



TRANSPARENT ELECTRICAL LINE IMPACT STUDIES

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Introducing the TELIS Project: Transparent Electrical Line Impact Studies

As leaders in the real estate field, we all understand the ongoing struggle for **access to accurate data** that support an opinion of **impact on property values created by high voltage electric transmission lines**. Too often the data are not made available to validate published studies.

We propose a groundbreaking shift in the status quo and we need your participation to accomplish this.

We invite you to join us in **TELIS: Transparent Electrical Line Impact Studies**. The **TELIS Project** is a series of pioneer research studies examining the impact of high voltage overhead electrical transmission lines on property values.

The studies include:

1. Impact of high voltage powerlines on acreage sales located in Pinal County, Arizona. Over 2,000 sales of 20+ acres include a large subset of sales purchased for residential development.
2. Impact of high voltage powerlines on residential properties located in Maricopa County, Arizona (Phoenix, Scottsdale, etc.)
3. Any other area in the United States where sales data are available.

Why is the TELIS Project needed?

The TELIS Project seeks in-depth independent analysis of data in order to glean valuable, non-biased insights into the effects of electrical lines on real estate values.

Although many existing studies have been conducted on the effects of high voltage powerlines on property values, **glaring issues are evident in these reports**, including:

1. Model misspecification errors such as predicting price when the natural log of price is more appropriate, omitted variable issues, or other issues regarding the validity of the regression analysis model used.
2. Large data sets over many locations indicating possible data heterogeneity issues.
3. Violations of regression analysis assumptions including large outliers, non-linear relationships between predicted and predictor variables, and non-normal distribution of residuals.

Previous researchers refuse to release the data to allow others to re-examine and validate the results. Thus, there is no way to check the model and verify that the intended question has been measured. Consequently:

1. In a recent study where data were available, we found what we believe to be gross errors leading to erroneous results.
2. Power companies are relying on these unverified data to support their claims of no or little loss in value to the remaining properties. As described above, there appear to be many statistical issues with previous property valuation studies, but these issues cannot be studied without the underlying data.
3. Without the ability to replicate the prior studies, these studies do not pass as scientifically credible. We believe they should not be relied upon by appraisers or the courts.

The issue of non-transparency of the data violates basic principles of the scientific method. We propose a fully transparent series of research projects that will quantify the data, use fair comparisons, and draw conclusions as objectively as possible.

Why be a part of the TELIS Project?

The project studies will provide multiple benefits for stakeholders, including:

- Appraisers and attorneys will have detailed documentation regarding property values for eminent domain cases.
- The TELIS Project data sets will be made available for examination.
- Unlike current studies, TELIS results may be reproduced from associated data sets. That is, we will provide the underlying data for our studies so that anyone with a statistics program can replicate the results.
- TELIS will provide a support and education model for appraisers by clearly showing study methodology and why the conclusions were made.
- To maintain an unbiased study, results will be posted on www.ConcernedCitizensMontana.net/telis-project regardless of outcomes.

Who is leading the TELIS Project?

Mr. Jim Sanders, MBA, will lead the TELIS Project as the Principal Investigator. A certified general appraiser since 1991, he is the President of Real Estate Appraisal Litigation, LLC in Tucson, Arizona. His focus is expert witness work involving eminent domain and complex issues including high voltage transmission lines, cell phone towers, noise, and stigma.

Dr. Peter Colwell will serve as Program Advisor. He is an Emeritus Professor of Finance at the University of Illinois at Urbana-Champaign where he held the Office of Real Estate Research Professorship. His research emphasis was on land value issues.

Mr. Sanders and Dr. Colwell are esteemed experts in real estate valuation. The two collaborated on an extensive analysis on the impact of high voltage powerlines on farm ground in Wisconsin and Illinois. Results of the analysis are consequential for both states, lending credibility and urgency for further studies.

The TELIS Project research team has partnered with **Concerned Citizens Montana (CCM)**, an educational non-profit that supports citizen involvement in promoting responsible and innovative energy solutions. CCM plays an influential role in the shaping of Montana energy and associated eminent domain policy. Along with the TELIS Project team, CCM seeks transparent studies that will outline the impact of powerlines on real estate values.

Dr. Debra Hanneman, President of Whitehall Geogroup, Inc. and executive board member of CCM, will serve as the liaison for CCM, the TELIS Project researchers, and project participants. Dr. Hanneman's background in scientific research will be instrumental in the TELIS Project as she will oversee the project's general scientific methodology.

What will the TELIS Project study?

The first proposed study will document the impact of high voltage powerlines by comparing acreage land sales in Pinal County, Arizona. Mr. Sanders has already completed several eminent domain appraisal cases in the area. These cases included several high voltage powerline takings. Many of these sales occurred prior to the real estate crash when many properties had increased value because of the potential highest and best use shift to residential subdivisions and supporting commercial uses.

These data will be the springboard for the anticipated project and will lead to future studies in multiple areas and different property types. The initial study is primarily single-family residential, but other uses may also be examined if the data are sufficient.

How can you participate in the TELIS Project?

There are two important ways you can help:

1. We invite you to contribute to these efforts of validating research models as we create transparency and consistency in the land valuation process. Tax-deductible contributions may be mailed by using the attached form. For online donations, please refer to www.ConcernedCitizensMontana.net/telis-project.
2. Do you know attorneys or appraisers who would be interested in promoting open access to data? **Please help us spread the word by forwarding this information.**

We plan to launch Phase 1: Pinal County Acreage Study by January 1, 2017. The funding needed to begin the initial study is \$5,000. Any TELIS Project donations that exceed our projected Phase 1 total cost of \$10,000 will be applied to the next TELIS Project study. Additionally, if a TELIS Project donor would like to be publicly acknowledged, we will add his/her name to a TELIS Project sponsorship section on the CCM website.

If you share our concerns regarding obscure data and research practices and the correct statistical treatment of these data, please join our efforts along with other attorneys and appraisers across the United States. More information on the TELIS Project is available at www.ConcernedCitizensMontana.net/telis-project. Questions on the TELIS Project may be directed to Jim Sanders, real@cox.net, or Dr. Debra Hanneman, whgeol@gmail.com.

Thank you for your time and consideration of the TELIS Project.