

**Complete Restricted  
Market Rental Appraisal  
for a new  
Telecommunications  
Site-Rental Schedule**

**May 18, 2009**

**Prepared For:  
Dan Pietropaulo  
Appraisal Section Manager  
Arizona State Land Department  
1616 West Adams  
Phoenix, AZ 85007**

**The Heath Group  
11403 West Bernardo Court  
San Diego, California 92127  
(858) 673-1177  
Fax (858) 673-8631**



FULL-SERVICE REAL ESTATE ANALYSIS

May 18, 2009

Mr. Dan Pietropaulo  
Appraisal Section Manager  
Arizona State Land Department  
1616 West Adams  
Phoenix, AZ 85007

Re: Telecommunications Site-Rental Schedule Update

Dear Mr. Pietropaulo:

In accordance with your request and authorization for a written restricted market-rental appraisal of 74 telecommunications sites under the jurisdiction of the Arizona State Land Department (ASLD), we hereby submit the following report which shows the methods used to arrive at the following rental rates. *(Note): This report is meant to be an update of a site-rental report prepared by this office in 2007. For the sake of this update, we have assumed that there have not been any significant changes to the inventory of the subject sites since that time.*

**The purpose and intended use of this report is to provide a telecommunications site-rental schedule based on market rents for ASLD. This schedule would then be used by ASLD (the intended user) for all new or renewing telecommunications-ground lease negotiations in the future.** The attached report includes supporting and pertinent data providing a background to describe in detail the information gathered and considered in arriving at our conclusion.

We certify that to the best of our knowledge and belief, the statements and opinions in this market survey report are correct, subject to the limiting conditions expressed. We further certify that this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice, especially Standard 6 as it relates to the preparation and reporting of a mass-appraisal assignment. Further, this report is prepared in compliance with the USPAP requirements and any special assumptions/conditions or requirements.

The following tables list our reconciled projected market rental rates for the various categories of sites under analysis.



FULL-SERVICE REAL ESTATE ANALYSIS

AVERAGE MONTHLY MINICELL RENTAL RANGES

(All uses)

Location Rating	USFS Rank	County	2007 Pop.	Television		AM/FM Radio		Cellular-PCS		MW Relay	
				Low	High	Low	High	Low	High	Low	High
Urban	Zone 2	Maricopa	3,072,149	\$3,200	\$3,800	\$1,800	\$2,100	\$1,600	\$1,900	\$1,300	\$1,500
Suburban	Zone 4	Pima	843,746	\$2,000	\$2,300	\$2,500	\$2,800	\$1,500	\$1,700	\$1,400	\$1,600
	Zone 6	Pinal	179,727	\$1,800	\$2,100	\$1,200	\$1,400	\$1,200	\$1,400	\$600	\$700
		Yavapai	167,517								
		Mohave	155,032								
		Yuma	160,026								
Cochise		117,755									
Coconino	116,320										
Zone 7	Navajo	97,470	\$1,000	\$1,200	\$700	\$800	\$1,000	\$1,200	\$500	\$600	
	Apache	69,423									
	Gila	51,335									
Rural	Zone 8	Santa Cruz	38,381	\$500	\$600	\$400	\$480	\$800	\$1,000	\$500	\$600
		Graham	33,489								
Zone 9	La Paz	19,715	\$200	\$400	\$180	\$300	\$500	\$800	\$300	\$480	
	Greenlee	8,547									

AVERAGE MONTHLY MACROCELL RENTAL RANGES

(All uses)

Location Rating	USFS Rank	County	2007 Pop.	Television		AM/FM Radio		Cellular-PCS		MW Relay	
				Low	High	Low	High	Low	High	Low	High
Urban	Zone 2	Maricopa	3,072,149	\$3,500	\$4,200	\$2,000	\$2,300	\$1,760	\$2,100	\$1,400	\$1,650
Suburban	Zone 4	Pima	843,746	\$2,200	\$2,500	\$2,750	\$3,100	\$1,650	\$1,870	\$1,540	\$1,760
	Zone 6	Pinal	179,727	\$2,000	\$2,300	\$1,300	\$1,500	\$1,300	\$1,500	\$700	\$800
		Yavapai	167,517								
		Mohave	155,032								
		Yuma	160,026								
Cochise		117,755									
Coconino	116,320										
Zone 7	Navajo	97,470	\$1,100	\$1,300	\$800	\$900	\$1,100	\$1,300	\$550	\$660	
	Apache	69,423									
	Gila	51,335									
Rural	Zone 8	Santa Cruz	38,381	\$550	\$660	\$440	\$500	\$880	\$1,100	\$550	\$660
		Graham	33,489								
Zone 9	La Paz	19,715	\$220	\$440	\$200	\$300	\$550	\$880	\$330	\$500	
	Greenlee	8,547									

(Note): 2007 population estimates for Arizona counties were the most recent data available from the US Census Bureau as of the date of this report. Therefore, we have used these estimates as the basis for the above location rankings.



FULL-SERVICE REAL ESTATE ANALYSIS

It has been a pleasure working with you. Due to the size and complexities involved in completing this market analysis, we understand that you might have questions after reviewing this report. If that is the case, we would be pleased to discuss any aspect of this assignment with you at your convenience.

Respectfully submitted,  
THE HEATH GROUP

Sean Heath  
AZ Certified General Appraiser  
#31525  
*Expires 3-31-2011*

Thomas D. Heath, MAI  
AZ Certified General Appraiser  
#31527  
*Expires 3-31-2011*

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## CERTIFICATION

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I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute, which include the *Uniform Standards of Professional Appraisal Practice*.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- As set forth in the Scope of Work, we have not agreed to visit every site involved in this assignment. We have, however, personally inspected over 60% of the sites and feel these inspections have given us enough background to complete this assignment for each of the use-types found in this survey.
- No one provided significant real property appraisal assistance to the person signing this certification.



Sean Heath  
AZ Certified General Appraiser  
#31525

## CERTIFICATION

---

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
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- No one provided significant real property appraisal assistance to the person signing this certification.
- As of the date of this report, I have completed the continuing education program of the Appraisal Institute.



Thomas D. Heath, MAI  
AZ Certified General Appraiser  
#31527

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## ASSUMPTIONS AND LIMITING CONDITIONS

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### GENERAL ASSUMPTIONS

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This appraisal has been made with the following General Assumptions:

- i. No responsibility is assumed for the legal description provided or for matters pertaining to legal or title considerations. Title to the property is assumed to be good and marketable, unless otherwise stated.
- ii. The property is appraised free and clear of any or all liens or encumbrances, unless otherwise stated.
- iii. Responsible ownership and competent property management are assumed.
- iv. The information furnished by others is believed to be reliable, but no warranty is given for its accuracy.
- v. All engineering studies are assumed to be correct. The plot plans and illustrative material in this report are included only to help the reader visualize the property. The appraiser has made no survey of the property.
- vi. The appraiser assumes that there are no hidden or unapparent conditions of the property, subsoil, or structures, which would render it more or less valuable. The appraiser assumes no responsibility for such conditions, or for engineering which might be required to discover such factors.
- vii. It is assumed that the property is in full compliance with all federal, state, and local environmental regulations and laws unless the lack of compliance is stated, described, and considered in the appraisal report.
- viii. It is assumed that the property conforms to all applicable zoning and use regulations and restrictions unless nonconformity has been identified, described, and considered in the appraisal report.
- ix. It is assumed that all licenses, certificates of occupancy, consents, and other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimated contained in this report is based.
- x. It is assumed that the use of land and improvements is confined within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in the report.

- x. On all appraisals, subject to satisfactory completion, repairs, or alterations, the appraisal report and value conclusions are contingent upon completion of the improvements in a workmanlike manner.
- xii. Disclosure of the contents of the appraisal report is governed by the bylaws and regulations of the professional appraisal organizations with which the appraisers are affiliated, or as determined appropriate by the State of Arizona.
- xiii. Access and adequate power will continue to be available to the subject sites. Should the State's tenants alter their improvements or power requirements, this may warrant a re-evaluation of the rental rates determined for each site.
- xiv. No specific inter-modulation problems exist on the site that cannot be remedied by the sites' users or adjacent users.

#### SUPPLEMENTAL STANDARD

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This report has been prepared in conformance with the State of Arizona Procurement Contract SCC050003-A4. We have performed this assignment in accordance with the current federal and Arizona statutes and Arizona Board of Appraisal rules related to the appropriate Uniform Standards of Appraisal Practice (USPAP).

#### ENVIRONMENTAL DISCLAIMER

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The value estimated is based on the assumption that the property is not negatively affected by the existence of hazardous substances or detrimental environmental conditions unless otherwise stated in this report. The appraiser is not an expert in the identification of hazardous substances or detrimental environmental conditions. The appraiser's routine inspection of and inquiries about the subject property did not develop any information that indicated any apparent significant hazardous substances or detrimental environmental conditions which would affect the property negatively unless otherwise stated in this report. It is possible that tests and inspections made by a qualified hazardous substance and environmental expert would reveal the existence of hazardous substances or detrimental environmental conditions on or around the property that would negatively affect its value.

#### AMERICANS WITH DISABILITIES ACT

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The Americans with Disabilities Act (ADA) became effective January 26, 1992. We have not made a specific compliance survey and analysis of this property to determine whether or not it is in conformity with the various detailed requirements of the ADA. It is possible that a compliance survey of the property together with a detailed analysis of the requirements of the ADA could reveal that the subject property is not in compliance with one or more of the requirements of the act. If so, this fact could have a negative effect upon the value of the subject property. Since we have no direct evidence relating to this issue, we did not consider possible noncompliance with the requirements of the ADA in estimating the value of the subject property.

## INTRODUCTION

Our assignment is to determine market rent for a total of 74 telecommunications sites under the jurisdiction of the Arizona State Land Department. To the best of our knowledge, the 74 sites to be considered break down as follows.

County	Telecommunications Use												
		Cellular/PCS	Private Mobile Comm	Governmentl	EMS	Common-carrier MW	Private MW	Passive Reflector	Low-Power Use	TV Broadcast	AM/FM	Cable TV	Satellite Radio
Gila	0												
Graham & Greenlee	1						1						
Maricopa	7	5					1				1		
Mohave	4	4											
Pima	9	2					5	1			1		
Pinal	10	7	1	1			1						
Santa Cruz	0												
Yavapai	11	1	1	2			1	1	2	3			
Yuma	0												
La Paz	0												
Navajo & Apache	4			1			2				1		
Cochise	24	6	2	1	3		8	1			2	1	
Coconino	4	2					2						
<b>Totals</b>	<b>74</b>	<b>27</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>0</b>

We understand that the purpose and intended use of this mass appraisal would be to estimate a unified rental-rate schedule that would encompass the varied categories of sites, locations, and tenant uses outlined in the above matrix. It is further our understanding that such a rate schedule, once developed, would be employed by the Arizona State Land Department (the intended user) as part of their internal evaluation of telecommunications facilities (both existing and proposed) within their jurisdiction.

In this report, we will outline the process used to arrive at a unified rental-rate schedule for the State Land Department's office. This process will include a classification of the 74 subject sites listed in the above table by location and size criteria.

In the first section of this report, we will provide an overview of the wireless industry, including definitions of terminology and descriptions of the common types of cell sites being developed and utilized at this time. Included in this overview will be a discussion of recent mergers and acquisitions among the top wireless carriers (including Sprint, Cingular, and Verizon) as well as a snapshot of the current state of telecommunications in the state of Arizona.

This overview will then lead into a brief description of the 74 subject sites. The information used to compile these descriptions was taken from on-site reviews of the State Land Department's lease files, interviews with lessees, and on-site inspections. Following the classification of these sites by location and by size will be the Valuation Analysis portion of our report. This section will consist of an analysis of other master-lease agreements or master-lease schedules used in other locations in Arizona, southern Nevada and California. Our analysis will also include a rental survey of individual telecommunications sites across the state of Arizona and southern Nevada.

## SCOPE OF WORK

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For this assignment, various resources were reviewed including:

- Review of Standard 6, which covers the development and reporting of mass appraisals, to ensure that our final product is in conformance with current USPAP standards.
- Details relating to the subject sites were obtained from our 2007 appraisal, and from information provided by the client. To the best of our knowledge, there have not been any significant material changes in the size or makeup of the subject sites.
- After all of the site-lease information was gathered, we organized and sorted the subject sites by location and size. Our location rankings were taken from classifications used by the California Department of Transportation (CalTrans) and were modified for use within an Arizona context. Similarly, we borrowed CalTrans' size categories (specifically, the terms "macrocell" and "minicell") and have redefined these terms to better describe wireless sites in Arizona.
- Once the subject sites have been organized by location and by size, we then compared each grouping of sites against available market data to determine reasonable fair market ground-rental rates.
- The sources we used for market data included the following: ASLD files (lessee contacts), LoopNet (an online leasing and sales database), Co-Star, Inc. (also, an online commercial leasing database), cold calling, and Fryer's Tower Source (an interactive online database of tower sites nationwide). Additionally, we referred to other lease comparables from our own appraisal files.

The resources we used to obtain market rental data have been listed below.

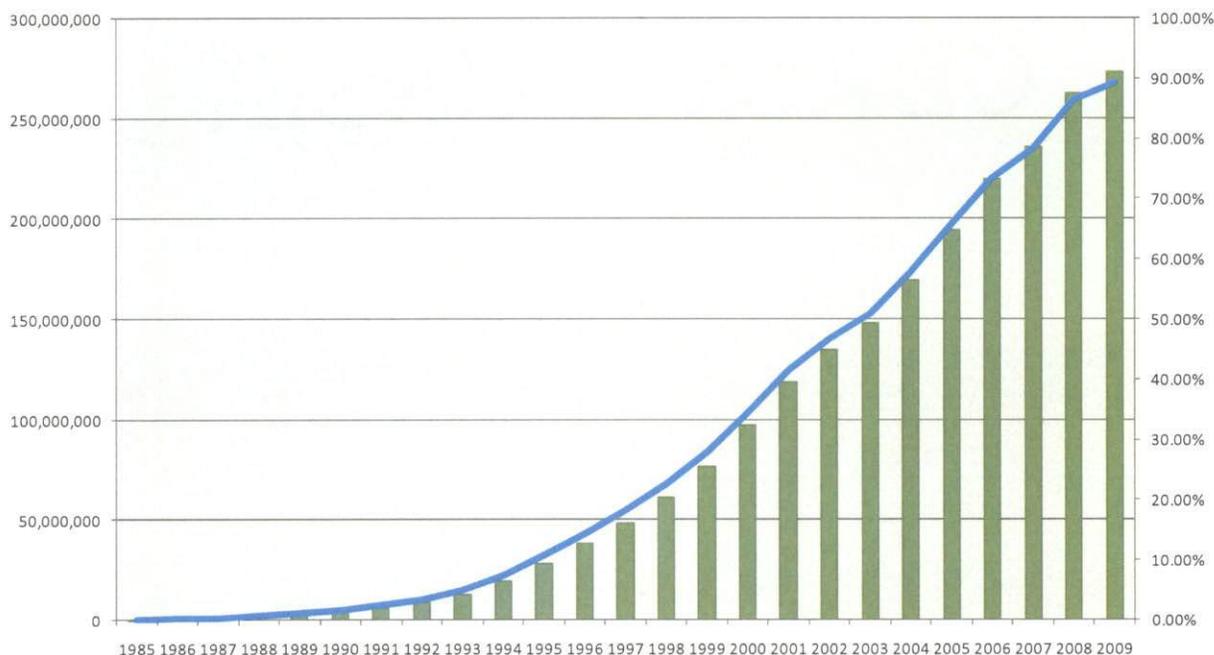
- Rental information obtained from various telecommunications users, facility managers, municipalities, government agencies, brokers and consultants.
- The telecommunications-site rental rate schedule used by the State of California Department of Transportation (CalTrans), as published in their Licensing Process and Siting Guidelines (8/97) manual, under Exhibit TC-6.
- The telecommunications-site rental rate schedule currently utilized by the US Forest Service.
- Information from the trade journals and industry periodicals for the radio, telecommunications and wireless industry.
- Personal interviews with knowledgeable owners, managers and real estate professionals specializing in the marketing and operations of these types of properties.

## BACKGROUND

In her novel *The Death of Distance*, Francis Cairncross stated that the mobile-phone use has grown at a pace even faster than the development of computer-chip technology. "In 1990," she stated, "there were just over eleven million mobile telephones worldwide. In 2000, there were 650 million, compared with 500 million personal computers. Every year since 1996, more people have subscribed to cellular telephones than to fixed ones, and the gap is widening." According to the latest data from the Cellular Telecommunications and Internet Association, as of 2006, 74.2% of our country's population had cell phones (up from 61.5% in 2004, and 50% as of 2003).

The chart below illustrates the exponential growth of cellular subscribers in the U.S., along with annual market saturation (i.e. number of subscribers divided by the U.S. population, shown by a blue line). In 1990, cellular subscribers represented only 1.74% of the nation's population, compared to 89% in 2009.

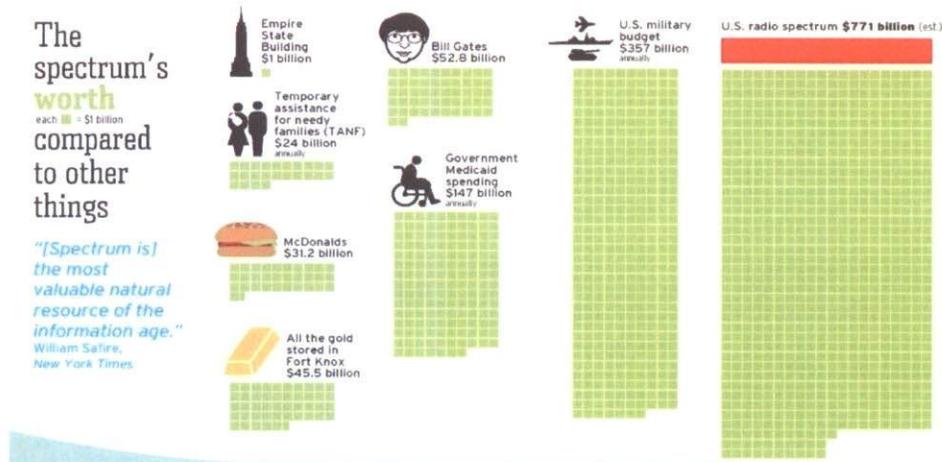
ESTIMATED CELLULAR SUBSCRIBERS  
 Nationwide (1985-2009)



Source: Cellular Telecommunications and Internet Association.

The telecommunications revolution is transforming the way we communicate beyond wires to the new wireless era. This change is so fundamental that, for some, the conquest of the wireless spectrum is regarded as the next great "frontier," the conquest of which will be a developmental touchstone, as fundamental as the development of the Western frontier in the 19<sup>th</sup> century or the exploration of space (the "final" frontier) in the 20<sup>th</sup> century.

The vast potential of telecom's growth lies in the licensing of unseen blocks of air, subdividing chunks of the radio spectrum above visible colors and below X-ray transmission to willing speculators as if they were prized tracts of beachfront land. The following graphic, courtesy of the New America Foundation's Spectrum Policy Program, illustrates the value of the wireless spectrum, in a comparison with other high-value items in our society.



Up until recently, the prevailing regulatory opinion (at least on the Federal level) was that the use of bandwidth for communications was a public right. Therefore, no one single entity (like the AT&T monopoly, for example) could claim ownership of this right, since it would be tantamount to owning air. However, with the breakup of AT&T in 1982 and the Federal Telecommunications Act signed by President Clinton in 1996, this concept was turned upside down.

In an attempt to deregulate the telecommunications industry, the 1996 Act required that segments of the radio spectrum (in other words, blocks of frequencies, like 280-285 megahertz, or 2.8 to 2.9 gigahertz) be sold on a public-auction basis. By purchasing these "blocks" of bandwidth, commercial wireless carriers now have a right of ownership—referred to as a "wireless estate."

FCC's recent auction of blocks of spectrum in the 700 MHz range has opened up new "wireless estates" for carriers with next-generation (or 3G) broadband mobile networks. These auctions began in February 2009 for the regional A, B and E Blocks and are anticipated to provide 35% more coverage by 2013 and 70% by 2019, according to Unstrung.com. For Arizona's metro markets, this will allow for more consumer choice and more network reliability when using currently popular services such as streaming video. As of the date of this report, 700-MHz sites have begun rolling out in rural areas, to augment existing emergency-mobile radio. Since these areas are already sparsely-populated with low rental demand, we do not envision much of a rental impact. This impact will have the greatest impact in the Phoenix metro. How much of a rental impact is hard to say at this point, since the auctions are still ongoing. At this point, we would leave this to ASLD's judgement.

## DEFINITIONS OF TELECOMMUNICATIONS USES

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The following telecommunications-use categories were compiled by ASLD, and provide an explanation of the variety of uses that can be found among the subject sites. *(Note): For this analysis, we have considered the most common telecommunications uses: i.e. television broadcast, AM/FM radio, cellular/PCS and microwave relay. It would be impossible for an appraisal of this nature to encompass every conceivable use, and therefore we would recommend ASLD use their judgment when using our reconciled rent tables. In general, cable TV, commercial communications, local-exchange networks and ISPs would fall within the microwave-relay category. However, ASLD would need to consider the site's location and intensity of use. As noted in the USFS table included in this report, CMRS would have the same rates as cellular for Zones 1-3, would be in between cellular and MW for Zones 4-7 and would be below microwave rates for Zones 8 and 9.*

### INTERNAL COMMUNICATION

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These are users who do not sell communication services; the services are limited to the user. This group includes two-way radio repeaters and industrial microwave facilities.

### COMMERCIAL COMMUNICATION

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These are users who facilitate communications for others, or who sell communication services. This group includes unregulated entities, such as 800 trunking and special mobile radios (SMRs), which hold FCC licenses; regulated entities, regulated by state Public Utility Commissions (PUCs) which offer paging and mobile or cellular phones; and Common Carrier Microwave which includes long-line carriers who relay telephone, television, information, and data transmissions using point-to-point microwave networks or systems and which are regulated by PUCs.

### PERSONAL COMMUNICATION SYSTEM (PCS)

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This group represents the current digital wireless technology. The Telecommunications Act of 1996 provides that "the regulation of the placement, construction and modification of personal wireless service facilities by any State or local government or instrumentality thereof (I) shall not unreasonably discriminate among providers of functionally equivalent services; and (II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services." "Personal wireless services" is defined as "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services." Therefore, it seems that PCS falls within the Commercial Communication grouping.

### LOCAL EXCHANGE NETWORK

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This subgroup of Commercial Communication refers to a carrier that provides basic telephone service for a community, primarily in rural areas.

### INTERNET SERVICE PROVIDER (ISP)

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This subgroup includes users who have communication facilities on public land

#### *RADIO BROADCAST*

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These users include FCC-authorized primary transmission facilities that broadcast audio signals for general public reception, including AM and FM radio stations, but not any rebroadcast systems such as translators. Ancillary activities authorized under this use relate to microwave and/or two-way radio links from a permitted site to studio or other fixed or mobile units directly related to the broadcast activity.

#### *TELEVISION BROADCAST*

---

This group includes FCC-authorized facilities that broadcast audio and video signals for general public reception, including VHF and UHF transmission, but not any rebroadcast systems such as translators. Ancillary activities authorized under this use relate to microwave and/or mobile units directly related to the broadcast activity.

#### *GOVERNMENT*

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This group includes FAA (navigation and aviation aids), Department of Defense (military/defense communications and systems) and public safety (police, fire, Border Patrol, FBI), etc.)

#### *FIBEROPTIC REPEATERS*

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1) In digital communication systems, a repeater is a device that receives a digital signal on an electromagnetic or optical transmission medium and regenerates the signal along the next leg of the medium. In electromagnetic media, repeaters overcome the attenuation caused by free-space electromagnetic-field divergence or cable loss. A series of repeaters make possible the extension of a signal over a distance.

Because digital signals depend on the presence or absence of voltage, they tend to dissipate more quickly than analog signals and need more frequent repeating. Whereas analog signal amplifiers are spaced at 18,000 meter intervals, digital signal repeaters are typically placed at 2,000 to 6,000 meter intervals.

2) In a wireless communications system, a repeater consists of a radio receiver, an amplifier, a transmitter, an isolator, and two antennas. The transmitter produces a signal on a frequency that differs from the received signal. This so-called frequency offset is necessary to prevent the strong transmitted signal from disabling the receiver. The isolator provides additional protection in this respect. A repeater, when strategically located on top of a high building or a mountain, can greatly enhance the performance of a wireless network by allowing communications over distances much greater than would be possible without it.

3) In satellite wireless, a repeater (more frequently called a transponder) receives uplink signals and retransmits them, often on different frequencies, to destination locations.

4) In a cellular telephone system, a repeater is one of a group of transceivers in a geographic area that collectively serve a system user.

5) In a fiberoptic network, a repeater consists of a photocell, an amplifier, and a light-emitting diode (LED) or infrared-emitting diode (IRED) for each light or IR signal that requires amplification. Fiber optic repeaters operate at power levels much lower than wireless repeaters, and are also much simpler and cheaper. However, their design requires careful attention to ensure that internal circuit noise is minimized.

6) Repeaters are commonly used by commercial and amateur radio operators to extend signals in the radio frequency range from one receiver to another. These consist of *drop repeaters*, similar to the cells in cellular radio, and *hub repeaters*, which receive and retransmit signals from and to a number of directions.

