

Adapting to

AB 57, "6409," & Mobile Now

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February 4, 2016 SCAN NATOA Seminar on Wireless

The Balancing Act for Communities

Design & Development Standards

Community concerns over cumulative effects, equipment noise, diesel generators, long term health effects, views from homes or public vistas & tenant or small business displacement (equipment in dense areas)

New mesh networks, Internet of Things & WISPs (microwave dishes for in-building internet instead of using cable company)



Customer Demand for Data Capacity, not just Voice "HetNets"

> State and Federal Laws Limiting local review

Historic Preservation (including sites on new buildings in historic districts)

"Least Intrusive Means" using all the tools in the carriers toolbox



Integrating antennas, support elements, and equipment areas (sometimes the size of a shipping container) into the built environment is a challenge

AB 57 | New California Law

- Basically says City/County has to make a decision on a complete application within 90 or 150 days or wireless facility is deemed approved.
- California legislators were told by wireless industry
 (Verizon reps leading the charge) that AB 57 copies Federal law.

It does not copy Federal law.....

- Feds twice refused in 2009 and 2014 to create auto approvals for new facilities and collocations
- Carriers instead pursued laws like AB 57 in multiple States

AB 57

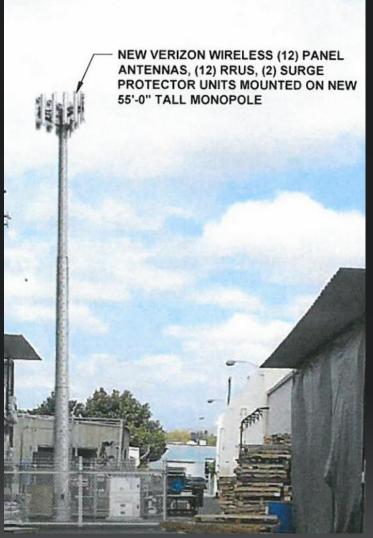
■ 150 days for new wireless facilities, such as:

antennas/equipment on a 100 foot steel tower, or a building rooftop, or a utility pole in front of a bedroom window (Planners: talk to Public Works Director for right-of-way wireless)

90 days for collocations

such as adding antennas/equipment for a new carrier on a rooftop alongside another existing wireless carrier,

or adding antennas/equipment for the same carrier if it doesn't quality for "6409" exemptions



 Monopoles (recently submitted in Orange County), with potentially noisy cabinets, and diesel generators next to homes, or (in other contexts) along ridgelines in scenic areas that define a region





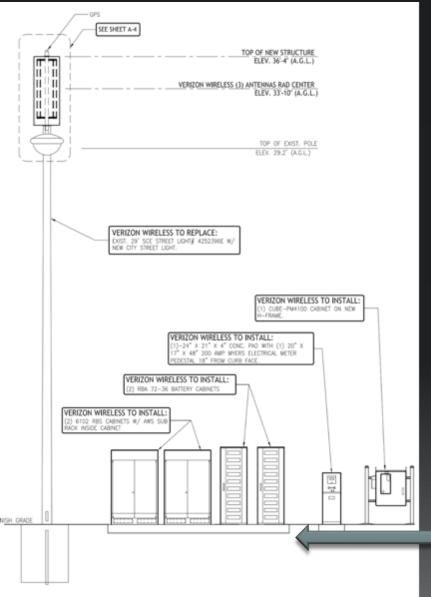
- Bulky and noisy antennas and equipment ("DAS XL") on wooden poles a few feet from a bedroom window
- Example of a Crown Castle (for Verizon Wireless) facility (left)

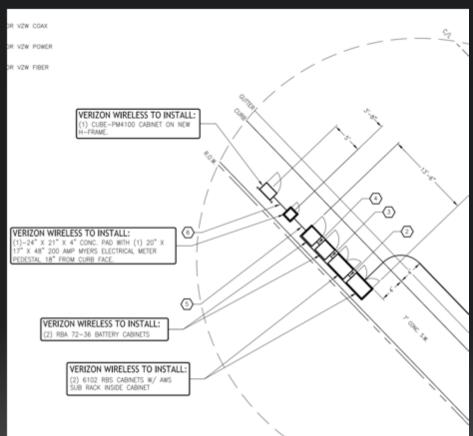
We all tend to know what we don't

want



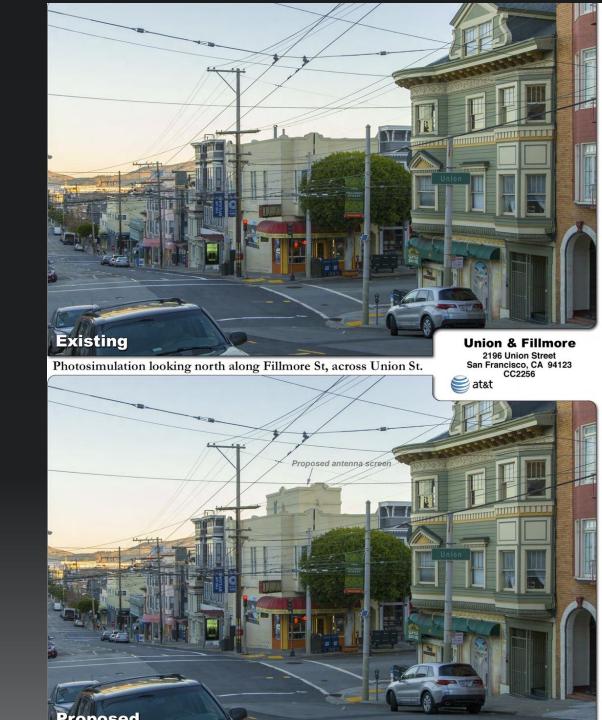
Phillips/Ericsson "ZeroSite" | Composite Pole with panel antennas inside and equipment in base | Considered too large for most small-scale streets





