

High Voltage Power Lines Impact On Nearby Property Values

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Three nationwide data searches were conducted through professional organizations whose members have experience in property valuation of land near electrical line rights of way. The focus of these inquiries is to uncover what information exists relative to power lines' impact on health issues as they relate to property and on property values.

Data relative to health issues is sparse at this point and is somewhat general in nature. The consensus is that the impact on health is indeed real; however, this impact drops off sharply as distance increases from high voltage lines. As would be expected, the higher the voltage, the more the "safe distance" from power lines increases. For instance, with computer display terminals and video display terminals, it's been stated that operating three feet away from these terminals is a "safe distance" to avoid undue health risks. Distance from high voltage lines is considerably greater. According to a Richmond, Virginia, appraiser who has been an expert witness in five similar court cases, the findings of a University of Texas, Arlington, study states there is a leukemia danger within 500 feet of high voltage power lines. Note that most studies of this sort are of 345 kilovolt lines or greater. It does not appear from the data that substantial studies have been completed about health issues as they relate to lesser lines.

Of more concern to the right-of-way agent is the impact of high voltage lines on the value of nearby property. Of substantial interest here is whether the public perception of danger has increased in recent years due to a greater focus on health risks. To address this issue, older data is being compared with more recent data to see if such a difference does indeed exist and, if so, what that difference may be. The next area of dis-

cussion is the impact of high voltage lines on property value, beginning with older data and concluding with the most recent and, interestingly, the most comprehensive data available.

One of the best studies was made by William Kinard, MAI, who has gained a reputation as one of the most knowledgeable appraisers in the field. He made a twelve-year study of 573 sales from which he derived 329 paired sales for a multiple regression analysis. Over the twelve-year time frame, he found that there was no negative effect on the value of vacant land due to the presence of high voltage power lines. Another authority in the field, Marion Eberhart of Scottsdale, Arizona, undertook 30 intensive studies addressing this issue. His studies were all of higher voltage lines (typically 345 kilovolts or above). Eberhart concluded that there is no measurable effect on value for the larger lines. There was also a separate study entitled "The Effects of Proximity of Marcy South Transmission Line Right of Way on Vacant Land Sales, Towns of Hamptonburgh and Wawayanda, Orange County, New York, January 1983 to December 1987" done by the Real Estate Consulting Group of Connecticut. In this study, a multiple regression analysis on 398 sales of vacant land found "no discernable or measurable difference" in the sales due to the lines. The Marcy South line is a 345 kilovolt line.

One limiting factor in these studies is that nearly all of them were of residential or agricultural land.

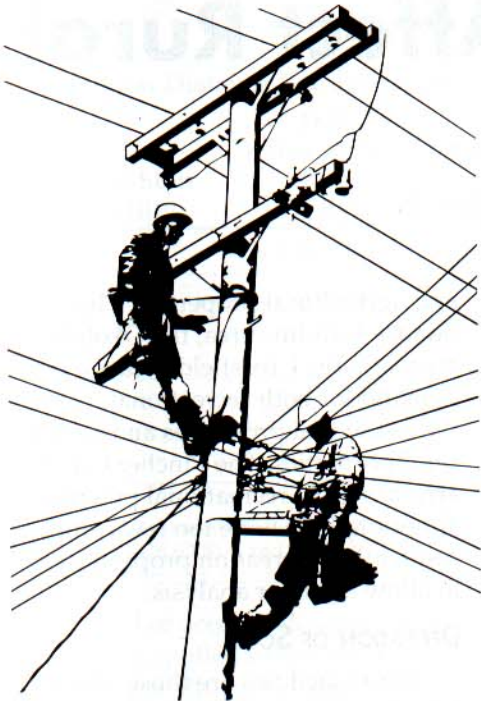
There are also several other appraisers who have conducted independent, small-scale studies who have likewise found that there is no effect on value. A side note here, however, is that occasionally such properties do tend to have a slower marketing time.

Interestingly, one of the more recent studies, one made in April 1989 by an appraiser in Charlotte, North Carolina, found that there is an approximately 5 to 10 percent positive effect on residential lots due to the proximity of power lines. In his study, a paired sales analysis of half-acre lots in the Charlotte area found that the sale of a lot near transmission lines would bring approximately 5 to 10 percent more than a lot farther from the lines. From interviews, it appears that the privacy afforded by the extra right of way is a contributing factor as well as increased land utility due to improved access and gardening space. The size of his study, however, is too small to draw any substantive conclusion.

Another recent study was made by an appraiser from Baltimore, Maryland. As part of a comprehensive appraisal, he made a study of dozens of paired sales in 15 subdivisions which had proximity to power line rights of way. He compared these sales to lots within the same subdivisions which didn't have this influence. Of particular note is that the study was made beginning June 1988 through the end of 1989 of subdivision lots along a 500 kilovolt line. He studied dependent variables both price and size and their correlation to proximity to the power lines.

The results of his studies are mixed. For lots which were developed with higher-priced homes (in

the \$225,000 to \$250,000 range) there appeared to be 0 to 5 percent negative effect in value of lots near the power lines as opposed to those which were not near lines. In interviewing developers associated with these lot sales and subsequent home sales, however, he ascertained that the prices are




usually somewhat quite similar. The influence comes in having a longer sellout time frame for lots near the power line rights of way. Interestingly, however, he found that the lots which sold near the power line rights of way sold for a higher price which roughly correlated to the increase in value of the lots due to CPI increases in value. The increase in values, therefore, appeared not to be because of the presence of the right of way, but to increases in general market prices over the time frame that it took to market these lots which were closer to the power line rights of way.

In terms of size, he found that there was no negative effect, and in fact, some positive effect on vacant land sales prices of three or more acres within these subdivisions. The buyers here apparently saw the extra space as an amenity with improved rear lot access to sections of their property which would have had a more difficult accessibility without the power line rights of way. For smaller lots, however, this was not so. In some of the subdivisions there were a number of approximately 7,000 square foot lots next to the 500 kilovolt power line towers and lots which were not near the towers. Those near the towers had an approximately 10 to 15 percent damage to land as opposed to those which

were not. Interviews with the owners and inspections of the lots revealed, however, that the difference in price appeared to be primarily due to the detrimental impact of the lines on the views from the properties as opposed to the proximity of the rights of way. Those lots that were next to the rights of way and had trees shielding views of the towers appeared to have no significant effect on price as opposed to those not located near the rights of way.

For residential properties from the above, therefore, it does not appear that the public recognizes a substantial detriment to value due to proximity to power lines.

One limiting factor in these studies is that nearly all of them were of residential or agricultural land. Data does not appear to exist that suggests a positive or negative influence on values of industrial quality land. The consensus of opinion relative to this issue was that most industrial sites need proximity to high voltage lines for industrial purposes and that industrial tracts within proximity to power lines typically sell for a higher price than those not so located. 



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