

Friends of Los Altos, Inc. (FOLA)

A non-profit, non-partisan, volunteer-run organization

Can You Hear Me Now?

"Can you hear me now?" A familiar question that was often asked by people trying to make a cell phone call back in the days when cell reception was universally terrible. It was made famous by Verizon, which advertised their wide coverage and ability for cell phone users to actually make phone calls and hear the person at the other end of the call. That was a decade ago. Today getting good cellular coverage has become a necessity for both phone calls and for internet connectivity and is a service we take for granted. We depend upon it, for both our personal lives and for work. And while it has gotten better overall, it often isn't very good in Los Altos. So, most people, ourselves included, want to make sure the City Council actually helps us get better service. But here is the reality; getting better cellular service in your house is an issue that you as a resident need to fix, either by contacting your cellular provider or by using your home internet for telephone calls. The City does not control what upgrades the cellular carriers make to their systems and what the quality of service is for customers. And yes, we will discuss 5G a bit later in this article.

But here is where politics and passion mix. Ask some residents about cell service in Los Altos and they immediately blame the City Council (or a subset thereof) for bad service and the holdup in the deployment of the newer 5G technology which they believe will solve all of their connectivity issues. Most of that turns out to be not true. But first let's talk about the issues currently before the City Council.

The Council is considering a proposal to regulate cellular carriers' facilities at the upcoming meeting on June 14th. The proposal provides carriers with the City's permissible locations and preferences on where they are located and design criteria requirements for cellular installations. To the extent legally feasible, the proposal does a reasonable job of balancing the needs of the carriers as well as the best interests of the community, albeit with one exception.

A group of residents has asked that the ordinance include the same fire safety requirements consistent with other commercial projects. From a practical viewpoint we don't see why that requirement should be a big issue, particularly since many households now depend upon cellular service for emergencies, including 911 calls. Why would you not protect the public by requiring cell towers and cellular facilities to meet the same safety requirements of any other commercial facility?

And as it turns out, a number of the major wildfires from 2007 through 2020 have been caused by cellular equipment malfunctions. And to put a finer point on it, there was a small fire in Los Altos Hills on Sunday, June 12. While we understand that this is a greater burden on the carriers, given the community risks of fire due to climate change, we see this change as good policy.

While we appreciate that carriers do not want additional cost or oversight, we all know what happened when PG&E failed to put fire safety at the top of their list.

Lastly is the issue of 5G transmitters and coverage. For those of you who do not follow the latest in wireless technologies, 5G (meaning 5th Generation) can provide higher data speeds that allow faster internet access including things like better surfing of the web, better email and applications like Netflix. 5G actually does not improve wireless phone calls. Actually, in many cases, wireless calls are worse with 5G.

Here is the problem-5G only works with direct line-of-sight and is sensitive to foliage and structural interference. Since it only works over relatively short distance that means if there is a tree or house between you and the local transmitter, you'll get a weak to no signal. And if you are more than 1500 feet from a 5G transmitter you also won't get service at all.

The primarily means of cell service is from one of the 3 large towers (located in Mt. View, Los Altos and Cupertino) and the 3 smaller cellular transmitters (atop utility poles in the City) all of which provides 4G service. So, the key to better cell service is getting the equipment providers to upgrade the quality of their equipment on those towers. Unfortunately, the City Council has no ability to require them to do so.

The other important fact we uncovered is that 5G service is more important for the future of internet services to and from your car, not internet and cell service from your phone. And there are some who believe that 5G, because of the line-of-sight issue, will be largely supplemented by satellite WIFI (such as the solution developed by Elon Musk and others). Another fact we discovered, today's Telsas, just as an example, rely solely on WIFI for updates, not 4G or 5G.

The other issue that often comes up is the poor cellular service within downtown offices and stores. Again, that is a provider issue that can be addressed by the equipment on the towers and/or the individual office/store putting in WIFI or a cellular amplifier. For those of you who don't know, most cell phones will allow you to make a phone call by connecting to your WIFI network. in many cases this solves the phone call issue. Cell phones can also connect to WIFI for data.

We hear the residents' concerns for better cell coverage and service. We hope the Council hears the need for common sense compromise that address important issues for Los Altos residents.

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