

AT&T Cell Towers Proposal: Want to Win? Palo Alto Lost.

Public meeting to be held on this issue at KMAC meeting, Feb. 26, 7 p.m. Community Center
This material collected by Philip Zimmerman
The images are from Google Images, search Distributed Antenna Systems

The FCC has reserved for itself alone all considerations of the effects on health of RF (radio frequency) radiation. Local officials MAY NOT take into account health concerns related to cell equipment permit applications.

If you mention your health concerns regarding AT&T's plans in public meetings, YOU ARE WASTING VALUABLE TIME!
Please do not. Take it up with the FCC.

Here is the link to the page containing the downloadable/viewable PDFs of AT&T's plans and permit applications:

<http://www.cocobos.org/DocumentCenter/Index/2660> (scroll down to KMAC)

The following addresses are adjacent to phone poles AT&T wishes to add its equipment on top of: 8 Highland Blvd., 98 Rincon Rd., 121 Windsor Ave., 8 Sunset Dr., 248 Grizzly Peak Blvd., 110 Ardmore Rd.

If you read to the end below, you will discover that Palo Alto is soon to get 75 of its utility poles topped with nine-foot extensions with cans on top.

Here is the link to a web site I found while googling around on the subject of Distributed Antenna Systems:

<http://planwireless.com/index.htm> It belongs to a wireless planning company, Kreines & Kreines in Tiburon, and contains great information like:

- a. We, the consumers and participants in this debate over AT&T's application must have a knowledgeable command of the legislatively dictated schedule for approval, etc. of this application. 60 days is mentioned prominently. If this schedule is violated by delay, except in certain circumstances, the application becomes approved by default.
- b. The various Telecommunications Acts favor more communications equipment; generally, the more the better.
- c. A Wireless Master Plan is helpful. (Since Kensington has land use restrictions that do not apply to the rest of the County's unincorporated areas, could we not have our own set of criteria for cell facilities? El Cerrito held up T-Mobile's application for a tower for many months while it updated its own master plan. According to planwireless.com, it must be called a "Personal Wireless Service Facility Ordinance")

Personally, I am not particularly opposed to a cell phone service provider building a Distributed Antenna System in Kensington, as long as it addresses our legitimate concerns. These systems can be designed to be unobtrusive. To demonstrate this, I include numerous photos below. Any one of these would be less offensive than the extensions AT&T proposes to place on some of our utility poles. Please note the diminutive scale of the hardware, and its placement on the poles at fairly low elevations. Note, too, that an antenna generally requires a transmitter quite close by to power it. The first picture, of an installation near UCLA, proves that the transmitter need not be on the pole or even in a box beside the street. The transmitter can be a source of more RF radiation to the immediate area than the antenna. Rather than have them in our way, let's require AT&T to put its transmitters underground.

One may view other local governments' versions of "Personal Wireless Service Facilities" Ordinances by googling

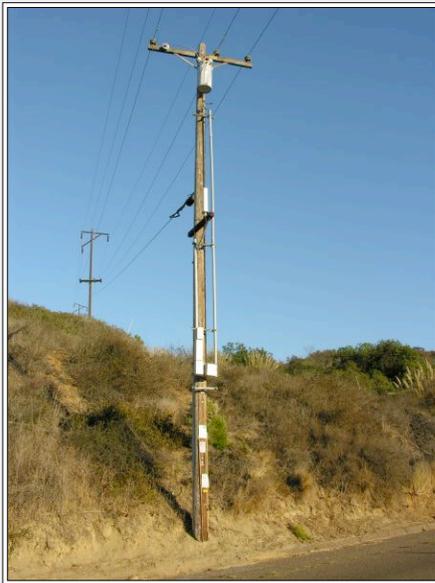
California Personal Wireless Service Facilities Ordinance.

We need not pay and sweat to re-invent the wheel; merely choose wisely, and talk to the owners to see how theirs worked



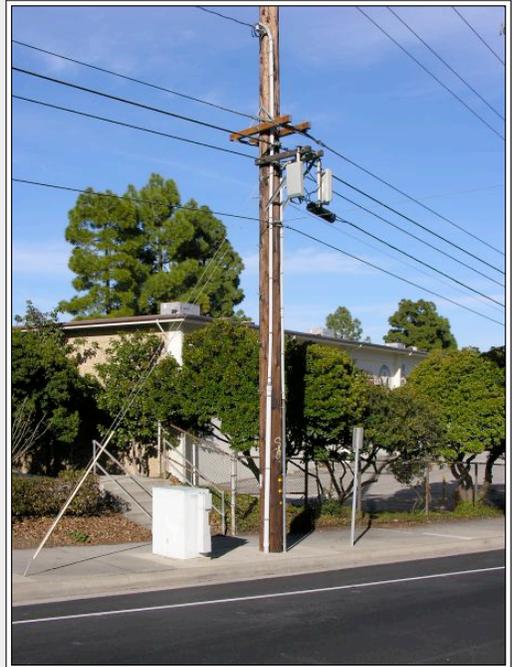
UCLA? I C LA!