#### CABLE AND SUBSCRIPTION TELEVISION

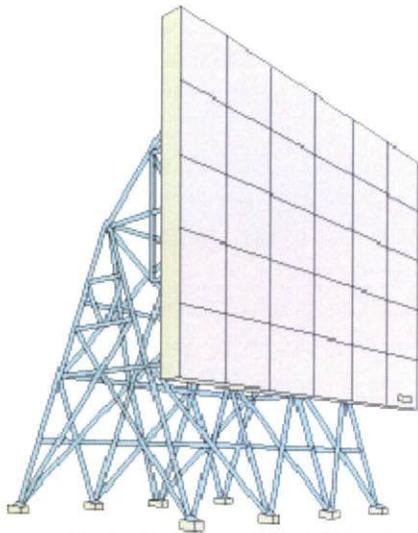
This group includes cable TV head-end antenna or satellite-dish receivers used for community-television pickups which retransmit by cable or any other means whereby subscribers pay periodic fees to receive the signal.

#### BROADCAST TRANSLATOR

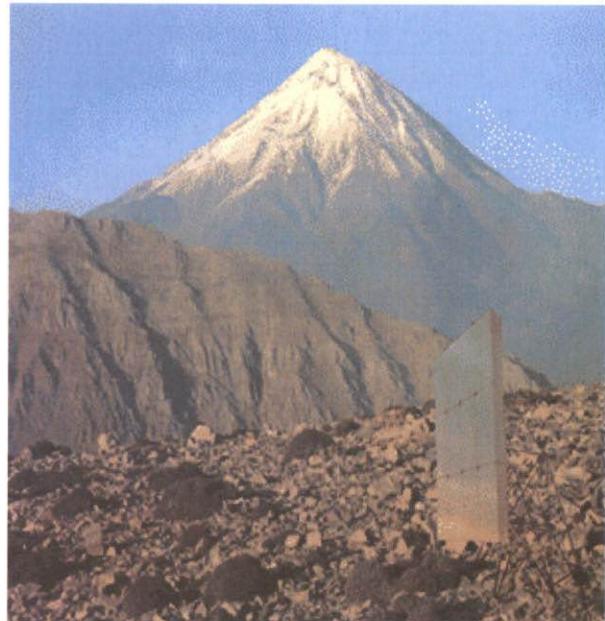
This group consists of the rebroadcast of television or FM radio signals on a different channel or frequency for local reception. In some cases, the translator relays the signal to another booster or translator. This group includes translators associated with public telecommunications service.

#### PASSIVE REFLECTOR

Passive reflectors include various types of non-powered reflector devices used to bend or ricochet electronic signals between active relay stations or between an active relay station and terminal. Maintenance is minimal and reflectors seldom require visitation.



A Passive Reflector to reflect VHF/UHF radio signals



Passive systems possess inherent advantages, namely that it is not necessary to build power lines or solar panels to feed them; maintenance is rarely necessary; and access roads are not a must. Passive systems can also eliminate the need for a costly active repeater. However, the small gain of a back-to-back repeater is a limiting factor. Sometimes it is necessary to erect large supporting structures or high towers to affix parabolic antennas or metallic reflector plates, which can increase the overall installation cost. Often the microwave installation crew must use an expensive helicopter to reach otherwise inaccessible sites.

### WHAT IS AN ANTENNA SITE?

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The antenna sites themselves can be organized into three categories, based on the type of support structure upon which the antenna is mounted: lattice towers, single masts or monopoles, and building-mounted.

Lattice towers range from 60 to 200 feet in height, and come with an inherent trade-off. Although they can accommodate many users at the same time (one analyst even coined a phrase “telecom hotel” to describe very-large sites), they often pose serious visual impacts. Equipment and antennas concentrated on one large structure tend to draw more attention than the dispersal of less visible but more numerous facilities, such as smaller monopoles or building attached facilities. Generally, leases at these sites are coordinated and managed by a tower operator, who in turn will pay a certain amount of rent to the underlying property owner for the right to occupy the mountain top.

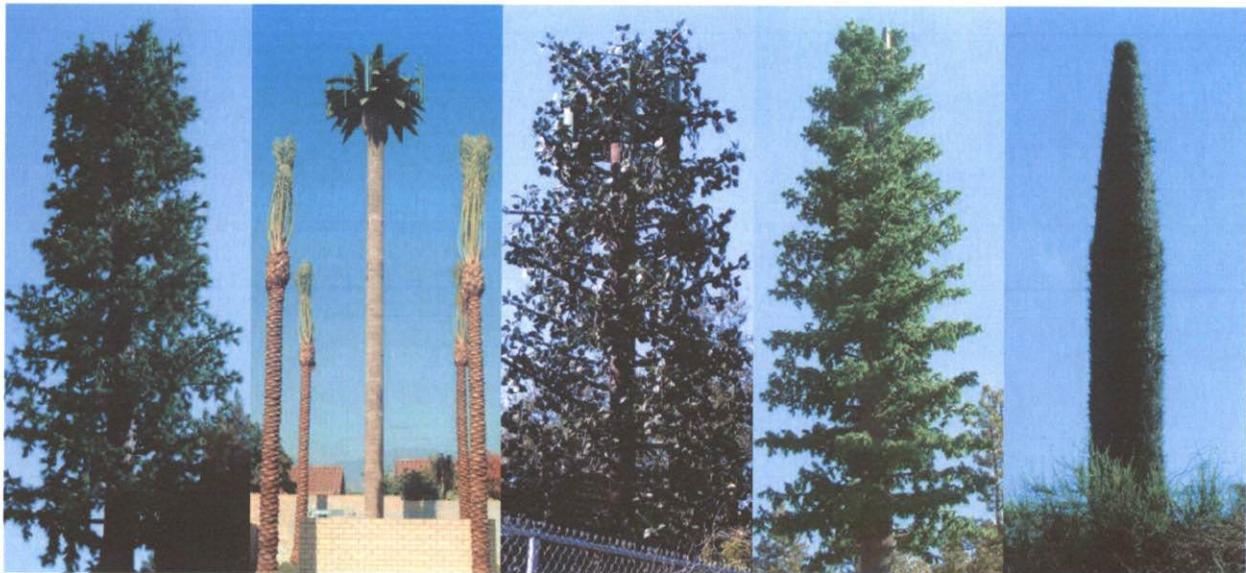
Monopoles tend to range in height from 25 to 125 feet, and consist of a single mast, approximately three feet in diameter at the base, narrowing to roughly 1.5 feet at the top, and may support any combination of whip, panel, or dish antennas. They are generally used in rural areas, near freeways, or in areas where buildings are not of sufficient height to meet line-of-sight transmission requirements. In the cellular mobile phone system, monopoles are used much more commonly than lattice towers.

These sites are typically accompanied by equipment buildings or boxes, which can vary in size depending on the type of telecommunications use. PCS equipment facilities, called base stations, are self-contained weather-proof cabinets about the size of a vending machine. Therefore, a typical monopole-site lease will specify enough ground area to accommodate both the mast and the equipment cabinet or building. As a point of comparison, an average monopole site along a freeway or similar major arterial will usually take up about 300 to 500 square feet of ground, whereas a paging site serving a small portion of a densely-populated city block may need less than 300 square feet of area.

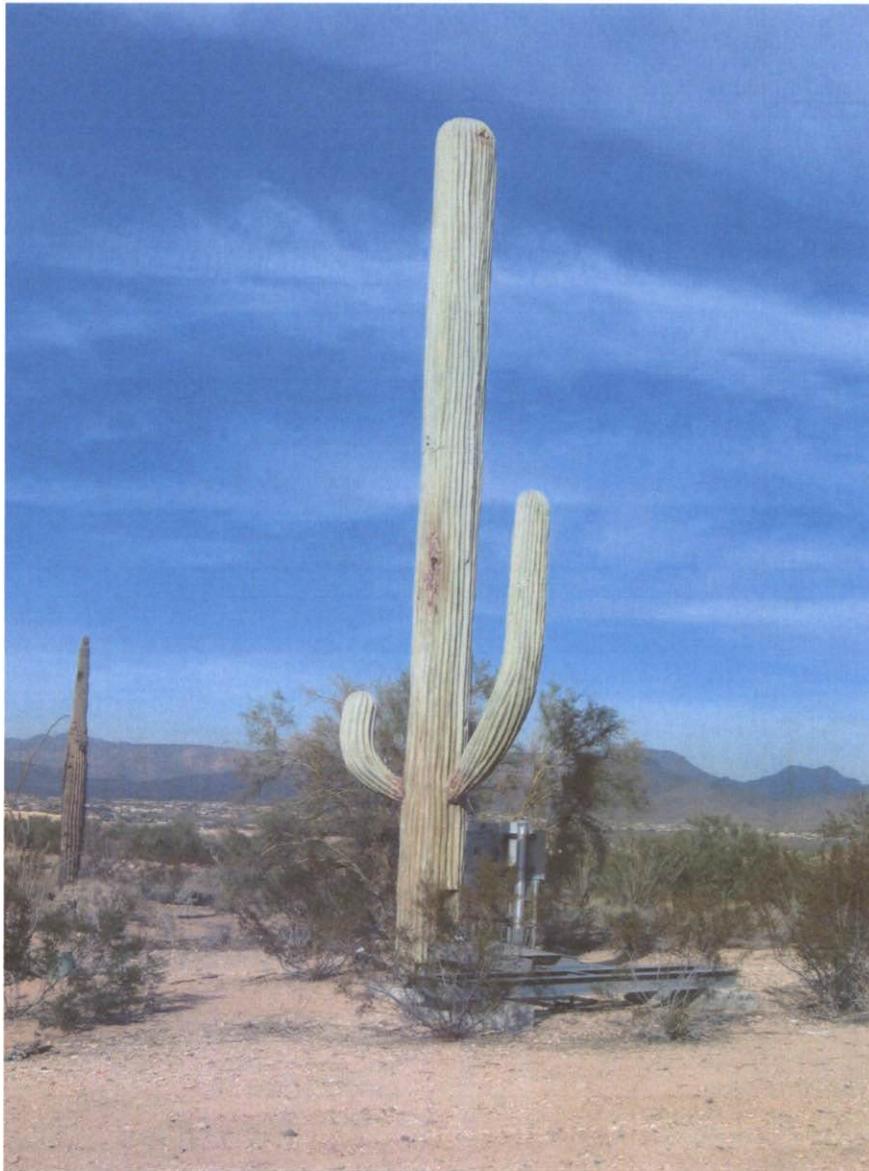
Building-attached facilities exist in two general forms: (1) roof-mounted, in which antennas are placed on the roofs of buildings, or (2) building-mounted, in which antennas are mounted to the sides of buildings. (Although not as common, facilities also can be “stealthily” mounted on other structures such as water tanks, billboards, church steeples, or other creative locations.) The latest trend in site development is to find different ways of camouflaging antennas to better blend in with the surrounding environment.

Another type of “stealth” enclosure is the monotree concept (see graphic below): monopole antennas enclosed within structures designed to look like pine, palm, broadleaf, oak, or cypress trees, complete with realistic bark covering the mast and a foliage canopy to conceal the antenna arrays mounted on the mast.

For example, some cities strongly encourage stealth designs for any sites proposed in or near residential areas.



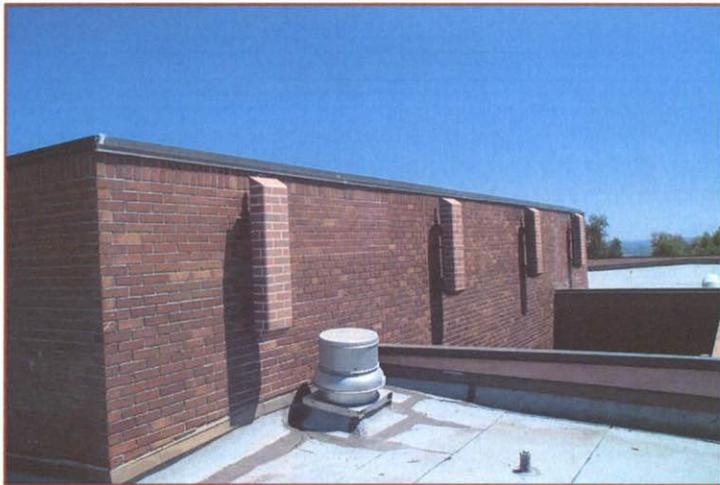
Monopole disguises take their cues from their surroundings. In Arizona, cactus is a common occurrence, considering the desert environment. So, monopoles could be disguised as cactus to blend in with the surroundings, as shown in the following photo.



*Subject Lease #103390: Stealth "cactus" overlooking the Carefree Highway in north Phoenix*

The exterior skin of the "cactus" is a special material made out of fiberglass which is opaque to light, but transparent to RF transmission. That means that the cactus' skin can hide arrays of antennas, yet not impede the signal sent from these antennas.

Although the visibility of building-attached facilities varies, roof-mounted antennas are generally hidden from view because they are located in the middle of the roof or in boxed structures resembling air-conditioning units. Likewise, building-mounted antennas are also unnoticeable if



they are painted to match the color and texture of the building. Antennas that are architecturally integrated into a building are often referred to using the term “stealth.”

*(Note): The antenna panels attached to the roof of this office building blend in due to the use of fiberglass shields, which have been painted to look like a brick façade, as shown in the following picture.*

It is important to note that although building-attached facilities are becoming common, they can be used only when buildings meet the height required for antennas to function within the surrounding system. Where buildings do not meet height requirements, providers tend to use monopoles.



A third type of single-tenant site is known as a “cow” or cellular-on-wheels. This consists of a 30’ to 100’ telescoping monopole, equipment cabinets and power generator—all mounted to a trailer (see photo). A cellular company will use “cows” to establish temporary coverage for an area (for special events, for example) or if they want to test the potential coverage in an area in advance of building a permanent site.

## DISCUSSION OF RECONCILED SUBJECT LEASE TERMS

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The market rental rates that will be determined for the subject facility are based on the following market lease terms regarding the responsibility of operating expenses. Based on our experience, a typical cabinet-rack or ground lease is on a modified-net basis, with certain expenses shared by both parties. Our rental conclusions take each of the following items into consideration.

### OPERATING EXPENSES

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#### *UTILITIES*

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Typically, lessees would be responsible for the cost of any utilities needed to run their telecommunications improvements (namely electricity and telephone). If any utilities service a building or area owned by the lessor and shared by the lessees, the payment of a proportionate share of this portion of the utilities would be passed on to the lessees.

#### *MAINTENANCE*

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This can also be a shared expense, in the sense that the lessees would be responsible for the maintenance of their own improvements, while the lessor would be responsible for maintenance of the site, and any shared building space.

#### *INSURANCE*

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Liability insurance is always required and is the responsibility of the lessee. In a typical telecommunications lease (either cabinet-rack or ground), it is common for the lessee to take out a hazard-insurance policy covering their telecommunications improvements. However, since this policy only protects their leasehold interest, it is suggested that the lessor insure the site as a whole and any shared area or building.

#### *IMPROVEMENT CONSTRUCTION*

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In ground leases, the cost of any telecommunications improvements is usually borne by the lessee, who would therefore own the rights to the improvements until the termination of their lease—at which time, ownership rights would revert to the lessor (assuming the improvements have not been removed). The construction cost of any improvements that will be subleased by the lessor (either now or at a later date) are borne by the lessor and typically included in the lease rate.

#### *PROPERTY TAXES*

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It is our understanding that ASLD, as a government agency, pays no property or possessory-interest taxes. Therefore, this would not be an expense that would be passed through to the lessee. In any event, any related expense would be passed through to the tenant.

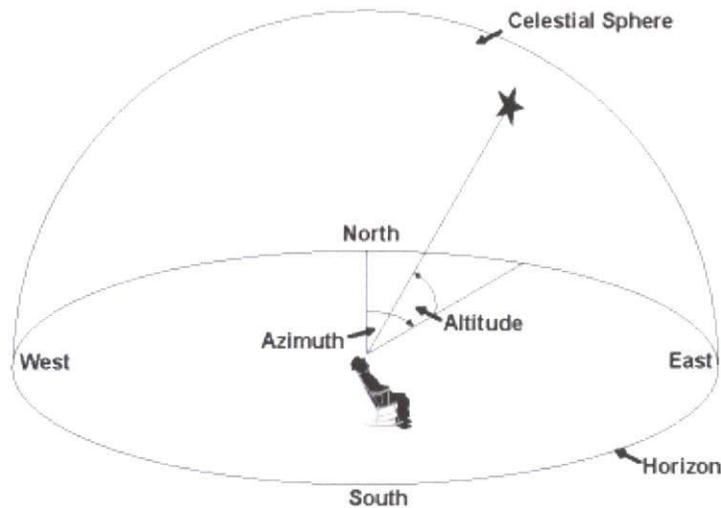
## DEFINITIONS OF TERMS

The following terms will be utilized throughout this report. Our rental analysis is based on the following definitions<sup>1</sup>:

■ Azimuth

Azimuth, defined:

*The direction of an object or target in the sky, measured clockwise around the observer's horizon from north. An object due north has an azimuth of 0 degrees, one due east 90 degrees, south 180 degrees, and west 270 degrees.*



■ Appurtenance

Appurtenance, defined:

*Items that have been affixed to a property and thus have become an inherent part of the property. Such items usually pass with the property when title is transferred although they are not part of the property (e.g. easements, water rights, telecommunications improvements).*

■ CDMA

CDMA, defined:

*Stands for "Code Division Multiple Access." Is the communication standard currently used by Sprint and Verizon. CDMA allows the use of one communication channel by up to 20 calls simultaneously by uniquely encoding each call. The standard was developed in 1993.*

<sup>1</sup> Appraisal Institute, *The Appraisal of Real Estate*, 10th ed. (Chicago: Appraisal Institute, 1992), 274.

- Co-Location  
Co-Location, defined: *Put simply, within the context of wireless base stations, this term means "to share a site, or equipment."*

Usually, an owner of a particular equipment building will sub-lease cabinet-rack space they are not using. Based on our experience, most tower operators and municipalities will specify terms of co-location as a specific clause within their lease (or master-lease) templates. Elements of this clause can include, but are not limited to, the following.

  - 1.) A specification of how much of a tenant's demised area can be sub-leased (this would also include whether the tenant has the right to enter into ground sub-leases).
  - 2.) A description, and means of calculating, sublease-recapture (or revenue-sharing) for the lessor.
  - 3.) The approval of the lessor for any sub-lease. This, along with regularly scheduled site visits, provides the lessor with a means of maintaining control over a particular site.

- Contract Rent  
Contract Rent, defined: *Contract rent is the actual rental income specified in the lease.*
- Demised Area  
Demised Area, defined: *The walled-off and secured area of a leased space, separated from spaces leased to others (by a "demising wall"). Within the context of a ground lease, demised area refers to the leased portion of ground upon which the lessee can construct telecommunications improvements.*
- Ground Rent  
Ground Rent, defined: *Ground rent is the actual rent agreed upon between a lessor (landowner) and a lessee (carrier) for a specified amount of land, for the purpose of constructing an equipment building and/or other telecommunications improvements (like a monopole or lattice tower). For smaller wireless sites, this is the most common type of rent.*
- iDEN  
iDEN, defined: *Stands for "Integrated Dispatch Enhanced Network." Is the communication standard used by Nextel's "push-to-talk" wireless network. It is not compatible with CDMA.*
- Lease  
Lease, defined: *A written document in which the right to use and occupy all or part of real property is transferred by the property owner (Lessor) to a telecommunications carrier (Lessee) for a specified period of time in return for a specified rent.*

- License  
License, defined: *A written document in which the right to use and occupy all of part of real property is transferred by a local government agency or public utility (Licensor) to a telecommunications carrier (Licensee) for a specified period of time in return for a specified license fee. Licenses are generally issued for specific uses and terms, and generally cannot be renewed or transferred.*
  
- Market Rent  
Market Rent, defined: *Market rent is the actual rent income that a property would most probably command in the open market; it is indicated by the current rents paid and asked for comparable space as of the date of the appraisal.*
  
- Market Value  
Market Value, defined<sup>2</sup>: *Market value is the amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would have sold on the effective date of the appraisal, after a reasonable exposure time on the open competitive market, from a willing and reasonably knowledgeable seller to a willing and reasonably knowledgeable buyer, with neither acting under any compulsion to buy or sell, giving due consideration to all available economic uses of the property at the time of the appraisal.*
  
- Mass Appraisal  
Mass Appraisal, defined: *The process of valuing a universe of properties as of a given date utilizing standard methodology, employing common data, and allowing for statistical testing.*
  
- Prospective Rent  
Prospective Rent, defined: *Prospective rent is the projected rental income that a proposed property would most probably command assuming completion of construction. It is also based on market rents for comparable space as of the date of the appraisal, with modifications made (if warranted) to compensate for the elapsed time between the date of the appraisal and the date of completion.*

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<sup>2</sup> Interagency Land Acquisition Conference, *Uniform Appraisal Standards for Federal Land Acquisitions*, 2003 ed. (Chicago: Appraisal Institute, 2003), 13.

## DEFINITION OF LOCATION RANKINGS

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In our description of the subject site and the comparables, we will use the terms “Urban,” “Suburban,” and “Rural” to describe the immediate area surrounding the site being described, as these are the three common categories used by appraisers for rating an area or neighborhood. Our definitions of these terms have been based on the definitions published by the Appraisal Institute in their *Dictionary of Real Estate Appraisal*.

Within the telecommunications industry in California, however, some participants utilize the rating system defined by the California Department of Transportation (CalTrans), in their *Licensing Process and Siting Guidelines* manual (Appendix D, page 7 of 23). In their manual, CalTrans organizes and classifies single-tenant cell sites within their jurisdiction based on two criteria: location and size.

There are three location ratings in CalTrans’ system: Prime Urban, Urban, and Rural, which will be compared with the Appraisal Institute’s definitions for Urban, Suburban, and Rural below. While these guidelines are meant to be fairly general, they are a useful means of organizing the subject’s sites in Arizona.

### URBAN

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The Appraisal Institute defines urban as “a mature neighborhood with a concentration of population typically found within city limits or a neighborhood commonly identified with a city.”<sup>3</sup>

CalTrans’ definition of a “Prime Urban” area (within a California context) were “the ‘urbanized’ portions of the Counties of Marin, San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Los Angeles, Orange, and San Diego. CalTrans also defines “urbanized areas” to be any California county with a population of 50,000 or more. Counties with populations of less than 50,000 would be considered Rural.

As best as we can determine, the Arizona Department of Transportation currently does not use a location-ranking system in their standardized telecommunications fee schedule.

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<sup>3</sup> Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 3rd ed. (Chicago: Appraisal Institute, 1993), 381.

SUBURBAN

The Appraisal Institute defines suburban as “a neighborhood that contains complementary properties with less concentrated population than is typically found in an urban neighborhood.”<sup>4</sup>

CalTrans’ definition of an “Urban” or “urbanized” area in California “includes all areas...with population of 50,000 or more designated by the Bureau of the Census, within boundaries to be fixed by responsible State and local officials in cooperation with each other, subject to the Approval of the Secretary.”

In general, most wireless facilities built in metropolitan areas like Phoenix or Tucson tend to be in suburban neighborhoods—Scottsdale for example, or Glendale, Tempe or Mesa. The reason for this has to do with the fact that wireless networks tend to be developed in three distinct stages, as described below.

- Stage 1: Growth of “Nodes”
- Stage 2: Suburban Invasion
- Stage 3: Filling in the Gaps

In larger cities like Phoenix, wireless development usually begins with the establishment of a backbone of coverage along major freeways (like Interstate 10 and 17), to accommodate the demands of the majority of cellular users placing calls from their cars during their commutes. Once this backbone is in place, then carriers can branch off into suburban neighborhoods like Mesa or Gilbert. Since sites in suburban areas tend to be smaller (lower tower height and smaller broadcast radii), more sites are needed to provide coverage compared to the sites used along the state’s major freeways (which tend to have taller tower heights, are more powerful, and can have larger broadcast ranges).

This is the case with the subject sites. Of these, 27 cover prime freeway segments, or other primary traffic arterials within their regions. These sites we will classify as Suburban-Primary Arterial to distinguish them from the rest of the suburban cell sites.

Another 19 subject sites are also in suburban locations across the state, but do not serve primary arterials. Instead, these sites cover secondary traffic routes like local two-lane highways or major surface streets. From this point on, we will distinguish these as Suburban—Secondary Arterial sites.

<sup>4</sup> Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 3rd ed. (Chicago: Appraisal Institute, 1993), 357.

**RURAL**

The Appraisal Institute defined rural as “pertaining to the country as opposed to urban or suburban; land under an agricultural use; signifies areas that exhibit relatively slow growth with less than 25% development.”<sup>5</sup>

In California, CalTrans defines rural as “any area within the State of California not Urbanized, as defined above.” This would include the smaller agricultural counties in the central portion of the state, as well as the state’s eastern counties in the Sierra Nevada Mountains, from the Redwoods and the Lake Tahoe region in the northeast to Inyo in the southeast.

Using the CalTrans criteria as a guideline then, we have redefined the three location rankings (Urban, Suburban and Rural) for Arizona counties, as shown below.

With this in mind, the majority of the subject sites managed by ASLD were determined to be in Suburban locations. While there were sites in Maricopa County, which accounts for more than 60% of the entire state’s population, none were in high-traffic areas (i.e. busy highway interchanges or in densely-populated neighborhoods with high call volume) which would warrant an Urban ranking.

