

**Telecompetitor
MoffettNathanson:
Household
Formation Will
Drive Cable
Broadband
Growth**

Thousands of first responder radios may be on the verge of an overhaul that could cost Delaware County between \$20 to \$40 million and take four to five years to complete.

A number of factors have created limitations on the existing 500 MHz system that is about three decades old. "The old models that we use are changing," Timothy Boyce, Delaware County Emergency Services Director, said. "A lot of advances have come in the last 30 years. It's just that technology has changed."

**The Hill
Attorney General
nominee to recuse
himself from
AT&T-Time
Warner merger
talks**

To begin to address that, Boyce asked for, and received, approval to solicit requests for proposals for an independent engineer to study the current capabilities of the county's emergency communications radio system and to make recommendations for the future. Delaware County Council unanimously approved the measure Wednesday. "Delaware County operates a historic radio system that's called a 500 MHz system, also referred to as T-Band," Boyce said. "In 2012, the (U.S.) Department of Commerce passed a law where they sold the rights to that spectrum to commercial television stations."

**McClatchy News
Legislators, some
of them
bewildered, may
do little on tech
issues this year**

He explained that there were provisions in that sale for public safety members to move to a different band. However, he said, there was no funding provided for them to make that move. And, Boyce added that the Federal Communications Commission placed a moratorium on improvements to 500 MHz systems, so Delaware County can no longer make improvements to their existing system. "There's nothing inherently wrong with a 500 system," Boyce said, "but it is a legacy system we've maintained for many years and they don't really make the parts for public safety anymore. I would liken it to FM in your car. In the '80's and '90's, FM worked and over the years, people have moved to a digital system, a cleaner system, subscription-based."

**Variety
CBS News
Slammed for Lack
of African-
Americans on
Political 'Embed'
Team**

And, another issue presents challenges with using the current radio system. "In a number of our communities, we have people hacking our radio systems," he said. "We have communities where officers are being harassed over the radios. Offensive things are being said. We have people interfering with operations. It's a critical life safety matter on that part." Boyce said these incidents cause problems with the public trust when an officer is in public and some offensive words come over his or her radio. "That is somebody hacking the system," he said. "That's not an officer. I've had situations where I've had to say, 'An officer didn't say that.'"

**Pennlive
Pa. Gov. Tom
Wolf, at halftime of
an 8-year tenure,
says he'll focus on
achievable goals**

Over the last year, Boyce brought together a consortium of people including police chiefs, fire chiefs, medics, staff from the sheriff's office, park police, port officials, refinery representatives, state police and school bus transportation personnel. "We really try to get everybody together to, one, agree that there's a problem and more importantly, be part of the solutions," he said, which he said was why he was asking to have an independent engineer perform an evaluation. "The ask is really to do a national search for an engineering firm, report back on the existing capability of the system, what frequencies are available in the marketplace ... and then what would be a pathway forward."

**Philadelphia
Inquirer
Unfettered by
reelection
concerns, will Gov.
Tom Wolf return to
progressive roots
in second term?**

Something that would need to be considered is whether the county will assist subscriber communities with the costs of purchasing the new radios, something the county does not do currently. In addition, Boyce said a move to an 800 MHz system would require more towers than the seven large towers and 43 smaller ones the county has.

**Pennlive
Inauguration 2019:
13 ways it will
differ from Gov.
Tom Wolf's first
one**

One possibility would be working with the plethora of cell phone towers that have popped up everywhere. "That's where an engineer would help us understand," Boyce said. "Are we building towers? Are we working off the leverage of what the phone companies have had?" Currently, he added, Delaware County does not collaborate with the cell phone companies. Delaware County Council supported Boyce and appreciated Boyce approaching them with the request before it reached emergency status. "This is a decision in the near to immediate future that's going to have public safety consequences, obviously consequences on the taxpayer, so I really do your

**Philadelphia Daily
News
Will Gov. Tom Wolf
start his second
term the way he
started his first?**

proactiveness," Councilman Kevin Madden said. Councilman Chairman John McBlain agreed. – ***Delaware County Daily Times***

More companies are sharing ambitious plans about how we'll live in a 5G world. This week at CES, the annual tech convention in Las Vegas was filled with demos highlighting the potential of next generation of internet speed.

5G could make the process of loading websites, downloading songs and streaming movies at least 10 times faster than 4G. It's not expected to start replacing 4G in the United States until 2020, but companies such as Verizon, Sprint and AT&T -- CNN's parent company -- aim to **launch 5G smartphones** this year. At CES, Verizon detailed how 5G will transfer data at super fast speeds. It showed off how augmented reality could be used in surgeries to help with precision and improve gaming and virtual reality experiences. "5G is a promise of so much more than we've ever seen of any wireless technology," CEO Hans Vestberg told attendees.

Last year, Verizon brought a broadband-like version of its **fixed wireless 5G technology** to several US cities. Verizon's 5G Home router converts 5G signal into Wi-Fi for customers' homes. But that version of 5G isn't mobile as of now -- after all, smartphones and cellular devices don't yet support 5G. Samsung CEO HS Kim said 5G will be intertwined with innovations in artificial intelligence and the Internet of Things. The company's demonstration showcased how these technologies could come together in a connected car.

Chipmaker Qualcomm devoted a large portion of its booth to showing off **what 5G could potentially do** on both smartphones and VR headsets. In one demonstration, a VR headset played a video streamed entirely over a 5G network with no latency. "We see 5G as being the biggest step yet," Qualcomm's Vice President of Marketing Pete Lancia told CNN Business. "3G brought the internet to your phone, and 4G enabled mobile-only companies like Uber and SnapChat to thrive. To say 5G will have a more profound impact than that is huge."

Intel's booth demonstrated how 5G enables better video game graphics on a laptop. CES also featured some 5G mobile devices on display, but none are currently available in the US market. For example, Samsung's 5G prototype smartphone was featured under protective glass. The company is expected to launch its first 5G mobile device in the upcoming months.

Qualcomm also displayed 5G devices, which were made for the Chinese market. The devices are thinner than what we'd likely see in the US in the future because of different system requirements for US and Chinese networks. Although 5G's potential was certainly a major talking point at the event this year, it remains just that for now: potential. – ***CNN***

