Connecticut 5G Council Meeting
Friday, October 25th, 2019
11am-1pm
Department of Transportation
2800 Berlin Turnpike, Newington, CT

In attendance for the 5G Council Meeting: Laura Cruickshank, University of Connecticut; Paul Hinsch, Office of Policy and Management, State of CT; Doug Moore, Department of Administrative Services; Graham Stevens, Connecticut Department of Energy and Environmental Protection; Richard W. Andreski, Bureau of Public Transportation (DOT); Armen Beermann, Connecticut State Colleges & Universities; Nick Simmons, Office of the Governor; John Bernick, Department of Transportation; Carl Jackson, Department of Transportation; David Lemendola, Verizon Representative; Liz Glidden, Verizon Representative; Michael Johnson, Lobbyist for Verizon; John Emra, AT&T Representative; Hans Fiedler, T-Mobile Representative; Tracy Persico, Lobbyist for T-Mobile.

VERIZON MEETING
Verizon is focusing on 5G build out to customers for higher network speeds, requiring the transition to small cell antennae. An MLA is underway with local business community to develop infrastructure. State assets are of interest with a path to permitting via building out 5 largest cities then other surrounding regions. Wooden utility poles and traffic structures can be used to set up infrastructure.

At UCONN, Verizon is looking to expand coverage of campus (all locations). UCONN's RFP was distributed but Verizon found it to be unattractive. Verizon's goal is to begin with major sites on campus and disseminate from these main network channels. UCONN is open and willing to work with Verizon so long as they match aesthetic requirements of each campus. Small cell development on one pole can be limited to one antenna due to FCC Radio Frequency emissions standards.

ATT MEETING
ATT Plan:
1. Mobile 5G plan, nationwide coverage using existing macro network supplemented with small cells by mid-2020;
2. Post-2020, continue to build network assets;
   Note: High usage millimeter waves

Regarding security, AT&T is a leader in cybersecurity. They fell 5G technology is safer than current technology. 5G networks will not pose cybersecurity risk to site owner unless sitting on owner's network.

AT&T posits co-locating is difficult, as every carrier has unique needs (coverage or capacity issue) depending on city density and penetration. Competition bill planning and collusion are causes of concern. Additionally, small cell co-location creates interference issues.

Broadly, AT&T is seeking regulatory certainty. Right now, it is ad hoc. Their hope is for the council to be mediators with municipalities regarding fee structures, application uniformity, approval processes and aesthetic-matching standards.

AT&T has conducted its own assessments of UCONN's campus. They found some utility poles are capable of handling small cell infrastructure but additional build out will be needed. A land grab must be prevented, and excessive holding periods must be allowed to expire after build out approval if no action taken by network providers.

As general rule, AT&T prefers to control broadband fiber connections, so they can manage and service assets at will. Some places this will not be necessary. Connecticut has a lot of fiber, allowing easy access from current fiber infrastructure. They are willing to be flexible with DEEP's recent parks development.

AT&T finds no added health risks in Radio Frequency emission standards from current FCC standards, claiming small cell nodes are lower frequency which result in lower emissions. Peer reviews were requested by 5G Council.

T-MOBILE MEETING

T-Mobile is working to bring 5G technology to Connecticut. Their algorithms are ready but must wait for hardware to fully develop. The most important deliverable of the 5G Council is a defined master plan addressing State requirements. T-Mobile would like to have access to more state infrastructure. Next steps are for T-Mobile to deliver an implementation plan that will be conducted in the most effective manner.

5G Council Debrief

5G Council will review model license agreements provided by carriers and use adapted version from DOS and DAS. Reviewal will be per site, but if sites have large density, this would need to be adjusted. Key question is: how can we handle the volume required for small cell networks. Further, Council needs to understand cost structure for reviewing the applications. The $250 standard set by the FCC seems low. A tiered fee structure may be more appropriate.