



University of Pittsburgh

Innovation Institute
Entrepreneurship. Commercialization. Economic Development

1st Floor Gardner Steel Conference Center
130 Thackeray Avenue
Pittsburgh, PA 15260
Tel 412-624-3152
Fax 412-648-8525
Email: efacher@innovation.pitt.edu
www.innovation.pitt.edu

Evan A. Facher, PhD, MBA
Director, Innovation Institute
Vice Chancellor for
Innovation and Entrepreneurship

Honorable Brad Roae
Chairman
House Consumer Affairs Committee
Pennsylvania House of Representatives
151 East Wing
PO Box 202006
Harrisburg, PA 17120-2006

Honorable Robert F. Matzie
Democratic Chairman
House Consumer Affairs Committee
121 Irvis Office Building
PO Box 202016
Harrisburg, PA 17120-2016

June 12, 2019

Dear Chairmen Roae and Matzie,

I am writing to express the support of the University of Pittsburgh's Innovation Institute for small cell technology. Small cells deliver voice and high-speed wireless broadband for emerging technologies like 5G and smart cities. Legislation that will help streamline the deployment of small cells in Pennsylvania, especially Pittsburgh, will enable needed investment in high-speed connectivity, benefitting the Innovation Institute and the entrepreneurs and startups we serve.

The Innovation Institute is a future-focused organization whose funding, programming and resources require the most robust, state-of-the-art network in order for our students and constituents to innovate. To that end, we must have reliable connectivity, high-speed internet, and redundancy. We support entrepreneurs in Western Pennsylvania with starting, growing or transitioning their innovation-oriented businesses. We help protect the intellectual property of University startups, license new discoveries and develop new enterprises. In 2018 alone, we received 363 invention disclosures, supported the formation of 23 startups, and transacted on 162 licenses/options providing third parties with access to discoveries made on campus. Since 1997, our spinouts have secured \$1.23 billion in third-party investments, and, since January of this year, innovators from the Institute were issued over 50 U.S. patents.

None of this would be possible without advanced Internet infrastructure. When 4G was deployed, it represented a new wave in innovation, enabling the next phases of artificial intelligence, virtual reality, robotics, and more, as well as an overall expansion of the Internet of Things. As demand continues to grow – and as we seek to be even more connected across industries – the infrastructure that makes such innovation possible must keep pace with the innovations themselves.

This is why small cells are key. They are the next step in our ever-evolving, ever-growing Internet-based ecosystem. Small cells make possible all the key ingredients organizations like the Innovation Institute need to support tech and innovation startups: the small nature of the cells allows them to be placed in concentration throughout busy corridors, providing needed redundancy; they are able to transmit huge amounts of data even while users are on the go; and they instantly connect mobile

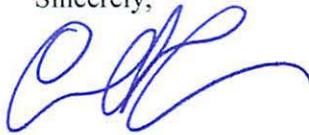
devices to the content, platforms, and data they need. Additionally, because of their size, small cells can be located on existing public structures without interfering with the overall aesthetic of the streetscape.

Small cells are also one component that can help facilitate next generation technologies, such as 5G. According to a recent study, building out 5G would impact the Pittsburgh economy by creating nearly 3,000 jobs and enable \$460M in GDP growth.

Innovation will not advance as quickly as it potentially can if we do not have the right kind of infrastructure in place to keep it moving forward, which will then impact the economy, both in Pittsburgh and beyond. With a lagging economy, we'd experience a decrease in talent here, causing the city and region to be impacted. We must avoid this negative possibility. Pittsburgh is a hub for tech and innovation, and Pitt's Innovation Institute is a leader among startup incubators with the record to prove it. We must ensure the positive, future-oriented momentum that has taken hold here continues, with a robust talent pool and the resources and infrastructure necessary to support their inventions.

In brief, small cells will keep innovation innovating. That is why I support the need for this critical infrastructure and a streamlined process for its swift deployment.

Sincerely,

A handwritten signature in blue ink, consisting of stylized, cursive letters that appear to be 'C. A. R.' or similar initials.