



August 21, 2017

California Assemblymembers
California State Capitol
Sacramento, CA 95814

Re: Vote NO on SB.649

Dear Assemblymember:

The National Institute for Science, Law & Public Policy (NISLAPP), along with its affiliates Citizens for Health, ElectromagneticHealth.org and Campaign for Radiation Free Schools, urges you to vote NO on SB.649.

NISLAPP will publish a policy paper in the Fall explaining why, on *technological grounds*, the intensely wireless approach to California communications and living environments envisioned in SB.649, facilitating the adding of millions of new antennas throughout California neighborhoods, is entirely unjustified. Only a fiber-based broadband system can overcome the access inequality and second-rate connectivity that is currently impeding our nation in myriad ways.

The rhetoric about copper being “obsolete” is propaganda promoted by wireless carriers. New technologies such as VDSL and G.fast allow the older copper phone wires to outperform wireless and deliver fast gigabit data as well as DC power. Old copper right-of-ways are a valuable national asset and they must be preserved and updated to augment a nationwide broadband initiative. California should prevent copper wires from being pulled up, as pulling up copper wires only serves the interests of wireless promoters, eliminating more sensible competition.

Know that the price tag of fiber buildout may not be as high as represented when the performance improvements in both new and legacy copper and fiber are considered. A hybrid solution may be possible based on a fiber backbone with tails of copper, coax, and fixed wireless, especially if synergies with electric power system upgrades are factored in. It is important, also, the state of California factor into its thinking the cost of illness generated by biologically disruptive and possibly carcinogenic (IARC, 2011) wireless radiation, a problem that would not exist with safer wired systems.

As will be explained in NISLAPP’s upcoming paper, investing for the future in fiber pays off. Chattanooga’s cutting-edge fiber network was enabled by an exception in Tennessee law that allows electricity providers to also provide telecommunications services such as cable and Internet. As the first US city to be wired for fiber-optic Internet service, Chattanooga has attracted dozens of tech firms and new businesses that take advantage of the fastest internet in the United States. This municipal broadband system cost \$220 million to develop, but that investment has so far translated into \$865 million in economic growth for the city.

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One other consideration, to be addressed in NISLAPP's upcoming paper, is sustainability impacts of adding more wireless antennas. Because wired transmissions are far more energy efficient than wireless, a national fiber broadband system deployed as close to the consumer as possible would produce tremendous energy savings, compared to energy-guzzling wireless technologies.

It is imperative California invest in hard-wired telecommunications infrastructure to sustain economic growth and competitiveness. This would at the same time diminish a wide range of risks from wireless communication, including safety, security, privacy, public health, and environmental risks.

The National Institute for Science, Law & Public Policy recommends California Assemblymembers come to terms with the fact that a very bad piece of legislation is before you, that will not serve California well. Instead SB.649 serves the interests of the wireless companies.

Please remember your Oath of Office and seek advice on matters of this import from parties who are not associated with the telecommunications industry. The stakes on so very many levels are very high, and the matter deserves your most serious and comprehensive attention.

Attached a list of 271 CA cities and towns, 45 counties and 50 environmental and health organizations that have formally opposed SB.649. The National Institute for Science, Law & Public Policy recommends you listen carefully to constituents and those you serve.

Very truly yours,

James Turner, Esq., President, NISLAPP

Camilla Rees, Senior Policy Advisor