City of Palo Alto
City Council Staff Report

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Council Priority: {ResProject:ClearLine}

Summary Title: Wireless Communication Facilities Workshop
Title: Wireless Communication Facilities
From: City Manager
Lead Department: Planning and Community Environment

Recommendation
Staff recommends that Council receive the staff presentation and public testimony, and offer comments and guidance with regard to the application process or potential ordinance changes regarding wireless communication facilities (WCFs).

Executive Summary
Wireless communications are integral to the everyday life of Palo Alto residents, businesses, and visitors, as well as the City government and other agencies. Silicon Valley technology is prominent in creating and advancing wireless communications and is highly reliant on wireless technology for today's global communications network. The need for these services is rapidly increasing due to a number of factors, particularly related to the need to provide capacity for demands for data transmittal and reception and for higher speeds. The provision of WCFs however, has generated a number of recent concerns in the Palo Alto community (and other communities as well).

This report is intended to provide a context and brief overview of wireless communications facilities (WCF) issues and to transmit some background material on these topics. The presentations are intended as a primer on the state of the industry, technology alternatives and radio frequency (RF) emissions, to provide clarification on use of city facilities and utilities for WCFs, and to outline the limitations of federal and state regulations on the City's actions on WCF applications. Staff will return to the Council in the future to provide additional information in the context of pending applications and/or modifications to the City's regulations or guidelines.

Background
Wireless communications are integral to the everyday life of Palo Alto residents, businesses, and visitors, as well as the City government and other agencies. Silicon Valley technology is prominent in creating and advancing wireless communications and is highly reliant on wireless
technology for today’s global communications network. The City of Palo Alto is also heavily dependent on wireless communications technology for the provision of improved emergency response and for public outreach in general.

The need for wireless services is rapidly increasing due to a number of factors, including but not limited to:

- Additional system capacity to accommodate escalating data transmittal needs;
- Demand for higher speed communications (3G and 4G);
- The competitive nature of the industry, with multiple carriers trying to provide full coverage, data capacity, and high speeds;
- Expanded spectrum width available for carriers; and
- Enhanced technology (wi-fi, distributed antenna systems, etc.) requiring even greater capacity and coverage.

The provision of WCFs, however, has generated a number of recent concerns in the Palo Alto community (and other communities as well). WCF applications in residential neighborhoods have become more controversial as the number of applications by carriers has increased, and the City’s ability to require coordination between carriers or to dictate location of these facilities is highly restricted by federal regulations.

FAQs
A set of Frequently Asked Questions (FAQs) and staff responses, provided to Council on April 4, 2011, has been updated and is attached to this report (Attachment A). The FAQs and other wireless information can also be viewed on the Planning and Community Environment Department webpage at: http://www.cityofpaloalto.org/depts/pln/news/details.asp?NewsID=1761&TargetID=85. This study session is generally organized around those FAQs and the presentations are intended to expand those discussions somewhat, while allowing ample opportunity for Council questions. The session is not intended to provide extensive detail on any one subject related to WCFs.

Current Wireless Communications Facilities in Palo Alto
Palo Alto currently leases six sites (three fire stations and three PG&E towers) to WCF providers, or “carriers” (Metro PCS, T-Mobile, AT&T, Cingular and Sprint (now Crown Castle). The City is also currently in discussion with a variety of WCF providers regarding a Master License Agreement for installation of WCFs within the public right of way on utility poles. The City is also exploring use of other City facilities for WCF installations.

In an effort to illustrate the status of WCF installations in Palo Alto, staff has attached a list of existing WCF sites (Attachment B) and an associated location map (Attachment C) to this report. Over one half of the 41 WCF sites existing within Palo Alto are building mounted installations (24 installations). Council recently approved a new building mounted installation at 488 University Avenue. There are approximately seven monopoles plus four faux tree poles, which are considered “stand alone” facilities in the City’s ordinance. Other “stealth” installations include placing antennas within a church cross and on a baseball field light pole.
These WCF sites in some cases accommodate two or more carriers or providers “collocated” together, reducing the visual impact of multiple installations. A few images of existing stealth designs and building mounted antennas are provided at the end of the FAQs (Attachment A).

Active Applications
This study session is not intended for discussion of current or pending applications; discussion regarding the merit of those applications will occur at the appropriate review levels. However, to provide the Council with some background on the types of wireless applications the City receives, the following outlines representative examples of recent applications: AT&T’s proposal at 488 University Avenue, approved by the City Council, and that firm’s requests for poles at the Eichler Swim Center and the St. Albert the Great Church, both of which were subsequently withdrawn. Five other macrocell applications are currently in process, including a monopole, a faux pine tree, and three modifications or additions to existing facilities. Staff is also aware of at least one potential monopole application that has not yet been submitted but the carrier is conducting outreach to surrounding neighbors in residential areas.

Of particular note, AT&T has an active application in process for installation of nine Distributed Antenna System (DAS) antennas on existing utility poles in a residential neighborhood of Palo Alto. These installations are smaller and in some ways less intrusive than a larger monopole, but may still have visual impacts. Many more DAS applications are anticipated to be submitted for City review by AT&T and others.

City of Palo Alto Comprehensive Plan and Zoning Regulations
The City’s Comprehensive Plan addresses wireless communications facilities to some extent in the Business and Economics Element. The following policies and programs are included:

Policy B-13: Support the development of technologically-advanced communications infrastructure and other improvements that will facilitate the growth of emerging telecommunications industries.

Program B-4: Develop the City Council-approved fiber optic ring around the City as recommended in the 1996 Telecommunications Strategy Study and evaluate and implement enhancements to the system.

Policy B-14: Work with electronic information network providers to maximize potential benefits for Palo Alto businesses, schools, residences, and other potential users.

Policy B-15: Allow the creative use of City utilities and rights-of-way to ensure competition among networks in providing information systems infrastructure.

There are also, of course, numerous policies and programs intended to protect the character of neighborhoods, which is sometimes at issue with installations of WCFs.

The City’s zoning regulations pertaining specifically to WCFs are provided in Palo Alto Municipal ....
Code (PAMC) Section 18.42.110 (Wireless Communications Facilities), and are also attached to this report (Attachment D). These regulations, adopted in 2007, set forth pertinent review processes, encourage “stealth” (aesthetically unobtrusive) design, and restrict the height of antenna placements. Antenna height and visual impacts are generally allowed to be regulated by local governments.

The zoning allows a height of 65 feet for a "stand alone" WCF, such as monopoles or faux tree poles designed to disguise antennas. A height of 15 feet above the maximum allowable building height in a district is permissable for antennas and related equipment for "building mounted" WCFs. Conditional Use Permits (CUPs) are required for stand alone facilities, any project in a residential zone, or amendments to prior CUPs, but not for compliant building-mounted antennas. Architectural Review is required for most installations. Both CUPs and architectural review are usually handled at a staff level, unless the applicant or another interested party requests a hearing. In that case, the Planning and Transportation Commission and Council review the project.

**Discussion**
The following topics are covered to some extent in the FAQs, and are summarized briefly below:

**Wireless Technology and the Wireless Industry**
Some information about the types of wireless technology in use today and the different type of antenna facilities is provided in the FAQs, and some links to Federal Communication Commission (FCC) websites are identified for further information. Staff has invited a consultant familiar with this technology to present to the Council and the public at the study session.

**Need for Capacity and Coverage**
Coverage gaps in Palo Alto, as identified by various carriers, may have adverse implications regarding the City's ability to implement a "smart grid", public safety needs, and mobile broadband, and the prevalence of "dropped calls" within certain geographic areas. Palo Alto has unique coverage needs and capacity issues due to the student population, high tech companies in the Stanford Research Park and downtown, and the general high level of tech sophistication in the community. Upgrades demanded by these customers are further driving requests for new or expanded installations to enhance capacity (particularly for data) and accelerate speed (3G and 4G). Consultants to the City and industry representatives will provide examples of coverage needs and technology changes addressing increased demand.

