Telecommunication Towers Subject Guide

By the IAAO Library

Telecommunication towers include all types of structures that transmit any communication signal such as radio and TV broadcasting, emergency medical services (EMS), microwave, global positioning satellite (GPS), and cellular phone antennas and towers. There are two aspects to consider when using the resources on this guide. The first is the valuation of telecommunication towers, and the second is the impact of telecommunication towers on property values. Both types of resources are intermingled below.

Telecommunication towers enable people to lead 21st century connected lives in a mobile ecosystem. The demand for new towers will continue to grow as the number of new cellular users and new services expands. The benefits of having towers is tax revenue and improved connectivity, but assessors must value these towers accurately and take into account the impact of the structure on property values.

Chart showing the top 10 populated areas in the US with the average cell tower lease rate in 2016 for ground leases:

<table>
<thead>
<tr>
<th>BTA Name</th>
<th>State</th>
<th>Population</th>
<th>SITA Anticipated Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>NY</td>
<td>18713662</td>
<td>$1,900</td>
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<tr>
<td>Los Angeles</td>
<td>CA</td>
<td>15989520</td>
<td>$1,500</td>
</tr>
<tr>
<td>Chicago</td>
<td>IL</td>
<td>8813457</td>
<td>$1,300</td>
</tr>
<tr>
<td>San Francisco-Oakland-San Jose</td>
<td>CA</td>
<td>7100609</td>
<td>$2,500</td>
</tr>
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<td>Philadelphia, Wilmington, Trenton</td>
<td>PA, DE, NJ</td>
<td>5992183</td>
<td>$1,400</td>
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<tr>
<td>Dallas-Fort Worth</td>
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<td>5253673</td>
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<td>Detroit</td>
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<td>Boston</td>
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<td>4281396</td>
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</tr>
</tbody>
</table>


Articles & Books in LibraryLink Catalog

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Cell tower and carrier equipment valuations, by Walt Woodard and Randy Scott. Presented at the 78th Annual International Conference on Assessment Administration, 2012.


Technological obsolescence of personal property in the telecommunications industry, by Ian Carr and David Schneider. Presented at the 78th Annual International Conference on Assessment Administration, 2012.


Trends in the taxation of tower assets: Can this be real? By Peter W. Hladek and Todd W. Heinrichs. Presented at the 71st Annual International Conference on Assessment Administration, 2005.

Valuation of cellular (wireless) technology, by Kevin Snow. Presented at the 72th Annual International Conference on Assessment Administration, 2006.


Valuation of wireless communication towers, by Gary McCabe. Presented at the 68th Annual International Conference on Assessment Administration, 2002.

Online Reports and Articles

**Appraisal of cell towers and billboards**, by John A. Hillas, Benjamin Scott, and Brett I. Reynolds. Presented at the Northern California Chapter of the Appraisal Institute Fall Conference, 2016.


Websites & Software

**Cell Site Leasing Market Data** by Tower Cap Advisors (based on TCA sales)

**Cellular Telecommunications Industry Association** (CTIA) Annual Industry Survey and general industry statistics.

**FCC Registered Cell Phone and Antenna Towers** in the United States.

**Lease Rate Calculator & Lease Buyout Calculator** by Steel in the Air.

**OpenSignal**, Survey signal strength in any area to identify if it’s a good prospect for additional tenants (i.e. network providers). Many websites rank network providers by network type (2G, 3G, 4G) by coverage area, signal strength, data transfer speed, etc.

**Telecommunications Industry Association** (TIA) Standard on tower construction.

**Top 100 Tower Companies in the US** by WirelessEstimator.com

**Wireless Industry Information** by WirelessEstimator.com

**Wireless Infrastructure Association** (WIA)