustainable and practical places to live. In the aftermath of the pandemic, we have the opportunity to reimagine why cities are built the way they are and for whom. The 15-minute city would do more than reduce carbon emissions—it would increase our quality of life. It may also, through densification, help to alleviate some of the pressing housing challenges faced in so many Canadian cities.

To achieve this, urban design systems would have to move from a centralized to a decentralized approach. In this respect, Metro Vancouver has a head start—its regional growth strategy, Metro 2050, envisions multiple urban centres, where the preferred modes of transportation are public transit, cycling, walking, and multiple-occupancy vehicles. Many areas—from downtown Vancouver to Metrotown in Burnaby—already enable residents to live and work in close proximity. Recent research reveals that 79% of Vancouver's population already lives within a 15-minute walk of a grocery store and a full 99% can access a grocery store by bike in that time.[2]

But the 15-minute city is about a lot more than proximity to a grocery store. Existing neighbourhoods will need to change, the public's preferences will need to evolve, and inequities in access to public transit will need to be narrowed or eradicated.

Through collaboration and partnerships between the public and private sectors, with people at the centre of every strategy and service, we can improve mobility in our cities, bolster access to services and opportunity, and enrich the quality of life of Canadians across the country. Let's work together to make the resilient and sustainable 15-minute vision our reality.

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Endnotes

1. Metro Vancouver, *Regional Industrial Lands Strategy*, June 2020.
2. Matt Kieltyka, "15-minute city within reach for Vancouver: SFU study," Simon Fraser University, May 18, 2022.

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