**Radio Frequency Emissions**
The FAQs provide an overview of the issue of radiofrequency (RF) emissions, the potential health implications, and links to FCC standards and other background information. Consultants to the City and industry representative(s) will provide a brief overview of the issue and the pertinent regulations. The City may not deny applications based on concerns about health impacts if RF emissions comply with FCC standards.
City Facilities and Utilities – Leases and License Agreements
The City currently leases antenna facilities on six City-owned sites to wireless communications providers. The proposals for Distributed Antenna Systems (DAS) would require the use of City utility poles for installation, and the Utilities Department and City Attorney have been working with the carriers to develop appropriate terms for such use. The City Attorney and Utilities staff will briefly discuss the approach to these issues. The City collects revenues for the lease of City-owned sites and is able to also collect revenue under the license agreements for the use of City utility poles and rights-of-way for WCF installations, particularly for DAS projects.

Federal/State Regulations and Restrictions on City Authority
The City has the ability to regulate aesthetic issues related to telecommunications facilities, including factors such as height and setback. However, under federal law, a local agency’s wireless facility siting decisions may not have the effect of prohibiting the provision of wireless service or unreasonably discriminating among wireless service providers. If a proposed facility is necessary to eliminate a significant service gap in wireless coverage, and the applicant can demonstrate that the proposed facility is the least intrusive feasible means of reducing the coverage gap, denial of the facility will be considered an effective prohibition. Under federal law the City may not regulate the placement, construction or modification of wireless communications facilities on the basis of the environmental effects of radio frequency (RF) emissions, so long as the facilities comply with the FCC regulations concerning such emissions. A summary of the limitations and timelines for City review is provided in the FAQs. The City Attorney will discuss examples of how courts have applied these rules in recent key cases.

Regulations in Other Cities
Staff has recently explored what several other cities are doing to regulate wireless communications facilities. Some of the cities surveyed include Davis, Richmond, Berkeley, San Carlos, Belmont, and Oceanside. A matrix is being prepared to outline the regulations, but won’t be available until the day of the meeting. As an example of one approach, however, Berkeley’s ordinance characterizes WCFs as a commercial use that are not generally appropriate on a residential parcel, unless a) the City is required to permit them in such locations in order to avoid violating the Telecommunications Act of 1996, and b) the wireless communications facilities are designed to interfere as little as possible with the character of the neighborhood. Consultants to the City and staff will speak to some of those regulations and, in some cases, the outcome of litigation associated with those regulations.

Fiber to Premises
City Utilities staff is currently developing a conceptual plan for expanding the City’s fiber optics network for broadband services. Phase One of the plan involves preparation of a feasibility study by the City’s telecommunications engineering consultant (Columbia Telecommunications Corp.), for using nine electric substation properties as fiber optic and wireless access points. The fiber optics system, when completed, may provide a supplemental approach to enhancing wireless communications facilities and at least limiting the need for as many WCFs. There may be an opportunity in the future for City of Palo Alto Utilities (CPAU) to license dark fiber to
vendors that build outdoor Distributed Antenna Systems (DAS) to improve coverage for wireless carriers. Staff of the Utilities Department will be available at the meeting if the Council wishes more information.

Comprehensive Strategy

The competitive and proprietary nature of the wireless communications industry, as well as the fact that WCF needs are evolving as users increase, makes it difficult to plan in a comprehensive manner for WCFs. Nevertheless, there are several short-term steps the City may consider implementing to more systematically analyze proposals and to facilitate collocation of antenna facilities. Some of these steps might require providers to:

- Submit, prior to or upon application, a coverage needs map demonstrating gaps in coverage and how the proposed facility will fill such gaps
- Show the location of all existing wireless communication facilities (even those that they don’t own) and indicate why they cannot collocate on those facilities.
- Produce modeling analysis for RF emissions located as close as practical to the nearest residence or school active use area to demonstrate compliance with emissions standards, including cumulative emissions from all sources.
- Monitor RF emissions annually and submit a report for the first five years after installation, again accounting for ambient emissions.
- Pay the cost of the City retaining qualified third party consultants to review the technical issues associated with the application, including coverage analysis and RF emissions modeling.

The City could, for its part, produce a map and/or list, for any provider upon submittal of its coverage needs, that outlines all City-owned sites (other than parks) within that ring, and/or maps of all sites zoned for Public Facilities (PF). Although the City could not require providers to locate WCFs in PF zones or lease land from the City, this step could give providers more options to consider and evaluate outside of residential zones.

Staff appreciates Council input on all of these issues and suggestions for proceeding with a more comprehensive approach to the analysis and planning of WCFs.

Resource Impact

Applications for Conditional Use Permits (CUPs) and/or Architectural Review are submitted by carriers for all WCF installations. Flat fees are currently charged for WCF entitlements. Staff estimates that the cost of processing some of these applications, given the level of neighborhood concern and difficulty in getting complete information to be submitted by applicants, is not adequate to cover staff (and consultant, if needed) costs. Staff is therefore proposing a cost recovery deposit for WCF CUPs in this year’s fee schedule changes. A cost recovery deposit establishes a fund for a project against which staff or consultant charges are deducted to assure all costs are borne by the applicant. This system is already in place for many of the City’s major permit applications.
Staff has not yet undertaken a comprehensive strategy to prepare for future DAS proposals or other new technology, and has not included within the FY11/12 budget any funding for additional research or preparation of a comprehensive strategy or revision to the existing WCF ordinance. Should the Council direct further efforts, staff would assess the fiscal impacts and return with a budget amendment if necessary.

The City of Palo Alto is also paid by providers to locate on City property. The City receives approximately $15,000 to $20,000 per year on those sites from carriers who lease or have a license to use a public facility for a WCF.

**COURTESY COPIES**

**ATTACHMENTS:**

- Attachment A: Wireless Communications FAQs (PDF)
- Attachment B: WCF List by Type (XLS)
- Attachment C: WCF Location Map (PDF)
- Attachment D: Wireless Communication Facilities, PAMC 18.42.110 (PDF)
- Attachment E: Correspondence to Council (PDF)

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City of Palo Alto
Wireless Communications
Frequently Asked Questions

1. **What are the different types of wireless communications facilities and what do they do?**

   Commercial mobile radio services (CMRs) fall under the regulatory scope of the Federal Telecommunications Act (TCA) of 1996. The term “CMRs” covers traditional cellular services and newer broadband personal communications services and narrowband PCs as well as wireless point-to-point and point-multipoint services, common carrier microwaves and paging services. The types of CMRs that are of particular interest to Palo Alto currently include:

   a) **Macrocell (pole and building mounted) antenna sites** – A **macrocell** provides the largest area of coverage within a mobile network. Its antennas can be mounted on ground-based masts, rooftops or other structures and must be high enough to avoid obstruction. Macrocells provide radio coverage over varying distances, depending on the frequency used, the number of calls and the physical terrain. Typically they have a power output in tens of watts.

   The most common cellular sites in past and present applications and installations are referred to as “macro” cell sites, which include antenna facilities on poles (hidden or not) and on buildings. A single directional antenna can typically provide wireless communication service to an area encompassing a ½-mile radius (a coverage “ring”), though that area may be reduced by topography or other factors. Coverage rings are established with a slight overlap to avoid coverage gaps. Antennas are generally two to four feet tall placed on a pole (monopole, flagpole, inside a steeple, or faux tree, etc.) or mounted on the side or top of a building (see attached photos). Co-axial cable and service equipment is typically located at the pole’s base, within a fenced enclosure. In some instances, two or more telecommunications service providers (“carriers”) can mount antennas to the same pole (called “collocation”) or on a rooftop. On a pole or faux tree, a 10-foot separation is typically needed between each carrier’s antenna. Macro sites are generally preferred by carriers over other installations because of their broader coverage area and reduced maintenance for one site rather than many (see discussion of DAS below).

   b) **Microcell antenna sites and DAS** - **Microcells** provide additional coverage and capacity in areas where there are high numbers of users, urban and suburban areas, for example. The antennas for microcells are mounted at street level, are smaller than macrocell antennas and can often be disguised as building features so that they are less visually intrusive. Microcells provide radio coverage over distances – typically between ¼ mile and 2/3 mile – and have lower output powers than macrocells, usually a few watts.