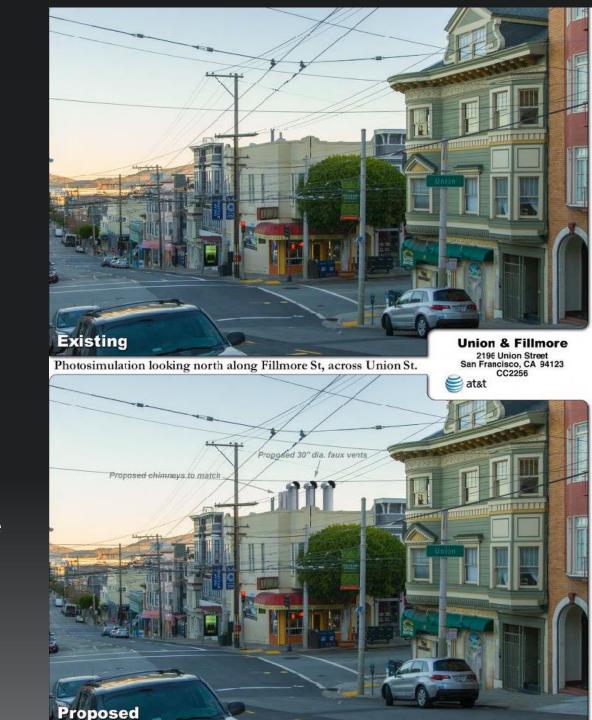
Bulky unscreened equipment cabinets proposed along a nicely landscaped street in South Orange County

Massing and locations that detract from views of scenic vistas like the entrance to the Golden Gate (Bay)



Faux vent pipes that are too concentrated and wide

Not context or scale appropriate



We all tend to know what is less intrusive

More viable AT&T Mobility Proposal

...with screen boxes to cover radio relay units (3 to 6 luggage sizes boxes) on roof as well

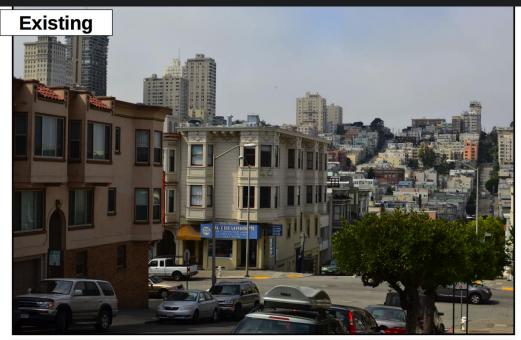




We also tend to know what is less intrusive

More viable (and approved)AT&T Mobility proposal

(initial submittal had 9 antennas)





CN5632 Francisco Launderette 1763 Stockton Street, San Francisco, CA 94133

AB 57 | Exceptions

 Does not apply to actions by the Coastal Commission, or other State review agencies such as (SF) Bay Conservation & Development Commission

- Does not apply to facilities at fire stations (carve out to stop opposition by firefighter unions who originally opposed bill). Has no real effect since stations are publicly owned.
- Does not apply to City properties (Cities/counties: talk to your local flood, school, water and Caltrans districts)

AB 57 | Tolling

"Tolling agreement" = wireless carrier VOLUNTARILY agreeing, with City/County, to "pause" Shot Clock to work out "issues"

- "Issues" include: redesign, new location, more outreach, and noise/environmental studies
- The first (post gut and amend) AB 57 bill versions, spearheaded by Verizon, nearly got rid of ability for carrier to ask for a "tolling agreement."
 - Would have been of detriment to BOTH local governments and wireless carriers as it would have forced more denials and repeat applications

Verizon and other wireless carriers cited delays in siting as reason for the State Assembly to pass AB 57.

When pressed for an example of such delays, Verizon and Assembly member Quirk (Hayward) mentioned the City of Thousand Oaks.

See the response from Thousand Oaks.....



City Council

2100 Thousand Oaks Boulevard • Thousand Oaks, CA 91362 Phone 805/449.2121 • Fax 805/449.2125 • www.toaks.org

> Al Adam Mayor

June 16, 2015

The Honorable Ben Hueso, Chair Senate Committee on Energy, Utilities and Communications State Capitol, Room 408 Sacramento, CA 95814 -Hand Delivered-

RE: AB 57 (QUIRK) WIRELESS TELECOMMUNICATIONS FACILITIES – OPPOSE

Dear Chair Hueso:

The City of Thousand Oaks strongly opposes Assembly Bill 57 titled "Telecommunications: wireless telecommunication facilities" and authored by Assemblymember Bill Quirk. AB 57 would impact cities and counties local authority by tacitly approving applications for new wireless towers and facilities if the city/county fails to approve the application based on the 2009 time frame established by the U.S. Federal Communications Commission. This bill would also impact applications for collocation of wireless facilities on or adjacent to existing facilities.

During the author's testimony at the Assembly Local Government Committee on May 12, 2015, the City was <u>named in testimony as an example of a municipality that has unreasonably withheld approval for wireless communications facilities</u>. We followed up with Assemblymember Quirk's office and asked for the application name or site referred to in testimony. We were told that there were three examples pertaining to Thousand Oaks. The City finally received the examples (*Baron, Brisas and Triunfo*) on June 9th.

In reviewing the examples <u>we found these applications were delayed in large part by the applicant</u> – Verizon---NOT the City:

- <u>Baron and Brisas</u>: These two facilities (4550 ½ Via del Rancho and 4990 Via el Cerro, Thousand Oaks, respectively) were both proposed immediately adjacent to residences.
 - Neither case has gone to hearing because Verizon has failed to fully evaluate reasonable alternatives in the immediate vicinity that would significantly reduce visual impacts, despite Verizon saying they would evaluate these alternatives.
 - o City staff identified alternate locations for these sites years ago at the pre-

AB 57 | Pause the Clock

- Incomplete applications pause the 90 or 150 day (whichever applies) Shot Clock
 - City/County tells wireless carrier within 30 days of submittal, in writing, of missing items not provided with submittal

 Once letter is sent, the clock pauses. In other words the time it takes carrier to provide re-submittal does not count against City/County



AB 57 | Pause the Clock

If wireless carrier re-submits, weeks or months later, and application is still incomplete, then City/County has only 10 days from re-submittal to tell carrier the Items that are missing and pause the clock again.

