

Support tomorrow's connected world.

To do so, we need better infrastructure. We need government reforms—**greater access, reduced costs, and streamlined processes**—that reflect new infrastructure technologies, such as small cells, that will help make 5G a reality. The benefits of wireless connectivity will fuel innovation across many sectors, including energy, health, public safety, and transportation.



**ENERGY** 



HEALTH



**PUBLIC SAFETY** 



**TRANSPORTATION** 

# Reduce the cost of your energy

Smart Grid adoption, enabled by wireless connectivity, could save the average consumer hundreds of dollars per year. Smart meters, which are already in use in some communities, harness usage information providing it directly to the consumers. This can help inform consumption choices to reduce use and cost.

### Decrease your energy consumption footprint

Utilities now and in the future use a combination of cellular and mesh wireless networks to communicate consumption and provided a direct way to monitor energy usage and costs.

### Increase access to your doctor or specialist

Telemedicine requires that both the physician and the patient have a secure, low-latency connection. With abundant cellular coverage, this connection can also work in rural areas, enabling greater access in all areas of the country.

# Spend less on a medical diagnosis

Goldman Sachs estimates that the total annual savings opportunity for the health system through digital health adoption is \$305 billion, with two-thirds from chronic disease management and remote patient monitoring.

# Better manage chronic disease, such as diabetes

Nearly 30 million Americans have diabetes, and 86 million Americans have a diagnosis of prediabetes. 5G supported smart devices and apps will track blood sugar levels, calculate how much insulin is needed, update family on food intake and levels, and share that information with your doctor.

# Decrease emergency response times

Enhanced connectivity capabilities will enable the integration of all video surveillance, with access to specific locations, pole by pole, in ultrahigh definition. That information is sent to authorities to speed up deployment of personnel to the location. One study estimates that a one-minute improvement in emergency response time translates to a reduction of 8% in mortality.

#### Reduce crime rates

Officers will be able to predict when and where crimes may occur, enabling police officers to anticipate problems, preemptively deploy, and potentially even prevent future crimes. In San Francisco, wireless sensors have been used to alert authorities when a gun is fired, allowing officers to triangulate the location, and sometimes identify the type of gun.

#### Save money

A reduction in congestion could save drivers in medium-sized cities approximately \$100 million annually. A decrease in traffic related deaths could save up to \$447 billion per year nationwide.

### Improve commuting times and reduce delays

Ford estimates that self-driving vehicles, one of the key innovations generated by next generation wireless technology, can save 37.5% in travel times and reduce delays by 20% for end-customers. Connected sensors in the road can also inform a driver of upcoming delays, such as those caused by roadblocks or a pothole, to better plan routes.

#### LEARN MORE

How 5G Can Help Municipalities Become Vibrant Smart Cities Accenture Strategies. January 2017





Wireless Connectivity Fuels Industry Growth and Innovation in Energy, Health, Public Safety, and Transportation

Deloitte. January 2017