Location Rank	County	2005 Pop.
Urban	Maricopa	3,635,528
Suburban	Pima	924,786
	Pinal	229,549
	Yavapai	198,701
	Mohave	187,200
	Yuma	181,277
	Cochise	126,106
	Coconino	123,866
	Navajo	108,432
	Apache	69,343
	Gila	51,663
Rural	Santa Cruz	42,009
	Graham	33,073
	La Paz	20,238
	Greenlee	7,521

Currently 28 subject sites are in sparsely-developed areas of the state. Listed on the next two pages are three tables of subject sites—one for each location group determined by us that we described above. *(Note): The information in these tables and in the master spreadsheet of subject sites included with this report was obtained from data in the Arizona State Land Department’s files. Cells marked “n/av” represent areas where no information was available in the State files.*

<sup>5</sup> Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 3rd ed. (Chicago: Appraisal Institute, 1993), 317.

**SUBURBAN-PRIMARY ARTERIAL (27 SITES)**

County	Tenant	Lease #	Purpose of Site	City
Cochise	Stereo 97, Inc.	103498	Unattended FM broadcast	Benson
Cochise	Crown Communication, Inc.	97208	Wireless tower & equip bldg	Dragoon Rd.
Cochise	Qwest Corporation	88022	MW comm and relay	Cochise
Cochise	Southwest Transmission Coop, Inc.	72450	MW comm and relay	Dragoon Rd.
Coconino	Alltel Communications	109319	Wireless tower & equip bldg	Seligman
Coconino	Verizon Wireless	53717	Wireless tower & equip bldg	Seligman
Coconino	Burlington Northern & Santa Fe RR	585	Analog MW and repeater station	Seligman
Maricopa	Crown Atlantic Co. LLC	98879	Wireless tower & equip bldg	Phoenix
Maricopa	Crown Atlantic Co. LLC	97492	Wireless tower & equip bldg	Phoenix
Maricopa	Spectrasite Communications	104584	LEO & MW relay site	n/av
Maricopa	Sprint Spectrum LP	102431	Wireless tower & equip bldg	Phoenix
Maricopa	Qwest Corporation	87214	Wireless tower & equip bldg	Phoenix
Mohave	New Cingular Wireless PCS	105741	Wireless tower & equip bldg	Topock
Mohave	Ubiquitel Leasing Co.	106510	Wireless tower & equip bldg	n/av
Pima	Arizona Lotus Corporation	98992	FM broadcast	Tucson
Pima	Tucson Electric Power Co.	23754	MW comm and relay	n/av
Pima	El Paso Natural Gas Co.	83407	MW comm and relay	n/av
Pima	Southwest Transmission Coop, Inc.	34108	MW comm and relay	n/av
Pima	Broadwing Communications LLC	108341	Wireless tower & equip bldg	Tucson
Pima	Scott Swanson	109576	Amateur radio system	n/av
Pima	Qwest Corporation	684	MW comm and relay	n/av
Pima	Williams Communications	105169	n/av	Tucson
Pinal	Crown Atlantic Company, LLC	105500	Wireless tower & equip bldg	Casa Grande
Pinal	Verizon Wireless	52316	Wireless tower & equip bldg	n/av
Yavapai	Yavapai County	97955	Local law-enforcement wireless site	n/av
Yavapai	Verizon Wireless	53716	Wireless tower & equip bldg	n/av
Yavapai	Multimedia Inc.	95070	MW comm and relay	n/av

**SUBURBAN-SECONDARY ARTERIAL (19 SITES)**

County	Tenant	Lease #	Purpose of Site	City
Cochise	CCR - Sierra Vista III LLC	274	Radio broadcasting station (AM/FM)	Sierra Vista
Cochise	Nationwide Comm. Specialists	106930	Wireless tower & equip bldg	Sierra Vista
Maricopa	Verizon Wireless	103390	Wireless tower & equip bldg	Phoenix
Mohave	Mohave Cellular LP	106364	Cellular comm site	Lk Havasu
Mohave	Mohave Cellular LP	52202	Cellular comm site	Lk Havasu
Navajo & Apache	Citizens Telecom Co. of the White Mtns	728	MW comm and relay	Hwy 60
Navajo & Apache	Country Mountain Airwaves LLC	105153	AM broadcast	Hwy 60
Navajo & Apache	Apache County Board of Supervisors	105648	Public-safety EMR	Route 260
Pima	Alltel Communications	92201	Wireless tower & equip bldg	Tucson
Pinal	Crown Atlantic Co. LLC	104090	Wireless tower & equip bldg	Oracle Junction
Pinal	Alltel Communications	106975	Wireless tower & equip bldg	Oracle
Pinal	Electrical District Number #3 Pinal County	436	Electric substation	n/av
Yavapai	Southwest FM Broadcasting	77740	Wireless tower & equip bldg	Prescott
Yavapai	Intermountain Communication, Inc.	89493	Solar-pwred two-way radio, paging	Prescott
Yavapai	FBI	98494	Internal telecom	Squaw Peak
Yavapai	Burlington Northern & Santa Fe RR	850	VHF mobile radio relay (analog)	Hillside
Yavapai	Prescott Valley Broadcasting	91916	Solar MW relay, FM broadcast	Prescott
Yavapai	Joseph P. Tabback	96306	AM broadcast	W. Sedona
Yavapai	Phelps Dodge Bagdad Inc.	78666	TV broadcast	Bagdad

RURAL (28 SITES)

County	Tenant	Lease #	Purpose of Site	City
<b>Graham &amp; Greenlee</b>	Williams Communications	105167	Fiberoptic-regen equip bldg	n/a
<b>Cochise</b>	Cable One, Inc.	157	Cable TV relay site to Bisbee, AZ	Mule Pass, Bisbee
<b>Cochise</b>	Arizona Water Company	849	Radio base station for mobile unit (paging)	Mule Pass, Bisbee
<b>Cochise</b>	Qwest Corporation	674	Wireless tower & equip bldg	Mule Pass, Bisbee
<b>Cochise</b>	Dale & Sheryl Eaton	848	Repeater for two-way radio	Mule Pass, Bisbee
<b>Cochise</b>	Action Communication, Inc.	109309	Wireless tower & equip bldg	Mule Pass, Bisbee
<b>Cochise</b>	Arizona Dept. of Public Safety	97312	Local law-enforcement wireless site	San Bernardino Pk
<b>Cochise</b>	Cochise County Board of Supervisors	105209	Public-safety EMR	San Bernardino Pk
<b>Cochise</b>	Alltel Communications	103912	Wireless tower & equip bldg	San Bernardino Pk
<b>Cochise</b>	Valley Telephone Coop, Inc.	86113	MW comm and relay	Hwy 191
<b>Cochise</b>	El Paso Natural Gas Co.	87096	Internal telecom and MW relay	Lime Peak
<b>Cochise</b>	Southwest Transmission Coop, Inc.	34107	MW comm and relay	Dos Cabezas
<b>Cochise</b>	Tucson Electric Power Co.	23755	Wireless tower & equip bldg	Dos Cabezas
<b>Cochise</b>	El Paso Natural Gas Co.	83406	Internal telecom and MW relay	Dos Cabezas
<b>Cochise</b>	Valley Telephone Coop, Inc.	72850	Multiple tower site	Dos Cabezas
<b>Cochise</b>	Valley Telephone Coop, Inc.	81481	Telco repeater site	San Bernardino Pk
<b>Cochise</b>	AZ Department of Public Safety	194	Public-safety EMR	Bisbee
<b>Cochise</b>	Qwest Corporation	683	Wireless tower & equip bldg	Benson
<b>Cochise</b>	Cochise County Board of Supervisors	34151	Public-safety EMR	Dos Cabezas
<b>Coconino</b>	Arizona Telephone Co.	99442	Telco service to Havasupai Indian Res.	Grand Cyn.
<b>Maricopa</b>	Circle S Broadcasting Co.	99563	AM/FM broadcast	Wickenburg
<b>Navajo &amp; Apache</b>	Burlington Northern & Santa Fe RR	745	Analog MW and repeater station	Petrified Forest
<b>Pinal</b>	Crown Atlantic Co. LLC	53619	Wireless tower & equip bldg	Grayback Mtn
<b>Pinal</b>	AZ Dept. of Public Safety	87095	MW comm and relay	Red Rock
<b>Pinal</b>	El Paso Natural Gas	92343	Wireless tower & equip bldg	Black Mtn area
<b>Pinal</b>	Tucson Electric Power Company	23438	MW comm and relay	Peters Corner
<b>Pinal</b>	Qwest Corporation	88023	Wireless tower & equip bldg	Oracle
<b>Yavapai</b>	Univision Radio Phoenix Inc.	95776	TV broadcast	Route 89

Now that we have reclassified the subject sites into three groups based on our location ranking, the next step is to sort them based on the sizes of their demised areas. This will facilitate easier comparison with market data, and will help enable us to arrive at a master-lease schedule for any wireless ground lease on state-owned lands in Arizona.

## DEFINITION OF SIZE RANKINGS

Generally speaking, wireless sites can be broken down into five classifications relating to facility size, or more specifically the size of an individual tenant's demised area. The first three ratings (macrocell, minicell and microcell) were first coined by the California Department of Transportation, and the latter two ratings (picocell and femtocell) were first used in articles published by CNet.com and *Information Week*.

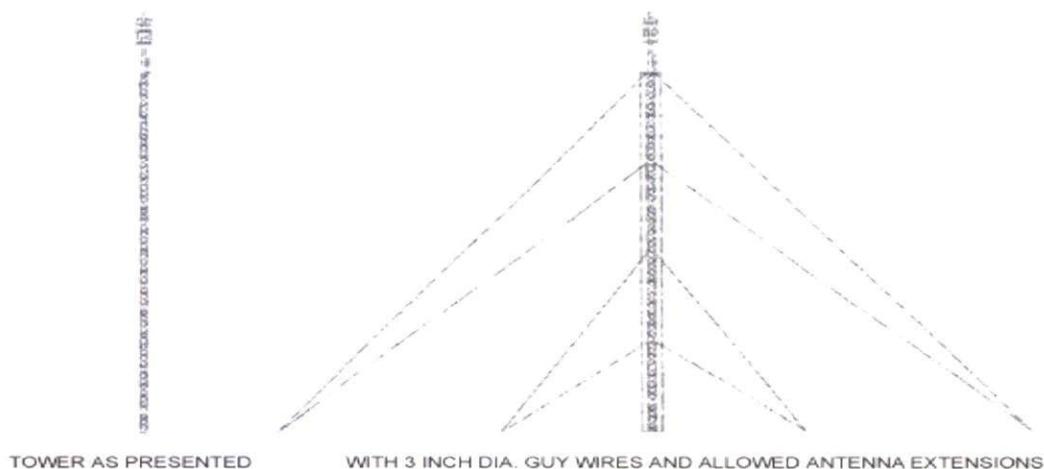
The original definitions of the first two categories were based on much smaller ground leases, not exceeding 2,500 square feet, which would make a certain amount of sense if one considers that land is at more of a premium in California than in Arizona.

During our review of the subject's site leases, we noted that the amount of ground leased to each tenant was considerably greater than the criteria used in California. Therefore, before we can assign "macrocell" and "minicell" to the subject sites, we would need to redefine these terms for an Arizona context.

### MACROCELL

The subject sites had site areas ranging from 0.02 acre (871 square feet) to 20 acres, with an overall average of 1.26 acres. In determining an upper size limit for this macrocell category, we reviewed the descriptions of the telecommunications improvements built on each site. A few of the subject sites had guyed towers ranging in height from 200' to 400'.

Of all the various types of antenna-support structures available, guyed towers require the most land area to accommodate the guy wires and anchors needed to secure the tower.



A guy ratio is the ratio of the horizontal distance of the guy-wire anchors to the vertical height of the tower, with typical ratios being approximately 70% to 80%. Therefore, if one wants to raise a 200' guyed tower, the anchors would have to be spaced approximately 160' feet from the base (assuming an 80% ratio). With this relationship in mind, we can determine the minimum amount of land needed to support guyed towers 200' or more in height.

Guyed Twr Ht	Guy Ratio	Min Anchor	Est Min	Est Min
		Distance	Site Size (sf)	Site Size (acs)
200	80%	160	80,425	1.85
225	80%	180	101,788	2.34
250	80%	200	125,664	2.88
275	80%	220	152,053	3.49
300	80%	240	180,956	4.15
325	80%	260	212,372	4.88
350	80%	280	246,301	5.65
375	80%	300	282,743	6.49
400	80%	320	321,699	7.39
425	80%	340	363,168	8.34
450	80%	360	407,150	9.35
475	80%	380	453,646	10.41

The largest tower built to date on any subject site was a 400' tower owned by Nationwide Communication Specialists in Cochise County (Cochise Subject Site #10). According to the table, the minimum amount of land needed to support this type of improvement would be 7.39 acres. In this particular case, 8.0 acres was leased to NCS by the State, which would indicate that a guy ratio of 83% was used. If 83% is then used for the other tower heights in the table, the following minimum site sizes are determined.

Guyed Twr Ht	Guy Ratio	Min Anchor	Est Min	Est Min
		Distance	Site Size (sf)	Site Size (acs)
200	83%	166	86,570	1.99
225	83%	186.75	109,565	2.52
250	83%	207.5	135,265	3.11
275	83%	228.25	163,671	3.76
300	83%	249	194,782	4.47
325	83%	269.75	228,598	5.25
350	83%	290.5	265,120	6.09
375	83%	311.25	304,347	6.99
<b>400</b>	<b>83%</b>	<b>332</b>	<b>346,279</b>	<b>7.95</b>
425	83%	352.75	390,916	8.97
450	83%	373.5	438,259	10.06
475	83%	394.25	488,307	11.21

Therefore, based on the current improvements, it would be reasonable to assume an upper limit of approximately eight acres for our redefined macrocell category.

To determine the lower size limit, we performed the same calculation as above, but have assumed a minimum tower height of 125', as shown below. This would indicate a minimum site area slightly larger than three-quarters of an acre.

Guyed Twr Ht	Guy Ratio	Min Anchor	Est Min	Est Min
		Distance	Site Size (sf)	Site Size (acs)
100	83%	83	21,642	0.50
<b>125</b>	<b>83%</b>	<b>103.75</b>	<b>33,816</b>	<b>0.78</b>
150	83%	124.5	48,695	1.12
175	83%	145.25	66,280	1.52
200	83%	166	86,570	1.99
225	83%	186.75	109,565	2.52
250	83%	207.5	135,265	3.11
275	83%	228.25	163,671	3.76
300	83%	249	194,782	4.47
325	83%	269.75	228,598	5.25
350	83%	290.5	265,120	6.09
375	83%	311.25	304,347	6.99

Based on this information, we can now redefine “macrocell” to represent any single-tenant ground lease with a site area of 0.74 acre to 8.0 acres in size. It is our recommendation that sites greater than eight acres in size be treated as excess land, and appraised separately.

**MINICELL**

Keeping the above range in mind, we have determined that the balance of the subject sites (which range in size from 0.02 acre to 0.63 acre) will be classified as “minicell” sites within the context of this report.

*(Note): We recognize that there is a gap in size classification between the minicell category (whose upper limit is 0.63 acre) and the macrocell category (whose lower limit is 0.74 acre). Our reconciled size ranges were based on typical guy ratios of existing sites within ASLD’s portfolio. Sites that fall between these two size limits would need to be evaluated by the ASLD using other variables as well: specifically their location and intensity of use (number of antennas/towers).*

In the management of multiple telecommunications site, the use of size categories like “macrocell” or “minicell” can be useful since it establishes up-front size parameters based on typical single-tenant sites. These parameters can also be used by ASLD to determine if a single-tenant site has excess land, or conversely, has the potential for sublease income. Although the size labels we used in this report have been borrowed from CalTrans and other databases, we have applied these labels within an Arizona context.

## WIRELESS-CARRIER MARKET CONDITIONS AND TRENDS

Looking back, it doesn't seem possible that cell phones have been part of our lives for more than 20 years. Ever since the first bulky, briefcase-sized phones hit the market in October of 1982, carriers have been scrambling to keep up with demand.

Back then, the children of the original Baby Bells had each spun off their own wireless companies: General Telephone and Telegraph created GTE Wireless, AT&T created AT&T Wireless, and Pacific Bell formed Pacific Bell Wireless.

Through the 1990s and into the 2000s, consolidation became a key component of survival, as carriers battled each other to gain market share. Listed below are some of the more well-known mergers of the past.

<u>(Former carrier)</u>	<u>(Now known as)</u>
GTE Wireless	Verizon
VoiceStream PCS	Verizon
Pacific Bell Wireless	Cingular Wireless
Cox PCS	Sprint PCS

In the late 1990s, there were three primary cellular providers: GTE, Pacific Bell Wireless and Cox PCS. Five years ago, there were six. Two years ago there were four, listed below in terms of their total number of subscribers.

- 1.) Cingular Wireless  
(merged with AT&T Wireless, who bought GTE Mobilnet)
- 2.) Verizon
- 3.) Sprint PCS (merged with Nextel)
- 4.) T-Mobile

On February 17 2004, Cingular acquired AT&T Wireless. With the third-largest company purchased by the second-largest cellular provider, the combined entity became the largest telecommunications carrier in the country. The combined Cingular-AT&T entity and Verizon now control 60 percent of the wireless-subscriber market. In addition, the merger expands Cingular's coverage from 87 to 97 of the top 100 markets in the country, which, according to Pyramid Research, will save the company almost \$1 billion in network infrastructure alone.

On May 25, 2004, T-Mobile USA announced that they had entered into agreements with Cingular to terminate their wireless network-sharing venture, and for T-Mobile to acquire 100% ownership of the shared network assets in southern California, Nevada, and New York for \$2.5 billion.

In December of 2004, Sprint PCS formally announced that they had acquired Nextel Communications. In a C-Net article published online at the time, reporter Ken Belson comments on the merger.

Now that Sprint and Nextel Communications have formally announced their merger, they have completed the easy part.

The harder part, industry executives and analysts say, will be competing against their much larger rivals, Cingular Wireless and Verizon Wireless, both of which are owned by regional Bell telephone companies that have more money and more services to sell to consumers who like one-stop shopping.

Sprint and Nextel will make a formidable No. 3 player in the wireless market. Together, they will have about 40 million subscribers, just 6 million fewer than market leader Cingular. Nextel's popularity with small businesses complements Sprint's power in the consumer market. And the new company, which will be led by Sprint CEO Gary Forsee, will have some of the most loyal subscribers in the industry. Yet the economics of selling wireless phone service dictate that Sprint and Nextel merge to survive. By combining forces, they can make better use of their networks and spectrum licenses to offer better service to more subscribers. They can also gain more leverage over handset manufacturers, advertisers and other vendors.

Even so, Sprint and Nextel will be hard pressed to match the firepower of the Bells and their wireless carriers.

The telecommunications industry is increasingly being defined by bundles of services—fixed phone lines, high-speed data connections, wireless services and video products. Customers who buy more than one service from a company not only spend more, but they also are less likely to switch to a competing company.

Cingular, which is owned by SBC Communications and BellSouth, and Verizon Wireless, which is owned by Verizon Communications and Vodafone, have been selling cellular service to customers who also buy local and long-distance phone service and broadband connections.

The Bells are also marketing satellite television services and they have started to build out their fiber-optic networks to deliver video programming to millions of homes. And they have the advantage of being able to broadcast their marketing message directly to a combined 135 million fixed-line phone customers.

"The future of the telecom really belongs to the Bells," said Robert Green, an investment strategist at Briefing.com, an independent financial analysis firm in Boston. "You'll see a one-source assault: wireless, wireline and data. Everything they've been doing over the last few years has been to provide one big bundle."

In contrast, Nextel has no traditional fixed-line business and Sprint has only 7.7 million local phone customers, just 5 percent of the market. The combined Sprint-Nextel is also expected to sell Sprint's local lines after the merger, which would actually reduce the range of products the new company could offer. Sprint and Nextel will also be hard pressed to match the financial resources of the Bells. The credit ratings for the three Bells are all rated A or higher by Standard & Poor's, though the ratings of all three also have a negative outlook. Sprint is rated BBB- and Nextel's credit has a BB rating.

Though S&P has a positive view of Sprint and Nextel, the companies' lower credit ratings mean they must pay more to issue and refinance their debt. This will not hamper a deal between Sprint and Nextel, which mostly involves exchanging stock. But it could limit Sprint's ability to acquire another wireless carrier later on. The higher credit ratings are "not a complete advantage for the Bells, but they mean Sprint has less financial flexibility to merge with others in the future," said Dave Novosel, a credit analyst at Gimme Credit. At the same time, "Verizon Wireless and Cingular have all sorts of other opportunities for buying other companies."

Yet, the new Sprint-Nextel entity has struggled to stay afloat, having lost 5,000 employees since the merger. Sprint CEO Gary Forsee, in an interview with *Telephony Online*, indicated that the company is “seeing divergent results, with growth in CDMA subscribers, but lower demand for iDEN services.”

On January 16<sup>th</sup> of 2005, Sprint-Nextel released the first dual-mode phone to incorporate CDMA 1X network for cellular voice and data access and the iDEN network for push-to-talk. The release of this phone (dubbed the Buzz ic502, and shown to the left) was anticipated to help shore up the loss of its employees, and will give Sprint customers access to Nextel’s prized walkie-talkie function. Since the Buzz’s release, AT&T, Verizon and T-Mobile have all introduced their own versions of this dual-mode phone.



In May 2008, Sprint-Nextel combined their wireless broadband unit with Clearwire to form a \$14.55 billion communications company. The new company, which will still be referred to as Clearwire, plans to provide wireless Internet services using WiMax technology that will reach an estimated 120 to 140 million people by the end of 2010.

Further consolidation lies ahead, as carriers struggle to stay competitive. Wireless Capital Partners LLC recently reported that Deutsche Telekom AG (the corporate parent of T-Mobile USA), “is exploring the sale of the US wireless division. While Deutsche Telekom has previously stated that T-Mobile USA was not for sale as it is a key source of company revenue growth, changes in the US market have forced the company to reevaluate its position. Recent mergers between top-tier carriers have created strong competitors with greater scale than T-Mobile USA. Additionally, numerous US wireless carriers are forging ties with cable, landline, and entertainment operators and providers which enable enhanced, bundled services. T-Mobile USA does not currently have access to those resources and assets. Another justification could be T-Mobile’s need to spend billions to upgrade its US network, which has already fallen behind those of other US service providers. That money and proceeds could be better used by Deutsche Telekom to make strategic acquisitions throughout Europe.”<sup>6</sup> As of May 2008, Deutsche Telekom was considering the possibility of taking over Sprint-Nextel, which if completed, would make T-Mobile the largest U.S. wireless provider. As of the date of this report, talks between the two parties were still in the planning stage.

Now that SBC Communications has morphed into the “new” AT&T, they have negotiated further mergers to expand their reach. In March 2006, SBC announced their merger with Bell South at a value of \$67 billion. This deal joins the new AT&T with the only remaining independent Baby Bell out of the seven regional phone companies created when the government broke up Ma Bell in 1984. The merger also gave AT&T sole control of Cingular Wireless (which it had previously co-owned with Bell South). After the merger, Cingular Wireless was renamed AT&T Mobility. As of the third quarter of 2008, AT&T Mobility was the largest U.S. carrier with 74.9 million customers.

<sup>6</sup> Taken from “Wireless Landlords’ Lunchtime Reading—Volume 2, Issue 6, July 2005”. This is an online circular published and distributed by Wireless Capital Partners, LLC.

Apple's introduction of the iPhone in June 2007 may become the most significant technological innovation of this decade. Partnering with AT&T for its wireless service, Apple has seen iPhone sales explode over the last two years, with approximately 40% of these consumers switching over to AT&T from other providers. In a January 2009 *Wired* magazine article about the development of the iPhone, Fred Vogelstein wrote the following. "For decades, wireless carriers have treated manufacturers like serfs, using access to their networks as leverage to dictate what phones will get made, how much they will cost, and what features will be available on them. Handsets were viewed largely as cheap, disposable lures, massively subsidized to snare subscribers and lock them into using the carriers' proprietary services. But the iPhone upsets that balance of power. Carriers are learning that the right phone—even a pricey one—can win customers and bring in revenue." The iPhone features a touch-screen display, 1,500-song capacity, Internet access at WiFi speeds, and the ability to run a number of software programs (known as "gadgets").

In January 2009, Verizon Wireless announced that their \$22.2 billion acquisition of Alltel (a regional wireless operator) had been finalized. The Alltel buyout now makes Verizon the largest U.S. carrier, with a combined 83.7 million subscribers and a blanket national coverage of 290 million people, according to an article in *Telecommunications Magazine*. However, the article goes on to state that the new company will more than likely lose roughly 2.1 million Alltel customers as it divests key markets where both Verizon and Alltel overlap in service coverage. Unlike Sprint-Nextel, this was seen as a merger of equals. Both Verizon and Alltel run CDMA-based networks, so there won't be any impact on customer service as the Alltel network is integrated into Verizon's structure. Verizon is now considering acquiring Qwest Communications, the smallest Bell company, which currently serves 14 Western states—partly to gain market share, and partly to keep Qwest out of AT&T's hands.

