TELECOMMUNICATIONS FOR THE 21st CENTURY

A "small" 4G cell site installed in 2017 in California without neighborhood notification or public hearing. The utility pole has an electric meter, transformers and radios. A 48" high antenna at the top of the pole is not visible in this picture. Because the big box containing backup batteries at the pole's base did not have protective poles around it as the National Electric Code requires, it was removed. The gear still stands.

LET'S AGREE: For emergencies, educational and economic opportunities, people need reliable phone and web access. To reduce risks from extreme weather and climate-related events, we must reduce energy consumption and CO_2 emissions *and* have reliable telecom infrastructure.

LET'S ASK: How could every American household have safer, more cyber secure, more reliable and energy efficient phone and web access while keeping within our means? How could municipalities best prepare telecom services that respect energy availability, regional topography and weather patterns?

MYTH-BUSTING INFO FOR EVERY LEGISLATOR AND CITIZEN:

1 Cell towers and "small" 4G-5G cell sites provide capacity to connect everything to the Internet *wirelessly*. We're talking about your baby's diapers, your toilet, thermostat, fridge, car and records of all kinds. During weather catastrophes and power outages, wireless services are especially vulnerable. Further, wireless networks emit radiofrequency radiation (RFR) and consume at least ten times as much electricity as wired networks.

2 Wired infrastructure (copper wires or fiber optic cables delivered to the premise) uses less energy and can provide faster speed, greater reliability and less risk of interception, hacking and RFR exposure. Wired telecommunications also allow more data growth than wireless infrastructure.

3 The Internet's main energy guzzlers are access networks, data storage centers, and manufacturing of devices and infrastructure. Each of these operations requires enormous amounts of natural resources (including fossil fuels, water and conflict minerals) and emits greenhouse gases (GHGs) that contribute to global warming.

4 Deploying millions of new "small" cell sites on public rights-of-way would consume yet more energy, emit yet more GHGs and RFR. Analysts project that for 5G (fifth generation of wireless infrastructure) to work, telecoms will need to deploy "small" cell sites every one to twelve homes.

5 Whenever phone or Internet include a wireless component, the services are minimally regulated and taxed. Corporations therefore make significantly greater profits from mobile services.

For more information visit: whatis5G.info

TIMOTHY SCHOECHLE, PhD,
author of *Re-Inventing Wires*

To adapt telecommunications for extreme weather events, wired phone and Internet services should be considered basic public utilities, like water, gas and electricity. We must revise our expectations and recognize mobility as an extreme luxury, a supplement to wired services. We must repeal legislation that promotes 5G wireless "small" cell sites on utility poles and removes local authority over telecom facilities.

THE RADIOFREQUENCY RADIATION SITE SAFETY INFORMATION ACT (House Resolution 7236)

would severely limit liability of telecom corporations for injury caused by exposure to radiation emitted by telecom equipment if the corporation complies with FCC-determined RFR emissions. **Tell Congress to vote NO on HR 7236.**

PRESERVATION OF RIGHTS OF STATES AND LOCAL GOVERNMENTS (HR 530)

would prevent the FCC's Orders 18-111 and 18-133 (which allow telecoms to hire non-union workers to install equipment on poles and which remove local authority over telecom facilities) from having any force or effect. **Tell Congress to VOTE YES on HR 530.**

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