   Carriers sometimes choose to use a “microcell” antenna arrangement in lieu of the macrocell antennas. These smaller multiple antenna locations may be appropriate when the firm either has difficulty finding an agreeable property owner on a site adequate to install a pole or building mounted antenna, or when topography limits the coverage of a macrocell installation, or when the microcell installations are less intrusive visually or in a neighborhood than a larger installation. One type of microcell installation, referred to as an Outdoor Distributed Antenna System (DAS), is currently proposed for several locations in Palo Alto. The DAS antennas are typically located on utility poles in public rights-of-way (see attached photos). The poles usually have a height of 34 feet above grade (6 feet of the 40 foot pole is located below grade). The DAS generally
requires 5 to 15 times the number of antennas as one macrocell antenna to cover the same ½-mile service area. The coverage rings for each antenna are again situated to provide some overlap to ensure coverage is consistent and calls are not dropped in the transition area between DAS locations. Antennas are placed at the top of the utility pole in a single pole or double pole arrangement (see attached photos). Antennas may be shared (“neutral host”) by multiple carriers rather than needing installation of separate antennas for each carrier collocating on a macrocell installation. Equipment boxes are needed for each carrier, usually shoe-box size enclosures in the “telecommunications zone” of the pole approximately between 18.5’ and 22’ above grade. The advantages of the DAS system are that the poles are usually shorter and are existing, and radiofrequency (RF) emissions are reduced, while the disadvantages are that the number of installations increases and the antennas and equipment boxes can still be visible, depending on the screening of the pole and the design of the antenna.

c) Indoor microcell sites: - **Picocells** provide more localized coverage. These are generally found inside buildings where coverage is poor or where there is a dense population of users such as in airport terminals, train stations and shopping centers. Picocells are generally for a building owner or tenant to serve its company’s needs inside the building, including for business customers, such as the wireless service available inside Starbucks locations. **Femtocell** base stations allow mobile phone users to make calls inside their homes via their Internet broadband connection. Femto-cells provide small area coverage solutions operating at low transmit powers.

d) **WiFi**: WiFi, an abbreviation for “wireless fidelity,” is a brand name for wireless networking technology based on IEEE 802.11 technology standards. Wi-Fi is used to link devices together, as well as to local area networks and the Internet through a variety of service providers. Wi-Fi is widely used in homes, businesses and school campuses, as well as public hotspot locations, such as cafes, hotels, airports and train stations. Wi-Fi can even be found installed on street lights, utility poles and aerial cable TV lines. Skyrocketing data usage on mobile networks is forcing the Wi-Fi issue; for consumers, Wi-Fi means faster download speeds on their mobile devices, and for Carriers, it is a method to reduce mobile network congestion while avoiding expensive cell site expansions. A recent example of this project type was for the Hotel President, 488 University Avenue where to WiFi antennas were approved.

2. Why are an extensive number of cell site applications in process or expected in the near future?

   Wireless providers are ramping up to address two primary concerns: capacity (particularly for data) and speed (3G and 4G). The extent of data demand for smartphones and tablets is rapidly diminishing the capacity of the wireless system, so most carriers are expanding to increase their ability to provide data services. Palo Alto has unique coverage capacity needs due to the student population, high tech companies in the Stanford Research Park and downtown, and the general high level of tech sophistication in the community. The 4G and other speed upgrades also demanded by customers is further driving requests for new or upgraded installations. Areas of coverage gaps are identified by carriers to determine where new facilities are needed. To satisfy its coverage needs in Palo Alto, for example, AT&T targeted 14 cell tower locations last year before approaching the City with applications and evaluating the DAS alternative. AT&T has since dropped six of the macrocell locations, to be replaced by its DAS proposal for antennas on more than 90 utility poles. Other wireless providers, such as T-Mobile and Verizon, are also expected to approach the City for multiple new installation locations or collocations.
3. **What criteria are set forth in the City’s Comprehensive Plan and Zoning Ordinance related to wireless communications facilities?**

The City’s Comprehensive Plan does not speak directly to wireless communications facilities. Comprehensive Plan Policy B-13, however, notes that the City should: “Support the development of technologically advanced communications infrastructure and other improvements that will facilitate the growth of emerging telecommunications industries.” Other Comprehensive Plan policies are directed in general at protection of visual quality and neighborhood character of the Palo Alto community.

Palo Alto Municipal Code Chapter Section 18.42.110 sets forth regulations for wireless communications facilities (WCF) in Palo Alto. The purpose statement specifies that WCFs should blend with existing surroundings and that building mounted WCFs and collocation facilities are preferred and encouraged. Each project is required to meet standard zoning requirements for the district with exceptions considered through the conditional use permit or architectural review processes outlined below. Exceptions include: (1) building mounted WCFs may extend 15 feet beyond the permitted building height in the zone; (2) stand-alone WCFs shall be no taller than 65 feet; and (3) stand-alone WCFs may encroach into the interior/street side and rear setback. In addition, the design of antennas must: (1) minimize visibility off site and be of “stealth” design; and (2) be architecturally compatible with the existing building (for building mounted antennas). There are also requirements for the associated equipment cabinets and enclosures and for removal of abandoned equipment.

4. **What review processes are required for each and which departments are involved?**

PAMC Section 18.42.110(b) describes the review procedures for planning entitlements required for Wireless Communication Facilities (WCFs). A Conditional Use Permit (CUP) and Architectural Review are required for new WCFs, except that no CUP is required for building mounted WCFs that do not exceed the existing building/rooftop screening height, and for collocated facilities (architectural review is still required). To amend an existing CUP for a location to allow the expansion of a WCF, both a CUP and Architectural Review are required. The CUP process typically involves notice to neighbors, an opportunity to request a hearing before the Planning and Transportation Commission, and a final determination by City Council. WCFs must be installed and maintained in accordance with all the City’s regulations (Planning, Building, Fire, Public Works, Utilities Departments) and with Federal Communications Commission (FCC) regulations to ensure the WCFs will not be detrimental to public health, safety, and welfare. In addition to discretionary review, Building Permits, including associated electrical permits, must be obtained. For installations on utility poles, appropriate approvals from the Utilities Department are required, and Encroachment Permits issued by Public Works may be necessary for work in a public right of way. License agreements may also be required.

5. **Can the City require the wireless communications carriers to provide plans for all facilities in the City over some future period, such as one or two years?**

The carriers are very guarded with their plans for potential cell sites and generally consider them to be proprietary information. In 2010, City staff was involved in discussions organized by Joint Venture Silicon Valley, involving most of the relevant carriers and staff from the cities of Palo Alto and San Jose. Staff strongly suggested that such plans would be helpful to provide context and to better understand the carriers’ needs. To date, only one carrier has met with staff to explain their plans for
the next year. Staff does not believe that the industry would put together a map synthesizing the needs of all of the carriers, though.

6. **What review timelines are required by state or federal law for City review?**

Under federal law, applications for new cell towers (CMRs) must be approved or denied within a 150-day review period. In contrast, applications that involve the collocation of wireless facilities are subject to a 90-day review period. The period of review may be reasonably extended under certain terms, for example if the Director of Planning and Community Environment first determines that the application for a new facility is incomplete, or if the applicant agrees to extend the timeline.