Otherwise clock keeps ticking....



AB 57 | Complete ≠ Viable

However.... "Complete" does not equal "Viable"

• If a application is "complete" but the design is NOT VIABLE, or does not meet City/County development standards (zoning or public works rules) the clock keeps ticking....



How AB 57 will affect cities/counties

AB 57 will force cities/counties to schedule hearings for potential denial at Planning Commission (if applicable) if complete AND viable designs are not provided by roughly 45 days before applicable 90 or 150 day Shot Clock set to lapse.

- Remember that it typically takes 35 days to notify public by mail/newspaper ad before public hearing
- Carriers: Remember if you actually get denied at a public hearing you often can't come back to hearing body, for the same site, for a year

 AB 57 creates a special exception not applied to all other development in California

 AB 57 does not allow the clock to pause due to complex environmental review (as it normally does with Permit Streamlining Act)

 However.....Cities/Counties are not supposed to approve projects unless they have analyzed the potential environmental impacts, pursuant to another State law.......

the California Environmental Quality Act ("CEQA")

 CEQA review for antennas/equipment on rooftops is typically limited to Aesthetics, Historic Preservation, Noise.

- CEQA review for new freestanding sites (e.g. faux trees) can be far more complex and harder to scope
- The broad definition of a wireless facility appears to include AM/FM/TV broadcast facilities as well. Spectrum "re-packing" in the next few years may require substantial changes to these facilities.
- It takes a lot of wires to go wireless....
 - And new access roads across potentially sensitive habitat/wetlands
 - And excavation of soil that may or may not be contaminated
 - And development in areas that may have tribal/historic/scenic significance
 - And don't forget about those easements or overlays for flood hazards, underground pipelines, or easements of other special districts (water, vector). Have carrier affirm in writing they have checked for conflicting easements/overlays
 - If near wetlands or streams, Department of Fish & Game or US Army Corps of Engineers may be involved.

- City/County may have to deny a wireless facility application if more complex CEQA review is needed and carrier does not voluntarily agree to extend shot clock
- Day to day reality #1: Not every relevant CEQA issue is evident on day 1 of wireless facility submittal
- Day to day reality #2: Even though most wireless facilities obtain a categorical exemption, it takes a lot of work/research/analysis to arrive at that exemption
- Day to day reality #2: A few bad actors in wireless industry don't bring forward complete designs or clear information up front, which results in last minute surprises for Planners, and may not allow for complete CEQA review.
 - Incomplete CEQA review is often the grounds for interested parties to challenge an approval before City Council or challenge in court....

 City/County should create applications checklists that call out what is generally required for most types of submittals (more relevant items for freestanding sites in greenfield areas, less so for previous disturbed areas).

- City/County should verify (have carrier affirm in writing)
 application includes the full wireless facility scope in application
 - Such as....access roads, equipment shelters, meter pedestals, new driveways, fencing (& barb wire), diesel generators, or perhaps aircraft warning lights on top of towers, or even on top of faux trees near airports (example in Upland near 210 freeway)

- Encourage (don't require) Pre-Application meetings, especially for freestanding sites.
- Some cities/counties have ordinances (e.g. Santa Barbara's draft) that allow staff to waive certain submittal requirements after preapplication meeting

(e.g. waiving certain environmental/species study items for a site that is clearly previously disturbed/developed)

AB 57 | PRE-APPLICATION MEETINGS

 Carriers: Please ensure proper handoff of information discussed between carrier representatives due to carrier rep staff churn.

Too often the permit submittals, a few weeks/months after preapplication meetings, do not reflect specific items that were both discussed, and sometimes agreed to, during pre-application meetings.

This is a true misuse of time for all, including cities/counties, wireless carriers and network customers....

AB 57 | HEARING BODIES

- Wireless carrier representatives should be empowered, by carrier, to sign tolling agreements, at public hearings.
- Potential Scenario to Avoid:

Planning staff recommends approval and item goes to hearing a few days before the Shot Clock is set to expire.

Planning Commission raises concerns with proposal and does not want to approve or disapprove, but is considering a continuance (to a future hearing date) to flesh out issues of concern.....

Planning staff or City Attorney may have to politely request that the Planning Commission, disapprove the facility if they are not ready to approve, and the carrier's representative is not able to sign a tolling agreement (to extend Shot Clock) at the public hearing

AB 57 | HEARING BODIES

 Timing can be problematic if a City/County requires separate public design review hearing before going to Planning Commission

(consider waiving this requirement for screened rooftop facilities or holding joint meetings)

 Can also be problematic if sites go to Coastal Commission for review before they go to the local Planning Commission

AB 57 | DUE PROCESS

 What happens if City/County approves the wireless facility at day 149 of the 150 day clock......

......and 10 days later a neighbor or individual City council member files a timely appeal of the project to City Council?

No one really knows

- Consider educating your hearing bodies about this issue.
- Fast track appeals for wireless if possible #exigentcircumstance
- Notify public in advance with a heads up on mailed public hearing notices

AB 57 | PARADIGM SHIFTS

- State mandated time limits create an exigent circumstance.
- Forces cities/counties to ensure a project is complete and for staff to decide early on whether to recommend approval or disapproval.
- This is made more challenging given <u>some</u> wireless industry interactions



AB 57 | Wireless Development Challenges

- Intrusive Designs
- Incomplete Designs
- Providing incorrect information
- Refusing sincere requests for analysis
- Not building sites correctly
- Not maintaining sites correctly
- Making changes without permits

AB 57 | Incomplete Submittals/Designs

- RF reports, structural calculations, project plans and photo simulations which don't match
- Example: wrong # of antennas
- Example: Plans showing equipment that is missing from photo simulations, where it would be visible.
- Example: RF Report says a licensed engineer visited the site and there are no other wireless carriers onsite... yet Google Earth shows 2 other existing carriers at same site

AB 57 | Incomplete Submittals/Designs

Plans and photo simulations that leave out known required elements on 1st and even 2nd submittals

Such as visible caged ladders on the sides of historic buildings, bright yellow fences visible from nearby sidewalks, and exposed cabling/electronics, and storefront alterations. Sometimes showing up as a surprise late in the process.

