

## **Appendix B: Commercial Industrial Studies**

<b>Author</b>	Chapman, D. (2005)
<b>Title</b>	Transmission Lines & Industrial Property Value
<b>Source</b>	<i>Right of Way</i>
<b>Publication Date</b>	November/December 2005
<b>Studied Geography</b>	California, Nevada, Utah
<b>Studied Transmission Lines</b>	Various
<b>Additional Data Description</b>	
<b>Studied Voltage</b>	Various
<b>Number of Observations</b>	NA
<b>Studied Time Period</b>	2000-2005
<b>HVTL Measurements</b>	NA
<b>Methodology</b>	This represents a description of several engagements involving industrial properties crossed by, or adjacent to, HVTL. The author reports that he has carried out over 100 interviews with buyers, sellers, tenants, property managers and brokers in connection with these studies. He also reports on matched-pairs analysis for several of the properties.
<b>Independent Variabl</b>	NA
<b>Dependent Variables</b>	Sales price, rents, marketing time
<b>Summary/Result</b>	<p>His overall conclusion is that there will be no effect of the HVTL on the value of the property provided the HVTL (lines, structures and easement) don't affect the highest and best use of the property. Since building codes and user requirements affect setbacks and coverage ratios, there can often be substantial encumbrance on an industrial site (say 30%) and no effect on the development potential of the site and hence no effect on value. As the encumbrance goes above 30%, the site plan may have to adjust to the encumbrance with some small impact on the value of the site up to the point where the development of the site has to be curtailed with corresponding decreases in site value.</p> <p>He has not seen any cases where marketing of the developed space or rents were affected by proximity to the HVTL. Visual or aesthetic concerns appear not to be an issue. Finally, he investigated issues around interference with electronic instruments caused by the HVTL. With electron microscopes, location and tuning of the instruments could be affected by the lines, but users reported that "inside the building" sources were a larger concern.</p>

<b>Author</b>	Jackson, T.O., Pitts, J. and Norwood, S. (2012)
<b>Title</b>	The Effects of High Voltage Electric Transmission Lines on Commercial and Industrial Properties
<b>Source</b>	Paper presented at American Real Estate Society Meeting, St. Petersburg, FL
<b>Publication Date</b>	April 19, 2012
<b>Studied Geography</b>	Wisconsin
<b>Studied Transmission Lines</b>	Various
<b>Additional Data Description</b>	
<b>Studied Voltage</b>	138 kV and higher
<b>Number of Observations</b>	106 to 123 depending on the regression model. In addition there were 5 paired sales analyses: two small apartment complexes, one office building and two parcels of vacant land slated for office development.
<b>Studied Time Period</b>	The regression analysis covered the period 2005 – 2010. The paired sales analyses considered transactions from 2000 – 2010.
<b>HVTL Measurements</b>	A categorical variable was used to indicate “proximate” (within 500 feet of a 138 kV line or greater) or “control” (beyond 500 feet of a HVTL).
<b>Methodology</b>	Regression in both linear and log-linear format.
<b>Independent Variables</b>	Year of sale, gross floor area, age, office build-out, sprinkler system, dock high doors, county in the greater Milwaukee area, proximate to HVTL.
<b>Dependent Variables</b>	Sale price and natural log of sale price
<b>Summary/Result</b>	<ol style="list-style-type: none"> <li>1. <u>Regression results</u> The regression results showed a large positive effect of HVTL proximity ranging from 19 to 35%. The authors don’t suggest causality but suggest that the HVTL are likely a proxy for some other variables influencing the value of the properties studied. Their conclusion was that at least the HVTL were not associated with any negative effects.</li> <li>2. <u>Paired Sales</u> The five studies the authors refer to as paired sales in fact used multiple sales comparables, adjusted as appropriate, plus some interviews with transaction participants. In each case (two apartment complexes, one office building and two office land tracts), there was no evidence of the transaction being affected by the HVTL.</li> </ol>