7. **What purview does the City have to deny or limit the use of telecommunications facilities?**

The City has the ability to regulate aesthetic issues related to telecommunications facilities, including factors such as height and setback. However, under federal law a local agency’s wireless siting decisions cannot have the effect of prohibiting the provision of wireless service or unreasonably discriminating among wireless service providers. If a proposed facility is necessary to eliminate a significant service gap in wireless coverage, and the applicant can demonstrate that the proposed facility is the least intrusive feasible means of reducing the coverage gap, denial of the facility will be considered an effective prohibition. Under federal law the City may not regulate the placement, construction or modification of wireless communications facilities on the basis of the environmental effects of radio frequency (RF) emissions, so long as the facilities comply with the FCC regulations concerning such emissions.

8. **What are radiofrequency emissions (RF)?**

Electromagnetic radiation consists of waves of electric and magnetic energy moving together (i.e., radiating) through space at the speed of light. Taken together, all forms of electromagnetic energy are referred to as the electromagnetic “spectrum.” Radio waves and microwaves emitted by transmitting antennas are one form of electromagnetic energy. They are collectively referred to as "radiofrequency" or "RF" energy or radiation. Extensive information about RF emissions, measurements and standards are available at: [http://www.fcc.gov/oet/rfsafety/rf-faqs.html#Q1](http://www.fcc.gov/oet/rfsafety/rf-faqs.html#Q1). Probably the most important use for RF energy is in providing telecommunications services. Radio and television broadcasting, cellular telephones, personal communications services (PCS), pagers, cordless telephones, business radio, radio communications for police and fire departments, amateur radio, microwave point-to-point links and satellite communications are just a few of the many telecommunications applications of RF energy. Microwave ovens are an example of a non-communication use of RF energy. Other important non-communication uses of RF energy include radar and industrial heating and sealing. There are also a number of medical applications of RF energy, such as diathermy and magnetic resonance imaging (MRI). [source: FCC]

9. **What health risks are associated with radiofrequency (RF) emissions?**

RF energy is a type of non-ionizing radiation, like visible and infrared light. Non-ionizing radiation is low energy and should not be confused with the high-energy ionizing radiation, which has several possible biological effects.

The quantity used to measure the rate at which RF energy is actually absorbed in a body is called the "Specific Absorption Rate" or "SAR." It is usually expressed in units of watts per kilogram (W/kg) or milliwatts per gram (mW/g). It is possible for biological effects to result from exposure to RF
energy, most commonly heating of tissue by RF, commonly referred to as "thermal" effects. Exposure to very high RF intensities can result in heating of biological tissue and an increase in body temperature. Tissue damage in humans could occur if RF levels were high enough to create heat so excessive that could not be coped with or dissipated by the human body.

At relatively low levels of exposure to RF radiation, i.e., levels lower than those that would produce significant heating, the evidence for production of harmful biological effects is ambiguous and unproven. Such effects, if they exist, have been referred to as "non-thermal" effects. Even in studies where certain effects have been found, there has been no determination that such effects constitute a human health hazard. It is generally agreed that further research is needed to determine the generality of such effects and their possible relevance, if any, to human health. In the meantime, standards-setting organizations and government agencies continue to monitor the latest experimental findings to confirm their validity and determine whether changes in safety limits are needed to protect human health.

Studies have shown that environmental levels of RF energy routinely encountered by the general public are typically far below levels necessary to produce significant heating and increased body temperature. [source: FCC]

10. What health standards have been established for radiofrequency (RF) emissions?

Exposure standards for radiofrequency energy have been developed by various organizations and countries. These standards recommend safe levels of exposure for both the general public and for workers. In the United States, the Federal Communications Commission (FCC) has adopted and used recognized safety guidelines for evaluating RF environmental exposure since 1985. Federal health and safety agencies, such as the EPA, FDA, the National Institute for Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA) have also been involved in monitoring and investigating issues related to RF exposure.

The FCC guidelines for human exposure to RF electromagnetic fields were derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurements (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). Both the NCRP exposure criteria and the IEEE standard were developed by scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The exposure guidelines are based on thresholds for known adverse effects, and they are intended to incorporate prudent margins of safety (typically 50 times the threshold level). In adopting the most recent RF exposure guidelines, the FCC consulted with the EPA, FDA, OSHA and NIOSH, and obtained their support for the guidelines that the FCC is using.

In addition, the NCRP and IEEE guidelines for maximum permissible exposure are different for different transmitting frequencies. For devices that only expose part of the body, such as mobile phones, different exposure limits are specified. The exposure limits used by the FCC are expressed in terms of SAR, electric and magnetic field strength and power density for transmitters operating at frequencies from 300 kHz to 100 GHz. The actual values can be found in either of two informational bulletins available at the FCC Web site (OET Bulletin 56 or OET Bulletin 65)." [source: FCC]

11. Does the City have to allow use of its utility poles and the public right-of-way?

California law permits qualified telephone corporations to install wireless communication facilities within the public right of way, although the City can adopt reasonable time, place and manner
regulations for these installations. To minimize neighborhood impacts, the City’s policy is to encourage co-location on existing utility poles, rather than installation of new poles.

12. Must the City allow use of City lands (fire stations, community centers, parks, etc.) for wireless telecommunications facilities? What is the process?

No, the City does not have to provide use of City lands for telecommunications facilities, and may do so on its own terms. City sites, however, are often large enough to accommodate these uses with less visual impact than on other sites. The City may also receive revenue from leasing sites for telecommunications use. There are currently six active leases of City land for wireless telecommunications purposes: two flagpoles on fire station sites, one faux tree on a fire station site, and three ground spaces at the Colorado electric substation site (the antennas are on PG&E antenna towers). The review of such requests is coordinated by the Real Estate Division of the Administrative Services Department. The request is routed to the appropriate departments for review, and is processed by Planning if a use permit or architectural review is required. The lease or license agreement is then provided to Council for its review and approval.

The Palo Alto Municipal Code prohibits commercial for-profit communications facilities in City parks and open space areas.

13. What can the City require in license agreements for use of City utilities/facilities?

The City’s master license agreement permits cellular carriers and DAS systems service providers to access and use City utility poles, streetlight poles and conduit facilities in the public rights-of-way and public utility easements for the placement of wireless communications facilities. The agreement covers a number of general terms and conditions applicable to the right of service providers to place their facilities in, on and about City-owned and City-controlled facilities, including conditions relating to permit applications, fees and costs, facilities construction, installation, maintenance, repair and relocation, and indemnity, insurance and bonding requirements.

14. What can the City charge for use of City utility poles or City lands?

The City may charge reasonable rates for the use of City owned utility poles and facilities in the public rights-of-way. While rates may be negotiated, they must be competitively neutral and nondiscriminatory. The City may also charge a permit fee for the placement, installation, repair or upgrading of lines poles or antennae. Under California law, these fees may not exceed the reasonable cost of providing the service for which the fee is charged.

15. If antennas are mounted on City utility poles, can the City require their removal if other utilities are placed underground?

Upon the formation of an underground utility district, the City can require all above-ground facilities located on utility poles to be relocated underground or elsewhere.

16. What is a “fiber optic” network and how could that support wireless communications and/or reduce the need for cell towers or distributed antenna systems?

“Fiber optics” (optical fibers) are long, thin strands of very pure glass about the diameter of a human hair that carry digital information over long distances.
“Fiber-to-the-home” broadband connections, or FTTH broadband connections, refer to fiber optic cable connections for individual residences. Such optics-based systems can deliver a multitude of digital information -- telephone, video, data, et cetera -- more efficiently than traditional copper coaxial cable. FTTH (also known as Fiber-to-the-Premise FTTP) can be deployed by using either Active Optical Network (AON) or Passive Optical Network (PON) architectures to function.

“Dark fiber” is a term used to describe unlit fiber optic cable that is being leased or is not being used at the time. The amount of dark fiber, particularly in the United States, is very high. Dark fiber is contrasted with active fiber optic cable, often referred to as “lit” fiber. It’s “dark” because it’s sold without light communications transmission. The user is expected to put his or her own electronics and signals on the fiber and make it light.