AB 57 | Incomplete Submittals/Designs

Carrier refusing to conduct basic structural analysis for heavy equipment cabinets and antennas (weight of a small car) on the roof of 1906 era wood frame buildings.

Then the carrier determines equipment area relocation is needed.....but not untill after the public hearing

AB 57 | Unnecessary Challenges



Carrier unnecessarily

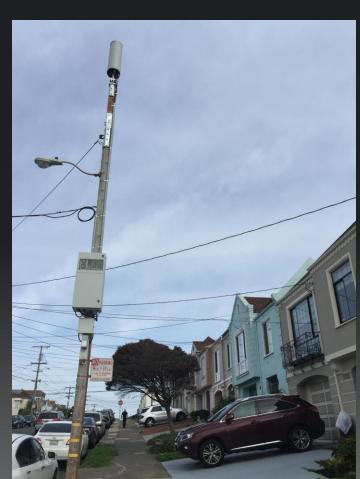
challenging ability of City to review wireless on Caltrans, smaller State or special district properties.

AB 57 | Unnecessary Challenges

Neutral host carriers
 (e.g. Extenet, Crown Castle, Mobilitie) SOMETIMES arguing a City/County can't review the design of wireless in public right of way, require permits, or or apply CEQA

(yes...a City/County can..)

- In one instance, carrier went to the State Public Utilities Commission (CPUC) for their CEQA exemption, but neither the carrier or CPUC consulted with the City, and carrier started putting new wood poles (without notifying City) in known Native American burial grounds
- Carriers proposing putting up brand new wood poles right in front of bedroom windows for antennas/equipment, when less intrusive means exist (example to right is on an existing light pole)



AB 57 | Unnecessary Challenges – Not quite an adequate vent pipe...







Sprint

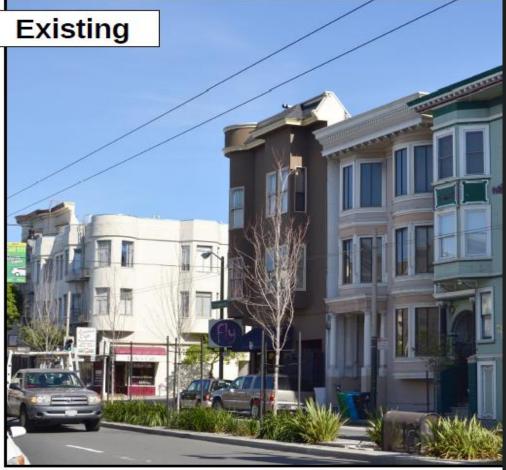
5F36X2C055 Elsewhere Books

246 Judah Street, San Francisco, CA

Approved upgrade with faux stairwell penthouse (with roof)

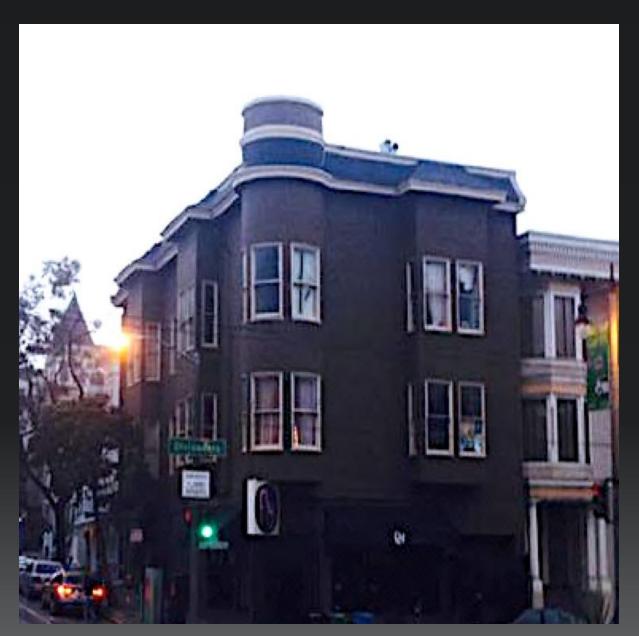


What was built (fix underway...)



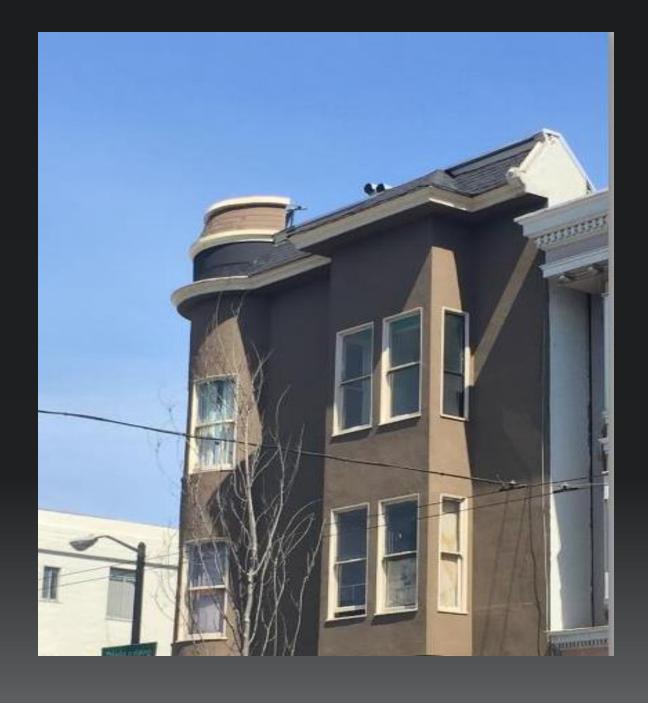
Proposed proposed AT&T se not visible beyond in the proposed AT&T antennas behind new FRP parapet

What was approved



What was built (fix made later)

Make sure the person creating the screening (S-sheet) plans has actually seen the photo simulations...



