9AM Meeting: 5G Council & Municipalities

In attendance:

Here to address 5G Council process update after hearing much input from other state and municipal entities; present to carriers a collective unit of ideas and procedures and hear carrier's feedback

5 key stakeholders in consideration for this process: State-, Municipally-, PURA-, Federal- and Private-Owned Property

State Policy concerns – Equity in the community, construction costs, fees and wages for workers implementing system

State Goal: To hear everyone's input on current policy guidance, update policy guidance document, list online for all in attendance, with carriers, to provide final feedback, final updates to policy guidance and create and list application online for commercial use

Municipality Issues: Timing of approval process mandated by FCC (Zoning approvals for municipalities will add difficulty); Fee structure being appealed by municipalities across nation; Equitability of 5G-service to all consumers; MLA to bypass City Council could handicap Municipalities by forcing City to offer same rights to every carrier; Process and structure of application process and approval ownership; Managing collective responsibilities and coordination of 5G small cell nodes throughout entire state (i.e. having PURA, Siting Council, Muni's and State all aligned in infrastructure development); Deployment of private-property (leverage good practices with carriers desire to access municipal- and state-owned properties; possible carrier work around could be their "updating" current antennas on building to be 5G capable)

- Stamford Approach / Solution: City poles on city property would not be subject to zoning
 restrictions / approvals; Individual operating agreement with each carrier including a master
 plan to compare all carriers together and create an efficient implementation strategy;
 Contract with light pole vendor to be "middle-man" and manage implementation and
 maintenance process with carriers, giving up City fees in return (giving up fees could be a
 red flag for Hartford)
- State could be helpful by issuing policy statement / legislation of requiring carriers to supply their Master Plan
- State could ask San Jose to come in and share learnings / best practices from current buildout efforts

Suggested topics to discuss with carriers:

- 1. Construction Process
- 2. Master Plan Must be shared and coordinated with other agencies within the State
- 3. Fiber / Broadband Equitable Access (Small / Rural Municipalities)

10AM Meeting: ATT with 5G Council & Municipalities

In attendance: John Emra, Abigail Jewett

AT&T Desired Requests: Predictability in process, timeline, buildout, rules / requirements; Fee structures aligned with FCC (willing to be flexible but in same ballpark)

State Requests: 2-year plan for the 5G Council to review and plan in accordance with cities

• ATT – May be difficult to forecast too far out but will be 1-2 year projections

Concern: Volume of applications is worrisome

ATT – Currently requesting low-band 5G network build outs primarily; Millimeter wavelengths
(5G+) is only being implemented in defined areas of larger cities and sports stadiums. This
millimeter wavelength development is the one we read about as requiring the heavy investment
into infrastructure; low-band only requires updating existing networks on current sites

Concern: Equitable access to rural / smaller municipalities

• ATT – Business as usual. Continuing to develop 4G access

Concern: Fiber infrastructure available for 5G networks

ATT – Not available yet, but will not require digging up / disrupting construction; need to access
existing infrastructure

Concern: Permitting process requiring differences among carriers

ATT – The permitting and application does and should not need to be different

Concern: Potential for collaboration among State and Municipalities to share City and State master plans

 ATT – Not a concern for Cities and State to share but more of a concern that wholesale carriers and competitors see plans

Concern: Aesthetics priority

• ATT – Willing to mimic style and design of locales; Aesthetics will differ and require different investments depending on the municipality (Hartford vs. New Haven)

10:30AM Meeting: T-Mobile with 5G Council & Municipalities

In attendance: Brian Palm, Hans Fiedler, Jason Oberbee

T-Mobile Current Plan / State of Affairs: Launched low-band 5G spectrum with plans to densify, then upgrade to millimeter wave and/or medium-band spectrum; Would like to understand where all assets are that T-Mobile should be placing small cell nodes and what are best application practices

Concern: T-Mobile 5G Network advancements versus competing carriers

 T-Mobile – Low-band width is currently being developed, which is easier and quicker to implement using existing infrastructure; Millimeter and Medium-band will require attachments and larger investments / development

Concern: Expand upon how densification is defined by carriers

• T-Mobile – In order to bring true 5G to customers, small cell devices need to be installed (i.e. densification) to grant this capability;

Concern: Co-location capabilities

Co-Location becomes a challenge because customers needs and locations differ; as time
progresses these differences may diffuse to all for co-location; there are instances where
antennas / supporting structures can be shared without disruption to network

Concern: Within 5 cities, possible to share current master plans for development

 T-Mobile – May have to deal with third-party dealers to implements systems as well as municipalities; Fiber needs to come to each of the pole locations; 5G requires fiber optics

Concern: Equitable access to broadband network

T-Mobile – Currently, there is broadband access but more fiber is required for greater access

Concern: Construction disruptions created by multiple carriers on separate timelines

T-Mobile – Valid concern; Could create an opportunity to communicate through a neutral party
with competing carriers giving notice of upcoming construction, which could provide access to
infrastructure upgrades / development for others without creating need of additional
construction disruptions (begin considering telecommunication companies as utility companies)

11:00AM Meeting: Verizon with 5G Council & Municipalities

In attendance: Liz Glidden, Verizon; Mike Johnson, Legal Representative of Verizon

Concern: Structure and progress of MLA Process

 Verizon – Agreement with municipalities to use municipal assets in form of MLA or Ordinance / Policy; Standard template Verizon likes to use but open to municipalities; Ordinance will be easier relationship structure

Concern: Openness to sharing 2-year plan (approximate number and location of nodes)

Verizon – Possible but needs to be moderately flexible ("blob" plan is easier); Replacement of
poles may be necessary for development, which Verizon would be responsible for costs

Concern: Priority Areas of each municipality is the whole municipality in order to provide equitable access

 Verizon – Submission of each municipality's priority areas would be helpful in assisting Verizon's implementation efforts

Concern: Standard MLA allows easier implementation into all localities with planning and zoning approvals

 Verizon – Welcomes opportunity so long as it ensures an expedited process to approval time frames; Ordinance structured to avoid planning and zoning hearing delays