Fiber optic cables are usually discussed in relation to the telephone system, the cable TV system or the Internet. One use of a fiber optic network is to provide high speed Internet access to its customers. Fiber optic cables push out data at high transmission rates (e.g., megabits per second “Mbps” or gigabits per second “Gbps”) enabling the uses of fiber optic services to surf the Internet or download files at amazingly high speeds. Many of the City’s commercial dark fiber customers gain access to the Internet through the Palo Alto Internet Exchange (PAIX, now known as Equinix). PAIX is a carrier-neutral collocation facility that hosts more than 70 Internet Service Providers (ISPs) at its facility in downtown Palo Alto.

The Fiber network, where available, may in some cases be preferable to other wireless communications approaches. Distributed Antenna Systems (DAS) technology employs multiple antennas placed atop utility poles alongside a road or highway to provide coverage to vehicles on the road and to nearby neighborhoods adjacent to the road. DAS technology is used when a carrier seeks to provide coverage to a particular area and there are no feasible locations in the area where a new cellular-tower can be constructed. DAS requires a communication link (fiber connection) to “backhaul” traffic to a wireless carrier’s network hub site and this fiber connection could be provided by the City. DAS technology is reliant on having the fiber connection to work effectively. With the introduction of DAS installations, the need for macrocell antenna sites may be reduced for a particular carrier.
Examples of Wireless Macrocell Antennas

Building Mounted

Church Steeple

Faux Tree

MonoPole
Distributed Antenna System (single rod) installation in San Francisco

Simulated Distributed Antenna System/DAS (double antenna) Installation
<table>
<thead>
<tr>
<th>Site Address</th>
<th>Type of Installation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 Alma</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>1082 Colorado St</td>
<td>Utility lattice tower</td>
<td>existing</td>
</tr>
<tr>
<td>1095 Channing</td>
<td>Tree pole (proposed)</td>
<td></td>
</tr>
<tr>
<td>1501 Page Mill Rd</td>
<td>Monopole</td>
<td>existing</td>
</tr>
<tr>
<td>1985 Louis Rd</td>
<td>Monocross</td>
<td>existing</td>
</tr>
<tr>
<td>200 Page Mill Rd</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>2047 Bayshore</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>2300 Geng Rd</td>
<td>Utility lattice tower</td>
<td>existing</td>
</tr>
<tr>
<td>260 Sheridan</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>2666 E Bayshore Rd</td>
<td>Silo</td>
<td>existing</td>
</tr>
<tr>
<td>2675 Hanover St</td>
<td>Tree pole</td>
<td>existing</td>
</tr>
<tr>
<td>2701 Middlefield Rd</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>300 Pasteur Dr</td>
<td>Rooftop</td>
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</tr>
<tr>
<td>3000 Alexis</td>
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<td>existing</td>
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<tr>
<td>3141 Maddux Dr</td>
<td>Utility lattice tower</td>
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</tr>
<tr>
<td>3401 Hillview Ave R-7</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>3431 Hillview</td>
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</tr>
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<td>345 Hamilton Ave</td>
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<td>existing</td>
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<tr>
<td>3475 Deer Creek Rd</td>
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<td>existing</td>
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<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>3600 Middlefield</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>3672 Middlefield Rd</td>
<td>Monopine (Proposed)</td>
<td></td>
</tr>
<tr>
<td>3862 Middlefield</td>
<td>Monopine</td>
<td></td>
</tr>
<tr>
<td>3990 El Camino Real</td>
<td>Tree pole</td>
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</tr>
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<td>4009 Miranda</td>
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<tr>
<td>4243 Manuela</td>
<td>Monopine</td>
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<td>4249 El Camino Real</td>
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<td>488 University</td>
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<td>Approved 4/4</td>
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<td>525 University Ave</td>
<td>Rooftop</td>
<td>existing</td>
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<td>531 Stanford Ave</td>
<td>Rooftop</td>
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</tr>
<tr>
<td>695 Arastradero Rd</td>
<td>65' Monopole</td>
<td>existing</td>
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<tr>
<td>711 Colorado</td>
<td>Monopole</td>
<td>existing</td>
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<tr>
<td>724 Arastradero</td>
<td>Rooftop</td>
<td>existing</td>
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<td>850 Webster St</td>
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<td>existing</td>
</tr>
<tr>
<td>855 El Camino Real</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>900 Blake Wilbur</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>Junipero Serra Blvd &amp; Stanford Ave</td>
<td>Light pole</td>
<td>existing</td>
</tr>
<tr>
<td>Page Mill Rd and Foothill Exp</td>
<td>Monopole</td>
<td>existing</td>
</tr>
<tr>
<td>799 Embarcadero</td>
<td>Rooftop</td>
<td>existing</td>
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<tr>
<td>724 Arastradero</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>760 Porter</td>
<td>Rooftop</td>
<td>existing</td>
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<tr>
<td>3000 El Camino</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>675 El Camino</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
<tr>
<td>2595 E. Bayshore</td>
<td>Rooftop</td>
<td>existing</td>
</tr>
</tbody>
</table>
18.42.110 Wireless Communication Facilities

(a) Purpose

The purpose of this section is to accommodate continued improvements to wireless communications while minimizing visual impacts of such development. Wireless communication facilities (WCF) are permitted subject to architectural review and/or a conditional use permit for placement and design of the antennas and related equipment to provide for facilities that blend with the existing surroundings. Building mounted WCF and co-location facilities are preferred and encouraged, subject to all other provisions of this section.

(b) Review Procedure

For projects proposed on a historic structure/site, as designated by Chapter 16.49, historic review is required in addition to the architectural review and/or conditional use permit.

A conditional use permit and architectural review are required for:

1. Projects that are located on a residentially zoned parcel;
2. Projects that are located on a parcel with residential use;
3. Projects that are a stand alone wireless communication facility;
4. Building-mounted projects that exceed the existing height of the building/roof-top screening; or
5. An existing wireless communication facility that is modified from the original CUP approval (e.g. size, location, capacity, landscaping, etc.).

Architectural review, but no conditional use permit, is required for:

1. Building-mounted projects that do not exceed the existing building/roof-top screening height;
2. Building-mounted projects on a planned community (PC) zoned site that do not exceed the existing building/roof-top screening height; all other project types require a PC amendment; or
3. Co-location facilities.

(c) Development Standards and Exceptions

Each proposed project shall meet the standard zoning requirements for the zone district in which it is located. The following development exceptions may be considered and approved in conjunction with the required review process:

1. Building-mounted WCF may extend 15 feet beyond the permitted building height in the zone.
2. Stand alone WCF shall be no taller than 65 feet.
3. Stand alone WCF may encroach into the interior/street side and rear setback.

(d) Equipment Cabinets and Enclosures

1. Shall utilize the smallest footprint possible;
(2) Shall be designed to minimize overall height, mass, and size;

(3) Shall be screened from public view;

(4) Shall be architecturally compatible with the existing site; and

(5) Shall not be placed in a location that removes required landscaping or reduces landscaping to a level of noncompliance.

(e) Antenna Design

(1) Antennas shall be designed to minimize visibility offsite and shall be of a "stealth" design; and

(2) Building-mounted antennas shall be architecturally compatible with the existing building.

(f) Removal of Abandoned Equipment

Wireless communication facilities, or any components of a facility, that are no longer in use shall be removed by the applicant, service provider, or property owner within three months of the termination of use. No new permit shall be issued to a carrier if that carrier has not removed abandoned equipment.

(Ord. 4934 § 4 (part), 2007)
May 10, 2011  
City Council, City of Palo Alto  
Palo Alto, CA  

Dear City Council, City of Palo Alto,  

Please approve AT&T's plan for wireless upgrades in my neighborhood. As a disabled person, it is especially important for me to have good coverage so I can call for help if needed. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind.

