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Telecom Sites

FOR
DUMMIES[®]

By Sean Heath



A Reference for all of us.

The request seemed innocent enough to the council members of the town of Anywhere.

A wireless-telephone company wanted to raise a couple of flagpoles in front of the city library. However, these were to be unique flagpoles. Inside each one would be a cluster of antennas, used to process and send cellular-telephone calls.

The council liked the design, and they especially liked the idea that they would be paid \$1,000 per month if they said yes. It seemed a little like finding a winning lottery ticket among the book stacks.

Yet the more they talked about it, the more they began to wonder. Was this a fair offer?

The answer to this question has traditionally been the province of a knowledgeable appraiser. It is the nature and training of an appraiser – working as an objective reporter, in a sense – to look for relationships among groups of data, and to use these relationships as tools to determine market value.

Yet, it has been the observation of some in the wireless industry that appraisers have no business trying to appraise telecommunications sites, since each site is unique and should be viewed separately.

"Each site is completely different from another site," says a Sprint PCS site-acquisition agent (who requests anonymity). "We negotiate rental fees for the lowest cost possible, and each site would have a different return on investment. Coverage objectives drive the site, minutes of usage determine the pay back [on investment]."

Telecommunications-site leases do not occur in a vacuum. When appraising telecommunications sites, an appraiser should always keep in mind whether the parties involved are meeting the conditions of market value. Is the principle of substitution being fairly applied?

This principle carries with it certain assumptions, which would imply the existence of an open market.¹

- Both parties have access to market data;
- Neither party has a bargaining advantage;
- A wireless company would be free to seek out an alternate site if they did not like the rent that was being offered; and that
- An alternate site could be obtained, if needed.

By using substitution as a litmus test when analyzing telecommunications site-rental leases, certain reasonable inferences can be made.

1. A site in a busy location would have a higher rental amount than a site in a less-traveled area.

Here, there are two forces at work: location and the potential number of subscribers to be served. We have found that rents for telecommunications sites serving a high concentration of cell-phone subscribers tend to have the highest rents for sites in a given locale.

The following is an example of how rates can change depending on call volume, based on actual site-rental data.

Site along secondary arterial (500 calls per hour or less):	\$1,200 to \$1,500 per month
Site along prime arterial (500-1,000 calls per hour):	\$1,500 to \$1,800 per month
Site along a freeway (1,000-1,500 calls per hour):	\$1,800 to \$2,000 per month
Site along a freeway interchange or other prime location (1,500 calls per hour+):	\$2,000 per month or more

2. The size of a site can also affect the rent being charged.

Within the telecommunications industry, different terms are used to describe the size and number of antennas used at a particular cell or tower site. The California Department of Transportation (CalTrans), in their *Licensing Process and Siting Guidelines* manual, coined the following terms to use in describing single-tenant cell sites within their jurisdiction.

MACROCELL

A facility with nine or more antennas and/or with equipment building or concrete-pad space and space required for the foundation of the monopole or tower, when combined, exceeds 500 square feet, not to exceed 16 antennas or 2,500 square feet. A standard telecommunications facility with a vault or enclosed building is an example of a macrocell site.²





MINICELL

A facility with four to eight antennas and/or with equipment building or concrete-pad space and space required for the foundation of the monopole or tower, when combined, is in excess of 300 square feet but less than 500 square feet. A standard telecommunications facility with freestanding cabinets on a pad is an example of a minicell site.³

MICROCELL

A facility with one to three antennas and/or with equipment building or concrete-equipment pad space and space required for the foundation of the monopole or tower, when combined, is less than 300 square feet.⁴

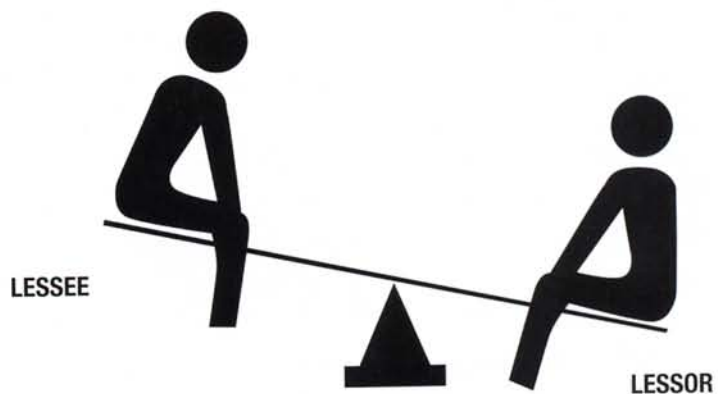
For example, a small paging site with one or two antennas would have a lower rental rate than a larger PCS site with an array of six to eight antennas.