*(Note): The CNet article on page 25 (paragraph 5) refers to "bundling of services." Bundling is commonly defined as a menu of services offered by a single company for a reduced package rate. Examples would be cable TV providers offering broadband Internet or cell-phone service (as Cox Cable appears to be ready to do by the end of 2009-early 2010), or wireless carriers offering streaming TV content. It is a way for companies to stay competitive with each other, while allowing the consumer the greatest amount of choice. Impacts on rental rates, however, would depend on which use in the service "umbrella" commanded the highest rate.*

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#### EFFECTIVE DATES OF ANALYSIS

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■ Date of Inspection:

We completed numerous field inspections of subject sites and comparables used during our analysis. Our inspection dates were as follows:

July 11, 2006  
September 12-13, 2006  
November 7, 2006  
January 9-10, 2007  
May 18, 2009

■ Date of Appraisal:

*(Note): To the best of our knowledge, there have been no significant changes to the subject sites or market conditions over the period of time between the initial date of inspection and the date of appraisal.*

## SUBJECT SITE DESCRIPTIONS

To summarize, the focus of our report will be the determination of market rent for 74 telecommunications sites across the State of Arizona. To the best of our knowledge, the sites to be considered break down as follows. *(Note): Any tenants in this section with expired lease terms (like the first site summarized below) are assumed to be on holdover status with the State, pending the completion of this appraisal.*

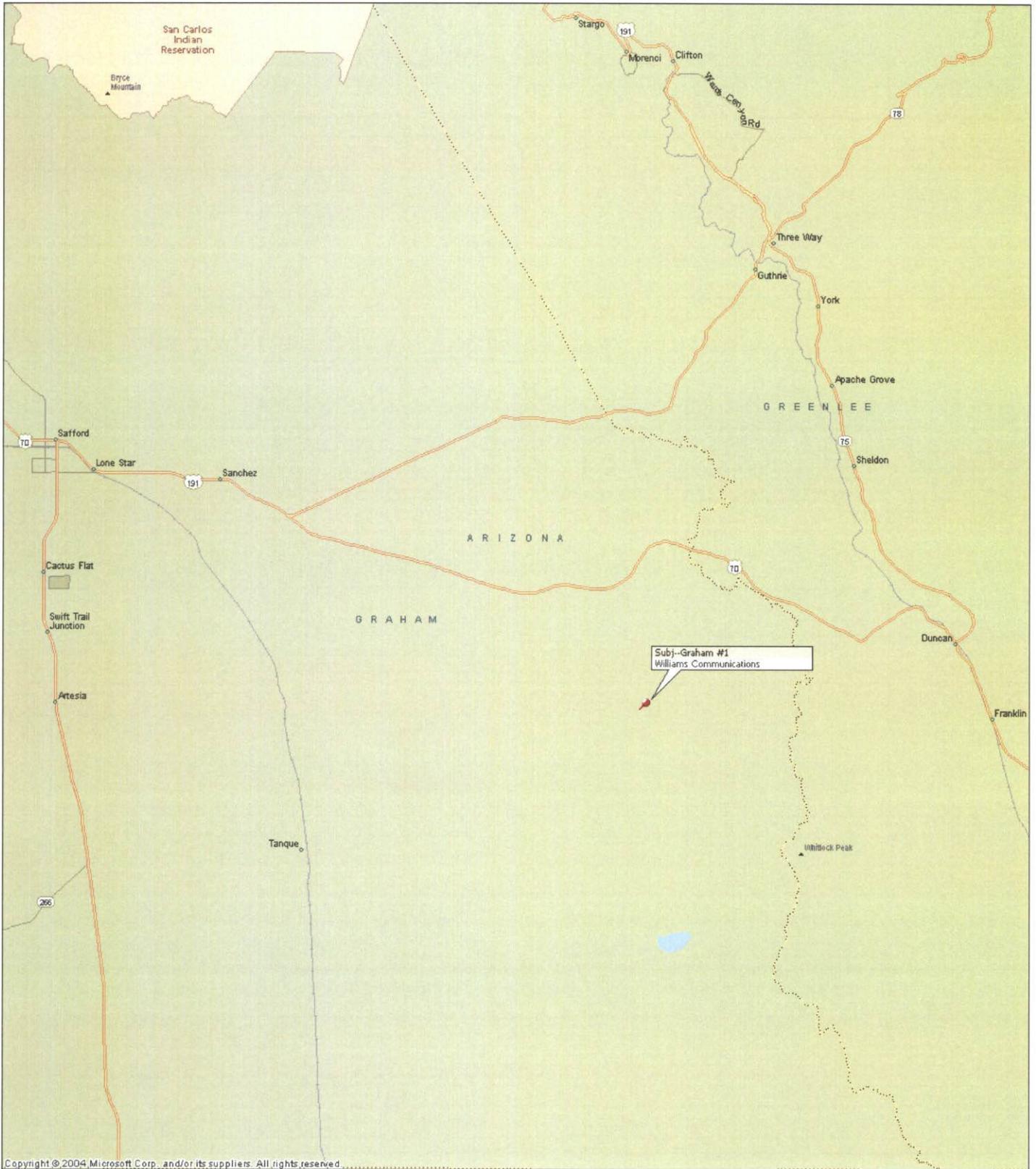
County	Telecommunications Use												
	Cellular/PCS	Private Mobile Comm	Government	EMS	Common-carrier MW	Private MW	Passive Reflector	Low-Power Use	TV Broadcast	AM/FM	Cable TV	Satellite Radio	
Gila	0												
Graham & Greenlee	1					1							
Maricopa	7	5				1				1			
Mohave	4	4											
Pima	9	2				5		1		1			
Pinal	10	7	1	1		1							
Santa Cruz	0												
Yavapai	11	1	1	2		1		1	2	3			
Yuma	0												
La Paz	0												
Navajo & Apache	4			1		2				1			
Cochise	24	6	2	1	3	8		1		2	1		
Coconino	4	2				2							
<b>Totals</b>	<b>74</b>	<b>27</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>0</b>

### GRAHAM AND GREENLEE COUNTIES:

Graham and Greenlee Counties are located in the southeastern portion of Arizona, bordered by Pinal and Gila Counties to the west, Navajo and Apache Counties to the north, the New Mexico State Line to the east, and Cochise County to the south. At this time, ASLD has one (1) site in Greenlee County, which has been described below and mapped on the following page.

Williams Communications built a fiberoptic-regeneration equipment building on 0.21 acre of ground east of Hackberry Road, and south of State Highway 70. It is approximately 12.1 miles west of the town of Duncan, 12.3 miles southwest of the town of Sheldon and 14.3 miles southwest of the town of Apache Grove (all in Greenlee County). The nearest Graham County towns to the site are Sanchez (18.6 miles northwest) and Tanque (14.3 miles southwest). *(Note): The information in these tables was obtained from data in the Arizona State Land Department's files. Cells marked "n/a" represent areas where no information was available in the State files. All rental rates shown are existing rents based on the most recent rental payment collected by the ASLD.*

County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Graham & Greenlee	Williams Communications	Fiberoptic-regen equip bldg	n/a	\$376	1/13/00	1/12/05



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**MARICOPA COUNTY:**

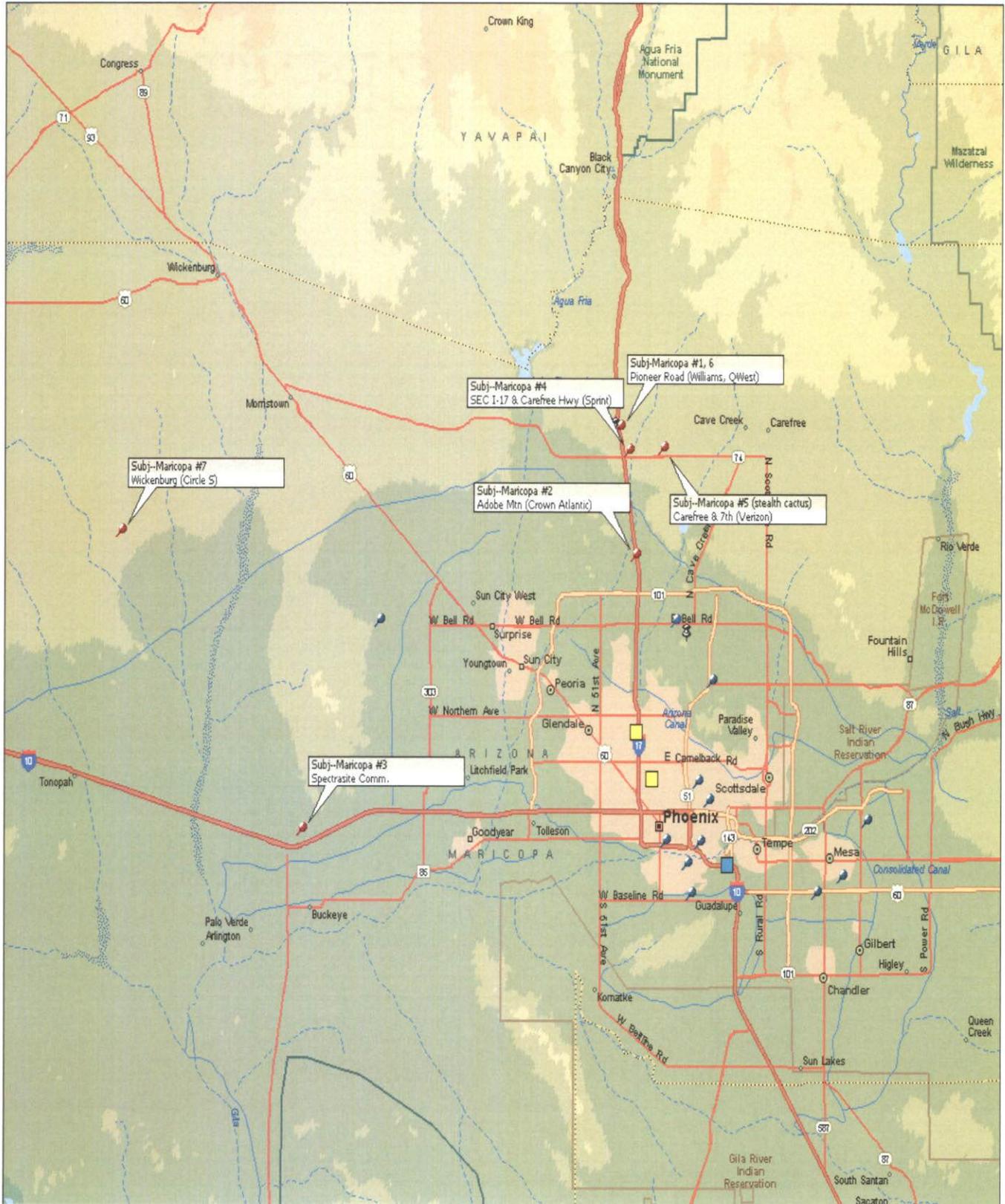
Maricopa County, in the southwest portion of the state, is the home of the state's capitol of Phoenix, and is the fourth most populous county in the United States. Maricopa is also the 14<sup>th</sup> largest county in overall size, covering 9,226 square miles. It is bordered by Yavapai County to the north La Paz and Yuma Counties to the west, Pima County to the south, and Pinal and Gila Counties to the east. The city of Phoenix and the surrounding cities of Peoria, Glendale, Paradise Valley, Scottsdale, Mesa, Chandler, Gilbert and Tempe make up the Phoenix metropolitan area. Phoenix serves as the county seat for Maricopa County, as well as the state capitol.

Geographically, the Phoenix metropolitan area is located near the center of the state in the Salt River Valley at an elevation of approximately 1,100 feet above sea level. The Salt River Valley is a broad, nearly-level plain surrounded by mountainous desert country. The area is part of the low-level, arid and hot Sonora Desert which extends south into Mexico and west into southern California. Climate is one of the most attractive features of the Valley of the Sun, with an annual average of 86 percent sunshine. Average annual daily high and low temperatures are 84.9 and 56.1 degrees Fahrenheit, respectively. Annual precipitation averages 8.4 inches. The coldest months are December, January and February, while the hottest months are July through September. Although generally moderate, the summer months can become quite hot with temperatures often exceeding 100 degrees. The development of efficient and affordable residential air-conditioning has been cited as one of the main catalysts for growth in the Salt River Valley.

The State of Arizona has seven telecommunications ground leases in this county, primarily along highways, and most of these are located in the greater Phoenix area. These sites have been summarized below.

County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Maricopa	Crown Atlantic Co. LLC	Wireless tower & equip bldg	Phoenix	\$1,250	7/3/01	7/2/11
	Crown Atlantic Co. LLC	Wireless tower & equip bldg	Phoenix	\$1,667	8/22/04	8/21/14
	Spectrasite Communications	LEO & MW relay site	n/av	\$833	4/19/03	4/18/08
	Sprint Spectrum LP	Wireless tower & equip bldg	Phoenix	\$1,650	6/30/02	6/29/07
	Verizon Wireless	Wireless tower & equip bldg	Phoenix	\$833	1/29/98	1/28/08
	Qwest Corporation	Wireless tower & equip bldg	Phoenix	\$200	1/23/04	1/22/14
	Circle S Broadcasting Co.	AM/FM broadcast	Wickenburg	\$1,250	4/20/02	4/19/12

The majority of these sites (Sites #1, #2, #4-#6) are clustered along Interstate 17 in north Phoenix, between the 101 beltway and New River Road. The Spectrasite site (#3) is an older microwave relay along Interstate 10, west of Phoenix. Site #7 (Circle S) is located five miles southwest of the town of Wickenburg, and 2.5 miles south of Highway 60 off of Vulture Mine Road. It is used as a AM/FM broadcast facility. The Verizon Wireless site is the same stealth cactus shown earlier in this report. It is situated behind a berm along the north side of the Carefree Highway at 7<sup>th</sup> Avenue in Phoenix. It is 40.5' in height, has six enclosed antennas, and is considered to be in a prime freeway location. These subject sites have been mapped on the following page.



MAP OF MARICOPA COUNTY SITES

MOHAVE COUNTY:

Mohave County is in the northwestern corner of the state of Arizona, and is the gateway for motorists entering Arizona from Salt Lake City or Las Vegas. Lake Mead defines the county's northwest border, as does the Colorado River to the west. To the north is the Utah state line, and to the east is Coconino County.

The State of Arizona has four telecommunications ground leases in this county. Three of these are in the Lake Havasu area (Sites #1 through #3) and one (#4) is near the county's northern border—serving Interstate 15 as it passes through the towns of Mesquite and Littlefield on the way to St. George, Utah. Mohave Cellular is a small telecommunications company covering northwest Arizona with mostly analog coverage. It is a subsidiary of Citizens Communications—a full-service communications provider offering telephone, television and Internet products and services for rural and small-town areas around the country.

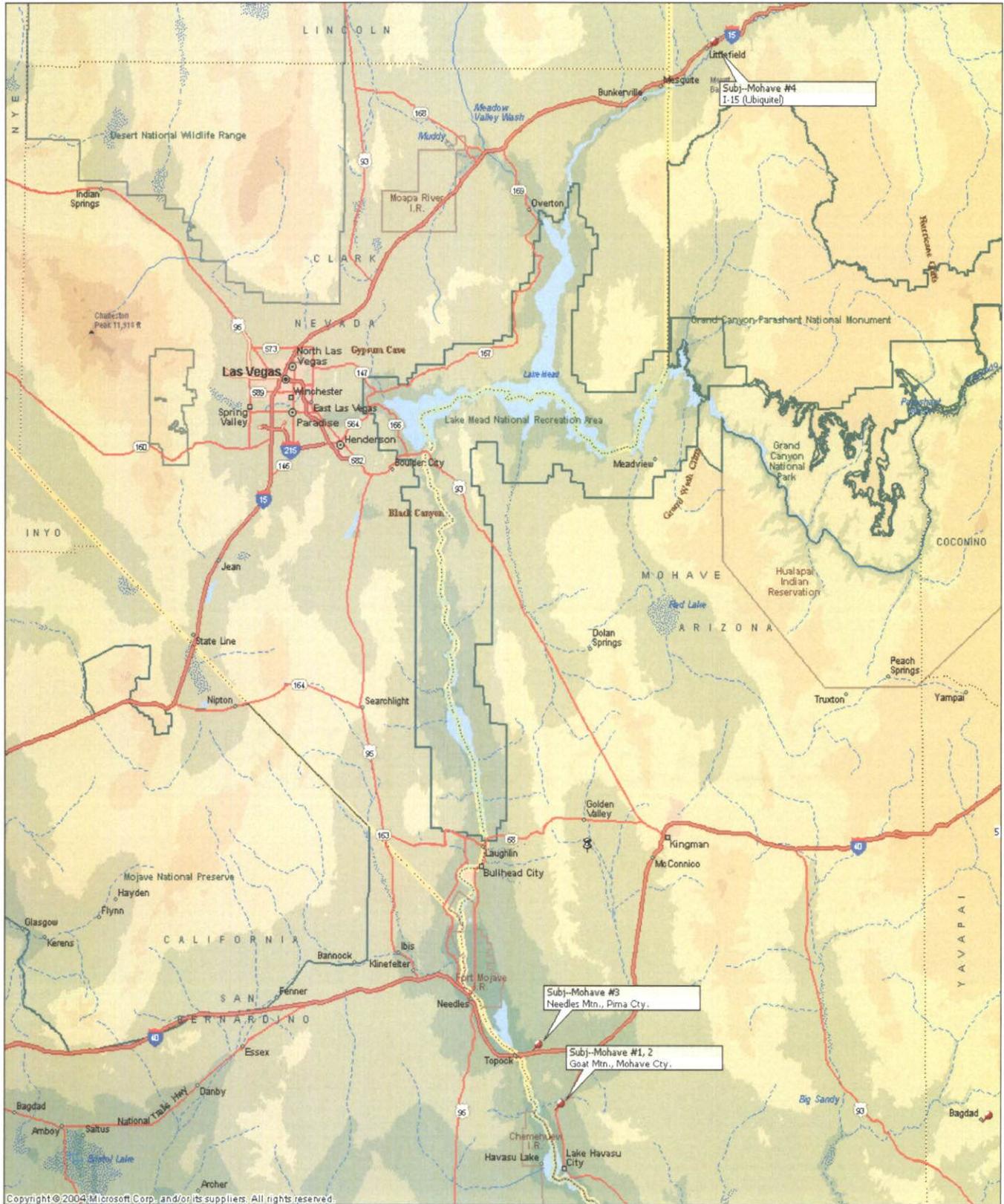
County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Mohave	Mohave Cellular LP	Cellular comm site	Lk Havasu	\$833	5/11/01	5/10/11
	Mohave Cellular LP	Cellular comm site	Lk Havasu	\$833	4/16/03	4/15/13
	New Cingular Wireless PCS	Wireless tower & equip bldg	Topock	\$833	11/3/05	11/2/15
	Ubiquitel Leasing Co.	Wireless tower & equip bldg	I-15	\$833	4/11/02	4/10/12

Ubiquitel Leasing is a reseller of Sprint PCS telecommunications services for the western and midwestern United States, including portions of California, Nevada, Washington, Idaho, Montana, Wyoming, Utah, Oregon, Arizona, Indiana, Kentucky, Illinois, and Tennessee.

These four sites have been mapped as shown on the following page.

In terms of exclusivity, Mohave Site #4 would be, in our opinion, considered in a prime location and would warrant a value at or near the upper end of its respective rental range. This site is located near the halfway point for a 27-mile stretch of Interstate 15 that passes through the State of Arizona. The land around this freeway segment is primarily owned by the State, and consequently, would command a premium in terms of rental rates, due to limited alternates.

*(Note): We have reviewed all 74 subject sites for exclusivity, and did not find any other site locations as unique as the one mentioned above. However, we reserve the right to reconsider our evaluation at the client's request should additional information become available.*



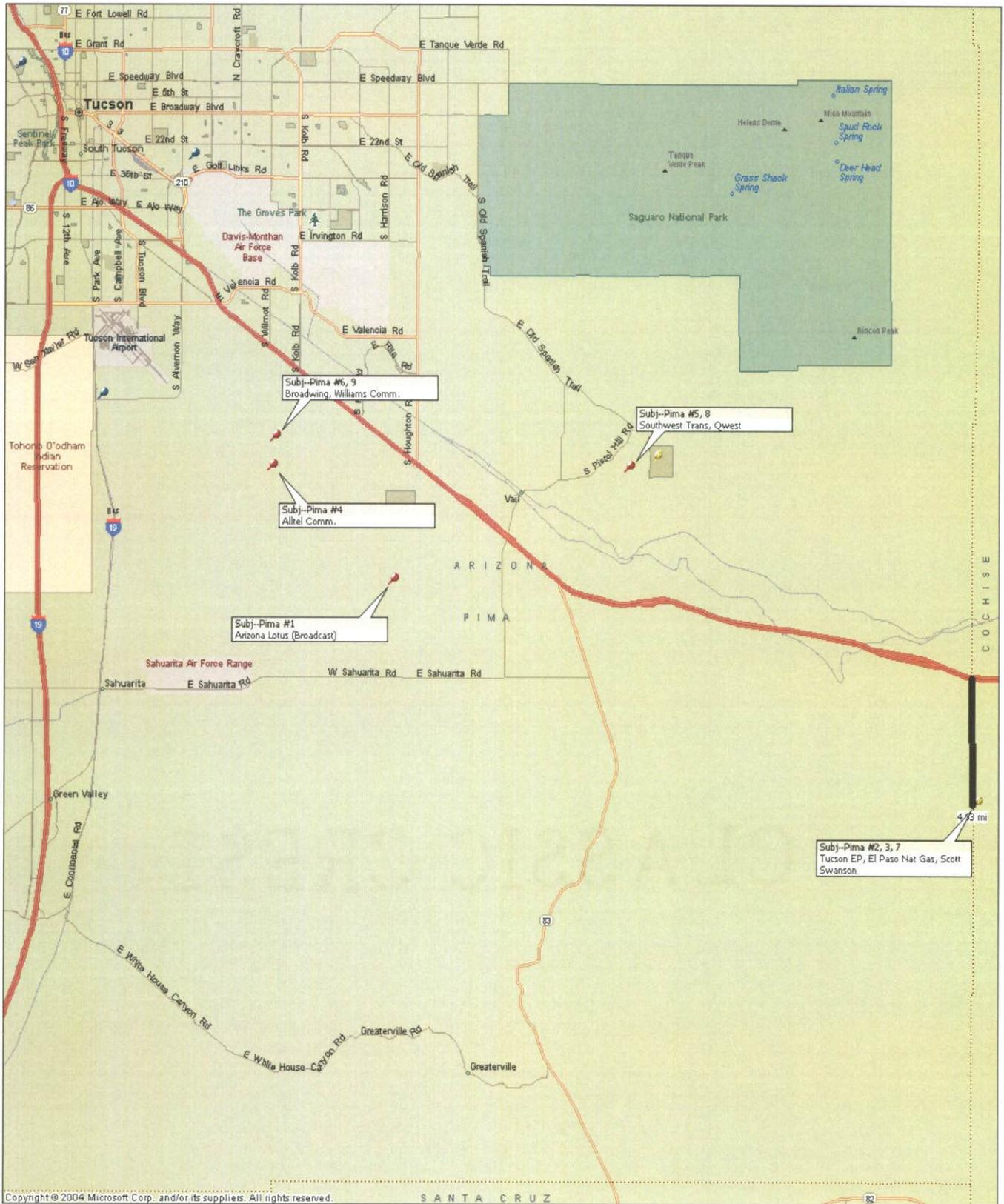
MAP OF MOHAVE COUNTY SITES

PIMA COUNTY:

Pima County runs along Arizona's border with Mexico across the Sonora Desert, and is flanked by Yuma County to the west and Santa Cruz and Cochise Counties to the east. Pima's urban center, Tucson, is one of the largest cities in the state. The State of Arizona has nine telecommunications ground leases in this county, described below.

