

What? - Microcells are transmitters which, like cell towers, emit electromagnetic frequencies 24/7.

Where? - Across Canada, telecoms are installing them on utility poles by our homes, businesses, parks, hospitals, and schools.



Why? -To sell us faster data and establish the infrastructure for unproven-to-be-safe technologies like 5G, smart cities, and the widespread use of artificial intelligence.

How? – Innovation, Science and Economic Development Canada allows microcells to be installed on existing structures without public consultation.

What are the Implications of Microcell Placement in our Communities?

- **Local Authority Undermined:** With public input denied, the shaping of our technological future has been put in the hands of private telecommunications companies.
- **Public Health and Safety:** Placing transmitters in the public right-of-way affects pole integrity, creates increased distraction for drivers, and causes sidewalk and roadway crowding. The international biomedical research community is increasingly linking radiofrequency radiation from wireless devices to adverse health effects.
- **Liability:** Once a municipal government has been made aware that microcells may cause personal injury or environmental harm, permitting transmitters to be installed in ROWs may be deemed an act of negligence, and this government may be liable for damage or injury these microcells cause.
- **Aesthetics & Property Values:** Universal deployment of microcells degrades intentionally designed neighborhoods and negatively affects property values. Concerns about the radiation microcells emit limit citizen's use and enjoyment of public ROWs.



The Right to Choose

Municipal governments in the United States are rallying to keep their right to be consulted on the placement of microcells in their communities. In the 2016-2017 session, Massachusetts legislators introduced five bills which address public exposure to wireless radiation. In October 2017, SB 69 - a bill giving telecoms free rein to install microcells on California rights-of-way, which 300 Californian cities opposed - was vetoed by state Governor Jerry Brown. Due to the health hazard microcells present, California firefighters fought for and won an exemption from having wireless transmitters placed on their fire stations.

Here at home, at the September 2017 Union of BC Municipalities Conference, BC's local governments passed a resolution mandating public consultation on microcell placement. We must now act quickly and decisively to create federal policies that secure **a collaborative and life-enhancing technological future for Canada.**

Microcells – Myths & Facts

Myth: Microcells are small, unobtrusive, and an aesthetic improvement over large cell towers.



Fact: A “small cell” could carry several bulky refrigerator-sized cabinets, lead acid batteries, noisy cooling fans, battery back-up systems, untidy cabling and more, resulting in a large and unappealing public eyesore.

Myth: Microcell networks are essential to providing faster data for our cell phones and internet use.

Fact: For mobile connectivity we could emulate France’s pilot project and install small cells with signals that are adequate for mobile use but do not penetrate peoples’ homes. For home and business internet access, a wired network of ***fiber optic and ethernet cables*** is the safe, fast, reliable, cyber-secure way to connect, and it will not blemish or obstruct local rights of way. Communities like Longmont, Colorado and Chattanooga Tennessee have created universal, affordable municipal fiber systems.

Myth: Wireless technologies and microcells are safe, harmless, and secure.

Fact: Thousands of peer reviewed scientific studies link radiofrequency radiation from wireless devices to adverse effects on the health of people, plants, pollinators and more. Among the devices of concern are cell towers and cell phones. In 2016, the US National Toxicology Program at the National Institutes of Health linked cellular radiofrequency radiation to malignant brain and nerve tumors of the heart in rats. A Canadian study published on May 23, 2017 reports that 558 lifetime hours of cell phone use more than doubles the chance of getting gliomas, a deadly brain cancer, in humans. Wireless networks are also easily hacked, putting our personal data at risk.

Myth: Microcells are indispensable as they lay the groundwork for desirable technologies like 5G and the Internet of Things (IoT) – a network of interconnected, wireless devices at home and everywhere.

Fact: 5G frequencies cover short distances only and are blocked by buildings, foliage, and bodies. To counter this, a network of radiation-emitting 5G transmitters - microcells - must be densely placed on residential and business streets. Although the 5G frequency spectrum has not been proven reliable or safe, telecoms are pushing for its accelerated implementation. Why? 5G provides the backbone of the Internet of Things and there is big money in Big Data. The IoT leaves us vulnerable to security breaches, data theft, and data mining. Microcells, 5G, and the IoT are a threat to health, aesthetics, and cyber security.