Verizon's right-of-way microcell monopole site on Hilgard Avenue near Manning just to the east of UCLA. The [base station](#) equipment is located underground adjacent to the two vents.



NextG Distributed Antenna [System Node](#)

NextG is a wireless carrier's carrier. They provide fiber links between the BTS and the antenna site using a technology referred to as Distributed Antenna System (DAS). This is a NextG DAS node located in Enclinitas, California. The carrier supported by this node is Cricket Wireless. NextG's Cricket [network](#) in San Diego County is thought to be the largest deployment of DAS in the U.S.



DAS Outboard on Power Meter Cabinet

Overview of a Cingular (now [AT&T](#)) DAS site in Rolling Hills Estates, California.

Any of these installations would seem preferable to those we will get if we cannot get the design changed. Indeed, the last picture illustrates that AT&T is already familiar with how to build less noticeable installations on utility poles. Look at what Palo Alto is going to get below.

Why do they want to build ours so high? The answer is in the nature of the radio signals they must employ. The higher the antennas, the less obstructions and undulations in the topography obscure the antennas from a greater number of potential customers per antenna. But they are ugly. Few high antennas in Kensington will mean that their reach will be farther and their transmitting power higher than if we contractually, through the use permit, specify that they transmit at the lowest level of power possible, while still remaining effective, AND:

Cell phone customers voice two main complaints about their service: dropped calls, and dead areas of no reception. We have a perhaps one-time opportunity to insure that AT&T designs its new system to address these issues.

Related to both issues is the notion that all Kensington residents live here and travel our streets and have to look at whatever system is installed, but that by no means does AT&T wish to be obligated to serve us all. It would rather cherry-pick the locations where the fewest antennas will maximize its customer numbers, and abandon to dead areas those areas which are not profitable to serve because of topography or sparse population. Dead areas have no cell antenna that

serves them. Dropped calls result from a given antenna being overloaded with volume, and shedding calls until it has a manageable number.

Here is what winning might look like:

By [Greg Galitzine](#)
Group Editorial Director

Traditionally, carriers have had to decide whether they wanted to build and maintain their own infrastructure or lease. The benefits of owning are clear, but the high upfront costs associated with a network build out are a major barrier to overcome. Likewise, leasing has its benefits, but often carries a series of restrictions that owners of their own infrastructure do not face.

Newport Beach, California-based Mobilitie, a provider of telecom infrastructure solutions, wants to help carriers who are interested in leasing infrastructure to do so. According to their [Web site](#), the company wants "...to be the premier owner/investor and lessor of capital assets to global telecommunications companies. Our carrier-centric business structure, which allows us to offer infrastructure terms and provide operating excellence to which no other firm can compete, assists wireless and wireline carriers to preserve precious capital while accelerating network development."

Mobilitie has just announced that they have constructed the initial phase of its fiber optic distributed antenna system (DAS) in New York City's Central Park, designed to provide wireless service providers a solution for coverage and capacity.



Of course, when building a system in a landmark setting such as New York's Central Park the company had to deal with numerous requirements designed to protect the natural appearance of the park and surrounding area and not interfere with ongoing recreational activities.

"This represents the collective efforts of our team, our carrier customer, and the local officials to provide the backbone for quality wireless services within Central Park," said Bud Noel, Vice President of Network Services for Mobilitie. The Central Park Conservancy and the New York City Parks and Recreation played an integral part in the successful completion of this project. "

Within the past year Mobilitie has successfully deployed over 13,000 fiber miles throughout Manhattan.

Mobilitie president and CEO Gary Jabara had kind words for New York City Mayor Michael Bloomberg ([News - Alert](#)) and his administration. "We could not have undertaken such an intricate fiber optic network without the tremendous support from the Department of Information Technology and Telecommunications and support from the Bloomberg administration," he noted.

Back in November, Mobilitie announced that [Mzima Networks](#), a high-performance network service provider, had signed an agreement to lease a dark fiber ring to expand Mzima's fiber network in New York City.

[Greg Galitzine](#) is editorial director for TMC's ([News - Alert](#)) IP Communications suite of products, including TMCnet.com. To read more of Greg's articles, please visit his [columnist page](#). He also blogs for TMCnet [here](#).

Note that the cell antenna on a light pole in New York's Central Park is quite small. Central Park is larger than Kensington. Note also the degree of involvement of New Yorkers, from the mayor on down, in that project. I'll bet there are no dead spots in the park. Bloomberg strikes me as the sort of person who gets what he wants, and what he wants is the best. That system might be the sort that has only antennas on poles, connected by fiber optics, mentioned in the planwireless.com site. Because the roads must be dug up, it says, for the fiber optic cables, the system must be quite expensive, perhaps too expensive for AT&T's budget. Were we to insist on a system as unobtrusive appearing above ground as Central Park's, we might end by being left alone.