Second try (side does not wrap sufficiently)





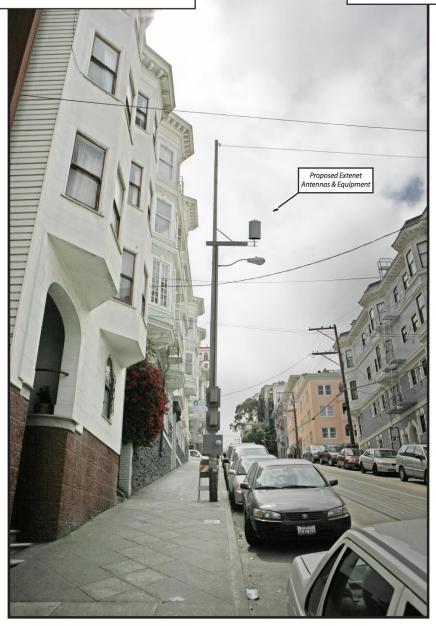


Actual Crown Castle Site. Modifications made w/o permits (whip antenna for Sprint, panel for Verizon)

EXTENST YOUR NETWORK.

MTAPOLY-VZW Node 221 1175 Washington Street, San Francisco, CA Proposed



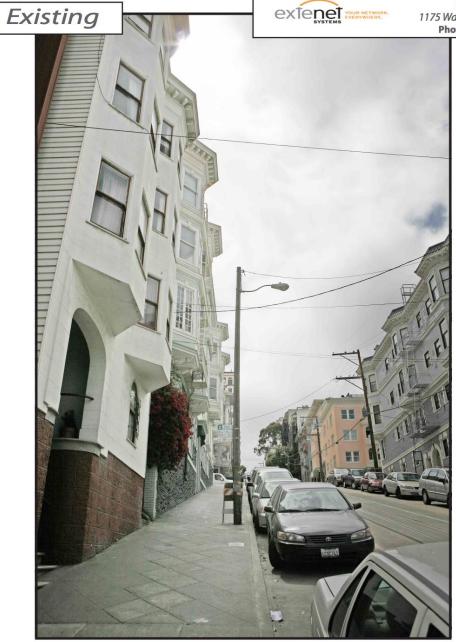


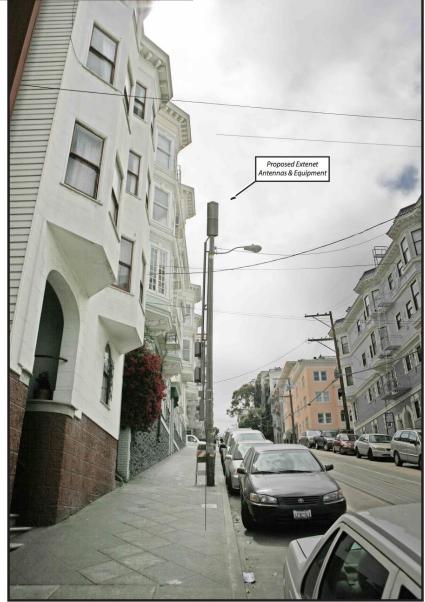
view from Washington Street looking west at site

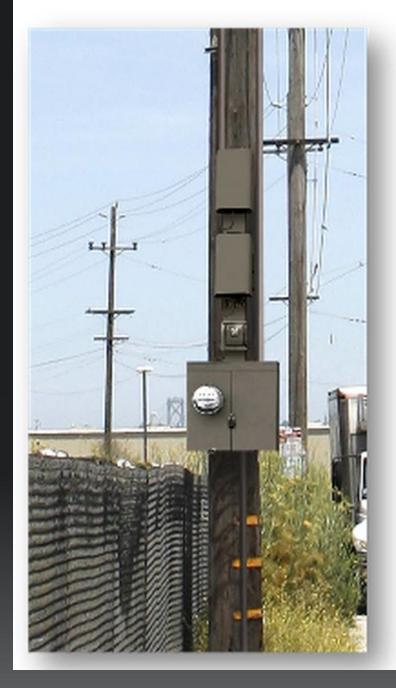


MTAPOLY-VZW Node 221 1175 Washington Street, San Francisco, CA
Photosims Produced On 3-3-2015

Proposed













Disapproved Design

AT&T Mobility

Replacement transit (electric MUNI bus/rail) support pole with panel antennas, and 4 boxes including equipment cabinet, battery backup, disconnect, and meter

1 of 9 locations in small scale residential neighborhoods of Haight-Ashbury and the Marina

Not Supported by Planning based on design



Original Small Cell Proposal on City Poles by Extenet for Verizon Wireless.







PUC9 / Steel Pole

San Francisco, CA

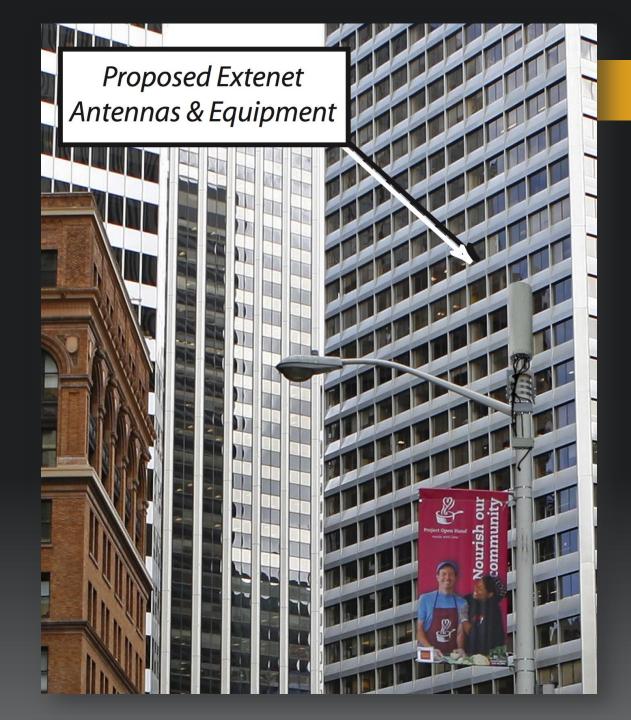
6/25/14

Applied Imagination 510 914-0500

Passive RF Gear below Antenna. This equipment was not show in the initial presentation

Exposed cabling & combiners not supported by Planning

Required redesigns to find compatible shrouding



Recently installed Extenet/Verizon Small Cell(with shrouding at base of antenna). Road signage used to partially screen computers midway up pole.