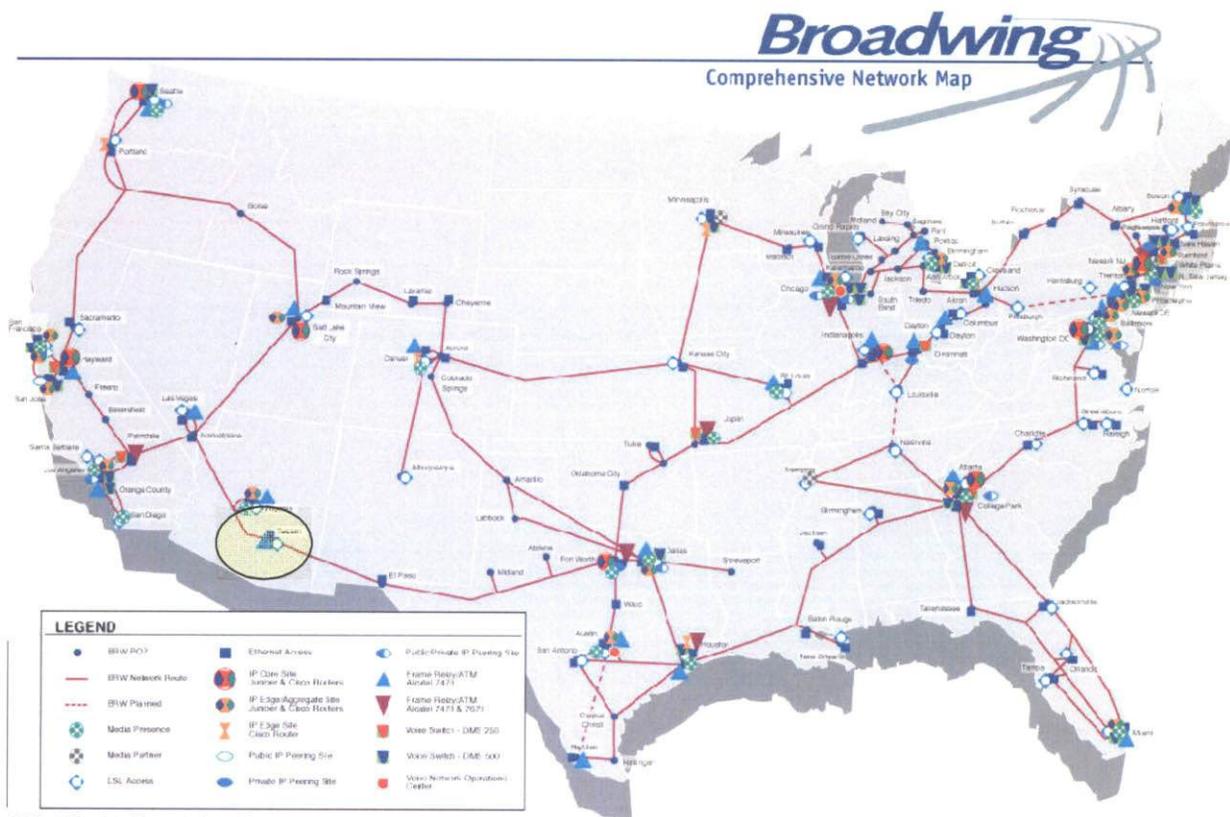
County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Pima	Arizona Lotus Corporation	FM broadcast	Tucson	\$1,292	7/3/01	7/2/11
	Tucson Electric Power Co.	MW comm and relay	Haystack Mtn	\$200	4/17/03	4/16/13
	El Paso Natural Gas Co.	MW comm and relay	Haystack Mtn	\$417	5/3/01	5/2/11
	Alltel Communications	Wireless tower & equip bldg	Tucson	\$667	11/20/05	11/19/15
	Southwest Transmission Coop, Inc.	MW comm and relay	Colossal Cave	\$200	11/1/05	10/31/15
	Broadwing Communications LLC	Wireless tower & equip bldg	Tucson	\$1,250	10/25/03	10/24/13
	Scott Swanson	Amateur radio system	Haystack Mtn	\$200	7/29/04	7/28/14
	Qwest Corporation	MW comm and relay	Colossal Cave	\$125	3/14/04	3/13/14
	Williams Communications	MW comm and relay	Tucson	n/av	n/av	n/av

As the following map shows, these nine sites are, for the most part, located along the I-10 corridor southeast of the city of Tucson. Sites #2, #3 and #7 are on Haystack Mountain (elevation 5,056') along the Pima/Cochise county line, and approximately four miles south of I-10. It is the easternmost subject location in Pima County. Sites #1, #4, #6 and #9 are south of I-10, between Houghton Road and Sahuarita Road, southeast of Tucson International Airport. Sites #6 and #9 are on Pistol Hill (elevation 4,000'), located six miles north of Interstate 10 between Benson and Tucson. Both Pistol Hill and Haystack Mountain are considered to be important handoff points in relaying microwave traffic along the I-10 corridor from Arizona to New Mexico. Sites #5 and #8 are located off of Pistol Hill Road, adjacent to Colossal Cave Mountain Park.



**MAP OF PIMA COUNTY SITES**

Arizona Lotus Corporation operates an FM-radio broadcast station from site #1, located off of Pima Mine Ranch Road and Houghton Road in Tucson. Tucson Electric Power leases multiple sites from the State of Arizona across several counties as part of their private microwave-communications system. El Paso Natural Gas is a natural-gas and energy provider and, like Tucson Electric, also leases a number of microwave-relay sites from the State for their own private communications system. Broadwing Communications provides networking solutions to enterprises, and government entities over their fiberoptic network. As shown on the following graphic, Broadwing has a number of sites clustered in the greater Phoenix and Tucson metro areas, used to provide wireless Internet and DSL access.



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 Approved for general use. Information subject to change without notice.

PINAL COUNTY:

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Pinal County begins southeast of the suburbs of Phoenix and covers much of the land in between the cities of Phoenix (in Maricopa County) and Tucson (in Pima County). Much of this county is flat farmland and is considered by some to be the next major development hotspot as Phoenix grows and extends to Tucson. The following excerpt from a November 14, 2006 article in the *Arizona Republic* describes the growth potential of this area.

*"A merger between Phoenix and Tucson is the more obvious and easier growth pattern, since the land between the state's two biggest metropolitan areas is flat farmland that is easy to build on.*

*Still, the Valley is expected to stretch from Prescott, 85 miles north of Phoenix, all the way south to the Mexico border as early as 2040.*

*The area already has garnered the designation of a megapolitan or "super-sized" metropolitan area. Urban researchers call it the "Arizona Sun Corridor" and rank it as one of the next 10 big U.S. growth hubs. That designation will help it get more growth funding and planning assistance from the federal government.*

*More than 100,000 people are expected to move to the Valley each year for the next several years.*

*"The jury is still out on whether the Valley's growth will connect it with Prescott," said Nate Nathan with the land brokerage firm Nathan & Associates. "There's demand for growth in the north, but it's not going to happen right away.*

*Growth that can't go north will likely go west to the White Tank Mountains and southeast to Pinal County. Those areas have transportation woes, but not as many land and water issues.*

*If the Valley doesn't easily connect with Prescott as soon as it does Tucson, it likely won't affect Arizona's megapolitan status. That status is key to getting more government money for freeways and planning, which could help Yavapai County with some of its growth issues.*

*More than 200 million people, two-thirds of the U.S. population, currently live in the 10 megapolitan regions. The combined areas are projected to add 85 million people, 64 million jobs and \$33 trillion in construction spending by 2040, according to Robert Lang, co-author of "Land Lines," a 2005 report on megapolitan areas for the Lincoln Institute of Land Policy."<sup>7</sup>*

The metropolitan areas of Phoenix, Tucson and Prescott together have a population of about 5 million, a figure expected to double by 2010.

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<sup>7</sup> The full article can be viewed online at <http://www.azcentral.com/community/pinal/articles/1114yavapai14-ON.html>

The State of Arizona has ten telecommunications ground leases scattered across Pinal County. Half of these are located in or near the border towns of Red Rock (off I-10) or Oracle Junction (25 miles north of Tucson at the Route 79/Route 77 junction). Both of these locations serve as ideal relay or switching stations for signals traveling between Tucson to the southeast and Casa Grande to the northwest.

County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Pinal	Crown Atlantic Co. LLC	Wireless tower & equip bldg	Oracle Junction	\$500	10/8/98	10/7/08
	Crown Atlantic Co. LLC	Wireless tower & equip bldg	Grayback Mtn	\$833	2/10/04	2/9/14
	Alltel Communications	Wireless tower & equip bldg	Oracle	\$500	4/12/02	4/11/12
	AZ Dept. of Public Safety	MW comm and relay	Red Rock	\$200	1/10/04	1/9/14
	El Paso Natural Gas	Wireless tower & equip bldg	Black Mtn area	\$200	1/10/06	1/9/16
	Crown Atlantic Company, LLC	Wireless tower & equip bldg	Casa Grande	\$1,000	1/12/11	1/11/11
	Verizon Wireless	Wireless tower & equip bldg	Picacho Peak	\$833	4/8/03	4/7/13
	Tucson Electric Power Company	MW comm and relay	Peters Corner	\$200	4/1/03	3/31/13
	Electrical District Number #3 Pinal County	Electric substation	Route 238	\$125	8/27/00	8/26/10
	Qwest Corporation	Wireless tower & equip bldg	Oracle	\$200	11/14/04	11/13/14

Site #4 (AZ Public Safety) is located five miles southwest of Red Rock along the county's southern border near the Santa Cruz River at a ground elevation of 1,961', which is 100' higher than the valley floor. Picacho Peak State Park, near Site #7 in Red Rock, commemorates the Battle at Picacho Pass, which was the westernmost battle of the Civil War, and marked the point when Arizona became part of Union territory (it was formerly a Confederate state)

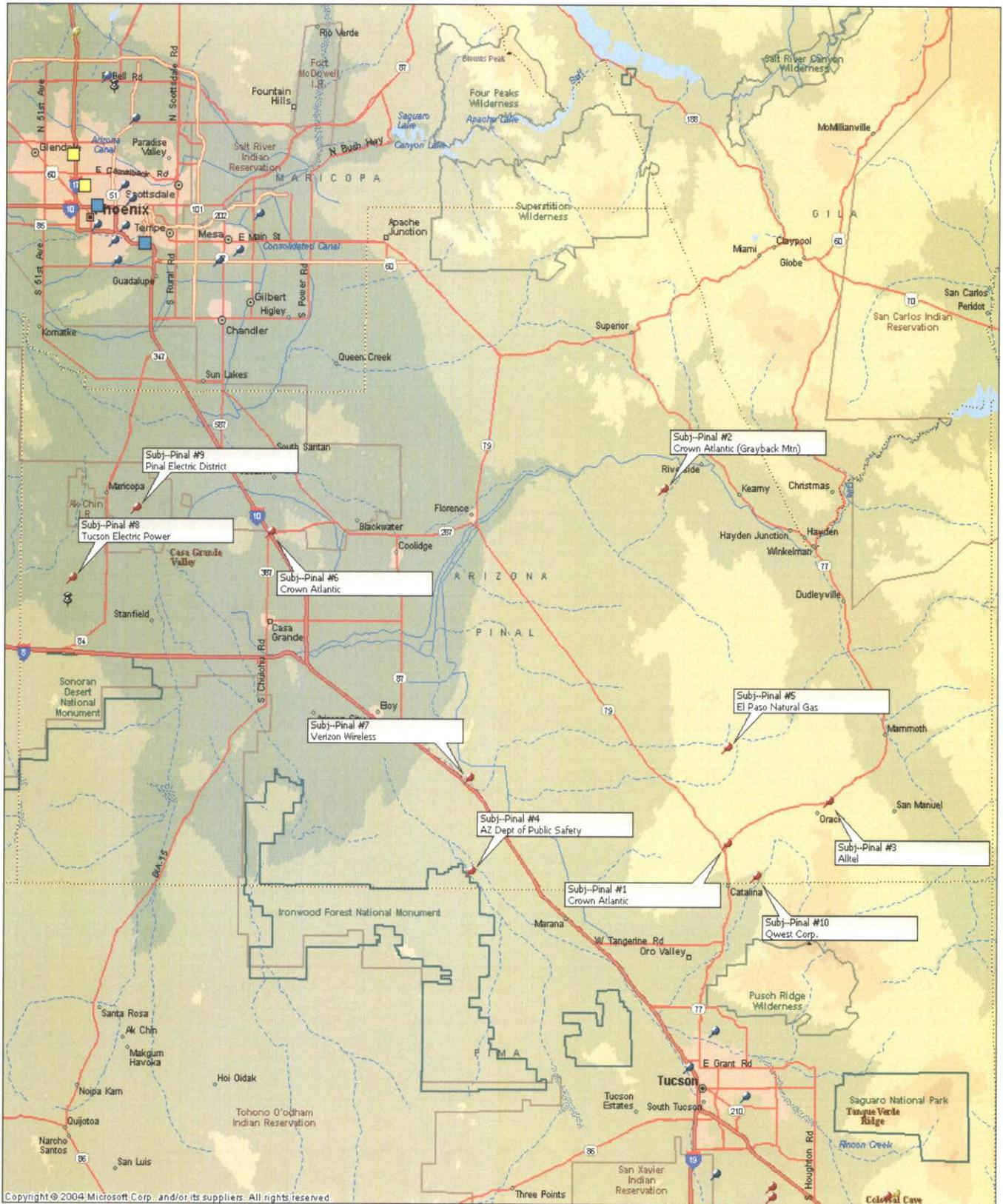
Site #6 is located in the city of Casa Grande, near the intersection of Interstate 10 and Route 387.



Founded in 1879, Casa Grande was named for the famous Casa Grande Ruins National Monument 20 miles to the northeast. Midway between Phoenix and Tucson, the city has grown to be the largest community in western Pinal County since its incorporation in 1915.

For over a thousand years, prehistoric farmers inhabited much of the present-day state of Arizona. When the first Europeans arrived, all that remained of this ancient culture were the ruins of villages, irrigation canals and various artifacts. Among these ruins is the Casa Grande (or "Big House," as shown in the above photo) one of the largest and most mysterious prehistoric structures ever built in North America.

The Tucson Electric Power substation (Site #8) is located approximately 6.5 miles north of Interstate 8, west of Ralston Road, in the town of Peters Corner. The substation listed above as Site #8 is located along Route 238 between the town of Maricopa and Casa Grande.



MAP OF PINAL COUNTY SITES

**YAVAPAI COUNTY:**

Yavapai County begins northwest of metropolitan Phoenix and fills out the northern end of the Valley of the Sun. It was the first county created by the Arizona Territorial Legislature in 1863. Prescott, the current county seat, was the original capital of Arizona. Yavapai covers 8,128 square miles of transitional terrain from the lower Sonora Desert in the south to the heights of the Coconino Plateau to the north and the Mogollon Rim to the east.

The State of Arizona has 11 telecommunications ground leases scattered across Yavapai County. Sales #1, #2 and #5 are located in the city of Prescott, and Site #4 is located in the town of Hillside along Route 96, halfway between Prescott and the county's western border. Sites #8 and #9 are relays along Interstate 40, which runs along the northern border of Yavapai from Kingman east to Flagstaff.

County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Yavapai	Southwest FM Broadcasting	Wireless tower & equip bldg	Prescott	\$1,500	7/22/02	7/21/12
	Intermountain Communication, Inc.	Solar-pwred two-way radio, paging	Prescott	\$292	5/23/05	5/22/15
	FBI	Internal telecom	Squaw Peak	\$150	10/1/01	9/30/06
	Burlington Northern & Santa Fe RR	VHF mobile radio relay (analog)	Hillside	\$649	11/5/75	11/4/05
	Prescott Valley Broadcasting	Solar MW relay, FM broadcast	Prescott	\$200	10/3/05	10/2/15
	Joseph P. Tabback	AM broadcast	W. Sedona	\$2,161	12/13/89	12/12/14
	Yavapai County	Local law-enforcement wireless site	Juniper Mtns	\$200	8/1/05	7/31/15
	Verizon Wireless	Wireless tower & equip bldg	I-40	\$833	3/14/04	3/14/14
	Multimedia Inc.	MW comm and relay	I-40	\$125	11/20/97	11/19/07
	Phelps Dodge Bagdad Inc.	TV broadcast	Route 97	\$208	8/19/02	8/18/12
	Univision Radio Phoenix Inc.	TV broadcast	Route 89	\$245	7/15/98	7/14/08

The Juniper Mountains run across the northern portion of the county approximately 15 miles south of the town of Seligman, off Interstate 40. This is a key relay peak for communication traffic traveling from Flagstaff west to Los Angeles. It is approximately halfway between Kingman and Flagstaff, and has line-of-sight into Mohave County.

Phelps Dodge is a copper-mining corporation who is leasing land from the State near the town of Bagdad, north of Route 97 near Yavapai's western border. They have subleased one acre of ground to a local TV broadcast station (Site #10) for a total consideration of \$208 per month. Univision is a Spanish-language TV broadcast station. They are presently leasing 0.98 acre of ground for a broadcast site south of the town of Yarnell along Route 89, southwest of Prescott.

NAVAJO AND APACHE COUNTIES:

These two counties are in the northeast corner of the state. Navajo County covers 9,953 square miles and contains portions of the Hopi Indian Reservation, the Navajo Indian Reservation and Fort Apache Indian Reservation. Its county seat is the town of Holbrook, which had a 2006 population of 5,126. Navajo County was split off from Apache County (which borders it on the east) in 1895. Distinctive features of this county include Monument Valley along the northern county line, and Fool Hollow Lake and Rainbow Lake in the southern portion of the county.

Apache County is in the northeast corner of the state, and contains Arizona's portions of the Four Corners Monument, shown in the photo below. Apache County covers 11,205 square miles and contains parts of the Navajo Indian Reservation, the Fort Apache Indian Reservation and the Petrified Forest National Park. Its county seat is the town of St. Johns (population 3,538).



The following excerpt on Apache County was taken from the free online encyclopedia Wikipedia.org. *Apache County is justly noted for its great natural resources and advantages. It is destined some day in the early future to have a large agricultural population. Now, immense herds of cattle and flocks of sheep roam over its broad mesas and its*

*fertile valleys. The Navajo Indians occupy the northern part of the county. In fact, they occupy much of the remainder of the county, as they refuse to remain on their reservation, preferring to drive their sheep and cattle on lands outside their reservation, where the grazing is better. The southern part is a fine grazing country, while the northern part is cut up into picturesque gorges and canyons by the floods of past centuries.*



The State of Arizona has four ground leases in these two counties. Site #1 is located northwest of the Petrified Forest National Park and is used by the Burlington Railroad as an analog microwave repeater along its rail right-of-way. Sites #2 and #3 are located along Highway 60, which cuts across the southeast corner of the county as it winds up through the Gila Mountains towards New Mexico. Site #4 covers a portion of Route 260 adjacent to the Sunrise Ski Resort in Arizona's White Mountains (see photo above right), and is used by the Apache County Board of Supervisors for emergency mobile radio communications.

County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Navajo & Apache	Burlington Northern & Santa Fe RR	Analog MW and repeater station	Petrified Forest	\$125	4/18/03	4/17/13
	Citizens Telecom Co. of the White Mtns	MW comm and relay	Hwy 60	\$200	12/12/02	12/11/12
	Country Mountain Airwaves LLC	AM broadcast	Hwy 60	\$500	4/27/04	4/26/14
	Apache County Board of Supervisors	Public-safety EMR	Route 260	\$200	5/11/01	5/10/11



COCHISE COUNTY:



Cochise County lies in the southeast corner of the state, and is bordered by Pima and Santa Cruz counties to the west, and Graham and Greenlee counties to the north. It covers 6,169 square miles and its county seat is Bisbee. It was created in 1881 out of the eastern portion of Pima County, and is characterized by the Dos Cabezas and Pedregosa Mountain ranges which run in a northwest to southeast direction across the county. Near Dos Cabezas is the Fort Bowie National Historic Site (*the photo to the left depicts the ruins of Fort Bowie*). The historic site was established in 1972 to commemorate the bitter

conflict between the Chiricahua Apaches and the US military and to preserve the ruins of Fort Bowie.<sup>8</sup>

Two engagements between the U.S. Military and the Chiricahua Apaches led to the construction of Fort Bowie in 1862. The first engagement took place in January 1861 when a band of Apaches raided the ranch of John Ward. Ward mistakenly believed that Cochise and the Chiricahua Apaches were responsible for the raid and demanded that the military take action against Cochise to recover property stolen during the raid. The next month, the army responded to Ward's request by sending Lt. George Bascom and 54 men to Apache Pass to confront Cochise. Bascom managed to capture Cochise and threatened to hold him hostage until Ward's property was returned but the Apache leader managed to escape. Sporadic fighting between Cochise's warriors and Army troops would continue for years to come.

In the Battle of Apache Pass, fought in 1862, a Union regiment was ambushed by a band of Apaches while en route from California to New Mexico where they were to confront Confederate troops. This battle led to the eventual establishment of Fort Bowie in order to protect Apache Pass and an important source of water, Apache Spring. For more than 30 years Fort Bowie and Apache Pass were focal points of military operations eventually culminating in the surrender of Geronimo in 1886 and the banishment of the Chiricahuas to Florida and Alabama. The fort was abandoned in 1894.

One of Cochise's more well-known towns, Tombstone, nearly became a ghost town after the decline of silver mining in the 1890s, saved for many years only by its status as the Cochise County seat. Tombstone is home to the Boot Hill graveyard of the Old West. Buried at the site are various victims of violence and disease in Tombstone's early years, including those from the OK Corral. Boot Hill (also known as the old city cemetery) was also the destination for bad men and those lynched or legally hanged in Tombstone.

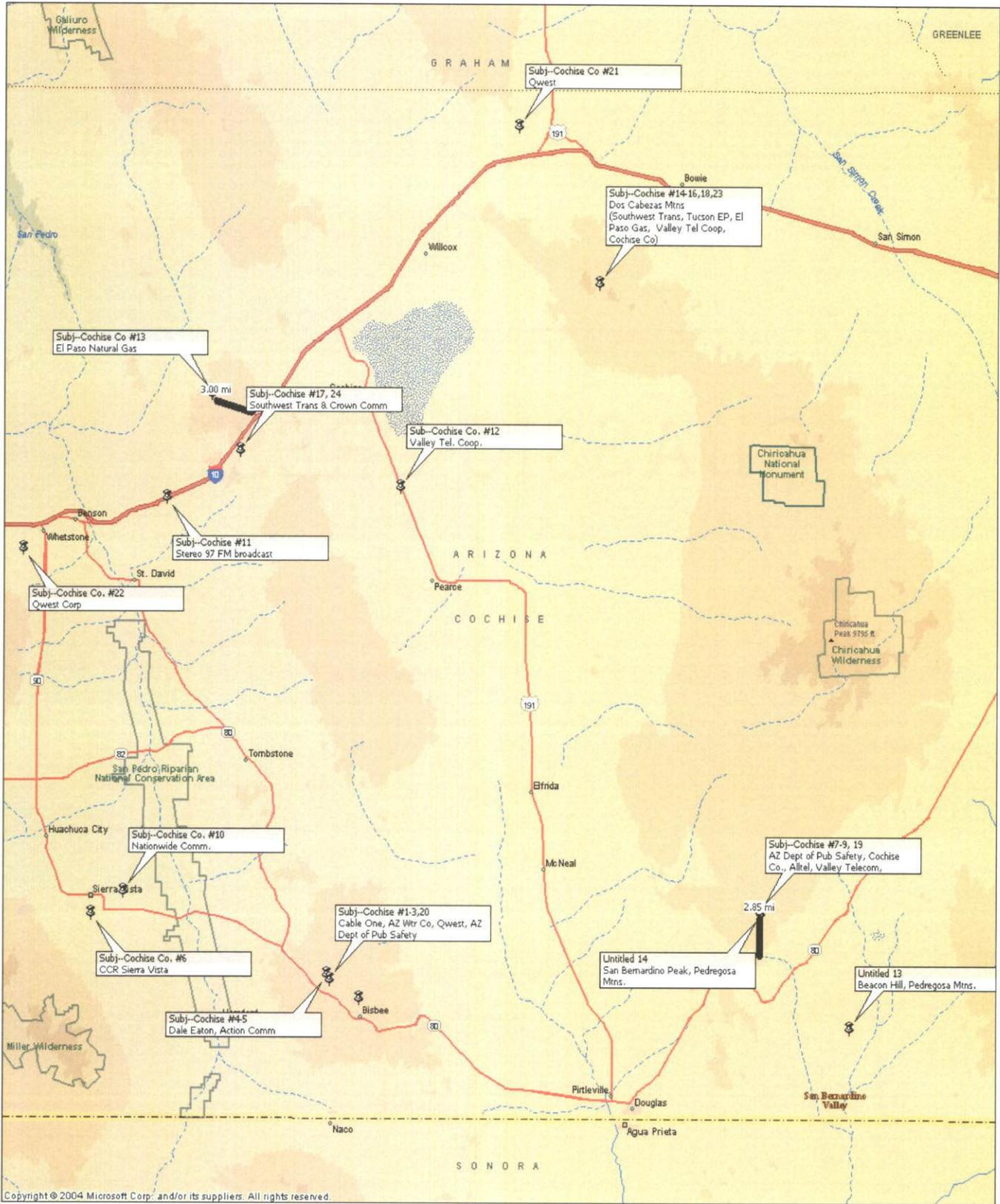
<sup>8</sup> Excerpt taken from Wikipedia.org.

From a telecommunications standpoint, the mountain ranges in Cochise County have historically been important relay locations for telecommunications traffic traveling from Tucson into New Mexico to the east.

County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Cochise	Cable One, Inc.	Cable TV relay site to Bisbee, AZ	Mule Pass, Bisbee	\$482	2/17/06	2/16/16
	Arizona Water Company	Radio base station for mobile unit (paging)	Mule Pass, Bisbee	\$200	9/24/97	9/23/07
	Qwest Corporation	Wireless tower & equip bldg	Mule Pass, Bisbee	\$200	12/7/03	12/6/13
	Dale & Sheryl Eaton	Repeater for two-way radio	Mule Pass, Bisbee	\$208	10/28/97	10/27/07
	Action Communication, Inc.	Wireless tower & equip bldg	Mule Pass, Bisbee	\$250	11/15/01	11/14/11
	CCR - Sierra Vista III LLC	Radio broadcasting station (AM/FM)	Sierra Vista	\$1,458	1/4/02	1/3/12
	Arizona Dept. of Public Safety	Local law-enforcement wireless site	San Bernardino Pk	\$125	10/1/98	9/30/08
	Cochise County Board of Supervisors	Public-safety EMR	San Bernardino Pk	\$200	10/13/05	10/12/15
	Alltel Communications	Wireless tower & equip bldg	San Bernardino Pk	\$417	2/26/01	2/25/11
	Nationwide Comm. Specialists	Wireless tower & equip bldg	Sierra Vista	\$833	2/15/02	2/14/12
	Stereo 97, Inc.	Unattended FM broadcast	Benson	\$125	9/3/98	9/2/08
	Valley Telephone Coop, Inc.	MW comm and relay	Hwy 191	\$200	6/20/03	6/19/13
	El Paso Natural Gas Co.	Internal telecom and MW relay	Lime Peak	\$200	10/25/03	10/24/13
	Southwest Transmission Coop, Inc.	MW comm and relay	Dos Cabezas	\$200	11/1/05	10/31/15
	Tucson Electric Power Co.	Wireless tower & equip bldg	Dos Cabezas	\$200	5/1/03	4/30/12
	El Paso Natural Gas Co.	Internal telecom and MW relay	Dos Cabezas	\$417	5/3/01	5/2/11
	Crown Communication, Inc.	Wireless tower & equip bldg	Dragoon Rd.	\$833	3/15/99	3/14/09
	Valley Telephone Coop, Inc.	Multiple tower site	Dos Cabezas	\$500	4/1/01	3/31/11
	Valley Telephone Coop, Inc.	Telco repeater site	San Bernardino Pk	\$200	2/16/02	2/15/12
	AZ Department of Public Safety	Public-safety EMR	Bisbee	\$208	2/17/04	2/16/14
	Qwest Corporation	MW comm and relay	Cochise	\$200	10/24/04	10/23/14
	Qwest Corporation	Wireless tower & equip bldg	Benson	\$200	3/14/04	3/13/14
	Cochise County Board of Supervisors	Public-safety EMR	Dos Cabezas	n/av	n/av	n/av
	Southwest Transmission Coop, Inc.	MW comm and relay	Dragoon Rd.	n/av	n/av	n/av

As shown on the map on the following page, these 24 subject sites are clustered into three regions. 1.) On or adjacent to the Interstate-10 corridor (Sites #11-18, 21-24); 2.) Route 80 corridor west of Highway 191 (Sites 1-6, 10, 20); and 3.) Route 80 corridor east of Highway 191 (Sites #7-9, 19).