Sincerely,

Joanie Schug  
965 Colonial  
Palo Alto, CA 94303-3727
May 9, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

Sincerely,

ShareThis, Inc.
250 Cambridge Avenue
Suite 103
Palo Alto, CA 94306-1549
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

As a Silicon Valley resident, I ask you to please consider AT&T's plans to improve its wireless coverage in the area. Our community thrives on the ability to communicate and do business from city to neighboring city. Without consistent wireless coverage throughout the entire Silicon Valley, we lose our competitive edge as technology leaders. Please help improve the way Silicon Valley does business!

Sincerely,

Peter Himes
2302 Webster St
Palo Alto, CA 94301-4055
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

Frank G. McCarthy
1440 S. California Ave
Palo Alto, CA 94306-1219
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

I can't even make a call in front of Steve Jobs house!

Sincerely,

Jeff Jahnke
P.O.Box 402
Menlo Park, CA 94026-0402
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T’s plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T’s improving my ability to make and receive calls in our community. AT&T’s improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency.

Sincerely,

Abraham and Linda Lui
3683 La Donna Ave
Palo Alto, CA 94306-2745
Minor, Beth

From: shorebird10@gmail.com
Sent: Friday, May 06, 2011 2:09 PM
To: Council, City
Subject: Signals for safety

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T's plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency.

HELP MAKE MY iPHONE WORK! (Community Center)

Sincerely,

Gordon Poulson
1302 Greenwood Ave
Palo Alto, CA 94301-3414
Minor, Beth

coryam2002@gmail.com
Friday, May 06, 2011 2:09 PM
Council, City
Better coverage for Palo Alto

May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Cory Morgenthaler
3478 Rambow Dr
Palo Alto, CA 94306-3638
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T’s plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

It is frustrating not being able to call or receive calls on the cell phones at home in Palo Alto, and that Internet connection is slower than other bay area locations. I fully support AT&T to improve the signal strength.

Sincerely,

Cathy Hsiao
781 Newell Road
Palo Alto, CA 94303-2850
Minor, Beth

From: jjpark@apple.com
Sent: Friday, May 06, 2011 1:59 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

For active business operations, I need to have better coverage of AT&T network in Palo Alto. I actively use AT&T wireless network, and the coverage of AT&T wireless network has been very poor in Palo Alto.

AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

JJ Park
549 Hilbar Ln
Palo Alto, CA 94303-3026
From: bob@goldins.com
Sent: Friday, May 06, 2011 1:59 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Robert Goldin
1219 Pitman Ave
Palo Alto, CA 94301-3052
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T's plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency.

Sincerely,

Richard A. Bautista
541 churchill ave
Palo Alto, CA 94301-3606
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As President of a non-profit organization in Palo Alto which employs 60 individuals, many of whom have AT&T iPhones, I must report that signal quality in Palo Alto is dreadful. AT&T wants to invest in infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for our staff.

Samuel Gubins, Ph.D.
President & Editor-in-Chief
Annual Reviews
4139 El Camino Way
Palo Alto, CA 94306

Sincerely,

Samuel Gubins
4139 El Camino Way
Palo Alto, CA 94306-4010
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T's plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency.

Sincerely,

ANN KALAR
418 COLERIDGE AVE
PALO ALTO, CA 94301-3609
Minor, Beth

From:  steven-chanin@alum.mit.edu
Sent:  Friday, May 06, 2011 1:49 PM
To:  Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I live and work in Palo Alto. I currently experience very inconsistent wireless service in the area. This makes it hard to work and keep in touch with either friends or colleagues. Things would be substantially better if AT&T was allowed to expand their coverage & put up more towers in the area. My impression is that they are trying to do so, but are blocked by a small number of people whose concern over unlikely health or property impacts is outweighing the greater good of better wireless services for everyone.

Sincerely,

Steven Chanin
Development Leverage
857 Waverley St
Palo Alto, CA 94301-2740
May 6, 2011  
City Council, City of Palo Alto  
Palo Alto, CA  

Dear City Council, City of Palo Alto,  

Hello, I'm a big supporter of increase wireless coverage in Palo Alto! As a researcher, it's very important to stay connected while I am in meetings, and it doesn't hurt to be able to maintain connectivity while enjoying some of the nice spaces of Palo Alto. However, coverage needs to be improved, particularly with the modern demands for high bandwidth. 

Sincerely,  

Alexander Morgan  
411 College Ave, Apt B  
Palo Alto, CA 94306-1526
Minor, Beth

From: Ed Roseboom [eroseboom@gmail.com]
Sent: Friday, May 06, 2011 1:47 PM
To: Council, City
Subject: Help improve cell phone reception in Palo Alto

I live in midtown Palo Alto and would like to see the quality of cell phone reception improve. Reception at the corner of Middlefield and Loma Verde is barely ok but it becomes rather bad driving south on Middlefield towards San Antonio. I know there is some concern about placing a cell tower at the baseball field but I am all for the addition of the cell tower at that location!

Thanks for your attention,
Ed Roseboom
725 Loma Verde Ave
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Yonkel Goldstein
3713 Ortega Court
Palo Alto, CA 94303-4451
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T's plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency (being a Dad).

Sincerely,

Harald Nuhn
837 Cowper St.
Apt Q
Palo Alto, CA 94301-2867
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T’s plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

Ben Lenail
1221 Parkinson Ave
Palo Alto, CA 94301-3451
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T's plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency.

Sincerely,

Mark Priestley
1112 Hamilton Ave
Palo Alto, CA 94301-2216
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a homeowner, I am proud to live in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to live, shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Carol Diamond
175 Heather Lane
Palo Alto, CA 94303-3002
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Katrina Edwards
3101 Middlefield Road #2
Palo Alto, CA 94306-3039
Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

Sincerely,

Julia Ball
4151 El Camino Way
#E
Palo Alto, CA 94306-4061
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

Jim Heeger
1410 Arcadia Place
Palo Alto, CA 94303-2811
From: mjaunich@rocketmail.com
Sent: Friday, May 06, 2011 12:09 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Matt Jaunich
860 Lytton Avenue
Palo Alto, CA 94301-2121
Minor, Beth

From: rohit.sharma.mail@gmail.com
Sent: Friday, May 06, 2011 11:59 AM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

i hope you support ATT's plans to improve wifi and wireless coverage in Palo Alto. Faster bits = more innovation friendly environment and we cannot risk losing that in Palo Alto.

as a long time palo alto resident and entrepreneur, i count on fast data access everywhere and the city's shortsighted opposition on flimsy nimby grounds make our city less business friendly and less innovation friendly.

Sincerely,

rohit sharma
926 COWPER ST
PALO ALTO, CA 94301-2818
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

It is embarrassing (and ironic) to drop calls every time I drive past Hewlett Packard on Page Mill Road, considering that the Silicon Valley originated there. Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

Serdar Uckun
736 Layne Court
Palo Alto, CA 94306-3023
Minor, Beth

From: lpublicB@mac.com
Sent: Friday, May 06, 2011 11:59 AM
To: Council, City
Subject: Support infrastructure

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve their services in the area.

Sincerely,

Luigi
3375 Alma Street #260
Palo Alto, CA 94306-3518
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

Gary Hammer
861 Sharon Court
Palo Alto, CA 94301-3058
From: josho@stanford.edu
Sent: Friday, May 06, 2011 11:59 AM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Josh
915 CLARK WAY
PALO ALTO, CA 94304-2315
Minor, Beth

From: chris.zaharias@gmail.com
Sent: Friday, May 06, 2011 11:59 AM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve their services in the area!

Sincerely,

Chris Zaharias
1486 Kings Lane
Palo Alto, CA 94303-2836
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Joan Zwiep
2345 Byron Street
Palo Alto, CA, CA 94301-4010
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T's plan for wireless upgrades in my neighborhood. As both a resident and a business owner, I am proud to have invested in Palo Alto. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me the service I need to remain productive and connected. Not only will this improvement to service help keep me connected for business and to friends and family, but it will increase my confidence in my ability to communicate in the event of an emergency.