3. No matter who has the initial advantage when negotiating rent, eventually the rental market will reach a state of equilibrium.



In situations where the lessee has more leverage, one result can often be lower-than-average rents, since it would be to their advantage to keep both the construction costs and the site rents for each site as low as possible.

Property owners in this situation are unfamiliar with how telecommunication site-leases are constructed due mostly to a lack of publicly disclosed data. Consequently, owners tend to accept whatever rental offer is presented to them, as was the case with the fictional town of Anywhere mentioned earlier. There are no checks and balances, since the first part of the principle of substitution (access to market data) is not being met.



The opposite extreme would be a situation where a property owner (or municipality) has the most leverage, and the wireless company is faced with a choice: pay an aggressively high rent, or risk not being able to serve a particular area.

In this case, the wireless company may not be able to move to an alternate location, due either to the terrain or competition.

Unlike the first situation, a property owner in this case would be familiar with the range of telecommunications-site rents in the area, and would use that information to "push the envelope" by asking for a very high rent.

An extreme example of this is a lease signed by one well-known wireless provider late last year atop a dormitory tower on a college campus in the Los Angeles area. The antennas would serve

both the campus, and an adjoining luxury-home community. Faced with limited alternates, and a need to serve this particular area, the wireless provider ended up agreeing to pay \$4,000 per month in rent.

"Technically, it is rare to have two carriers competing for a site," says Wayne Lusvardi of the Metropolitan Water District of Los Angeles. "So mainly it is a one buyer-one seller market. If the owner holds out for too high rent, and the lessee has another site or another technical alternative, the owner ends up with nothing. This is called a bilateral market. The telecom industry uses flat pricing structures; or indexed structures for rents. If they had to pay hold-out rents, they would go broke yesterday."

In response to this, some municipalities are switching to a form of rent control in determining site-rental rates – claiming that this would help streamline the application and review process and ensure a level of predictability for wireless vendors.

As a concept, standardized rents are not new – some state and federal agencies have been using their own pre-determined rate schedules for a number of years.⁵

One of the flaws in using a standard-rent approach is that it does not take location into account – specifically differences in traffic, call volume and demographics of a particular neighborhood. Consequently, a telecommunications site along a busy freeway would be leased for the same amount as a site in a less-traveled location.

Since it has been our experience that most standardized rents are based on an average, this can mean that some sites will be underleased, while others will be overleased.

Teresa Heine, site-acquisition agent for SureWest Wireless in Sacramento, agrees.

"I have occasionally heard requests for standardized rents in this area," says Heine. "We have successfully argued against that concept with private landowners. In fact, in some of our license areas, it doesn't make sense, since these areas are in the boondocks."

Although a few of the companies SureWest dealt with were a little more hard-lined about their position, they were successful at negotiating a lower rent or have found another location, says Heine.

TYPICAL LEASE TERMS

A typical site lease is usually a triple-net lease, with all of the expenses associated with the operation of the antennas and associated improvements passed through to the tenant. A common term would be for a base period of five to 10 years, with up to three option periods of five years each. In most leases, rent escalators are factored in, based either on a fixed percentage (4 percent per year) or on the local Consumer Price Index.

In a general sense, the following factors should be taken into consideration during any evaluation of a telecommunications-site lease.

1. Existing lease terms (are there clauses, which might prevent re-negotiation of a rental rate approximating prevailing market terms);
2. The amount of space taken up by a particular tenant (including both existing and future-expansion). In other words, is a tenant occupying space that could otherwise be leased to another carrier? Along the same lines, does a tenant have the right to sublease any or all of their cabinet space – thereby creating an additional source of income for the tower operator or lessor;
3. Frequency-bandwidth interference – Will the tenant's improvements interfere with the ability of the lessor's right or

the right of other tenants to operate their antennas or dishes at the site;

4. Power requirements;
5. Additional antennas or dishes; and
6. Changes in technology.

Although this is not meant to be a comprehensive list, and should be confirmed by a qualified RF engineer, it nevertheless highlights the types of influences that are taken into consideration in negotiating leases.

