

From: Dave Clark [REDACTED]
Sent: Friday, March 11, 2022 12:22 PM
To: General Plan <generalplan@cityofsanmateo.org>
Cc: Rick Bonilla <rbonilla217@gmail.com>; Eric Rodriguez <eric@ericrodriguez.com>
Subject: GPU: Implementing wireless networks in municipalities

Save/toss. I understand that the period for General Plan comment is over.

I heard a piece recently on millimeter wavelength communications. Much of 5G promises never came to fruition but the technology is catching up. In terms of physical implementation of 5G infrastructure, what is likely is lots of small towers. There was talk about having one "tower" per row of a football stadium as an example of density.

So we will be faced with new physical requirements for wireless infrastructure of our smart city. This can be accommodated by incorporating some of the towers into other features (street lamps), by providing underground conduits for signal and power distribution, etc. Much less expensive and attractive in appearance to implement over a planned topography than to do retrofit.

There is a lot more to wireless infrastructure than 5G.

- Thermal imaging and screening for infectious diseases

- Continued operations during citywide emergencies

- Unclear business model of carrier

- Look at the [Section on smart sewage!](#) (internet of turds?)

Anyhow, didn't do any research, just throwing this over the wall in case someone is interested.

5G smart cities whitepaper : deloitte (2020) 48 pages

<https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/technology-media-telecommunications/deloitte-cn-tmt-empowering-smart-cities-with-5g-white-paper-en-200702.pdf>