Sincerely,

Randy Popp
375 Monroe Dr
Palo Alto, CA 94306-4418
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Palo Alto is allowing the voices of a very small minority to overwhelm the masses. Does the City Council really believe that residents of Palo Alto shouldn't have high quality cellular service? There are parts of the world that barely have running water yet have wonderful cell coverage. It defies logic that the city continues to oppose the deployment of more cellular infrastructure. Please let common sense prevail. It is why you were elected.

Sincerely,

Scott Carter
1827 Cowper Street
Palo Alto, CA 94301-3806
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Mary Rodocker
355 Iris Way
Palo Alto, CA 94303-3042
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T’s plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

mila seamon
574 vista ave
palo alto, CA 94306-3210
Minor, Beth

From: meimeipan@aol.com
Sent: Friday, May 06, 2011 3:09 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Lynn Jacobson & R.M. Pan
334 whitman ct.
palo alto, CA 94301-2753

5/6/2011
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am no fan of AT&T but it's clear we need more wireless antennae in Palo Alto. Most of the time I get 2 bars but calls simply won't go through. When they do the other side can't hear me. For better or for worse, most people have AT&T as their wireless carrier, including the vast majority of iPhone users. Palo Alto businesses and residents have contributed greatly to the mobile web technology that we now depend upon to do business. It would be ironic if we are not able to take advantage of our own technology due to the lack of wireless antennae in Palo Alto.

Sincerely,

Michael Lin
307 Olmsted Rd
Palo Alto, CA 94305-7702
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

Recognizing that immediate neighbors sometimes object, we really do need better cell phone coverage in Palo Alto. Here, in the center of Silicon Valley, our city has coverage "dead zones" in the middle of town. That's not acceptable in this day and age. We do need to do what is in the best interests of the citizens overall.

Sincerely,

Blair Stewart
1580 Walnut
Palo Alto, CA 94303-2917
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

As a Palo Alto home owner since 1988, I am proud to live in this community. I love using iPhone and iPad and am a long term AT&T user. As the local coverage is so very bad I eagerly support any reasonable efforts by AT&T to improving wireless coverage.

Sincerely,

Andy Protter
185 North California Avenue
185 North California Avenue
Palo Alto, CA 94301-3912
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Give ATT cooperation on cell and wifi installs serving downtown PA. Its in the city's best interest to have full connectivity.

Sincerely,

Mark meltzer
228 Byron St
Palo Alto, CA 94301-1307
Minor, Beth

From: tsanami@gmail.com
Sent: Friday, May 06, 2011 3:58 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

Sincerely,

Takenori Sanami
1850 Sand Hill Rd #29
Palo Alto, CA 94304-2147

5/9/2011
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Thank you for your continued support of cell phone towers in Palo Alto. Quality of coverage is essential for public safety and business.

For many people, cell phones are their only connection to emergency services. For a specific example in business we have recently noticed people considering the quality of coverage in their decision on a restaurant for a business lunch.

Having watched the debates closely, every general objection to new cell phone towers has been well addressed. In fact, some of the base concerns are rationally addressed by better coverage and more towers. Aesthetics are a valid concern and the work of the planning commission is highly appreciated in this regard.

Please support improvements to the infrastructure in Palo Alto.

Sincerely,

Joe Caporaletti
3758 Grove Ave
Palo Alto, CA 94303-4536
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Mark Lennon
2690 Kipling St
Palo Alto, CA 94306-2425
Minor, Beth

From: gailannharper@yahoo.com
Sent: Friday, May 06, 2011 4:29 PM
To: Council, City
Subject: Better coverage for Palo Alto

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Gail Harper
4250 El Camino Real
C3232
Palo Alto, CA 94306-4406
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T's plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency.

Sincerely,

Theresa Anderson
71 Morton Way
Palo Alto, CA 94303-3035
Minor, Beth

From: beccavandyck@mac.com
Sent: Friday, May 06, 2011 5:49 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

Sincerely,

Rebecca Van Dyck
1528 College Ave
Palo Alto, CA 94306-1226
Minor, Beth

From: jcre_mail@yahoo.com
Sent: Friday, May 06, 2011 5:58 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Juan C. Rey
868 Warren Way
Palo Alto, CA 94303-3627

5/9/2011
May 6, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

Julie Nolan
2935 Waverley St.
Palo Alto, CA 94306-2441
Minor, Beth

From: kmnolan@kmnolan.net
Sent: Friday, May 06, 2011 5:59 PM
To: Council, City
Subject: Better coverage for Palo Alto

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Kenneth Nolan
2935 Waverley St.
Palo Alto, CA 94306-2441
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Tian Hong Li
4238-O Rickeys Way
Palo Alto, CA 94306-5906
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

Sincerely,

camilla olson
805 melville ave
palo alto, CA 94301-3444
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Peggy McCurdy
741 Ramona
Palo Alto, CA 94301-2548
Minor, Beth

From: sheintz@gmail.com
Sent: Friday, May 06, 2011 6:39 PM
To: Council, City
Subject: Better coverage for Palo Alto

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T’s plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Steven Heintz
800 High Street
#101
Palo Alto, CA 94301-2450
Please support AT&T's plans to improve their services in the area! If any area should be ahead of the technological curve, it should be us. The people saying, no cell tower at the church, no cell tower at the baseball field would do a quick turnaround if they ever needed cell phone service in an emergency. The arguments against their placement seem bogus.

From the American Cancer Society:

Public exposure to radio waves from cell phone tower antennas is slight for several reasons. The power levels are relatively low, the antennas are mounted at high above ground level, and the signals are transmitted intermittently, rather than constantly.

At ground level near typical cellular base stations, the amount of RF energy is thousands of times less than the limits for safe exposure set by the Federal Communication Commission (FCC) and other regulatory authorities. It is very unlikely that a person could be exposed to RF levels in excess of these limits just by being near a cell phone tower.

Some people have expressed concern that living, working, or going to school near a cell phone tower might increase the risk of cancer or other health problems. At this time, there is very little evidence to support this idea. In theory, there are some important points that would argue against cellular phone towers being able to cause cancer.

First, the energy level of radiofrequency (RF) waves is relatively low, especially when compared with the types of radiation that are known to increase cancer risk, such as gamma rays, x-rays, and ultraviolet (UV) light. The energy of RF waves given off by cell phone towers is not enough to break chemical bonds in DNA molecules, which is how these stronger forms of radiation may lead to cancer.

A second issue has to do with wavelength. RF waves have long wavelengths, which can only be concentrated to about an inch or two in size. This makes it unlikely that the energy from RF waves could be concentrated enough to affect individual cells in the body.

Third, even if RF waves were somehow able to affect cells in the body at higher doses, the level of RF waves present at ground level is very low -- well below the recommended limits. Levels of energy from RF waves near cell phone towers are not significantly different than the background levels of RF radiation in urban areas from other sources, such as radio and television broadcast stations.

For these reasons, most scientists agree that cell phone antennas or towers are unlikely to cause cancer.

Carol Gilbert
555 Byron St. #209
Palo Alto, CA 94301

5/9/2011
Minor, Beth

From: Sabb107@yahoo.com
Sent: Friday, May 06, 2011 8:29 PM
To: Council, City
Subject: Signals for safety

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please approve AT&T’s plan for wireless upgrades in my neighborhood. As an AT&T customer, I welcome AT&T's improving my ability to make and receive calls in our community. AT&T's improvements to wireless infrastructure will provide better coverage, and that gives me peace of mind. Not only will this service help keep me connected to friends and family, but it will also help me in the event of an emergency.

