To: California State Assembly Members  
California State Capitol  
Sacramento, CA 95814

August 25, 2017

Dear California State Assembly Members:

Physicians for Safe Technology is joining the AARP, Sierra Club, EWG, League of Cities, the California Chapter of the American Planning Association, the California Municipal Utilities Association and the California State Association of Counties to ask that you strongly oppose SB649 (Hueso) Wireless Telecommunications Facilities for several reasons including:

*Increased liability to cities and states for lower property values, expensive security breaches, fires and injury *Removal of critical democratic local authority with public input to effectively address local issues * Current FCC guidelines are obsolete *Public health and environmental health impacts of 3G and 4G technology have not been adequately or appropriately addressed to date * 5G is untested for safety *The Internet of Things may never be publicly accepted due to unmanageable cybersecurity experienced now with botnet attacks.

**Loss of Local Authority**

As noted by the League of Cities, municipalities will lose discretionary review of antenna placement for aesthetic or other practical reasons. This can affect the character of the community and the ability to attract businesses or tourists. Despite industry promises this would be an economic loss to the state. This will also erode local governments ability to generate revenue from public property.

**Health and Safety**

There are serious concerns about the long term and short term safety of the current infrastructure for 4G telecommunications along with wireless devices we are continuously exposed to. FCC guidelines look only at heat as a measure of harm and do not take into account non-thermal biological effects demonstrated at levels well below current limits. Despite industry claims, scientific evidence clearly demonstrates non-thermal biological harm to cellular structures including DNA, proteins and cell membranes that could lead to cancer, reproductive failure and neurologic dysfunction. Studies have demonstrated one mechanism to be that of oxidation causing cellular disruption, similar to other toxic exposures. Research has shown an association between radiofrequency EMR exposure and brain cancer, neurodegenerative diseases and sperm abnormalities in addition to injury to trees, plants wildlife and insects.

Electrosensitivity is also being recognized as a medical diagnosis and was described as “microwave illness” by NASA, the EPA and the Department of Defense decades ago in military personnel exposed to radiofrequency EMR. The same symptoms are now reported in people from all walks of life with near exposure to cell towers, smart meters and wireless devices. These symptoms include headaches, memory loss, insomnia and heart palpitations.

Firefighters have also reported these symptoms and thus have an International Policy to ask for an exemption to prevent placement of cell towers on their facilities. Firefighters have an exemption in SB649 due to health concerns, thus codifying that health issues are a legitimate argument. 4G technology will be placed in small cell antenna prior to 5G systems. 5G technology is even less well studied but evidence to date shows adverse health effects. More work needs to be done by scientists and legislators prior to this massive uncontrolled increase in cell towers. We need to slow down and put in place adequate privacy, security, EMR exposure monitoring and health precautions before proceeding with further expansion as Europe is doing. It is inappropriate to proceed with expansion of 4G or 5G antennas until updated standards are developed. While profits may be realized in the short term, indirect costs will overshadow those in the long run.

Respectfully Submitted,  
Cindy Russell, MD