Recently approved T-Mobile design

2 mRRUs only (computers with built-in antennas)

Primary request by Planning/Historic Preservation was to use "blinders between back of each mRRU and the pole, to screen bolt/brackets (mockup below):



Ideally,
manufacturers
would create
equipment with a
rear fed cabling
option for steel
pole attachments;
so the cabling
isn't as visible
below each
mRRU

The Extenet/Verizon deployment used a flat mounting bracket instead (so no need for blinders)





City Planners!

Don't assume the existing site is legal/conforming.

Do talk to public works about public right of way (oDAS and Small Cells)

Do update application forms (see examples by Calabasas/Ojai/San Francisco)

Do encourage creativity, paired with early neighborhood outreach

Do make sure Planners see re-submittals within 10 days (completeness item). Coordinate with administrative support staff!

Do make sure the screening "wraps" around antennas/brackets/cabling sufficiently. Avoid the TV stunt set syndrome where screening elements look half-baked (can see around the back of it).

City Planners!

Do make sure to have wireless carrier adds the photo simulations to project plans, on a sheet preceding the site plan. This is to ensure the construction crew and City/County building inspector both see the photo simulations when they are out in the field.

Do consider streamlining denials (some cities allow administrative approvals, but require a hearing for a denial. This may be a challenge if the denial hearing requires public notice and no notice labels were required as part of initial submittals)

Engage in Section 106 Review (tribal or historic preservation concerns)

Develop siting type and design type preferences that are appropriate for your community. Say up front that monopoles are generally not acceptable. Otherwise, don't be surprised if carriers propose monopoles.

When looking at composite/decorative poles with integrated wireless consider overall width, noise (if any, from cooling fans), and whether a separate electric meter pedestal is needed nearby (work with City/County Manager and local electric utility on "line drops" or wireless metering). Have carrier affirm in writing that photo simulations show all known required elements (i.e. avoid exposed cabling, GPS antennas)

DON'T pay construction contractors until the building permit shows up as complete on the City/County permitting website. Many contractors who fail to build sites correctly, do not request final inspections.

Time spent by City/County staff to get carriers to fix sites built incorrectly in the first place is a drain on limited staff resources and slows down permitting for modifications and new site approvals

DON'T use existing/proposed site symbols on coverage maps that mimic nuclear tridents

DON'T propose unscreened monopoles as a starting point (it's not a good use of staff time) when you know it's not viable

DO Talk to Fire Department about what information they want on plans (reduce revisions to plans); including what information is needed if there are other batteries/fuel tanks for co-locations at the same site (especially if cabinets/racks are located inside building)

DO Ensure coverage maps show nearby sites, and ensure the capacity gap analysis includes recently approved, but not yet built, sites nearby as well

DON'T place RF warning stickers on Small Cells/oDAS on steel/wood poles at/near ground level.

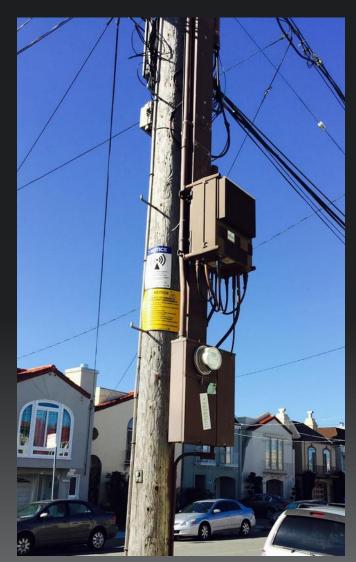
Place the sticker up near the antenna instead.

Otherwise...... Planning or Public Works staff will receive numerous calls from community members who aren't familiar with RF propagation and assume they are being exposed to RF levels exceeding Federal limits while walking their dog

DO bring an RF engineer to public hearings that can speak in a <u>clear</u> and <u>understandable</u> manner before the public

DO indicate, in reports, that the RF exposure within a dwelling right below a rooftop-mounted antenna will fall below 2% (if applicable) of the FCC's public exposure limit; for sites on top of apartments/hotels

Do offer RF testing for residents, in their dwelling, at no charge.



DO submit modification permits that already include cleanup items within the scope (moving GPS antenna to less visible location, fixing broken cable trays or inadequate screening). Also copy the photo simulations onto the plan set on a sheet preceding the site plan sheet

DON'T tell a City you are putting in a fiber pole only, then come back and add a wireless facility without telling the City...

DON'T hold community meetings at locations that are hard to find or don't show up correctly on Google/Yahoo Maps & Mapquest

DON'T file a brief at the FCC to target a small city as being unreasonable on wireless...if the City doesn't actually exist... www.tinyurl.com/attsiliconvalley

DON'T refuse to provide a spot estimate of potential RF exposure, if asked by the Planner, at a nearby public school playground