Sincerely,

Sabrina Ramirez
3980 El Camino Real # 23
Palo Alto, CA 94306-3326
Minor, Beth

From: myrmecophaga@gmail.com
Sent: Friday, May 06, 2011 8:59 PM
To: Council, City
Subject: Technology for Palo Alto

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

I live in Mountain View and work in Menlo Park. I commute through Palo Alto every day. Not to mention I shop in Palo Alto all the time.

The mobile cell phone coverage in Palo Alto is abysmal. It's the worst in the entire surrounding area. Really pathetic for being the epicenter of technology in the Bay Area.

Sincerely,

Gregory Frank
2342 Lida Drive
Mountain View, CA 94043-4210
Minor, Beth

From: cwehbe 2005@yahoo.com
Sent: Friday, May 06, 2011 9:09 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Cynthia Wehbe
1704 oak creek drive
Palo alto, CA 94304-2152
May 6, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a Silicon Valley resident, I ask you to please consider AT&T's plans to improve its wireless coverage in the area. Our community thrives on the ability to communicate and do business from city to neighboring city. Without consistent wireless coverage throughout the entire Silicon Valley, we lose our competitive edge as technology leaders. Please help improve the way Silicon Valley does business!

Sincerely,

Bernard Cooper
2554 Webster St
Palo Alto, CA 94301-4249
May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Kenneth Tracton
2611 South Court
Palo Alto, CA 94306-2462
Minor, Beth

From: kavanut@gmail.com
Sent: Saturday, May 07, 2011 7:59 AM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Paula Collins
1212 Fulton St
Palo Alto, CA 94301-3316
I am a resident in College Terrace, where cell phone coverage has been notoriously bad for a long time. ATT is willing to finally upgrade it's woefully under-capacity system. And we should support that effort.

And as a working professional in Palo Alto, I am constantly interrupted in my ability to serve my clients because of the lack of cell coverage.

Please use your influence to help ATT improve it's service in Palo Alto. We are the heart and lungs of Silicon Valley and need to have the technology in place to retain that moniker.

Thank you.

Ken Van Vleck
1535 College Avenue.
May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

Sincerely,

Patrick Heron
585 Ashton Ave.
Palo Alto, CA 94306-3608
May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T’s plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

You have been fooled once by a selfish property owner, don’t let it happen again.

Sincerely,

Gavin W. Carr
285 Walter Hays Dr.
Palo Alto, CA 94303-2927
May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Tim Mealiffe
290 Stanford Ave
Palo Alto, CA 94306-1144
May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a long time resident, it is really important that we expand the wireless infrastructure. The luddite approach that fears anything new needs to be overcome. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

David Olson
805 melville ave
palo alto, CA 94301-3444
Minor, Beth

From: wcchiu@newellrea.com
Sent: Saturday, May 07, 2011 2:58 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T's plans to improve their services in the area!

Sincerely,

Wei Chiu
228 Hamilton Ave
Suite 300
Palo Alto, CA 94301-2583

5/9/2011
May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Pierre Saslawsky
353 Addison Ave
Palo Alto, CA 94301-2706
Minor, Beth

From: davidgalpert@gmail.com
Sent: Saturday, May 07, 2011 7:09 PM
To: Council, City
Subject: Support infrastructure & support Palo Alto business!

May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto. As you may know, many businesses have left the area. AT&T wants to invest in revitalizing neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for reestablishing Palo Alto as the preeminent destination to shop, dine, and do business. Please support AT&T’s plans to improve their services in the area!

PLEASE...we need it!

Sincerely,

David Alpert
103 Tennyson Ave
Palo Alto, CA 94301-3734
May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

David Allen
1160 Fulton St
Palo Alto, CA 94301-3314
May 7, 2011
City Council, City of Palo Alto
Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T’s plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Kevin Mooore
1160 Channing Ave
Palo Alto, CA 94301-3020
Minor, Beth

From: doxsee@pacbell.net
Sent: Saturday, May 07, 2011 9:59 PM
To: Council, City
Subject: Better coverage for Palo Alto

May 7, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. While shopping and visiting friends in Palo Alto, I often find that the AT&T wireless signal is very weak. Also, it's very frustrating and ironic to have a business call dropped in downtown Palo Alto, near the birthplace of Silicon Valley.

From reading the Weekly, I learned that AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage. Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Tad Doxsee
848 Boyce Ave.
Palo Alto, CA 94301-3003
May 8, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Dear City Council-
My cell carrier is AT&T, and I am writing to ask you to approve their planned construction of additional cell transmission sites in Palo Alto. Like most Palo Alto residents, I depend on my cell phone, and improved coverage in Palo Alto would be very helpful.

Sincerely,

Francisco Leon
777 Addison Avenue
777 Addison Avenue
Palo Alto, CA 94301-3302
May 8, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

Bruce Greenwood
1656 Madrono
Palo Alto, CA 94306-1017
May 8, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I live on Alexis Drive and have some of the worst wireless coverage you can imagine. I use my cell phone for business and need it to stay in business and therefore collect sales tax for Palo Alto. AT&T has supplied me with a 'MicroCell' in order to alleviate the lack of coverage but it is of little use. Having more cell sites is the wave of the future as cell phones continue to proliferate and I, for one, certainly desire better coverage.

Please stay out of the way of progress in the guise of 'power levels' as that excuse is bogus. The person actually USING the phone is exposed to higher levels that a cell tower emits. Now that cell sites can be disguised as church steeples, trees and other designs there is no reason not to allow placement in Palo Alto.

Sincerely,

William Radcliffe
2930 Alexis Drive
Palo Alto, CA 94304-1301

5/9/2011
May 8, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I am an AT&T customer and Palo Alto resident. AT&T wants to make an investment in Palo Alto that will lead to improved wireless voice and data coverage in Palo Alto, and I am anxious to enjoy this improved coverage! Please support AT&T's plans, as access to great wireless coverage is vital to a thriving community like Palo Alto.

Sincerely,

William F. Abrams
437 College Avenue
437 College Avenue
Palo Alto, CA 94306-1525
May 8, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a Silicon Valley resident, I ask you to please consider AT&T's plans to improve its wireless coverage in the area. Our community thrives on the ability to communicate and do business from city to neighboring city. Without consistent wireless coverage throughout the entire Silicon Valley, we lose our competitive edge as technology leaders. Please help improve the way Silicon Valley does business!

Sincerely,

Jennifer Devine
134 Park Avenue
palo alto, CA 94306-1107
May 9, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

I live in a wireless black hole. While I have Verizon coverage in my house, I have very spotty ATT wireless. I strongly encourage you to support ATT’s applications to install additional wireless antennas in Palo Alto to provide adequate coverage. This is essential for me and my friends who have ATT cell phones. Wireless service is no longer an optional, but it would be nice to have a choice of carrier knowing that I would have adequate coverage where I live, shop and work. And right now, I don’t.

Sincerely,

Glenn Fisher
3854 Corina Way
Palo Alto, CA 94303-4508
May 9, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

Please support AT&T's plans to improve wireless and data coverage in Palo Alto. As leaders in innovative technology, Palo Altans deserve access to the cutting edge upgrades proposed by AT&T. With more and more people relying on cell phones and devices for everyday activity, these improvements in coverage will enhance safety as well as our work and social lives.

Sincerely,

Barbara Thompson, Ph.D.
3221 Waverley St
Palo Alto, CA 94306-2906
May 9, 2011
City Council, City of Palo Alto

Palo Alto, CA

Dear City Council, City of Palo Alto,

As a business owner, I am proud to have invested resources and provided jobs here in Palo Alto.

AT&T wants to invest in neighborhoods by adding infrastructure that is critical to improving wireless coverage. This would be a tremendous boost for keeping Palo Alto as the preeminent destination to shop, dine, and do business.

Please support AT&T's plans to improve their services in the area!

Sincerely,

Kevin Compton
737 Bryant Street
Palo Alto, CA 94301-2504