



April 13, 2017

Honorable John Hickenlooper
Governor, State of Colorado
136 State Capitol Building
200 East Colfax Avenue
Denver, CO 80203

RE: Support for House Bill 1193 – Small Wireless Infrastructure

Dear Governor Hickenlooper,

On behalf of CTIA, the trade association for the wireless communications industry, I am writing in strong support of House Bill 1193, related to the deployment of small wireless infrastructure, and urging your signature. The people of Colorado continue to demand – at increasing levels – access to wireless products and services. This is demonstrated by the fact the number of wireless subscribership in Colorado has grown 16% since 2012, amounting to over 5.4 million subscribers, and that 99% of Coloradan use wireless.^{1,2} These demands from the wireless industry's customers – your constituents – require that wireless networks be updated today and readied for the next generation of wireless networks. House Bill 1193 is a needed mechanism to accommodate consumer demands and help to realize the future.

Small wireless infrastructure – called small cells – are being widely deployed to accommodate this increased demand. Small cells are wireless antennas, typically no more than six cubic feet in volume, and associated equipment, generally less than twenty-eight cubic feet in volume, that are being installed on existing structures like utility poles, street lights and traffic signal poles. This global trend is sweeping the country. More than 250,000 small cells are expected to be installed over the next few years in the United States, nearly the number of traditional “macro” cell sites built over the last 30 years.

Small cells enhance capacity on existing 4G LTE wireless networks by efficiently using scarce spectrum, and they will be required for the higher-frequency spectrum 5G networks will depend on. The benefits provided by 5G are astounding. 5G networks will provide increased capacity to accommodate growing consumer demands by connecting 100 times more devices. Imagine a future where nearly everything is connected to ubiquitous wireless networks at speeds up to 100

¹ FCC, Voice Telephone Services Report: Status as of June 2015, August 2016, at <https://www.fcc.gov/wireline-competition/voice-telephone-services-report>, last accessed 4/13/2017.

² U.S. Census, Population Estimates, at <http://www.census.gov/data/tables/2016/demo/popest/state-total.html>, last accessed 4/13/2017.



times faster than today. Imagine communities that are smarter and more connected. Entire sectors, from public safety to transportation, will be transformed.

In fact, Accenture recently published a study noting that 5G wireless networks could create as many as three million jobs and boost the U.S. GDP by nearly \$500 billion over the next seven years.³ More specifically, Colorado communities – from small towns to big cities – that embrace the next-generation of wireless connectivity will realize significant economic benefits. For instance, 5G deployment in a community like Denver may create over 6,000 jobs and increase GDP by over \$1 billion, and a community like South Aurora may create 3,000 jobs and increase GDP by over \$500 million.⁴

Furthermore, a report recently published by Deloitte illustrates how other industries are leveraging today's wireless platform for innovation and growth, and how increased wireless deployment will spur even more advancements in these key economic sectors⁵:

- **Energy.** Wireless-enabled smart grids could create \$1.8 trillion for the U.S. economy—saving consumers hundreds of dollars per year.
- **Health.** Wireless devices could create \$305 billion in annual health system savings from decreased costs and mortality due to chronic illnesses.
- **Public Safety.** Improvements made by wireless connectivity can save lives and reduce crime. A one-minute improvement in emergency response time translates to a reduction of 8% in mortality.
- **Transportation.** Wireless powered self-driving cars could reduce emissions by 40-90%, travel times by nearly 40% and delays by 20% – and translate to \$447 billion per year in savings, and, more important, 21,700 lives saved.

That's the promise of the next-generation of wireless technology. America needs to lead in its deployment.

House Bill 1193 helps to remove barriers to efficient deployment of small cell wireless infrastructure by streamlining processes and imposing reasonable rates and fees. House Bill 1193

³ "How 5G Can Help Municipalities Become Vibrant Smart Cities," Accenture Strategy, Jan 12, 2017. These estimates are based on expected benefits for the United States from next generation wireless networks and some smart city technologies. They are based on per capita application of the estimated national benefits to individual cities (e.g., the number of construction jobs are national averages assigned on a per-capita basis), and may vary depending on the individual city.

⁴ *Ibid.*

⁵ Deloitte, "Wireless Connectivity Fuels Industry Growth and Innovation in Energy, Health, Public Safety, and Transportation," http://www.ctia.org/docs/default-source/default-document-library/deloitte_20170119.pdf, last accessed 4/13/2017.



allows providers the opportunity to deploy small cells responsibly by having reasonable access to existing local infrastructure within and outside of the public rights-of-way (ROW). Such access will help to meet customer demands for faster data speeds, stronger in-building signals and an improved customer experience overall. House Bill 1193 makes small cells on existing infrastructure a "permitted use" and not subject to the type of review larger "macro" towers receive. The legislation also provides that a locality has 90 days to process a small cell application. In addition, House Bill 1193 also allows for consolidation of substantially similar small cell applications in order to minimize administrative impacts while improving efficiency.

Finally, it is important to note that House Bill 1193 places no limitations on localities' ability to deny permits based on building, safety or electrical codes or standards. There is no removal of localities' jurisdiction in these areas.

In closing, since 2010, wireless providers have invested more than \$177 billion to improve their coverage and capacity and better serve Americans, with \$32 billion invested in 2015 alone.⁶ As stated above, more than 250,000 small cells are expected to be installed over the next few years in the United States. Appropriate siting and land use regulation will facilitate and encourage capital investment because capital tends to flow to places that are ready for investment. House Bill 1193 will send a signal that Colorado is ready for investment.

Thank you for the opportunity to submit comments in support of House Bill 1193. CTIA strongly urges your signature.

Sincerely,

Jamie Hastings
Senior Vice President, External & State Affairs
CTIA

⁶ CTIA's Wireless Industry Summary Report, Year-End 2015 Results, 2015, <http://www.ctia.org/industry-data/ctia-annual-wireless-industry-survey>, last accessed 4/13/2017.



Example of a Small Cell





5G Benefits: Colorado



• Denver

- Over 6,000 jobs created
- Over \$380 million in Smart City benefits
- Over \$1 billion in estimated GDP growth

• Northeast Jefferson

- Over 4,200 jobs created
- Over \$260 million in Smart City benefits
- \$688 million in estimated GDP growth

• South Aurora

- Over 3,000 jobs created
- Nearly \$190 million in Smart City Benefits
- Over \$500 million in estimated GDP growth