DON'T clear cut/top trees when you are running fiber between poles

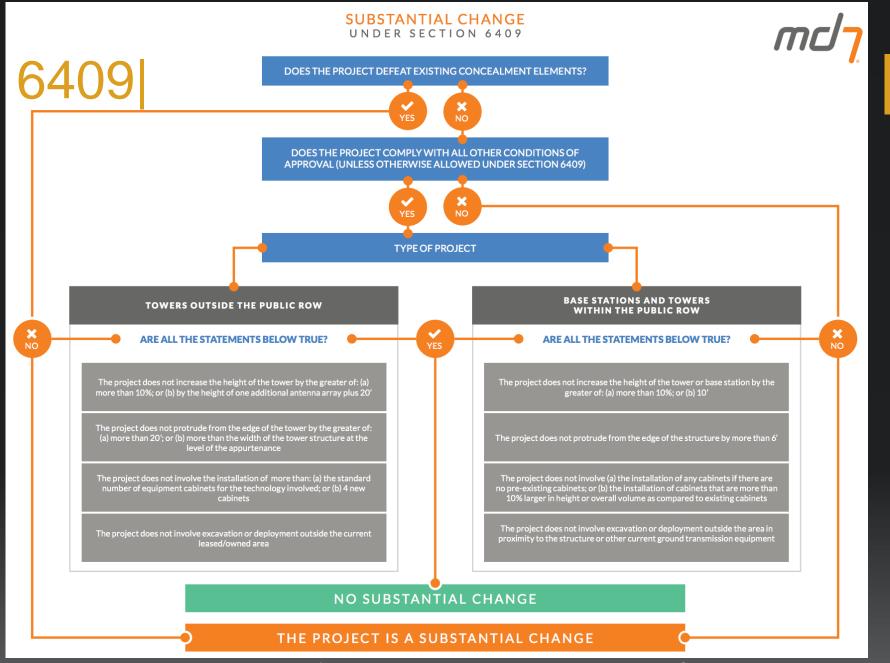
DON'T refuse to send the community meeting notice in other languages in a relevant neighborhood. Also, don't hold outreach meetings on days that happen to be locally relevant cultural/religious holidays (e.g. lunar new years, orthodox Christmas in January). If possible, check the local school district calendar and avoid meetings on days of school closures.

DON'T testify before a Planning Commission and conflate your cell antenna project with Wi-Fi in public schools (as happened for a Verizon facility in West Hollywood recently)

DON'T call it a "Small Cell" if it resembles a monopole (bulky/cluttered and noisy equipment with tangled wires and logos/decals/stickers)

DO be proactive if a resident calls about noise from a cell site. Even if noise meets City/County noise limits, demonstrate leadership and creativity. It makes a difference. Noise dampening blankets can work very well.

- The FCC's interpretations can allow for changes to existing UNSCREENED sites (both rooftops, towers, and public right of-way) that can appear absurd and/or problematic.
- With right of way (Small Cells/oDAS) sites on non-City owned poles it may allow for changes that look like a mini (cluttered) monopole and don't remotely resemble what was originally approved.
 - 10 foot height increase
 - Cluttered jumbles of boxes and cabling
 - 6 foot stand off arms with antennas and cabling
 - Noisy (cooling fans) equipment next to bedroom windows
 - Concern over increased stress on wood poles
 (apparent contributor to 2007 Malibu fires, to which carriers paid large fines)

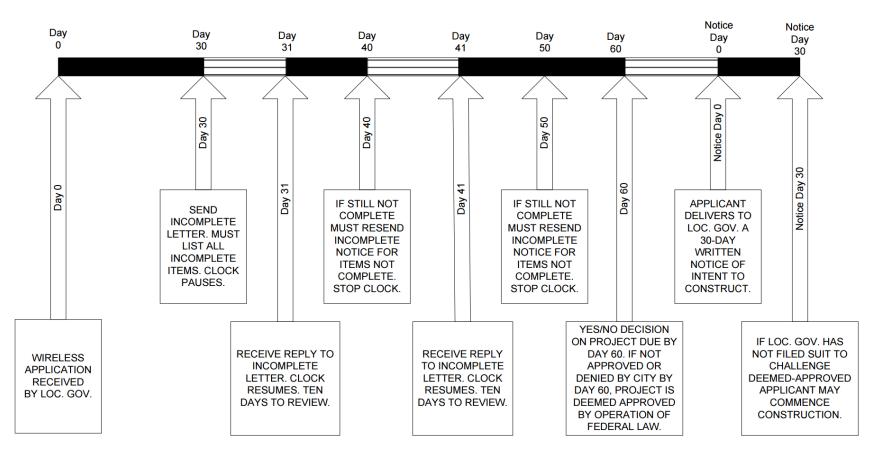


Introductory 6409 chart by Md7 (the chart does not include need to conduct Section 106 review, and the need to determine if existing site is legal and complies with prior approvals – which many sites do not)



SHEET 4 COLLOCATION SUBJECT TO 6409(A) 60 DAY SHOT CLOCK AB 57 DOES NOT APPLY

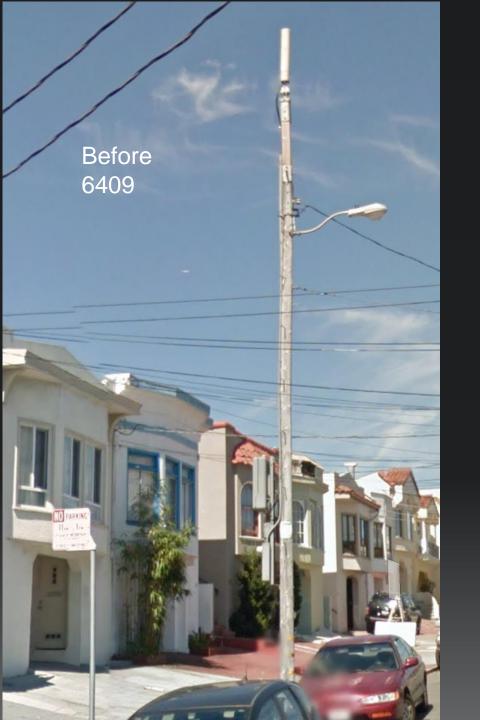


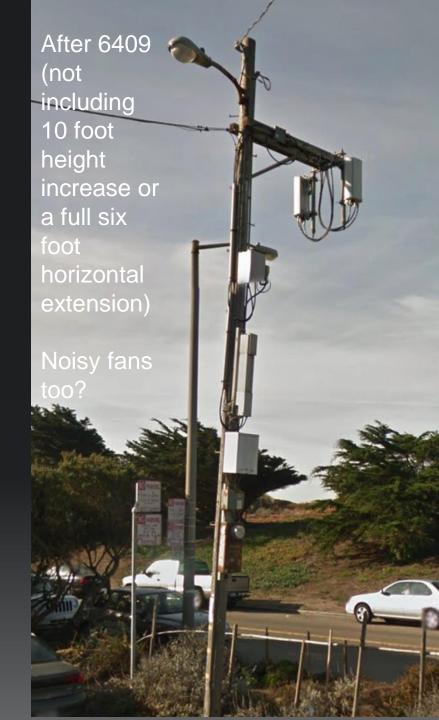




DAYS COUNTED TOWARDS SHOT CLOCK

DAYS NOT COUNTED WAITING FOR APPLICANT'S ACTION





FCC's interpretation forces City/County Planners to ask for more screening on new sites than they would normally be inclined to.