If we require that AT&T act like a utility (isn't it one?) and provide cell coverage to all of Kensington, no exceptions, no dead areas, and that it use lower less ugly antennas than it was planning to, it would put more of them in. They could have lower power because they would be closer to each other, and because their use permit required that they had to use the lowest power that would work. More antennas would mean less dropping of calls, because there would be more of them to share the load.

Are we going to grant AT&T an unregulated monopoly? There is a better approach. We must require that the company share its physical facilities that it would build here with its competitors—how many I do not know—but I am not a trusting soul, and I would require that AT&T have contracts up front with the number of them you think best as a condition of its

use permit and operating permit becoming and remaining valid. Otherwise, it will build its system, and exclude competition by setting the price of sharing it too high for there to be any takers. This is discussed on the web.

Verbal understandings relative to real estate contracts have no standing before the law. Get the specifications the contractor is to build to into the drawings and make them conditions of the use permit. Make the use permit suspendable if AT&T violates its terms. Or perhaps there is an ongoing operating agreement with the County that specifies the terms under which the cell installations are to be managed. Is the installation to have a certain look? Exactly what look? An artist's rendition may not be a firm enough understanding. Is there a photo in a manufacturer's catalogue of what you expect that can be included by reference into the drawings and agreement? Why not include everything relevant into every relevant document by reference?

A permit should include these conditions:

a. No areas of free public parking will be reduced as a result of cell installations in Kensington.

b. The visual screening effect of trees and other foliage will take precedence over any considerations of their possible interference with communications. Trees and other foliage are not to be cut or removed to reduce interference. (Cell tower leases on private land often allow the operator to sue a landowner if he declines to cut his own trees on the demand of the operator)

c. Engine driven generators are prohibited at the site after the final building inspection. (T-Mobile claimed they use batteries for backup power. The El Cerrito Design Review Board hearing on their cell tower application drew a comment from a neighbor to another company's cell tower which had been powered for a year and a half with a diesel generator which ran 24/7.)

d. Equipment will be shared with other wireless providers.

e. All of Kensington will be served.

f. Equipment will be as visually unobtrusive as possible, with standards set forth, not to be exceeded, including maximum height above ground.

Considering that the bureaucrats in Martinez do not continue to hold their jobs at our pleasure, I don't trust them much to further our concerns. We must be our own advocates if we are to get the best deal possible. If AT&T perseveres, it will prevail, eventually. All we can do is massage the design in the direction we would prefer.

The photos above represent examples of what we can accomplish. We cannot tell them to go away, though we could, presumably, make the project uneconomical for them to pursue.

If we are not energetic, we could suffer the fate of Palo Alto, where AT&T has gotten recent permission to construct nine-foot extensions with cans on top of about 75 phone poles (see following page).

What to do? Inform yourself. Look at the plans.

Read the planwireless.com website.

Spread the word to all the people you know in Kensington to get involved. Forward this document to them. Add your own thoughts.



AT&T Approved to Install Distributed Antenna System 'Mini-Cell' Antennas In Palo Alto

AT&T's ambitious plans to fill in cellular coverage gaps with smaller cellular antennas won approval in Palo Alto, Calif. last week, despite protests from residents who live adjacent to one of the 75 future antenna sites.

AT&T's new Distributed Antenna System (DAS) is designed to cover reception gaps and cope with congestion-related issues in urban and residential areas. The new antennas will be mounted on top of existing utility poles, extending their height approximately nine feet.

AT&T said the new DAS system was necessary in Palo Alto because of the city's unique topography and building density. The company hopes the lower profile antennas, designed for neighborhood-wide coverage, will also reduce traffic on its existing cellular network. AT&T expects to install one DAS antenna every 1/4 to 1/3 of a mile.

The new antennas will be serviced from a cabinet mounted on the pole or sidewalk-based concrete pad. This cabinet houses a fiber connection from AT&T's U-verse network as well as power and monitoring systems necessary to operate the antenna.

AT&T [earlier announced](#) it intended to deploy smaller, more-localized cell sites to bolster coverage and network capacity. Many of these antennas will be located in residential and suburban areas that have traditionally rejected large cell towers.

Although the antennas are designed to be fitted to pre-existing utility poles, some residents object to their additional height, which can bring them into view above nearby buildings and trees.

Dorianne and Roy Moss will have one of the antennas as a new neighbor, and they don't like it.

"When I open my eyes in the morning I see a tree line," Dorianne Moss [said](#). "The current proposal would be to put a box 9 feet above that."

Local residents want AT&T to consider shielding certain antennas from public view and AT&T insists it took residents' complaints into account.

Paul Albritton, AT&T's counsel, told Palo Alto city officials the company chose locations away from block corners and close to foliage.

Residents in other cities may find AT&T seeking to install similar antennas in the coming year.

[<http://stopthecap.com/?s=palo+alto>]