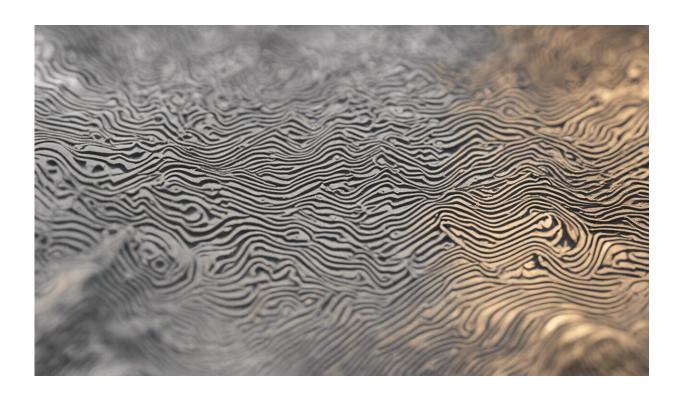


# Inclusion, walkability will be key to rebuilding cities after the COVID-19 pandemic

January 11 2022, by Kate Choi, Patrick Denice



Credit: AI-generated image (disclaimer)

Cities emerged as the epicenters of the COVID-19 pandemic: <u>roughly 90</u> <u>percent of COVID-19 infections worldwide were reported in urban settings</u>. And poor urban neighborhoods were hit especially hard.



Researchers frequently attributed the vulnerability of cities to <u>high</u> population density, overcrowding and poor air circulation. The vulnerability of cities during the COVID-19 pandemic has highlighted the need to create sustainable cities that promote health.

### Less density, more diversity

As sociologists interested in urban settings, we examined how the physical environment of neighborhoods shaped the spread of COVID-19 in Toronto. Our findings suggest a few things cities should keep in mind as they rebuild following the pandemic.

First, we should create more walkable neighborhoods. COVID-19 spread at a much slower pace in highly walkable neighborhoods. Residents in these neighborhoods <u>can travel shorter distances</u> on wider and better maintained sidewalks, which may reduce their exposure to the COVID-19 virus.

Second, we should reduce the number of overcrowded households. Soaring real estate prices have forced many socio-economically disadvantaged families into overcrowded housing. Space constraints in these housing units may make it more difficult for residents to practice adequate physical distancing. It may have also deprived them of the space necessary to isolate if they contracted the virus. These factors may have increased their risk of contracting COVID-19. Increasing the supply of affordable housing may hold the key to reducing the urban poor's vulnerability to infectious diseases.

Third, we should increase the number of mixed-income housing units and better integrate our neighborhoods. COVID-19 spread much faster in lower-income neighborhoods. Housing affordability may have pushed out <u>disadvantaged families from higher-income neighborhoods and</u> forced them to settle in lower-income areas with fewer amenities.



Displacement and higher density due to limited housing affordability may have increased the concentration of residents who were exposed to the COVID-19 virus. Residents of low-income neighborhoods are more likely than their peers in affluent neighborhoods to live in close proximity to someone with a COVID-19 infection.

# Tailored responses

Residents of low-income neighborhoods rely more on neighborhood amenities than their peers in affluent neighborhoods because they have fewer personal resources at their disposal. And even when communities have the same amenities, those in lower-income neighborhoods are more likely to be poorly maintained. For example, lower-income neighborhoods may <u>lack wide and well-maintained sidewalks</u>.

They also have fewer health-promoting amenities, such as grocery stores with fresh produce or <u>high quality health care facilities</u>. Therefore, a neighborhood's physical environment contributes to the spread of COVID-19 differently in lower and higher income neighborhoods.

Our study reveals that population density increased the spread of COVID-19 in low-income neighborhoods, but it lowered the infection rate in high-income neighborhoods. In more affluent neighborhoods, even high-density apartment buildings come with amenities and protections—like better ventilation systems and additional staff to properly sanitize common areas—that similarly dense buildings in lower-income neighborhoods lack.





Credit: AI-generated image (disclaimer)

Similarly, green space mitigates the spread of COVID-19 in lower-income, but not higher-income, neighborhoods. Housing units in low-income neighborhoods are likely smaller, overcrowded, less well-maintained and have poorer ventilation. Residents of low-income neighborhoods may thus face greater difficulty adhering to stay-at-home policies. Large green spaces in such neighborhoods may provide a safe space where residents can get clean air and safely practice social distancing.

Furthermore, neighborhood walkability helps mitigate the spread of COVID-19 more in lower-income neighborhoods than in higher-income neighborhoods. This pattern likely emerges because residents of <a href="low-income neighborhoods">low-income neighborhoods</a> are less likely than their counterparts in affluent neighborhoods to own cars. They are more likely to rely on public



transportation for errands that cannot be completed on foot. For residents of low-income neighborhoods with poor walkability, <u>running</u> <u>errands may require longer trips and making multiple transfers in the public transportation system</u>.

## After the pandemic

The COVID-19 pandemic has highlighted the need for us to build sustainable cities that promote health and reduce the vulnerability to infectious diseases among their residents. Future urban planning efforts should not adopt a one-size-fits-all approach. Instead, they should tailor the rebuilding process to meet the diverse needs of residents of lower and higher income neighborhoods.

Specifically, rebuilding efforts should prioritize low-income neighborhoods and remedy their <u>high population density</u>, construct more green spaces and improve their walkability.

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