The majority of these are high-elevation sites. Sites #1 through 5 and Site #20 are located on Mule Pass near the town of Bisbee, which has a peak elevation of almost 7,000 feet above sea level. Sites #7 through 9 and Site #19 are on a 6,540-foot peak in the West Pedregosa Mountains north of the San Bernardino Valley in the southeast portion of the county. Site #13 is on Lime Peak (elevation 4,957 feet) which is approximately three miles northwest of the town of Johnson, off of Interstate 10. (Note): The State Land Department's files refer to this location as the Cascabel Tower site. Sites #14 through 16, #18, and #23 are part of a multi-tenant telecommunications facility on Dos Cabezas Peak, which is the highest point in the Dos Cabezas Mountains (facility has a ground elevation of 7,795 feet).



**MAP OF COCHISE COUNTY SITES**

COCONINO COUNTY:

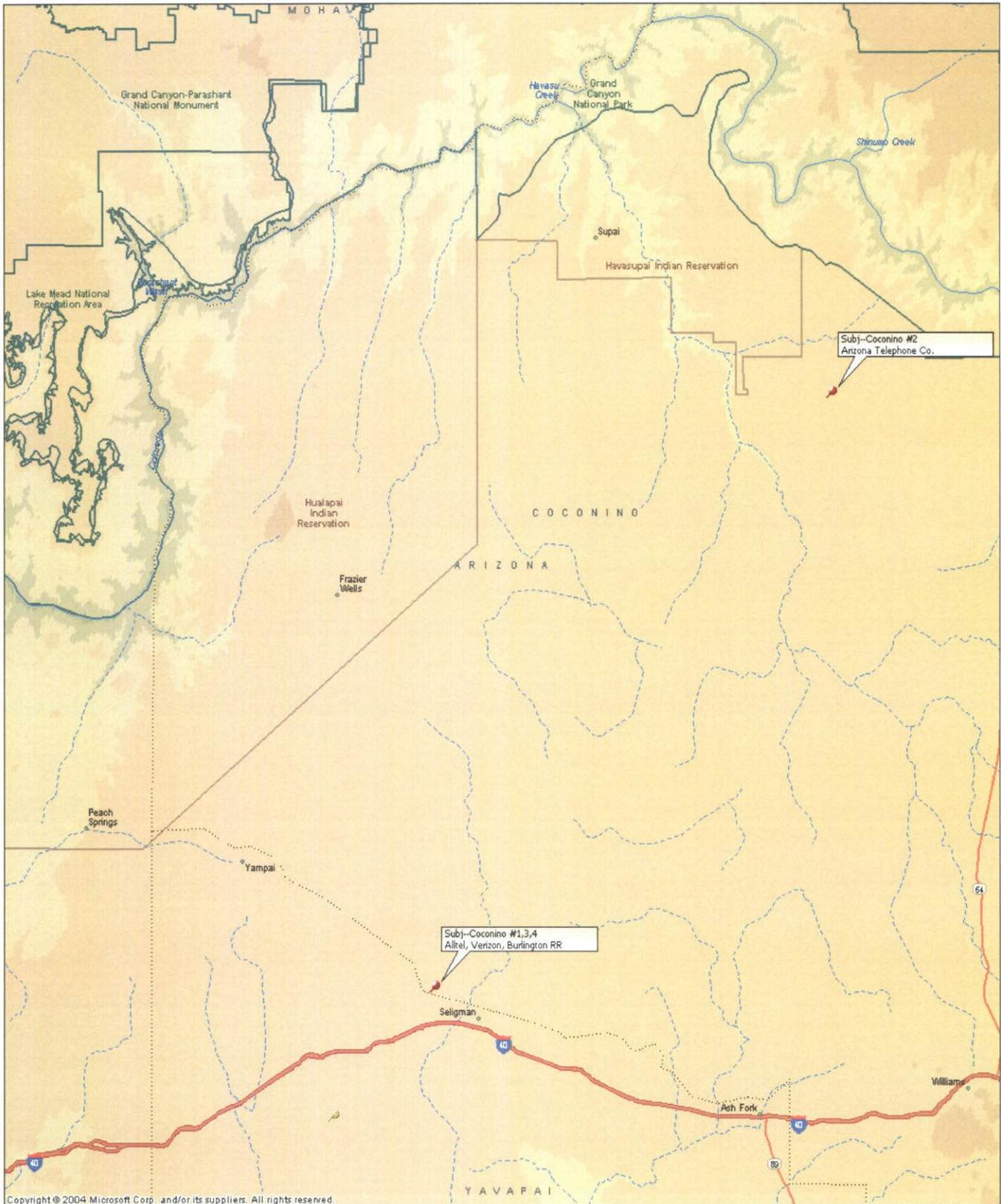
Coconino County is located in the north central portion of the state, and covers 18,661 square miles. It is physically larger than Denmark and has more land area than four US states put together. It is the second largest county by land area in the contiguous US, behind San Bernardino County in California. After the building of the Atlantic & Pacific Railroad in 1883 the region of northern Yavapai County began experiencing rapid growth. The people of the northern reaches had tired of the rigors of traveling all the way to Prescott for county business. They also believed that they were a significant enough entity that they should have their own county jurisdiction. Therefore, they decided in 1887 to petition for secession from Yavapai and the creation of a new Frisco County. They remained part of Yavapai, however, until 1891 when Coconino County was formed. The seat was at Flagstaff.

Coconino contains Grand Canyon National Park, the Havasupai Indian Nation and parts of the Navajo Nation, Hualapai Nation and Hopi Nation. Its county seat is Flagstaff.

The State of Arizona has four ground leases in Coconino County. Sites #1, #3 and #4 are located northwest of the town of Seligman on a hill known as Chino Point, overlooking Interstate 40. Site #2 is a remote relay 14 miles southwest of Grand Canyon Village, and is used to provide telephone service to the Havasupai Reservation, located another 4.5 miles northwest of the subject. This relay replaced 70 miles of copper telephone toll line which had limited capacity (only 3 lines into the reservation and 3 lines out) and was at the end of its useful life.

County	Tenant	Purpose of Site	City	Rent/Mo.	Lease Start	Lease End
Coconino	Alltel Communications	Wireless tower & equip bldg	Seligman	\$833	1/16/04	1/15/14
	Arizona Telephone Co.	Telco service to Havasupai Indian Res.	Grand Cyn.	\$200	10/15/01	10/14/11
	Verizon Wireless	Wireless tower & equip bldg	Seligman	\$833	3/15/04	3/14/14
	Burlington Northern & Santa Fe RR	Analog MW and repeater station	Seligman	\$201	10/7/00	10/6/10

These sites have been mapped on the following page.



MAP OF COCONINO COUNTY SITES

## SUBJECT LEASE TERMS

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Although the specific terms of the subject sites vary, there are some commonalities, which we have summarized below.

### *DURATION*

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Almost all of the subject sites were negotiated for fixed ten-year terms and no option periods to renew. In fact, only one of the subject site leases was negotiated to include (1) ten-year renewal with an automatic-renew clause. Typical lease terms for wireless leases are for five years as a base, with four to five option periods of five years each. It has been our experience that automatic-renewal clauses (which assumes that the lessee will renew at the end of each period) are fairly common, although they tend to be found in leases that favor the lessee. Leases written with a lessor's advantage in mind will not have this type of clause in place, and will specify that the lessee obtain written approval from the lessor prior to renewing.

Based on our experience reviewing wireless leases for sites in five western states (California, Oregon, Washington, Nevada and Arizona) as well as multiple interviews conducted over the years with industry participants, we would recommend to ASLD that they utilize a five-year base term for new leases with annual CPI rental adjustments, coupled with either four or five five-year option periods, with no automatic ability to renew. In addition, we would suggest that ASLD include some form of "marked to market" language in their lease templates, which would allow the lessor to compare their contract rents with prevailing market rates at that time to ensure that they are receiving a fair-market rental for the next lease-option term. We would suggest that the subject sites be "marked to market" at least every five years, or following any significant change in tenancy or tenant improvements. If a lessee can lock in a rental rate for ten years or longer, there is a greater likelihood that the lessor will receive under-market rent over the duration of the lease.

The phrase "marked to market" is stock-trading terminology. Within that context, the phrase refers to an arrangement whereby the profits or losses on a futures contract are settled each day. Within a real-estate context, the phrase refers to an arrangement whereby the contract rent and terms in a lease agreement are compared with market rates and terms on a regular and consistent basis—usually every year or every five years.

*RENT ESCALATIONS*

Most of the subject leases have the following clause regarding annual escalations in rent. *"Lessee understands and agrees that rent charged for the first lease year represents a current minimum rate for communications sites. Future rent increases may include significant changes in minimum rental rates. Minimum rent adjustments shall be effective upon the anniversary dates of this lease. Rent shall reflect the most current rate schedule for the use(s) designated herein."*

Although we are not attorneys, we have taken this clause to mean that ASLD reserves the right to increase rent in the future. This clause does not imply the use of a Consumer Price Index or other market benchmark as the basis for determining rent increases, and in our experience, is somewhat vague.

After reviewing ASLD's files, it appeared that fixed escalators were used in the 1990s, when site rents were increased by a fixed 20% every five years. By the start of this decade, it did not use any annual escalations—electing to occasionally raise rents by approximately 12.5% to 20% per year as a market-corrective measure.

Thirteen of the subject site leases use a national CPI as the basis for annual escalations. Escalations in a typical wireless lease will be based on either a fixed percentage (usually 3% to 5% per year), or will be based on a version of the CPI (either local, regional or national depending on the site's geographic location and the demographics of the surrounding area). We would suggest that ASLD utilize either a national CPI or a local price index tied to the Phoenix-Mesa area—both of which have been shown below. *(Note): The Bureau of Labor Statistics of the US Department of Labor does not have CPI data for Phoenix-Mesa prior to 2002.*

National CPI		
Year	Annual Average	Annual Incr.
1996	156.9	---
1997	160.5	2.29%
1998	163.0	1.56%
1999	166.6	2.21%
2000	172.2	3.36%
2001	177.1	2.85%
2002	179.9	1.58%
2003	184.0	2.28%
2004	188.9	2.66%
2005	195.3	3.39%
2006	200.6	2.71%
2007	207.3	3.36%
2008	215.3	3.84%
2009	212.0	-1.53%

Phoenix-Mesa CPI		
Year	Annual Average	Annual Incr.
1996	---	---
1997	---	---
1998	---	---
1999	---	---
2000	---	---
2001	---	---
2002	101.2	---
2003	103.3	2.08%
2004	105.2	1.84%
2005	108.3	2.95%
2006	111.5	2.95%
2007	115.3	3.39%
2008	119.3	3.45%
2009	<i>Estimated</i>	-1.92%

*TERMINATION RIGHTS*

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The termination rights in the subject leases we reviewed allow either party to cancel the agreement at any time, provided they state their intentions in writing to the other party in advance (usually sixty days). Most leases that we have reviewed do not allow cancellation until the end of the lease term.

*SURRENDER/REVOCAION*

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All of the subject leases have the following clause in place relating to lessee's surrender of their leasehold rights, in conformance with Article 5 (Improvements on State Lands), Subsection 37-321 in the Arizona State Statutes

*"In the event this Lease is not renewed, Lessee shall surrender peaceably the possession of the Parcel upon expiration of the term of this Lease."*

Although this clause assumes that the lessor will receive fee-simple ownership of the property in question if the lease is allowed to expire, it does not specifically address the ownership of the tenant improvements. Other wireless leases we have reviewed have stated specifically that it is lessee's responsibility to remove any tenant improvements at the end of their lease, or at lessor's discretion, leave the improvements in place. If the lessee does not do so, or if improvements are allowed to remain (like equipment shelters or towers that could be costly to dismantle), the ownership right to these improvements would automatically revert to the lessor.

*USE/PRIOR APPROVAL REQUIRED*

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In the majority of the subject leases we reviewed, we found a very specific use clause, like the one shown below.

*"The Parcel shall be used solely and exclusively for: maintenance and operation of a telecommunication mini-hut facility...Lessee shall not place or construct or permit to be placed or constructed any Improvement or Removable Improvement on or to the Parcel. All other improvements are prohibited. Prior to applying for a building permit from the local government authority or prior to beginning of the construction if no permit is required, Lessee shall submit a current Application To Place Improvement ("Application"). No construction shall begin until Lessor approves in writing the Application...Any Improvements placed on the Parcel shall conform to existing laws and ordinances applicable to the proposed construction in the jurisdiction where the Premises are located, unless Lessor determines and advised Lessee in writing that such conformity is not in the best interest of the Trust."*

In our experience, a statement of specificity of use is advisable since it protects the lessor against unapproved construction for which it could charge additional rent. Some leases and licenses we have seen have gone further than the above language by stating the degree and nature of the improvements to be allowed—(such as the height of the tower or monopole, number of antennas and size of any building improvements). This tends to be more common with licenses (as opposed to leases), which are often granted for a very specific use. The above language, however, simply states the type of telecommunications use allowed, and allows the lessee to build or modify their improvements as needed as long as their improvements conform to this general description.

Although we are not attorneys, we would recommend that ASLD preserve their existing use clause because of the protection it provides, keeping in mind that this language could be a negotiable issue on the part of the lessee

*OPERATING EXPENSES*

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The majority of the subject site leases we have reviewed have been on either a triple-net or modified-net basis, where the majority of the expenses associated with the operation and periodic maintenance of the site are passed through to the lessee. Our rental conclusions take each of the following items into consideration.

*(Utilities):*

Typically, lessees would be responsible for the cost of any utilities needed to run their telecommunications improvements (namely electricity and telephone). If any utilities service a building or area owned by the lessor and shared by the lessees, the payment of a proportionate share of this portion of the utilities would be passed on to the lessees.

*(Maintenance):*

This can also be a shared expense, in the sense that the lessees would be responsible for the maintenance of their own improvements, while the lessor would be responsible for maintenance of the site, and any shared building space.

*(Insurance):*

Liability insurance is always required, and is the responsibility of the lessee. In a typical telecommunications lease (either cabinet-rack or ground), it is common for the lessee to take out a hazard-insurance policy covering their telecommunications improvements. However, since this policy only protects their leasehold interest, it is suggested that the lessor insure the site as a whole and any shared area or building.

*(Improvement Construction):*

In ground leases, the cost of any telecommunications improvements is usually borne by the lessee, who would therefore own the rights to the improvements until the termination of their lease—at which time, ownership rights would revert to the lessor (assuming the improvements have not been removed). The construction cost of any improvements that will be subleased by the lessor (either now, or at a later date) are borne by the lessor and typically included in the lease rate.

*(Property Taxes):*

It is our understanding that the ASLD pays no property or possessory-interest taxes. Therefore, this would not be an expense that would be passed through to the lessee. In any event, any expense of this or any related expense would be passed through to the tenant. The subject's existing terms regarding operating expenses are, in our opinion in keeping with standard market terms, and we would not recommend any changes or revisions. It has been our experience, however, that any or all of the operating expenses can be negotiated depending on the needs of the lessee and the nature of the negotiation process.

*CO-LOCATION/SUBLEASE RECAPTURE*

Based on our experience, most tower operators and municipalities will specify terms of co-location as a specific clause within their lease (or master-lease) templates. Elements of this clause can include, but are not limited to, the following.

- 1.) A specification of how much of a tenant's demised area can be sub-leased (this would also include whether the tenant has the right to enter into ground sub-leases).
- 2.) A description, and means of calculating, sublease-recapture (or revenue-sharing) for the lessor.
- 3.) The approval of the lessor for any sub-lease. This, along with regularly scheduled site visits (once a month is suggested, annually at a minimum), provides the lessor with a means of maintaining control over a particular site.

However, older site agreements did not always specify co-location terms. A good example of this is an analog site we appraised within the Lake Mead National Recreation Area in Nevada. Approximately ten years ago, the primary tenant had entered into an agreement with the Colorado River Commission to operate a wireless site at this location within the Lake Mead National Recreation Area. Since the original agreement did not specify that the primary tenant could not sub-lease, they subsequently entered into two subleases. One of these was a co-location within their building, and the second was a ground sublease. The current policy of the National Park Service holds that all wireless ground leases will be negotiated directly with NPS.

A case cited by the primary tenant's legal counsel (*Cupples v. Level*) states that if a particular agreement "is silent on the issue of whether the tenant may sublet or assign, the default rule is that the Tenant will be allowed to sublet or assign without the landlord's consent."<sup>9</sup>

Most of the subject leases have the following co-location clause in place, which was taken from leases we reviewed during our previous appraisal.

*"Subject to Lessee (i) receiving technical and construction details of the additional user's proposed installation and Lessee verifying that such proposed installation will not interfere with Lessee's facilities or its operation and (ii) reaching reasonable and mutually acceptable terms and conditions of co-location with the additional user (including, without limitation, reimbursement or pro-rata capital costs, payment of modification costs, if any, payment of subrents, additional user's agreement to reasonable continuing non-interference and operational rules and regulations, Lessee agrees that co-location of other compatible and similar communication users on the Premises is mandatory where space is available or where facilities can be modified to allow such use, and wherever non-interference to radio frequencies of Lessee and any approved sublessees can be assured. Lessee and any additional user shall comply with subleasing requirements of Article 14."*

<sup>9</sup> Excerpted from "Reflections on Subleasing and Assignment In An Uncertain Economic Environment" by Buck & Gordon LLP, Attorneys At Law. The contents of this article can be viewed over the Internet at (<http://www.buckgordon.com/CM/In%20the%20News/in%20the%20news135.asp>.)

This clause, to our understanding, appears to allow the lessee to sublease without necessarily obtaining lessor's approval beforehand. The above text also does not appear to specify whether the lessor can participate in any sublease income received by the lessee. This participation, also known as recapture, allows the lessor to benefit directly from any additions or expansion of the telecommunications facility on the part of the lessee. Recapture is related to highest and best use, in the sense that (for most wireless sites) their highest and best use is often the ongoing use of the land for telecommunications purposes. Since these sites tend to be leased more often than they are sold, the value of the leased-fee estate is tied directly to the site's ability to generate income.

Like other portions of a wireless lease, the terms of sublease-recapture can also be measured by market data. Our experience with leases in southern California has been that recapture rates tend to range from 35% to 50% of gross sublease income, before expenses. These leases are also assumed to be on a triple-net basis, where the majority of the operating expenses are passed through to the tenant.

We have illustrated this concept using the following fictional example. Let's say ASLD leases a site to Verizon for \$1,400 per month, and Verizon decides at a later date to sublease to a third party. If ASLD has a 50% recapture rate in place, the income they would receive from Verizon would be at least as much as the following.

Base rent to Verizon:	\$1,400 per month
Plus 50% of \$1,400:	\$700 per month
Total income received:	\$2,100 per month

In this example, we determined the sublease rental rate would be \$1,400 per month, since this would be the rate that the sublessee would be charged if they negotiated directly with ASLD in the first place. If Verizon decided to charge the sublessee a higher rent, then ASLD would participate in this increase as well. Another way of saying this would be in terms of a minimum rent. The base rent of \$2,100 per month represents a minimum that the initial lessee would have to pay for one co-location under this scenario.

Leases negotiated after the date of our previous appraisal have the following language in place, which allows for subleasing subject to lessor approval. We mention this here for the reader's information—since both lease clauses would still be in effect at this time.

**4.2 Co-location.** Subject to Lessee (i) receiving technical and construction details of the additional user's proposed installation and Lessee verifying that such proposed installation will not interfere with Lessee's facilities or its operation and (ii) reaching reasonable and mutually acceptable terms and conditions of co-location with the additional user (including, without limitation, reimbursement of pro-rata capital costs, payment of modification costs, if any, payment of subrentals, additional user's agreement to reasonable continuing non-interference and operational rules and regulations), Lessee agrees that co-location of other compatible and similar communication users on the Premises is mandatory where space is available or where facilities can be modified to allow such use, and wherever non-interference to radio frequencies of Lessee and any approved sublessees can be assured. Lessee and any additional user shall comply with subleasing requirements of Article 14.

**14.1 Prior Approval Required.** Lessee shall not assign this Lease or any interest therein, nor shall Lessee sublease any portion or all of the Premises without obtaining Lessor's prior written approval. In no event may this Lease or any interest therein be assigned or sublet unless Lessee is in full compliance with this Lease. Lessor may require additional rent in consideration for approval of any sublease. Lessee shall not enter into a contract of sale, mortgage, lien or other encumbrance affecting this Lease unless a copy is filed with Lessor. Sublease approval shall be contingent upon the proposed sublessee obtaining and complying with the terms of a Special Land Use Permit ("SLUP") for the sublessee's use of the Parcel and Premises. Sublease approval shall terminate automatically upon the expiration, or cancellation for any reason including non-renewal, of the SLUP.

## VALUATION ANALYSIS

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As with the appraisal of other property types, the value of a telecommunications base station is dictated by the principle of substitution. The relationship of the principle of substitution to income-generating properties can be described as follows:

*This principle affirms that no prudent investor would pay more for a property than the cost to lease a comparable site...The prices, rents, and rates of return for property tend to be set by the prevailing prices, rents, and rates of return for equally desirable substitute properties. The principle of substitution is market-oriented and provides the basis for estimating rents.<sup>10</sup>*

Substitution is one of the core principles of real-estate appraisal, in part because of its intuitiveness about the actions of buyers and sellers—or in this case, lessors and lessees. In short, substitution states that we will not pay more for an item or product if we can find a cheaper alternative. A corollary to this principle is the perception of additional benefit—if we do end up selecting the more expensive product or item, it may be because we are placing value on some additional feature of the more-expensive product, compared with its cheaper alternative.

Some market participants have argued that cell-site leasing is a closed market, with little circulation of market data, and as such, would not be subject to the application of appraisal principles—since each transaction is different. On the other hand, if enough leasing data is gathered, certain patterns begin to emerge, supporting the relevance of the application of substitution and other appraisal principles.

This mental balancing-act occurs countless times a day in the minds of consumers, including those who lease, maintain, and manage cell sites. Once enough leasing data is gathered, appraisers can then use this price-comparison balancing act to estimate the contributory value of certain benefits or influences. For example, one type of paired-lease analysis might be completed to estimate the value of additional panel antennas or microwave dishes. Another paired-lease analysis might be performed to determine the value of a busy location versus a sparsely-developed area, and so on.

This valuation analysis will be comprised of two sections, followed by a final reconciliation. Since ASLD's goal with this report is to obtain a standardized telecommunications-rate schedule that could be applied to any wireless site across the state, the first group of comparables we will analyze will be master-lease-rate schedules from other municipal, state and federal agencies.

In the second portion of our valuation, we will analyze single-tenant site-lease comparables throughout the state, organizing them as we did the subject sites earlier in this report. After sorting the market data by location and size, determinations for market rental ranges will be made for each data group. These ranges will then be reconciled into a single market rate per group, which will then be applied to the subject sites.

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<sup>10</sup> *The Appraisal of Real Estate—Tenth Edition*, Appraisal Institute (Chicago: Appraisal Institute, 1992), 410.

## COMPETITIVE MASTER LEASES

Up until recently, there hasn't been enough market data regarding master ground leases to be able to conduct a direct comparison. However, more agencies are beginning to consider a flat-rate approach as a means of streamlining their application and review process, and to ensure a level of predictability for wireless vendors.

The County of San Diego is one example. In 2000, the County used a standard base rent of \$1,500 per month for any single-tenant site within their jurisdiction. By December of 2001, this standard rent was increased to \$1,600 per month. Since then, however, the County has moved away from a master-lease schedule to individual determinations of rent for each site within their jurisdiction.

In 2004, the City of Poway, California adopted a master cell-site lease for new sites within the city limits, as well as for existing sites pending renewal. In an interview with Jennifer Johnson, Senior Management Analyst for the City of Poway, we were told that their current master-lease rate is \$26,256 (or \$2,188 per month) for the first year of tenancy, with 5% annual increases as indicated below.

Year 1:	\$26,256 (\$2,188 per month)
Year 2:	\$27,569 (\$2,297 per month)
Year 3:	\$28,947 (\$2,412 per month)
Year 4:	\$30,395 (\$2,533 per month)
Year 5:	\$31,915 (\$2,660 per month)

Since this agreement was drafted in 2004, the above rates would need to be adjusted for market conditions. At 5%, the adjusted master-lease rate for 2009 would be approximately \$2,792 per month.

The city of Mesa, Arizona has also adopted a master-lease schedule, as described below.

