

CELL TOWER INDUSTRY OVERVIEW

Tower ownership is a big business. Today there are over 207 million wireless subscribers in the United States, which is over 69% of the nation's population. There are 180,000 tower sites with only 44,000 controlled by the top four tower companies. Yet the industry has been consolidating. With the merger of Cingular with AT&T in 2005, 12,000 towers were decommissioned. Additional mergers since then including Sprint-Nextel have produced a total of over 47,000 tower decommissions nationally. These consolidations have followed a healthy year over year growth of 14% in subscribers with the average revenue per customer going up. So the industry is healthy but now striving to lower tower rentals to achieve better profitability.

Technology has played a large part in the success of the industry. It also can create a change in tower usage and patterning. The average life expectancy of cellular equipment is three years before innovation leads to obsolescence. For example, conversion to digital from analog transmissions greatly increased the volume of calls from a single tower, although the quality of a voice transmission has been compromised for the volume advantage. The FCC will finally end analog transmissions altogether making all analog cell phones and tower equipment counterparts obsolete. Today all digital cellular radio systems are second generation. The future of all digital systems is for wide band transmissions transitioning from the current narrow band framework, which suffers from over compression to meet all the features provided by cell phones.

The effect of technology on cell tower owners goes to every lease clause that gives the right to cancel a lease if technology makes a location obsolete. Yet the hexagonal tower cell cluster arrangement and frequency reuse are the important feature of a tower location for a carrier. The cellular system relies on a tower structure relay that can only be thinned down by the elimination of competition and redundancy. As such, mergers are functional to economic obsolescence and the creation of an excess tower supply. Current industry facts for tower rentals are as follows:

Average of Tenants Per Typical Tower Site:	2.4
Average of Cellular Communications Tenants per Typical Tower Site:	1.8
Estimated Market Share of Top Five Wireless Carriers: (2005)	78%

Source: Unison: A Tower Consultant