In order to ensure carrier can't defeat existing screening (cluttered antenna array or equipment rising into view).

While the phones are getting smaller, some antennas are now 8 feet tall, and up to 24 radio relay units (luggage sized equipment) are being added to some sites.

FCC's rules say carrier can not add antennas/equipment in a manner that defeats existing concealment/screening

 6409 appears to allow carriers to override common sense rules, such as placement of a diesel generator next to bedroom windows of adjacent window.

- Cities/counties can still apply historic preservation review as part of Section 106 consultation process (many newer carrier reps forget this).
- City/County does not have to approve changes, per 6409, to existing cell sites that aren't built/maintained correctly or where the carrier made changes without permits.

This tends to be a significant problem in California with many wireless facilities (antennas added without permits, screening that is falling apart, electrical work that does not comply with California electrical codes, lack of compliance with fire codes for brush clearance).

 6409 does not apply to sites on government owned properties, but would apply to sites on investor owned utility poles in the public right-ofway

- Cities/counties can ask FCC for a waiver
 (may also have to ask for a stay from a court to stop the shot clock).
- This came up during an appeals court challenge by Montgomery County, Maryland.
- Judges raised concern over significant size changes potentially allowed. Lawyers representing FCC and wireless industry responded the City/County can ask for a waiver.

Mobile Now Act

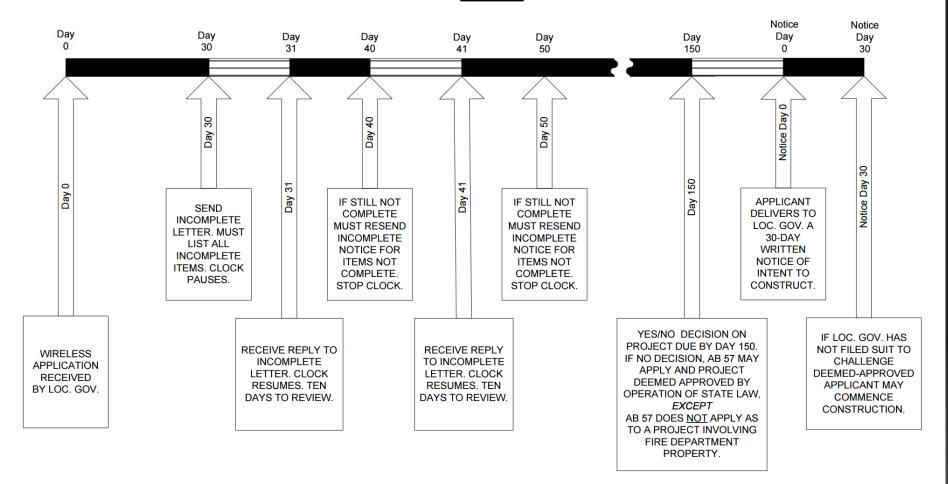
Draft law before Congress focuses on new spectrum for wireless data, but also:

- Would gut Section 332 of Telecom Act
- Would prohibit cities/counties from require abandoned equipment/antennas to be removed
- Would prohibit cities/counties from placing a 10 year time limit on permits or CUPs (Conditional Use Permits)
- Would prohibit cities/counties from requiring drive tests to determine a new site is needed to meet coverage/capacity gap
- Completely gut any sensible rules over placement of loud/dirty diesel generators (even if placed next to a resident's window)



SHEET 2 NEW SITE 150 DAY SHOT CLOCK AB 57 <u>DOES</u> APPLY







DAYS COUNTED TOWARDS SHOT CLOCK

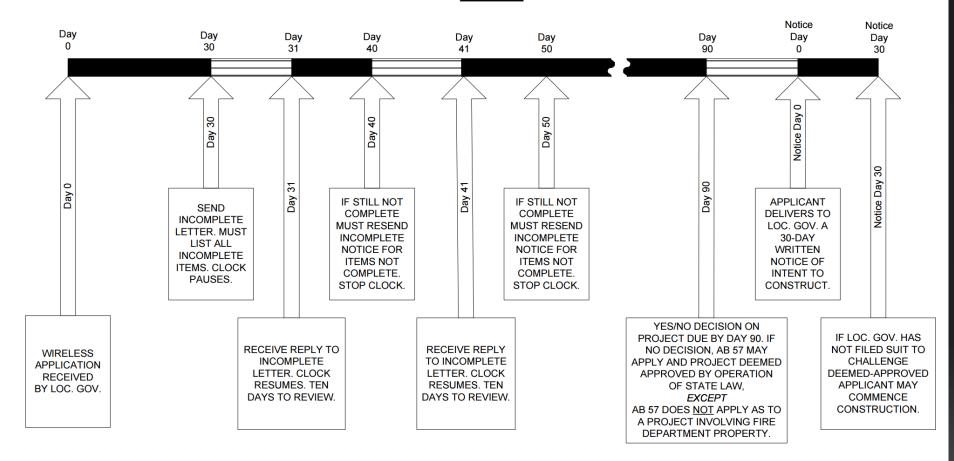
DAYS NOT COUNTED WAITING FOR APPLICANT'S ACTION

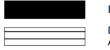
NOTE: TIMELINE NOT TO SCALE



SHEET 3 COLLOCATION NOT SUBJECT TO 6409(A) 90 DAY SHOT CLOCK AB 57 DOES APPLY







DAYS COUNTED TOWARDS SHOT CLOCK

DAYS NOT COUNTED WAITING FOR APPLICANT'S ACTION

NOTE: TIMELINE NOT TO SCALE

