

# PUBLIC SPACES, PRIVATE LIVES

## Surveillance, Equity, and the Smart City



### Promises

The world is undergoing rapid urbanization. Approximately 64% of the world's population is expected to inhabit cities by 2050. Smart cities technology is that which uses data atop traditional infrastructure to improve the quality of life of its citizens by increasing operational efficiency, fostering sustainability, and promoting democracy through open data.



### Energy

- Building automation systems
- Home energy consumption tracking
- Dynamic electricity pricing
- Distribution automation



### Security

- Real-time crime mapping
- Data-driven building inspections
- Optimized emergency response



### Mobility

- Real-time transit information
- Autonomous vehicles
- Intelligent traffic signals
- Car and bike sharing



### Waste

- Digital waste disposal tracking
- Optimized collection routes
- Fleet management systems



### Health

- Infectious disease surveillance
- Telemedicine
- Remote patient monitoring
- Real-time air quality mapping

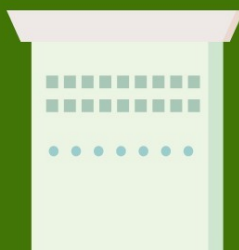


### Water

- Water consumption tracking
- Leakage detection/control
- Smart irrigation
- Water quality monitoring

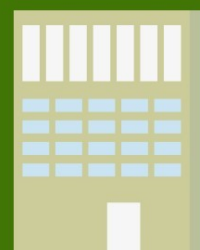
**35%** faster emergency response times. **20%** reduction in mean commute times. **15%** reduction in greenhouse gases.

Alphabet's Sidewalk Labs, a sister company to Google, has promised this futurist reality to Toronto. But does the promise hold any weight?



**19.4%**  
increase in average rent for purpose-built units between 2012 and 2017 in Toronto.

Toronto's population grew by 4.5% between 2011 and 2016. An estimated 47% of Toronto residents are renters, and nearly half of renters spend 30% or more of their income on housing. In 2017, the average rent for purpose-built units was \$1,426.



### Challenges

A smart city is not necessarily an equitable city. Some problems include:

#### Displacement

The top ten smart cities in North America are also undergoing rapid processes of gentrification. Market disruption, a lack of respect for existing zoning laws, and unreasonable rent or tax hikes may displace local businesses and long-term residents who are disproportionately older, poorly educated, lower income, and of colour.

#### Access

Older adults, people with disabilities, immigrants, or lower income populations might not experience the benefits these technologies yield. This may be a result of poor digital literacy or a lack of affordable internet access.

#### Privacy

With ever-present sensors, citizens are reduced to mere data in an electronic panopticon of mass surveillance. Lack of access to this data and the algorithms analyzing them can exacerbate inequities in outcomes, especially among marginalized communities.

#### Democracy

Outsourcing public development to large tech companies over elected officials might undermine any promises of improved democratized urbanism as citizens are subject to the corporate vision.

### Case Study:

#### Sidewalk Labs and Toronto

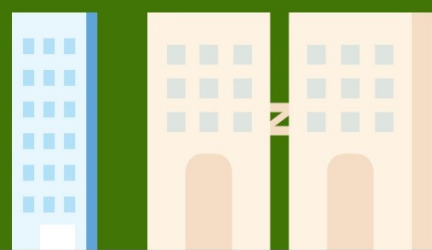
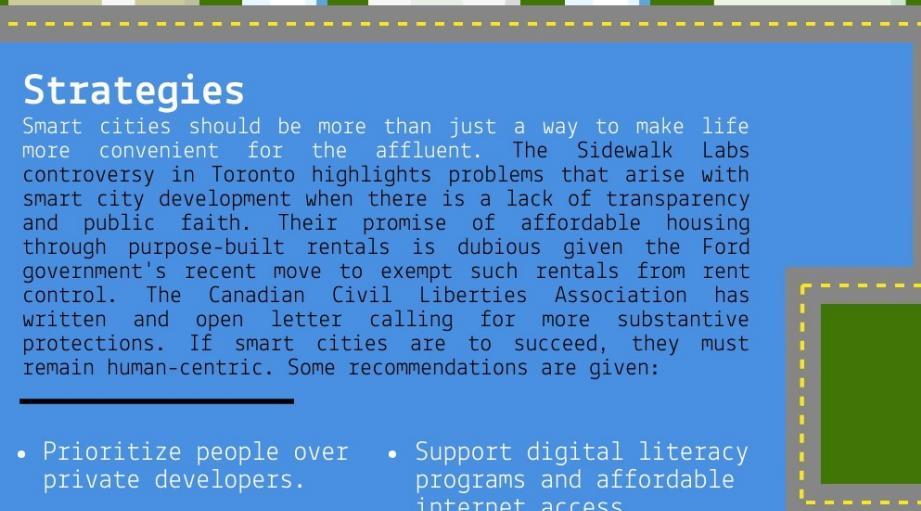
Sidewalk Labs, in partnership with the government, promises to expand light rail transit; develop tall-timber buildings; add affordable housing; to "build a neighbourhood from the internet up." \$50 million was committed to a joint planning process with Waterfront Toronto at Quayside.

The project has sparked controversy over privacy, market disruption, and American economic imperialism. The urban development plan is publicly funded, yet the governing board is entirely appointed. On the matter of homeownership, a spokesperson responded: "the specifics of how we achieve a socio-economically diverse mix of housing [is] going to be figured out as part of the planning process."

### Strategies

Smart cities should be more than just a way to make life more convenient for the affluent. The Sidewalk Labs controversy in Toronto highlights problems that arise with smart city development when there is a lack of transparency and public faith. Their promise of affordable housing through purpose-built rentals is dubious given the Ford government's recent move to exempt such rentals from rent control. The Canadian Civil Liberties Association has written an open letter calling for more substantive protections. If smart cities are to succeed, they must remain human-centric. Some recommendations are given:

- Prioritize people over private developers.
- Recognize that inclusion is needed to drive results.
- Ensure that the needs of marginalized populations are on the agenda.
- Support affordable commercial spaces for small businesses.
- Support digital literacy programs and affordable internet access.
- Embrace open systems and transparency.
- Advocate for land use justice in zoning laws.
- Legislate projects and maintain *Charter* rights.
- Push for local civic engagement.



1. McKinsey Global Institute, "Smart Cities: Digital Solutions for a More Livable Future" (2018) at vi, online (pdf): McKinsey & Company <goo.gl/mWz6BM>.
2. Mariana Valverde, "Public Lands, Private Control, and Housing Needs in the "Smart City" Quayside Development" (4 December 2018) online (blog): Ryerson University Centre for Free Expression <goo.gl/phJPVG>.
3. Avery Robinson, "Is a Smart City a Healthy City?" (17 March 2017) online: Conscious Cities <goo.gl/yBAvqg>.
4. Alessandro Rigolon & Jeremy Németh, "Toward a socioecological model of gentrification: How people, place, and policy shape neighborhood change" (16 January 2019) Journal of Urban Affairs <doi.org/10.1080/07352166.2018.1562846>.
5. "By the numbers: Toronto's rental market" (9 February 2018) online: CityNews <goo.gl/icLe7z>.
6. Molly Sauter, "Google's Guinea-Pig City" (13 February 2018) online: The Atlantic <goo.gl/13oRqY>.
7. Michael Bryant and Dr. Brenda McPhail, "Open Letter from CCLA: Calling for a Reset on Waterfront Toronto" (5 March 2019) online: Canadian Civil Liberties Association <goo.gl/Y459tp>.

powered by