The City of Mesa has existing lease rates for the ground space requested by providers. The 2009 lease rates are based on the following four classifications:<sup>11</sup>

- Class 1: (Very little room, controversial, hard to site, high population coverage, high vehicle traffic area) currently an annual rate of \$47 per square foot.
- Class 2: (Difficult to site, mid to high coverage area, mid to high vehicle traffic, little room on the site) currently an annual rate of at \$37 per square foot
- Class 3: (Sited in a residential neighborhood, some room on the site, semi-concealed site) currently an annual rate of at \$31 per square foot.
- Class 4: (Rural area, little controversy, lots of room, not a lot of people or vehicles nearby) currently an annual rate of at \$26 per square foot.

<sup>11</sup> 2009 rates obtained by interview with Jill Schow, Real Estate Services Department, City of Mesa. Previous rates obtained from the Minutes from Parks and Recreation Board, City of Mesa (May 24, 2005). Web link: [http://citydoc.cityofmesa.org/stellent/groups/public/documents/meetings/2prb\\_minutes2005may24.hcsp](http://citydoc.cityofmesa.org/stellent/groups/public/documents/meetings/2prb_minutes2005may24.hcsp)

The above rates represent a \$4 per square foot increase from the 2007 rates listed in our previous appraisal, equating to a total increase of 9.3% or 4.65% per year. This increase is slightly ahead of the inflationary trend over the last two years, as noted in the table below.

### Inflation Rate Table

(Source: www.inflationdata.com)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVE
2009	0.03%	0.24%	0.38%										0.22%
2008	4.28%	4.03%	3.98%	3.94%	4.18%	5.02%	5.60%	5.37%	4.94%	3.66%	1.07%	0.09%	3.85%
2007	2.08%	2.42%	2.78%	2.57%	2.69%	2.69%	2.36%	1.97%	2.76%	3.54%	4.31%	4.08%	2.85%
2006	3.99%	3.60%	3.36%	3.55%	4.17%	4.32%	4.15%	3.82%	2.06%	1.31%	1.97%	2.54%	3.24%
2005	2.97%	3.01%	3.15%	3.51%	2.80%	2.53%	3.17%	3.64%	4.69%	4.35%	3.46%	3.42%	3.39%
2004	1.93%	1.69%	1.74%	2.29%	3.05%	3.27%	2.99%	2.65%	2.54%	3.19%	3.52%	3.26%	2.68%
2003	2.60%	2.98%	3.02%	2.22%	2.06%	2.11%	2.11%	2.16%	2.32%	2.04%	1.77%	1.88%	2.27%
2002	1.14%	1.14%	1.48%	1.64%	1.18%	1.07%	1.46%	1.80%	1.51%	2.03%	2.20%	2.38%	1.59%
2001	3.73%	3.53%	2.92%	3.27%	3.62%	3.25%	2.72%	2.72%	2.65%	2.13%	1.90%	1.55%	2.83%
2000	2.74%	3.22%	3.76%	3.07%	3.19%	3.73%	3.66%	3.41%	3.45%	3.45%	3.45%	3.39%	3.38%
1999	1.67%	1.61%	1.73%	2.28%	2.09%	1.96%	2.14%	2.26%	2.63%	2.56%	2.62%	2.68%	2.19%
1998	1.57%	1.44%	1.37%	1.44%	1.69%	1.68%	1.68%	1.62%	1.49%	1.49%	1.55%	1.61%	1.55%
1997	3.04%	3.03%	2.76%	2.50%	2.23%	2.30%	2.23%	2.23%	2.15%	2.08%	1.83%	1.70%	2.34%

Based on the criteria established for each class, we would define Mesa's Class 1 as an Urban location ranking. Class 2 would be similar to a Suburban ranking, and Classes 3 and 4 would be analogous to a Rural ranking. If one assumes a typical demised area of 480 square feet, as the Mesa city planners have shown in the above example, the following fixed rates would be determined for each class.

Class 1 (Urban):	\$1,880 per month
Class 2 (Suburban):	\$1,480 per month
Class 3 (Rural):	\$1,240 per month
Class 4 (Rural):	\$1,040 per month

Mesa has also established the following fee schedule for carriers wishing to co-locate on towers owned by the city. Its rates increase annually by three percent, as shown in the following table.

### City of Mesa Co-Location Rates

Tower Use\*

Antenna Length	July 1996	July 2000	July 2001	July 2002	July 2003	July 2004	July 2005	July 2006	July 2007	July 2008	July 2009
0-4 feet	\$9.00	\$10.40	\$10.70	\$11.00	\$11.40	\$11.74	\$12.09	\$12.46	\$12.83	\$13.22	\$13.61
4-8 feet	\$10.20	\$11.40	\$11.75	\$12.10	\$12.45	\$12.82	\$13.21	\$13.60	\$14.01	\$14.43	\$14.87
8-12 feet	\$11.40	\$12.80	\$13.20	\$13.60	\$14.00	\$14.42	\$14.85	\$15.30	\$15.76	\$16.23	\$16.72
12-16 feet	\$12.60	\$14.70	\$15.15	\$15.60	\$16.10	\$16.58	\$17.08	\$17.59	\$18.12	\$18.66	\$19.22
16-20 feet	\$13.80	\$15.45	\$15.90	\$16.40	\$16.90	\$17.41	\$17.93	\$18.47	\$19.02	\$19.59	\$20.18
20+ feet	Negotiable										

\* The total annual fee is calculated by multiplying the fee shown by the height above ground of the highest point of the antenna and the number of tower corners or faces used for an array of antennas.

So, if a carrier wanted to install an array of nine (9) 4' panel antennas on one of the City's towers, at a height of 50' (at centerline), their rate would be determined as shown below.

Base 2009 Antenna Rate (4-8' length):	\$14.87
Highest point of antenna:	52' (to top of antenna)
# of tower corner or faces needed:	3
<u>(\$14.87 * 52' * 3):</u>	<u>\$2,319.09</u>
Estimated annual rent for antennas:	\$2,320 (rounded)

These assumptions would equate to a monthly rate of approximately \$190 per antenna as of 2009. So far, Mesa was the only city we were able to find with a master-lease schedule in place. The City of Flagstaff has considered the adoption of a similar rate schedule, but has not done so yet.

We did not find any master-lease schedules in place on a county level, either. As of the date of this report, Maricopa County has individual sites appraised when new licenses are warranted (the county does not use leases). Maricopa had previously considered the adoption of a master-lease schedule, but now appears to be moving away from that position. According to Dennis Lindsey of the county's finance department, current license fees are in the \$2,000 per year range for a single-tenant site with a nominal amount of land (between 300 to 500 square feet), or \$166 per site per month. For Maricopa County, this rate is considerably below market, and is even lower than the historical rates we compiled for rural Arizona counties, which ranged between \$200 to \$500 per site per month in 2006.

The Arizona Department of Transportation has a master-lease agreement in place with eight wireless providers as of the date of this report. The ADOT uses a standard annual lease rate, as noted in the following table. The typical length of an ADOT master lease is twenty years, divided into an initial five-year base, plus (3) five-year options that automatically renew. Rent is escalated every five years at 20%. A typical cell site covered under this arrangement is approximately 600 to 1,000 square feet in size. To the best of our knowledge, ADOT places these sites on land that they own, or on access easements.

**ADOT Base Ground Rates**

Year	Ground Rental Rate	
	\$/Year	\$/Month
2005	\$9,000	<b>\$750</b>
2006	\$9,450	<b>\$788</b>
2007	\$9,923	<b>\$827</b>
2008	\$10,419	<b>\$868</b>
2009	\$10,940	<b>\$912</b>

Other features of their MLA include the following.

- *RFP process*— In its RFP, Arizona asked proposers to consider the limited access highway and identify the sites that they would like to use. ADOT will award master leases to each viable bidder. Winning bids do not gain exclusive access to the system; instead, the DOT awards each bidder a priority for individual site negotiations. The highest-ranking bidder gains primary access to the site. If the site requires a tower, the winning proposer constructs and owns the tower, providing collocation for a fee. The top proposer wins exclusive access if the location is a one-user site (sign, light pole, etc.).

- *Colocation*— ADOT requires collocation of operationally compatible users. ADOT must award all leases of highway ROW through a competitive process. The successful firm(s) selected by ADOT for collocation must also meet all of the application requirements of the facility owner and be compatible with all other existing tenants on the premises. Potential tenants for collocation will be subject to the same lease terms and conditions as the facility owner, except for the rental rate. ADOT reserves the right to negotiate the rental rate but will not accept less than the fee currently paid by tenants on the premises.

*(Note): Although we are not lawyers, our interpretation of this clause is that ADOT will allow lessee to sublease, provided that the sublease rent is not higher than the rent ADOT would charge if the sublessee were to negotiate directly with the government. The benefit of this is that subleasing could be accomplished faster if lessees and potential sublessees deal with each other directly, than in trying to go through ADOT's approval process.*

- *Master lease*— Proposers enter into a master lease (renewable every 5 years for a total of 20 years) that governs the general terms for all ADOT sites. The parties complete individual site agreements and encroachment permits for each site.

- *Rolling proposal consideration*— After the initial 90-day RFP window, firms may submit proposals for collocation or additional sites at any time. ADOT will then solicit site-specific competitive bids.

- *Cash and barter*— ADOT will accept cash and barter. Cash income contributes to the State Highway Fund. No current contracts include barter compensation.

- *Available sites*— ADOT does not designate specific site locations. The RFP included a general map depicting 6,000 miles of DOT highway. Proposers specified potential sites to ADOT in writing and on a larger State map.

- *Proposer overlap*— Because site bids overlapped in only 2 of 200 locations proposed, ADOT was able to award sites to multiple bidders. In the two cases of overlap, ADOT granted sites to the highest-ranking bidder.

- *Utility status*— Historically, ADOT designates telecommunications firms as utilities.

In addition to the above rates, we reviewed the rate schedules from the California Department of Transportation (CalTrans), and from the US Department of Forestry. Although both of these schedules have historically been lower than the lease rates obtained from direct negotiation, we mention them here for the reader's information. Shown to the right are CalTrans' present site rents for 2009 for macrocells and minicells.

	Annual	Monthly
<b>Macrocell</b>		
Prime Urban	\$31,728	\$2,644
Urban	\$24,480	\$2,040
Rural	\$15,264	\$1,272
<b>Minicell</b>		
Prime Urban	\$27,204	\$2,267
Urban	\$22,668	\$1,889
Rural	\$15,264	\$1,272

We also interviewed agents with the Commercial Resources Division of the New Mexico State Land Office, and received the following rates as of April 1, 2003. The State of New Mexico increases their rents by a fixed 3% annually, so we have determined their equivalent 2009 rents by inflating their 2003 rates as shown. *(Note): We contacted New Mexico's State Land Office and confirmed that this schedule and rent escalations are current and that the 2009 rates shown below are being used today.*

Use	Location within NM	Annual Rent							Estimated Monthly Rent
		2003	2004	2005	2006	2007	2008	2009	
MW/Cellular	Urban	\$9,885	\$10,182	\$10,487	\$10,802	\$11,126	\$11,459	\$11,803	\$984
	Rural	\$4,325	\$4,455	\$4,588	\$4,726	\$4,868	\$5,014	\$5,164	\$430
Broadcast/Radio	Statewide	\$2,575	\$2,652	\$2,732	\$2,814	\$2,898	\$2,985	\$3,075	\$256
Industrial/Non-Commercial	Statewide	\$1,030	\$1,061	\$1,093	\$1,126	\$1,159	\$1,194	\$1,230	\$102

The fee schedule on the next page was taken from the US Forest Service's Special Uses Handbook (Chapter 90 – Communications Site Management). It is a broad schedule, covering all forms of wireless communication including television radio, cellular/PCS and microwave-relay. Annual rent increases are tied to the regional CPI.

**RENTAL FEE SCHEDULE FOR COMMUNICATIONS USES**

Calendar Year 2009

ZONES and POPULATION	TELEVISION	AM/FM RADIO*	CABLE TELEVISION	BROADCAST TRANSLATOR/ LPTV/LPFM	CMRS/ FACILITY MANAGER	CELLULAR TELEPHONE and PCS**	PRIVATE MOBILE RADIO SERVICE	MICROWAVE and Wireless Internet Service Provider (ISP) ***	OTHER	PASSIVE REF. & LOCAL EXCH. NETWORK
Zone 1 5,000,000 plus	\$64,525.21	\$48,752.40	INSUFFICIENT	INSUFFICIENT	\$17,206.72	\$17,206.72	\$14,338.94	\$14,338.94	\$107.54	
Zone 2 2,500,000 to 4,999,999	\$43,016.81	\$30,111.77	MARKET DATA	MARKET DATA	\$14,338.94	\$14,338.94	\$8,603.36	\$11,471.17	\$107.54	
Zone 3 1,000,000 to 2,499,999	\$25,810.09	\$20,074.50	FEE TO BE DETERMINED	FEE TO BE DETERMINED	\$11,471.17	\$11,471.17	\$8,603.36	\$10,037.25	\$107.54	RENTAL FEES FOR THESE USES ARE DETERMINED BY EACH USFS REGION
Zone 4 500,000 to 999,999	\$20,074.50	\$14,338.94	BY APPRAISAL OR OTHER METHODS	BY APPRAISAL OR OTHER METHODS	\$7,169.46	\$8,603.36	\$5,735.57	\$7,886.41	\$107.54	
Zone 5 300,000 to 499,999	\$17,206.72	\$11,471.17	BY APPRAISAL OR OTHER METHODS	BY APPRAISAL OR OTHER METHODS	\$5,735.57	\$7,169.46	\$3,584.73	\$3,584.73	\$107.54	
Zone 6 100,000 to 299,999	\$8,603.36	\$5,735.57	\$3,441.34	\$3,441.34	\$4,301.68	\$5,735.57	\$2,867.79	\$2,867.79	\$107.54	
Zone 7 50,000 to 99,999	\$4,301.68	\$2,867.79	\$1,720.68	\$1,720.68	\$1,720.68	\$4,301.68	\$1,433.89	\$2,150.83	\$107.54	
Zone 8 25,000 to 49,999	\$2,150.83	\$1,720.68	\$1,433.89	\$716.94	\$1,433.89	\$3,584.73	\$860.32	\$2,150.83	\$107.54	
Zone 9 LESS THAN 25,000	\$1,720.68	\$1,290.50	\$860.32	\$143.39	\$860.32	\$3,584.73	\$501.85	\$2,150.83	\$107.54	

Index Factor: 1.050

\*RENTAL FEE FOR AM RADIO IS 70% OF THE FM SCHEDULED RENT

\*\* Also includes Enhanced Specialized Mobile Radio (ESMR), Improved Mobile Telephone Service (IMTS), Air-to-Ground, Offshore Radio Telephone Service, Cell Site Extenders, and Local Multipoint Distribution Service (LMDS)

\*\*\* For ISP populations between 1-1000, use the applicable Regional Local Exchange Network schedule.

On page 18, we ranked Arizona's counties by population, and divided them into three groups: Urban, Suburban and Rural. For clarification, this table has been repeated as shown to the right.

The US Forest Service does not use classifications like "urban" or "suburban." However, they do break down their rental rates by population. Using their schedule, the average rental rates for cellular-telephone and microwave sites can be determined for the three categories shown to the right. For example, the annual cellular rent for Maricopa would be \$14,338.94 and the annual microwave rent would be \$11,471.17. The cellular and microwave rents for Arizona's remaining counties, as indicated in the Forest Service's 2009 schedule are listed in the table below.

Location Rank	County	2007 Pop.
Urban	Maricopa	3,072,149
Suburban	Pima	843,746
	Pinal	179,727
	Yavapai	167,517
	Mohave	155,032
	Yuma	160,026
	Cochise	117,755
	Coconino	116,320
	Navajo	97,470
	Apache	69,423
Gila	51,335	
Rural	Santa Cruz	38,381
	Graham	33,489
	La Paz	19,715
	Greenlee	8,547

**USFS RATES FOR STATE OF ARIZONA**  
*(Based on 2007 population estimates)*

Location Rating	USFS Rank	County	2007 Pop.	Cellular rate		MW rate	
				Annual	Monthly	Annual	Monthly
Urban	Zone 2	Maricopa	3,072,149	\$14,338.94	\$1,195	\$11,471.17	\$956
Suburban	Zone 4	Pima	843,746	\$8,603.36	\$717	\$7,886.41	\$657
	Zone 6	Pinal	179,727	\$5,735.57	\$478	\$2,867.79	\$239
		Yavapai	167,517				
		Mohave	155,032				
		Yuma	160,026				
		Cochise	117,755				
	Coconino	116,320					
Zone 7	Navajo	97,470	\$4,301.68	\$358	\$2,150.83	\$179	
Apache	69,423						
Gila	51,335						
Rural	Zone 8	Santa Cruz	38,381	\$3,584.73	\$299	\$2,150.83	\$179
		Graham	33,489				
	Zone 9	La Paz	19,715	\$3,584.73	\$299	\$2,150.83	\$179
		Greenlee	8,547				

**COMPETITIVE MASTER LEASES--RECONCILIATION**

Over the previous pages, we have cited a number of examples of master leases (or master-lease schedules) currently in use by various government agencies. Listed below is a summary of this data. Also included in this table are the master-lease rates of the comparables listed over the last several pages. Comparables that had separate rates for macrocell and minicell sites have been noted as indicated.

AVERAGE 2009 MASTER-LEASE RATES  
(Unadjusted for location)

Agency		Annual	Monthly
<b>CalTrans</b>	<b>Macrocell</b>		
	Prime Urban	\$31,728	\$2,644
	Urban	\$24,480	\$2,040
	Rural	\$15,264	\$1,272
	<b>Minicell</b>		
	Prime Urban	\$27,204	\$2,267
	Urban	\$22,668	\$1,889
	Rural	\$15,264	\$1,272
<b>New Mexico</b>	<b>MW/Cellular</b>		
	Urban	\$11,803	\$984
	Rural	\$5,164	\$430
	<b>Broadcast/Radio</b>		
	<b>Ind/Non-Comm.</b>	\$3,075	\$256
	<b>Ind/Non-Comm.</b>	\$1,230	\$102
<b>USFS</b>	Urban	\$14,339	\$1,195
	Suburban	\$5,736	\$478
	Rural	\$3,585	\$299
<b>ADOT</b>	Rural	\$10,940	\$912
<b>Mesa, AZ</b>	Class 1 (Urban)	\$22,560	\$1,880
	Class 2 (Suburban)	\$17,760	\$1,480
	Class 3 (Rural)	\$14,880	\$1,240
	Class 4 (Rural)	\$12,480	\$1,040

After interviewing officials from state and federal agencies, as well as a selection of Arizona and California cities, we compiled the following 2009 lease rates. The agencies that have broken down their rental rates by location or size or both include CalTrans, the US Department of Forestry, the Arizona Department of Transportation, and the City of Mesa. In this table, the Prime Urban rate for CalTrans (\$2,644 per month) would compare with the City of Mesa's Class 1 rate at \$1,880 per month. Comparing the two would seem to indicate that rental rates in Arizona are 29% less than those found in California—everything being equal.

The rates from New Mexico would need to be adjusted as well, compared to Arizona, for a proper comparison. Comparing New Mexico's current Rural rate of \$430 per month with ADOT's rural rate of \$912 per month would indicate an approximate location adjustment of +52%.

Therefore, we can now display the California and New Mexico data within an Arizona context, as noted below. *(Note): Again, it should be pointed out that it would be nearly impossible for an appraisal of this nature to encompass every combination of intended use, size and location. We offer these tables and our data analysis here for ASLD's benefit, and suggest that the client use their judgment when evaluating individual sites.*

AVERAGE 2009 MASTER-LEASE RATES  
*(Adjusted for location)*

Agency		Annual	Monthly
<b>CalTrans</b>	<b>Macrocell</b>		
	Prime Urban	\$22,527	\$1,877
	Urban	\$17,381	\$1,448
	Rural	\$10,837	\$903
	<b>Minicell</b>		
	Prime Urban	\$19,315	\$1,610
	Urban	\$16,094	\$1,341
<b>New Mexico</b>	<b>MW/Cellular</b>		
	Urban	\$17,941	\$1,495
	Rural	\$7,850	\$654
	<b>Broadcast/Radio</b>		
	Ind/Non-Comm.	\$1,869	\$156
<b>USFS</b>	Prime Urban	\$14,339	\$1,195
	Urban	\$6,453	\$538
	Rural	\$3,585	\$299
<b>ADOT</b>	Rural	\$10,940	\$912
<b>Mesa, AZ</b>	Class 1 (Urban)	\$22,560	\$1,880
<b>Mesa, AZ</b>	Class 2 (Suburban)	\$17,760	\$1,480
<b>Mesa, AZ</b>	Class 3 (Rural)	\$14,880	\$1,240
	Class 4 (Rural)	\$12,480	\$1,040

It is our opinion that the subject sites (on a mass-appraisal basis) would compare favorably with the average rates indicated by the above master-lease comparables. Yet, before we conclude our reconciliation of market rent, we will also consider another pool of comparables—single-site ground-lease transactions in various counties across Arizona and Nevada. This will be accomplished in the next section.

**SINGLE-TENANT GROUND-LEASE MARKET DATA:**

In addition to the master-lease comparables described in the previous section, we also analyzed data from 24 individual telecommunications ground leases in various counties across Arizona. This data has been summarized below. For comparison purposes, we have organized this data using the same location and size criteria we used to organize the subject sites and the master-lease comparables earlier.

*(Note): Unless otherwise noted, all of the comparables listed on the pages that follow are on triple-net leases.*

**SINGLE-TENANT TELECOMMUNICATION GROUND LEASES**

County	Address	Location		Demised Area (sf)	Lease Start	Lease End	Escalator	# options
		City/Town	Rank					
<b>Maricopa</b>	Class 1 site-rental rate (2009)	Mesa	Sub-P	480.00				
	Class 3 site-rental rate (2009)	Mesa	Sub-S	480.00				
	Chaparral Park	Mesa	Sub-S	484.85	5/1/2005	4/31/2010		
	1545 East Corona Avenue	Phoenix	Sub-S	\$1,353.64	11/1/2006	10/31/2026	5% per yr	(4) 5-yr
	Class 2 site-rental rate (2009)	Mesa	Sub-S	480.00				
	735 W Carver Road	Tempe	Sub-S	\$1,500.00	11/1/2007	10/31/2012	3% per yr	(3) 5-yr
	4500 S Basha Road	Chandler	Sub-S	\$1,626.00	8/23/2007	8/22/2012		
	420 East Southern Avenue	Mesa	Sub-S	\$1,650.00	9/1/2006	8/31/2011		
	8049 W Glendale Avenue	Glendale	Sub-S	\$1,700.00	1/1/2007	12/31/2012		(4) 5-yr
	Class 4 site-rental rate (2009)	Mesa	Rural	\$1,040.00				
<b>Pima</b>	Joaquin Murrieta Park	Tucson	Sub-P	\$1,210.00	6/6/2006	6/5/2026	See text	(3) 5-yr
	4159 S Elizabeth Drive	Tucson	Sub-P	\$1,250.00	12/1/2006	11/30/2016	5% per yr	(2) 5-yr
	7161 E Escalante Road	Tucson	Sub-S	\$1,157.00	10/1/2006	9/30/2011	See text	(3) 5-yr
	1220 N. Greasewood Road	Tucson	Sub-S	\$1,000.00	7/1/2008	6/30/2013	5% per yr	(3) 5-yr
	Pima Nanini Governmental Center	Tucson	Sub-S	\$1,036.80	2/9/2008	2/8/2013	0	
	2445 S Pantano Road	Tucson	Sub-S	\$1,250.00	3/5/2007	3/4/2012	See text	(3) 5-yr
	3939 N Magnetite Ln (Robins ES)	Tucson	Sub-S	\$1,250.00	8/23/2008	(Offer only)		
	2400 S Craycroft Road	Tucson	Sub-S	\$1,250.00	12/1/2008	11/30/2018	5% per yr	(3) 5-yr
	9490 E Speedway Blvd	Tucson	Sub-S	\$1,250.00	2/1/2009	1/31/2019	5% per yr	(3) 5-yr
	Rillito Downs Park	Tucson	Sub-S	\$1,650.00	3/8/2005	3/7/2025		
<b>Pinal</b>	Former admin-offices site	Apache Junction	Sub-P	\$2,000.00	2006	2011		(4) 5-yr
<b>Yavapai</b>	Northwest Tank tower site	Prescott (ASLD)	Rural	\$1,500.00	5/1/2007	4/30/2017		
	9982 Old US Highway 66	Holbrook	Rural	\$440.00		8/28/2013		
	9982 Old US Highway 66	Holbrook	Rural	\$550.00		12/31/2009		

SUBURBAN-PRIMARY COMPARABLES:

To summarize, Suburban-Primary comparables include sites in developed areas, whose primary objective is to provide wireless coverage along highways or interstates. Sites along surface streets with lower traffic count may also be considered in this class if they are adjacent to high-density development (apartment complexes, large PUDs) or large commercial centers (regional malls, theme parks).

A total of four Suburban-Primary comparables were found during our research, and have been summarized below.

*(City of Mesa—Class 1 rate):*

As mentioned earlier, the City of Mesa has adopted a fixed-rate schedule for all new and existing sites within their jurisdiction. Their Class 1 rate for 2009 is \$47 per square foot, which would equate to \$1,880 per month for a typical 480-square-foot, single-tenant site. Mesa's Class 1 locations have high-population coverage, and are in high vehicle traffic areas.

*(Joaquin Murrieta Park):*

T-Mobile is leasing 225 square feet of ground from the City of Tucson in this city park. Their lease commenced on June 6, 2006 and will expire on June 5, 2026. According to George Parker, Tucson Property Manager, T-Mobile's rent increases by a fixed 5% annually, and there are (3) five-year options (not automatically-renewing). T-Mobile built a 72' monopole on this site, and has (2) equipment cabinets.

