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Submission – COVID-19 and cities

The impacts of COVID-19 have only been felt for less than two months in North America yet the number of articles already declaring the end of the city as we know it is staggering. As I write this, I am deeply concerned about the lack of adequate preparation and response that will cost thousands of life, especially in the United States. But the solution, in my opinion, will not be a city that is designed for self-isolation in the sense of physical changes to the urban environment that keep us away from one another. Rather, my hope is that there will be a stronger, more nimble, more prepared public health system that is ready to act early and consistently to prevent the world from ever getting to this state. This may include early testing, contact tracing, intermittent shelter in place orders and serious and expedient medical response. Assuming these changes happen, urban spaces – both interior and exterior – will evolve to be more nimble in order to adjust to a need for physical distancing. In this context, I believe cities will look very much the way they do today, with a few underlying and long-lasting changes as outlined below:

Social cohesion will be more important than ever – supported by technology that is available and accessible to all. Cities must work to enhance the opportunity for social connections.

-   Social cohesion will become more important than ever. Much like natural disasters, which take a huge toll on elderly, vulnerable and isolated populations who lack social networks to help provide them with basic services – similarly, the difference between life and death in a pandemic situation may be due to having a network of individuals who can check on an individual and provide basic, necessary services.
-   Social networks are supported by physical proximity but also by internet access. Cities should fund free wifi as a public utility thus minimizing the digital divide.
-   In order to maintain social connections, safe social spaces will be important; cities must find ways to build and **enhance public space** that can provide valuable **fresh air and outdoor space**, as well as a means of connecting with other individuals even in times of physical distancing. This may mean a redesign of parks to include more solo seating, moveable furniture (for example, moveable chairs and tables in Bryant Park, NYC), and less passive green

Bryant Park, NYC
SOURCE: Jean-Christophe BENOIST, commons.wikipedia. org

-   space and more programmed or usable space such as walking paths or diverse, local vegetation for viewing.

Diverse forms of movement will be necessary as will improvements to public transit systems.
-   Public transit will need to continue as it is the only viable means of transportation for many individuals. This may mean new precautions and practices such as riders wearing masks, increased cleaning of buses and trains, and adaptations to stations that allow individuals to self-distance. Long-term precautions must be established for transit operators.
-   Cities may need to experiment with reduced or zero fare options to provide transportation for vulnerable populations while bringing back valuable transit riders lost during the crisis. Members of essential workforces or areas with a high percentage of vulnerable populations should be fare exempt.

- New sources of revenue or a reallocation of revenue such as road subsidies or gas tax must be used to restore transit systems after significant decreases in revenue during the pandemic.
- Additionally, there may be programmatic changes that help reduce congested transit systems such as staggered work hours, allowing some employees to work from home regularly or intermittently.
- Finally, it will be important to enhance other forms of transportation including infrastructure for safe cycling and walking.

Urban life must provide us with the lifestyle we need most, while protecting the most vulnerable.

- Cities that have the means to become welcoming, attractive, safe and equitable will fare well when normality returns. Households who can choose where they live will become more selective about their living environment. The benefits of an urban environment must outweigh the potential hardship and danger of another pandemic. Quite simply, it must be worth the risk.
- Cities will also not fare well if they only retain the most vulnerable populations who lack the means and mobility to live elsewhere. This was the lesson taught in the 1950s – 1970s when cities were abandoned by the middle class. Any urban recovery plan must address disparities and aim to help the most vulnerable through new economic opportunities, education, childcare and healthcare.
- Small cities may recover better than large metropolises if they can offer the amenities and lifestyle of a large metropolis without the cost, extreme densities and congestion. This is already happening as large cities like New York, San Francisco and Vancouver become unaffordable and therefore unliveable to large middle and low-income populations. A post-COVID-19 environment will only exacerbate this trend.
- Individuals with choice and mobility may see the value of a mixed-use neighbourhood that creates employment opportunities close to home; this could be the push that mixed-use, mixed-income and infill development needs in many small and mid-sized cities.
- Support for small businesses must be strong. Cities will suffer tremendously if the outcome of the economic strain during the virus is that only big box and chain stores survive. Not only will this alter main streets and dense urban areas, it will leave behind decent paying employment in lieu of a low wage, unskilled workforce with little opportunity for economic advancement or resilience.
- Density is an inevitable quality for many cities due to the need to provide housing in proximity to services, transportation and employment but cities should strive for density in a more liveable form. Cities should look at ways to provide density through medium density housing – the so-called 'missing middle' – by replacing single-detached and high-rise neighbourhoods with consistent medium density housing that may provide the same units per hectare at a different scale. For example, the Plateau neighbourhood in Montreal is one of the densest neighbourhoods in North America (>12,000 ppl/km^2), yet most housing is three to five stories in height with small pocket parks scattered throughout and commercial areas in close proximity. The typology of the Montreal triplex is a

Montreal Triplex. Photo: author

form of housing to be considered; the triplex design includes exterior spaces, separate entrances, and cross ventilation thus reducing transmission of disease through shared spaces and providing fresh air. The narrow but deep floor plans make for front and back balconies for fresh air and

planting while also enabling comradery by allowing residents to interact from balconies at a safe distance while maintaining a relationship with the street.
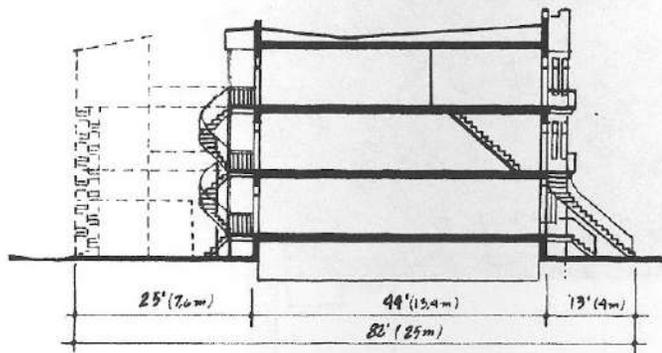
Section – Montreal Triplex. Source: dynamiccities.org/

Interior balcony. Photo: author

- Multi-generational living may grow as a result of COVID-19 providing a supportive family network with reciprocal benefits: childcare, sharing of essential goods, emotional support. New residential development should consider units with lock-off suites that can be self-contained or subordinate but linked to provide both independent and communal living situations.

Local manufacturing, supply chain technologies and a resilient transportation system will be important and prioritized.

- The need for medical supplies and personal protective equipment has shed light on the weaknesses of production and supply chains in times of crisis. Small, local manufacturing should be supported in growing to be nimble so as to be able to provide a variety of goods. While the current need is medical supplies, manufacturing entities must anticipate the needs that will result from climate change crises. Green manufacturing practices should be at the heart of these changes.
- Businesses must have a plan to be pandemic-prepared or pandemic-safe so they can quickly and efficiently shift to safely operating while protecting front-line workers if a pandemic returns.
- Transportation supply networks must also be nimble. Recent strikes that halted rail transportation for several weeks in Canada revealed the weakness of a rail system that has been under-funded for decades. Natural disasters and workforce frailties must be factored into the transportation system to provide safe, efficient means of moving goods that protects workers.