

My name is Sheila Resseger, and I am writing **in favor of H5148**, the RI Broadband Development Program, for all of the reasons listed in the Legislative Findings. I am a long-time resident of Cranston, RI, and a retired teacher from the RI School for the Deaf. I am also a founding member of 5G Free RI. For the past several years I have been researching the damaging effects of pulsed radiofrequency/microwave radiation emitted from wireless devices, and I am convinced that fiber-optics to the premises is the safest, fastest, and most reliable and privacy-secure means of providing Internet access throughout RI. I want to point out one observation related to point 3 in the Legislative Findings:

(3) The telecommunications industry has been using fiber-optic cable for the past forty (40) years. Any effective fifth generation (5G) wireless network requires a fiber-optic backbone.

While this statement is accurate, to my mind it offers a loophole for the continued rollout across RI of the “small cell” antennas for 5G and the Internet of Things. With fiber to the premises (FTTP), each home and business would be connected to the Internet with the full benefits of access, and none of the harms of the wireless systems.

Here is a summary of the reasons that FTTP is superior to wireless. Fiber-optics to the premises:

- Runs directly to the home or business and allows data rates up to 1,000 times faster than wireless.
- Allows for more secure and private transmission (as wireless communications can be hacked or surveilled).
- **No** harmful pulsed radiofrequency/microwave radiation emissions.
- More resilient as continues to work in case of a power emergency (wireless will not run without power for the “small cell” transmitters and towers).
- Capable of transmitting tremendous amounts of data.

- Infinitely upgradable for up to 40-50 years. As the end-point electronics improve, can swap out the electronics to increase the data rate transmitted over the fiber-optic cable.
- Is **not** an energy guzzler, as is wireless.

Here is a chart that summarizes the harms to human health and security, as well as environmental health, from 5G wireless and the Internet of Things that 5G enables:

Nine ways 5G and the IoT will harm humans, the environment, and Earth

- **Health** – The robust and growing *independent* science shows harms to our health from microwave radiation
- **Privacy** – The invasion of our privacy from the collection and mining of our digital data
- **Cyber Security** – The fast growing and devastating cyber security risks
- **Environment** – The harms to wildlife, particularly bees, butterflies and other pollinators
- **Energy** – The huge energy consumption to produce and power a wireless Internet of Things
- **Brains and Humanity** – The effects on our brains and humanity from humans increasingly inhabiting the cyber world
- **E-Waste** – The astronomical e-waste that will be generated from connecting virtually every “thing” to the Internet
- **Conflict Minerals** – 5G and the IoT will vastly grow our dependence on conflict minerals, which have brought about the death of close to 6 million people
- **Ethics** – Ethical issues arising from the IoT. New human rights laws are being considered; how should humans relate to robots and AI? The blurring of what was once a clear delineation between technology and humans

“Concern for man himself and his fate must always form the chief interest of all technical endeavors...in order that the creations of our minds shall be a blessing and not a curse to mankind.” – Albert Einstein, California Institute of Technology, February 16, 1931

<https://whatis5g.info/?fbclid=IwAR1k4RjBrdc7mGkTeegvUSXliDBpfVc6eHMfTsdTI3OP4udkT6tN3eetITE>

For more information on 5G and why it is the wrong direction for Rhode Islanders, please see our website 5GFreeRI.com.

I hope and expect this important bill to pass out of committee and be passed in the General Assembly. Please keep in mind the benefits of fiber to the premises, and abandon the notion that 5G wireless is the only or best means to provide safe, reliable, and affordable Internet access for Rhode Islanders.

Rather than creating "Smart" cities, we have the responsibility to apply human wisdom and foresight toward the protection of our residents and the natural environment on which all of us in the Ocean State depend. Thank you for your serious consideration of my comments.

Sincerely,

Sheila Resseger, M.A.

50 Malvern Avenue

Cranston, RI 02905