WHERE TO FIND THE DATA

Since the majority of these sites tend to be leased, rather than sold (particularly government-owned properties), the best means of estimating value would be the income approach.

Site leases are more prevalent, although it takes a little investigative work on the appraiser's part to uncover the data. A good place to start would be at the city or county level, through the following departments or agencies.

1. City clerk's office (this is always the best place to start, and may end up being your best resource in terms of securing copies of telecommunications-site leases);
2. Parks and recreation (for antennas on ballfields or other park lands);
3. Police and fire departments,
4. School districts;
5. Water districts; and
6. Local newspapers.

Once the appraiser collects site-leasing data, the next step is to estimate the market value of the site, based on its income stream. Ideally, capitalization rates could be extracted from the market – just like for other income-producing properties like apartments, office or retail buildings. However, as mentioned, the market for telecommunications sites is still fairly closed. Telecommunications sites do sell, although infrequently. Therefore, an appraiser should use a band-of-investment technique to arrive at a reasonable capitalization rate.

For smaller, single-tenant sites, a direct-capitalization technique can be used. In this situation, a site's net operating income would be equivalent to its gross potential income, less a facility-management fee for overhead and supervision. In our area, cities and tower operators charge approximately 15 percent to 30 percent of gross income, although in other areas, we have seen this fee drop down as low as 5 percent to 6 percent.

THE FUTURE OF SINGLE-TENANT SITES

One new concept being tested right now is an "RF umbrella," which would cover a central business district, a shopping mall or theme park. For example, if a carrier were to conceal cellular antennas inside the Matterhorn peak at Disneyland®, the height of these antennas may be sufficient to provide cellular coverage for every subscriber inside the park – thereby creating an "umbrella" of coverage. As long as subscribers stay under the umbrella, or inside the park in this example, then they would be able to place and receive calls.

Essentially, this concept accomplishes the same thing as traditional mountaintop sites improved with bulky lattice towers and large microwave dishes. At this state of technology, there are only two ways



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to cover a particular area: either with a series of small, low-power sites at low elevations (30-feet to 50-feet for example) or with fewer, high-elevation and higher-power sites.

In many areas, due to the rising objections of planning boards and homeowner's groups against the proliferation of cellular base stations, trying to create an umbrella of coverage by constructing a bulky lattice tower is becoming more difficult to get approved. Therefore, the only way to accomplish the same goal of broader coverage with fewer sites would be to hide, or stealth, the antennas. The tradeoff is fewer sites, but a drop in the quality of the reception.

According to a site-acquisition agent (who requests anonymity), the cost to build this type of stealthed high-elevation site would be almost prohibitively expensive at this point. For example, if a carrier wanted to hide antennas inside Matterhorn's peak, the construction cost could be as much as \$800,000 to \$900,000 compared with \$150,000 to \$250,000 for a lower-elevation, single-tenant site (like a cellular flagpole or fake palm tree). Right now, according to carriers, the average time to recover the cost of investment (i.e. the cost to construct a particular cellular site) for a low-elevation, single-tenant site would be approximately two to three years.



CONCLUSION

As an industry, appraisers' pool of knowledge regarding wireless-telecommunications sites needs to continue to grow and be fed by shared data and debate. Up until recently, this had largely been a closed market, with one side (wireless vendors) having more information available to them (i.e. rental rates of other sites, proximity to competition, time to recover the cost of investment) than the other side, which often viewed these ground leases as "found money." The input of appraisers is vital to help ensure a more equitable marketplace for all participants involved.

REFERENCES:

1. The principle of substitution is defined as: "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 property. The principle of substitution is market-oriented and provides the basis for estimating rents and expenses and selecting an appropriate discount rate or capitalization for the subject property." *The Appraisal of Real Estate—Tenth Edition* (Appraisal Institute, Chicago), pg. 410.
2. California Department of Transportation, *Licensing Process and Siting Guidelines—Appendix D* (8/97), 7.
3. California Department of Transportation, *Licensing Process and Siting Guidelines—Appendix D* (8/97), 8.
4. California Department of Transportation, *Licensing Process and Siting Guidelines—Appendix D* (8/97), 8.
5. The California Department of Transportation (CalTrans) has their own telecommunications policy and site-rental rate schedule, a copy of which can be viewed at: <http://www.dot.ca.gov/hq/row/wireless/guide>.