## **Appendix D: Attitudinal Studies**

Author	Delaney, C.J. and Timmons, D. (1992)
Title	High Voltage Transmission Lines: Do They Affect Residential Property Value?
Source	Journal of Real Estate Research. 7(3): 315-329
Study Area	United States
HVTL	NA
Data	Random sample of 500 appraisers holding the RM designation from the Appraisal Institute. 219 useable responses giving a RR of 43.8%.
Summary/Results	<ul> <li>84.0% of respondents indicated that market value of residential property is negatively affected by proximity to HVTL. Proximity defined as properties crossed, abutting or from which HVTL are visible.</li> <li>Mean value decrease was 10.2%.</li> <li>Concerns cited included visual (93.9%), Health (58.9%), noise (43.1%) and safety (28.6%).</li> </ul>

Author	Kinnard, W.N. Jr. (1967)
Title	Tower Lines and Residential Property Values
Source	The Appraisal Journal. April: 269-284
Study Area	Hartford, Connecticut
HVTL	Not indicated.
Data	791 homes in 17 subdivisions in the Greater Hartford area were the basis for the study. Each of these subdivisions was either crossed or abutting a HVTL. Home owners over the period 1954-1964 were sent surveys. 45.0% response rate. Responses were categorized both in terms of distance from the HVTL—crossed, abutting, within 200 feet, more than 200 feet and depending on whether significant improvements had been made to the property over the study period. In addition, assessors (84), appraisers (26), builders (31), lenders (85) and realtors (45) with experience in this market were surveyed.
Summary/Results	<ul> <li>Home owner results</li> <li>1. 79.9% aware of the HVTL at time of purchase</li> <li>2. 76.3 % no effect of HVTL on purchase decision or price</li> <li>3. 79.9% would buy in this location again</li> <li>4. 80.7% have made home improvements</li> <li>5. No response differences associated with home locations</li> <li>Market Professional Results</li> <li>1. HVTL affect market values of crossed lots: realtors (89.7%), appraisers (78.9%), Lenders (69.4%), builders (61.5%).</li> </ul>

Author	Kung, H. and Seagle, C.F. (1992)
Title	Impact of Power Transmission Lines on Property Values: A Case Study
Source	The Appraisal Journal. July: 413-418.
Study Area	Memphis and Shelby Counties, Tennessee
HVTL	Various
Data	47 responses (response rate of 59%) from owners of properties crossed or abutting HVTL.
Summary/Results	<ul> <li>53% of respondents considered the HVTL an eyesore, 47% didn't.</li> <li>None considered it a health hazard.</li> <li>Of the 53% who considered the lines an eyesore, 72% said the price they were willing to pay was unaffected.</li> </ul>

Author	Morgan, M.G., Slovic, P., Nair, I., Geisler, D., MacGregor, D., Fischoff, B., Lincoln D. and Florig, K. (1985)
Title	Powerline Frequency Electric and Magnetic Fields: A Pilot Study of Risk Perception
Source	Risk Analysis. 5(2): 139-149
Study Area	NA NA
HVTL	NA
Data	116 respondents (response rate 70%) drawn randomly from alumni rolls of Carnegie-Mellon university were asked to evaluate 16 known or potential hazards, e.g. automobiles, electric blankets, caffeine, nuclear reactors, large power lines, etc.
Summary/Results	<ul> <li>Of the 16 known or potential hazards, HVTL were considered among the least risky.</li> <li>The risk profile for the HVTL was similar to that found for electric blankets.</li> </ul>

Priestley, T. and Evans, G.W. (1996)
Resident Perceptions of a Nearby Electric Transmission Line
Journal of Environmental Psychology. 16: 65-74.
City of Vallejo, Solano County, California. Two subdivisions—one developed just before the line upgrade, the other developed just after the line upgrade.
115 kV line on 60 foot steel lattice structures upgraded to 115 kV and double circuit 230 kV on 120 to 160 foot steel poles in a 100 foot ROW.
Survey responses from 266 residents of the two subdivisions (response rate of 60%) three years after the HVTL upgrade. Respondents were asked about perceived HVTL impacts, line visibility, ROW use, evaluation of design and attitudes in opposition to the upgrade. In addition the researchers established distance measures and objective measures of visibility.
<ul> <li>87% of respondents see the HVTL as a negative influence on the attractiveness of their neighborhood.</li> <li>Health and safety was perceived as the most significant negative impact, 3 times more negative than aesthetics and 6 times more negative than impacts on property values.</li> <li>None of the perceived impact responses were correlated with distance to, or visibility of, the HVTL.</li> <li>40% of the respondents overestimated the visibility of the line.</li> <li>60% of the residents living in the neighborhood prior to the upgrade strongly opposed the upgrade. Those opposed were more like to exaggerate visibility of the line.</li> <li>Generally, the respondents favored the tubular steel structures to the steel lattice structures two to one and 75% viewed the landscaping of the ROW positively.</li> </ul>

Author	Solum, C.L. (1985)
Title	Transmission Line Easement Effects on Rural land in Northwest Wisconsin
Source	Right of Way. April: 14-18
Study Area	Rural Wisconsin
HVTL	69 kV to 161 kV.
Data	180 responses (43% response rate) from individuals with properties crossed by a HVTL. There were 127 agricultural properties, 43 recreational (wooded) properties and 10 rural residential properties. Interviews were also completed with buyers and sellers of 23 encumbered properties.
Summary/Results	<ul> <li>For the agricultural properties, 56% said no effect on value or use, 35% said the HVTL represented an inconvenience and only 2 responses out of 127 thought resale value might be affected.</li> <li>For the recreation properties, the most frequent concern (30%) was loss of timber value from clearing of the ROW, next (22%) was a concern that future resale value would be affected and 14% saw the HVTL as having no effect on the property.</li> <li>For residential property, the most frequent concern (58.5%) was aesthetic followed by loss of building sites and potential loss of resale value (41.2%).</li> <li>The interviews of participants in transactions of encumbered properties failed to indicate a single case in which the presence of the HVTL had any effect on the sale price.</li> </ul>