*(4159 South Elizabeth Drive):*

Cingular (now known as AT&T Mobility) is leasing 1,200 square feet of ground from the City of Tucson in this city park, known as La Mar Park. Their lease commenced on December 1, 2006 and will expire on November 30, 2016. According to George Parker, Tucson Property Manager, T-Mobile's rent increases by a fixed 5% annually, and there are (3) five-year options (not automatically-renewing). Cingular installed their antennas on a 65' Tucson Electric pole at this location and has an 11.5' by 20' equipment shelter.

*(City of Apache Junction):*

In 2006, Verizon executed a ground lease for a new wireless facility adjacent to a former administrative-office building in this city in Pinal County. The current contract rent is \$2,000 per month, and the current term will expire in 2011. Verizon has (4) five-year options.

SUBURBAN-SECONDARY COMPARABLES:

To summarize, Suburban-Secondary comparables include sites along surface arterials in developed areas. A total of 16 Suburban-Secondary comparables were found during our research, and have been summarized below.

*(City of Mesa—Class 3 rate):*

The City of Mesa's Class 3 rate for 2009 is \$31 per square foot, which would equate to \$1,240 per month for a typical 480-square-foot, single-tenant site. Class 3 locations are in residential neighborhoods with low to moderate vehicle traffic.

*(Chaparral Park):*

The City of Mesa has leased approximately 485 square feet of ground within one of their city parks to T-Mobile, who built a 55' monopalm. T-Mobile's lease began in May of 2005 at a base rate of \$1,333 per month; their current monthly rent (for 2009) is approximately \$1,600 per month.

*(1545 East Corona Avenue):*

This is an existing office/flex building southeast of Broadway and 16<sup>th</sup> Street, near I-10 in Phoenix. Cingular (AT&T Mobility) is currently paying \$1,353.64 per month for a ground lease that began on November 1, 2006 and will expire on October 31, 2026. Its rent increases by a fixed 5% per year, and Cingular has (4) five-year options that will automatically renew.

*(City of Mesa—Class 2 rate):*

The City of Mesa's Class 2 rate for 2009 is \$37 per square foot, which would equate to \$1,480 per month for a typical 480-square-foot, single-tenant site. Class 2 locations are in mid to high-population areas, with moderate to high vehicle traffic.

*(735 West Carver Road):*

On November 1, 2004, ATC (American Tower Corporation) leased 2,520 square feet of ground on a vacant lot adjacent to a residential tract in the city of Tempe. The original base rent was \$600 per month for five years, expiring on October 31, 2009. On November 1, 2007, ATC subleased a portion of their demised area to Clearwire. At that time, the property owner/lessor increased ATC's rent to \$1,500 per month to compensate. ATC's rent increases 3% per year, and their current term will expire on October 31, 2012. The tenant has (3) five-year options.

*(4500 South Basha Road):*

Verizon entered into a ground lease with the City of Chandler on August 23, 2007 for a five-year base term. The site is on a city skate park, and the current contract rent is \$1,626 per month. This was a five-year extension of a lease executed on July 26, 2002 at an original rent of \$552 per month. The rent was increased in 2007 when Verizon added more antenna arrays to their existing facility.

*(420 East Southern Avenue):*

The City of Mesa also disclosed to us limited information on another ground lease on a strip-retail property at a high-traffic intersection. The lessee in this instance (who was not disclosed by the City) signed a lease on September 1, 2006 for approximately 480 square feet of ground, and is presently paying the city \$1,650 per month in rent.

*(8049 West Glendale Avenue):*

T-Mobile currently leases 240 square feet of ground on the edge of a self-storage facility on West Glendale Avenue in the city of Glendale. The lease commenced on January 1, 2007 and will expire on December 31, 2012. There are (4) five-year options.

*(7161 East Escalante Road):*

T-Mobile currently leases 300 square feet of ground at this location, which is less than a half-mile east of the entrance to Davis-Monthan Air Force Base in the city of Tucson. The lease began on October 1, 2006 and will expire on September 30, 2011. The current rent is \$1,157 per month and annual increases will be either 5% or the change in the CPI for that year, whichever is greater. There are (3) five-year options with no automatic-renewal clause. T-Mobile's improvements consist of six antennas mounted on a 65' utility pole owned by Tucson Electric, along with a 20' by 20' equipment shelter.

*(12220 North Greasewood Road):*

This is another T-Mobile lease within a suburban area in the city of Tucson. T-Mobile's demised area is 160 square feet, and their lease commenced on July 1, 2008 for a base five-year term, plus (3) five-year options. Rent increases annually at a fixed 5%, and the current contract rent is \$1,000 per month. The lessee also pays a rental tax of \$300 per year, which increases annually at 5%.

*(Pima Nanini Governmental Center):*

This single-tenant ground lease involves 870 square feet at the Nanini Branch Library and community center at 7300 North Shannon Road in the city of Tucson. This lease began on February 9, 2008 and will expire on February 8, 2013. The current contract rent is \$1,036.80 per month and is fixed for the duration of this five-year term. The lessee's improvements consist of a 52' monopole with three antennas and a 20' by 8' equipment shelter.

*(2445 South Pantano Road):*

Cingular currently leases 964 square feet of ground on this site, at the intersection of South Pantano and 35<sup>th</sup> Street in the city of Tucson. The lease began on March 5, 2007 for a five-year base term plus (3) five-year options with no automatic-renewal clause. The current contract rent is \$1,250 per month, which is fixed for the first ten years of the lease, then increases by 5% per year thereafter. Cingular's improvements include six antennas mounted at 52' on a new 70' utility pole owned by Tucson Electric, plus a 12' by 20' equipment shelter.

*(3939 North Magnetite Lane):*

In August of 2008, Cingular/AT&T presented a ground-lease offer to the Tucson Unified School District for a proposed site at this location, also known as Robins Elementary School. The proposed base rent would have been \$1,250 per month, and the proposed improvements would have been a 65' monopole and a 11.5' by 20' equipment shelter. TUSD ultimately declined this offer after numerous parent protests. However, they have 24 other cell towers in their district with lease rates supporting Cingular's offer.

*(2400 South Craycroft Road):*

On December 1, 2008 Verizon entered into a ground lease with the City of Tucson for 620 square feet in a city park a half-mile north of the entrance to the Davis-Monthan Air Force Base. The base term will expire on November 30, 2018 and there are (3) five-year options with no automatic-renewal clause. The current contract rent is \$1,250 per month and increases at 5% per year. Verizon's improvements include six antennas on a 90' monopole and a 11.5' by 20' equipment shelter.

*(9490 East Speedway Boulevard):*

This is a ground lease for 400 square feet within a Park-N-Ride lot on East Speedway Boulevard in the city of Tucson. AT&T entered into the lease on February 1, 2009 for a ten-year base term plus (3) five-year options with no automatic-renewal clause. Their current rent is \$1,250 per month, which increases 5% per year. AT&T built a 67' monopole and a 15' by 20' equipment cabinet on this site.

*(Rillito Downs Park):*

This is a city park in Tucson, with a five-eighths mile racetrack/casino offering quarter-horse, thoroughbred and Arabian-horse racing. On March 8, 2005 Alltel Communications signed a twenty-year lease at a base rate of \$1,500 per month. Alltel is an Arkansas-based telecommunications company that provides wireless services to residential and business customers in 36 states. It primarily focuses on small- to mid-sized cities and would be considered a second-tier carrier (compared with the four industry leaders: Cingular, Verizon, Sprint and T-Mobile). The current contract rent is \$1,650 per month.

RURAL COMPARABLES:

Wireless comparables with a Rural rating are in sparsely-developed areas with low populations and traffic count, and are typically used as coverage “bridges” along connecting routes, or as signal relays into small towns not otherwise serviced by the area’s infrastructure.

A total of four Rural comparables were found during our research, and have been summarized below.

*(City of Mesa—Class 4 rate):*

The City of Mesa’s Class 4 rate for 2009 is \$26 per square foot, which would equate to \$1,040 per month for a typical 480-square-foot, single-tenant site. Class 4 locations are in rural areas without a lot of people or vehicles nearby.

*(Northwest Tank tower site):*

The City of Prescott entered into a ground lease on May 1, 2007 for emergency communications, and it will expire on April 30, 2017. The current contract rent is \$1,500 per month. The lessor is the Arizona State Land Department (ASLD Lease No. 03-111311). This facility is located outside of the city of Prescott in Yavapai County.

*(9982 Old US Highway 66):*

This is a high-elevation hill (4,200’) east of the town of Holbrook, and overlooking Interstate 40 and the Petrified Forest National Park approximately 1.5 miles north. The hill is almost directly parallel with the Navajo-Apache County line, and is a popular high-elevation site for telecommunications providers in this area. To confirm this comparable, we spoke with listing broker Art Tatum of Century-21, who informed us that there were two ground leases in place to Cingular Wireless and to CellularOne. CellularOne’s parent, Dobson Communications Corporation, serves 60 wireless markets in 16 states and presently has 1.5 million subscribers. Like Alltel, CellularOne is also considered a second-tier carrier—its emphasis is in providing rural wireless coverage.

Cingular is presently leasing 0.23 acre (10,018 square feet) from the property owner, and is currently paying \$440 per month in rent. Their lease will expire on July 31, 2015. Cingular’s improvements consist of a 70’ monopole and a prefabricated equipment building.

CellularOne is currently paying \$550 per month for 2500 square feet of ground, and their lease will expire on December 31, 2009. They also have a 70’ monopole on this site, and have their own prefab equipment building.

SINGLE-TENANT GROUND LEASES--RECONCILIATION:

To summarize, the market data we found indicated the following rental ranges for each location category.

Category	# of comps	Monthly Rent		
		Minimum	Maximum	Average
Suburban-Primary	4	\$1,210	\$2,000	\$1,585
Suburban-Secondary	16	\$1,000	\$2,000	\$1,422
Rural	4	\$440	\$1,500	\$883

Although the oldest lease comparables were negotiated in 2005 and 2006, the majority of the comparables we considered occurred from 2007 to 2009. Therefore, all of these were considered to be good representations of market value. For a more apples-to-apples comparison, all of the comps (with the exception of the 2009 leases) were adjusted for market conditions based on either the escalations specified in their respective leases, or by using approximately 5% per year.

As one might expect, the bulk of our market data came from Arizona's two most populous counties: Maricopa and Pima. However, we were also able to confirm leasing details for sites in Pinal and Yavapai counties, and have given these equal consideration in our final reconciliation.

MASTER-LEASE RENTAL RATES—FINAL RECONCILIATION:

Over the previous pages, we reviewed telecommunications site-lease data from Arizona and Nevada in an attempt to determine a reasonable market-rental range to apply to the subject sites. As mentioned in the Subject Description section, the subject sites are predominately single-tenant ground leases, and as such, would have market rental rates that would be similar to the comparables we have summarized. Listed below are the rental ranges we have found.

*(Note): Because of New Mexico's lower population compared to Arizona, its adjusted "Urban" rate of \$984 per month was considered more comparable to suburban locations in Arizona. Therefore, we did not include this rate as part of our urban-location reconciliation shown below. Also, since the USFS rental matrix has historically been less than directly-negotiated, arms-length leases, it was not included in the following ranges.*

Master-Lease Rates:

Urban locations:	\$1,610 to \$1,880 per month	\$1,789 per month avg.	(Say \$1,800)
Suburban locations:	\$1,341 to \$1,495 per month	\$1,441 per month avg.	(Say \$1,500)
Rural locations:	\$654 to \$1,240 per month	\$942 per month avg.	(Say \$950)

Individual Site-Lease Data:

Suburban-Primary:	\$1,210 to \$2,000 per month	\$1,585 per month avg.	(Say \$1,600)
Suburban-Secondary:	\$1,000 to \$1,700 per month	\$1,375 per month avg.	(Say \$1,400)
Rural:	\$440 to \$1,500 per month	\$883 per month avg.	(Say \$900)

From a size standpoint, most of the comparables we surveyed fell within the minicell category. The data determined from the individual site-lease comparables correlated with the suburban category of the master-lease comparables, and as such, we have given equal weight to both sets of comparables.

Since the majority of our comparable data fell within the minicell category, we can determine a macrocell-rent equivalent by considering the rental difference used by CalTrans in their Site-License Schedule (shown to the right, for clarification). As the table indicates, its monthly macrocell rates range from \$1,272 to \$2,644, and average \$1,985 per month. Its minicell rates range from \$1,272 to \$2,267 per month (unadjusted for location), and average \$1,809 per month. The difference between the two averages is 9.7% (Say 10%), meaning that a typical macrocell leases for approximately 10% more than a typical minicell, everything else being similar. We have incorporated this difference in the following reconciled rental-rate table.

	Annual	Monthly
<b>Macrocell</b>		
Prime Urban	\$31,728	\$2,644
Urban	\$24,480	\$2,040
Rural	\$15,264	\$1,272
<b>Minicell</b>		
Prime Urban	\$27,204	\$2,267
Urban	\$22,668	\$1,889
Rural	\$15,264	\$1,272

Therefore, we can summarize the market data for wireless/PCS tenants as noted below.

**RECONCILED WIRELESS/PCS RENTAL-RATE SCHEDULE**

	Annual		Monthly	
	Low	High	Low	High
<b>Macrocell</b>				
Urban	\$21,100	\$25,100	\$1,800	\$2,100
Sub-P	\$19,800	\$22,400	\$1,700	\$1,900
Sub-S	\$15,800	\$18,500	\$1,300	\$1,500
Rural	\$6,600	\$15,800	\$600	\$1,300
<b>Minicell</b>				
Urban	\$19,200	\$22,800	\$1,600	\$1,900
Sub-P	\$18,000	\$20,400	\$1,500	\$1,700
Sub-S	\$14,400	\$16,800	\$1,200	\$1,400
Rural	\$6,000	\$14,400	\$500	\$1,200

On page 61, we sorted each county in Arizona into one of three groups (Urban, Suburban and Rural), and then fine-tuned this rating system through the use of USFS Zones. For clarification, this has been repeated on the next page for the reader's information.

LIST OF ARIZONA COUNTIES BY POPULATION  
(Based on Location Rating and USFS Rank)

Location Rating	USFS Rank	County	2007 Pop.
Urban	Zone 2	Maricopa	3,072,149
	Zone 4	Pima	843,746
Suburban	Zone 6	Pinal	179,727
		Yavapai	167,517
		Mohave	155,032
		Yuma	160,026
		Cochise	117,755
		Coconino	116,320
	Zone 7	Navajo	97,470
Rural	Zone 8	Apache	69,423
		Gila	51,335
	Zone 8	Santa Cruz	38,381
	Graham	33,489	
	Zone 9	La Paz	19,715
Greenlee	8,547		

We have applied our market-data ranges from the previous page to each county in Arizona as follows. The Urban range was given the most weight for Maricopa County, given its large population, while the Sub-P range was given the most weight for Pima County. The Sub-S range was used for Zone 6 counties, the upper end of the Rural range was used for Zone 7 counties. The middle of the Rural rental range was used for Zone 8 counties, while the lower end was used for La Paz and Greenlee counties. This has been summarized below.

AVERAGE MONTHLY MINICELL RENTAL RANGES  
(Wireless/PCS uses only)

Location Rating	USFS Rank	County	2007 Pop.	Cellular-PCS	
				Low	High
Urban	Zone 2	Maricopa	3,072,149	\$1,600	\$1,900
	Zone 4	Pima	843,746	\$1,500	\$1,700
Suburban	Zone 6	Pinal	179,727	\$1,200	\$1,400
		Yavapai	167,517		
		Mohave	155,032		
		Yuma	160,026		
		Cochise	117,755		
		Coconino	116,320		
	Zone 7	Navajo	97,470	\$1,000	\$1,200
Rural	Zone 8	Apache	69,423	\$800	\$1,000
		Gila	51,335		
	Zone 8	Santa Cruz	38,381		
	Graham	33,489			
	Zone 9	La Paz	19,715	\$500	\$800
Greenlee	8,547				

The next step in our determination of a rental-rate matrix for the subject sites is the determination of market rent for uses other than wireless/PCS. This will be accomplished below.

**DETERMINATION OF RENT FOR NON-WIRELESS/PCS USES**

Looking back over the list of subject sites, one can see a variety of telecommunications uses, ranging from television and radio broadcast to wireless/PCS and microwave relay. Determining a market-rental range for wireless/PCS was fairly straightforward, since this was the most common use of the lease comparables we analyzed.

Lacking a sufficient amount of non-wireless market data in Arizona, we referred back to the USFS schedule listed on page 60. Its below-market rent notwithstanding, this was one of the only rent schedules we have seen that delineated different amounts for different uses.

The table below indicates, by percentage difference, the amount of variance of the following use categories when compared to the cellular-telephone/PCS column. *(Note): For the purpose of this appraisal, only the television, AM/FM radio and microwave-relay columns were considered since these constituted the bulk of the subject's non-wireless uses.*

2009 USFS RATES FOR STATE OF ARIZONA  
*(Percentage Variance Compared to Cellular-PCS)*

Location Rank	County	2007 Pop.	Percentage Variance			
			Television	AM/FM Radio	Cellular-PCS	MW Relay
Zone 2	Maricopa	3,072,149	200.00%	110.00%	---	-20.00%
Zone 4	Pima	843,746	133.33%	66.67%	---	-8.33%
Zone 6	Pinal	179,727	50.00%	0.00%	---	-50.00%
	Yavapai	167,517				
	Mohave	155,032				
	Yuma	160,026				
	Cochise	117,755				
	Coconino	116,320				
Zone 7	Navajo	97,470	0.00%	-33.33%	---	-50.00%
	Apache	69,423				
	Gila	51,335				
Zone 8	Santa Cruz	38,381	-40.00%	-52.00%	---	-40.00%
	Graham	33,489				
Zone 9	La Paz	19,715	-52.00%	-64.00%	---	-40.00%
	Greenlee	8,547				

According to USFS, television commands the highest rents, but only for counties with populations greater than 100,000. AM/FM radio commands the second-highest rents, but only for counties with populations greater than 300,000. Six of Arizona's counties would be in USFS Zone 6, which charges the same amount for AM/FM and wireless/PCS. Navajo, Apache and Gila Counties would be in USFS Zone 7, which charges the same amount for television and wireless/PCS.

Applying these percentage variances to the average monthly minicell rates from page 72 would result in the following average non-wireless ranges. These ranges, plus the wireless ranges from page 72, represent the conclusion of this report. The corresponding macrocell-rent equivalents would be 10% higher as discussed earlier, and have also been summarized below.

AVERAGE MONTHLY MINICELL RENTAL RANGES  
(All uses)

Location Rating	USFS Rank	County	2007 Pop.	Television		AM/FM Radio		Cellular-PCS		MW Relay	
				Low	High	Low	High	Low	High	Low	High
Urban	Zone 2	Maricopa	3,072,149	\$3,200	\$3,800	\$1,800	\$2,100	\$1,600	\$1,900	\$1,300	\$1,500
	Zone 4	Pima	843,746	\$2,000	\$2,300	\$2,500	\$2,800	\$1,500	\$1,700	\$1,400	\$1,600
Suburban	Zone 6	Pinal	179,727	\$1,800	\$2,100	\$1,200	\$1,400	\$1,200	\$1,400	\$600	\$700
		Yavapai	167,517								
		Mohave	155,032								
		Yuma	160,026								
		Cochise	117,755								
	Coconino	116,320									
Zone 7	Navajo	97,470	\$1,000	\$1,200	\$700	\$800	\$1,000	\$1,200	\$500	\$600	
	Zone 8	Santa Cruz	38,381	\$500	\$600	\$400	\$480	\$800	\$1,000	\$500	\$600
		Graham	33,489								
	Zone 9	La Paz	19,715	\$200	\$400	\$180	\$300	\$500	\$800	\$300	\$480
		Greenlee	8,547								

AVERAGE MONTHLY MACROCELL RENTAL RANGES  
(All uses)

Location Rating	USFS Rank	County	2007 Pop.	Television		AM/FM Radio		Cellular-PCS		MW Relay	
				Low	High	Low	High	Low	High	Low	High
Urban	Zone 2	Maricopa	3,072,149	\$3,500	\$4,200	\$2,000	\$2,300	\$1,760	\$2,100	\$1,400	\$1,650
	Zone 4	Pima	843,746	\$2,200	\$2,500	\$2,750	\$3,100	\$1,650	\$1,870	\$1,540	\$1,760
Suburban	Zone 6	Pinal	179,727	\$2,000	\$2,300	\$1,300	\$1,500	\$1,300	\$1,500	\$700	\$800
		Yavapai	167,517								
		Mohave	155,032								
		Yuma	160,026								
		Cochise	117,755								
	Coconino	116,320									
Zone 7	Navajo	97,470	\$1,100	\$1,300	\$800	\$900	\$1,100	\$1,300	\$550	\$660	
	Zone 8	Santa Cruz	38,381	\$550	\$660	\$440	\$500	\$880	\$1,100	\$550	\$660
		Graham	33,489								
	Zone 9	La Paz	19,715	\$220	\$440	\$200	\$300	\$550	\$880	\$330	\$500
		Greenlee	8,547								

The previous tables represent our estimates of reasonable market rents for telecommunications sites within the jurisdiction of the Arizona State Land Department, and convey average benchmarks for single-tenant ground leases, organized by location and population. As a result, these reconciled ranges are based on the most common uses and sizes as determined from market data, and are not meant to include every conceivable variation of telecommunication site.

With this in mind, we would recommend that ASLD consider the individual attributes of each site in question, if this schedule is to be used as the basis for new rent negotiation.

For example, the rent for a cellular site serving a busy freeway segment outside of Phoenix could be based on the Urban Zone 2 ranges from the previous page. However, a site in an undeveloped portion of Maricopa County would warrant a rental rate at the lower end of the Urban range. Conversely, the potential rent for a microwave-relay site in Gila County could be based on the Suburban Zone 7 ranges noted earlier (\$500 to \$600 per month for minicell sites, and \$550 to \$660 per month for macrocell sites). However, a microwave site that is used to provide telephone service to rural towns not otherwise served by the state's wireline infrastructure, would have a potential rental rate closer to the upper end of the Rural range.

If you have any questions concerning our conclusions, or any of the material in this report, please feel free to contact us.

Respectfully submitted,  
THE HEATH GROUP



Sean Heath  
AZ Certified General Appraiser  
#31525  
*Expires 3-31-2011*



Thomas D. Heath, MAI  
AZ Certified General Appraiser  
#31527  
*Expires 3-31-2011*

## ADDENDUM

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- RESUME – SEAN HEATH
- RESUME - THOMAS D. HEATH, MAI

*Sean Heath*  
*The Heath Group*  
*11403 West Bernardo Court*  
*San Diego, California 92127*  
*Tel (858) 673-1177 Fax (858) 673-8631*  
*sean@heath-group.com*

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S U M M A R Y   O F   Q U A L I F I C A T I O N S

Certified General Real Estate Appraiser (#31525) *May, 2007*  
State of Arizona

Certified General Real Estate Appraiser (AG 008315) *February, 2004*  
State of California

Member *January, 2002*  
International Right-of-Way Association  
San Diego Chapter 11  
(MEMBER OF CHAPTER EXECUTIVE BOARD)

Associate Member (MAI Candidate) *July, 2008*  
Appraisal Institute

Approved Residential Appraiser *March, 1999*  
Department of Housing And Urban Development  
RIVERSIDE, ORANGE AND SAN BERNARDINO COUNTIES

Approved Residential Appraiser *December, 1994*  
Department of Housing And Urban Development  
SAN DIEGO COUNTY

Approved Residential Appraiser  
FNMA

Graduate *June, 1985*  
University of California, San Diego  
BACHELOR OF ARTS DEGREE, LITERATURE/WRITING

THOMAS D. HEATH, MAI  
11403 West Bernardo Court  
San Diego, California 92127  
Telephone (858) 673-1177

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ACADEMIC CREDENTIALS AND PROFESSIONAL AFFILIATIONS

- Arizona Certified General Real Estate Appraiser #31527
- California Certified General Real Estate Appraiser #AG007301
- MAI, Appraisal Institute (#6324)
- SRPA, Society of Real Property Appraisers
- California Real Estate Broker License
- FNMA and FHLMC approved appraiser and underwriter
- Graduate, Northwestern University
- School of Mortgage Banking
- Graduate, University of California, Los Angeles
- Certificate of Real Estate
- Graduate, California State University, Los Angeles
- Degree, emphasis in Real Estate Finance

## GENERAL EXPERIENCE

Mr. Heath has been involved in real estate appraising, lending and sales since 1965. For the last four years, he has been the owner of his own appraisal company in San Diego, California. Prior to establishing his own firm, he served in various co-owner and management positions as follows:

- Co-Founder, President and Chief Executive Officer
- Advanced Savings and Loan, Encino, California
  
- Co-Owner, President and Chief Executive Officer
- PreConstruction Development Corporation
- Studio City, California
  
- Vice President/Division Manager
- Merrill Lynch Mortgage Company/
- United First Mortgage Company, La Jolla, California
  
- Vice President
- Bowest Mortgage Company, San Diego, California
- (subsidiary of Bowery Savings Bank)
  
- Senior Vice President
- BanCal Mortgage Company
- Los Angeles, California
- (subsidiary of Bank of California)
  
- Vice President
- Bank of California
- Los Angeles, California

In these capacities, Mr. Heath has appraised all types of real estate in the western United States. He had been involved in lending and mortgage banking activities for local and national companies and was involved in property purchases, sales and development. He has prepared a variety of assignments including market studies, financial feasibility studies, highest and best use studies, and other special purpose investigations.