

Scope of Work and Methodology

The following research and analysis were included in the scope of work for this study:

Study areas identified by scope of work

Two study areas were determined for this project, consisting of Study Area #3 and Corridor #1. For each study area, case studies were chosen based on a property's proximity to or encumbrance by a preexisting HVTL. Encumbered or proximal properties were researched and selected to include only the most current sales of single family residential properties considered "fair and arms length." Subsequent to the selection process a total of eight case study sales were considered for further analysis. Conclusions based on potential impact of HVTL were ultimately categorized as either having an impact on sales price or marketing period, having a potential impact on sales price or marketing period or having no impact on either sales price or marketing period.

Property Selection

Existing corridors were identified visually utilizing aerial photogrammetry or via existing corridor right-of-way data sets provided by PSNH. Areas of specific interest were predetermined by the project scope and included two primary areas of focus. Corridor #1 extends northerly from the Massachusetts border in Pelham, NH to the Vermont border in Monroe, NH. Corridor #1 selection area included all municipalities intersecting the existing HVTL corridor south of Bedford, NH. Potential case study properties in Bedford and points north had already been researched by an alternate study group.

Study Area #3 corridor traverses Portsmouth, Newington, Durham and Madbury. Properties within Study Area #3 were selected based on a 10-mile search radius originating in Portsmouth, NH and excluding Maine municipalities.

The selection methodology identified the two most recent single-family residential arms length sales per municipality. Size of the HVTL (width or transmission capacity) and residential sale size (GLA or Acreage) were not considered.

Initially only the most recent year was researched for each municipality (December 2013 to December 2014). If that year did not yield at least two residentially improved and arms length sales, the search period was extended one-year prior until at least two sales were identified. The same search period was used for all sales within each study area, meaning if the sales search of one municipality required searching in 2011 to satisfy the search requirements, then sales from all municipalities in that study area were collected back to 2011.

After the sales were initially selected, municipal tax cards and tax maps were obtained. Sales that appeared to be encumbered or abut an HVTL were eliminated during this step if the encumbrance or proximity to the corridor was incorrectly identified.

Properties were further excluded based on: lack of fair and arms length status, Assessors' indication of an unqualified transaction, an assessment transfer price listed as \$0, if the property was identified as non abutting or non encumbered, or if the property was non residential, including commercial, industrial or vacant.

Subsequent to the aforementioned process, 18 potential properties were selected for further analysis ten of which were removed because they were commercial properties, non-arms length transfers, or not located abutting or encumbered by an HVTL.

Collection of data

Data was collected through site visits, telephone surveys, email surveys, directly from municipal or state agencies and through the solicitation of independent qualified appraisal services. The vast majority of municipal assessment data was collected using the Internet and included tax cards, tax maps and recorded deed information. New Hampshire Registry of Deeds online services were utilized to review case study subject property deeds and lot surveys. Existing corridor data was provided by PSNH identifying specific corridor configurations including width, pole height, improvement density and corridor voltages. Publicly available New Hampshire GIS Data was sourced for development of the case study GIS maps. Appraisal services of The Stanhope Group of Portsmouth, NH were also employed to determine the retrospective fair market value opinion of each of the case studies absent the influence of HVTL.

Site visits were conducted on February 7 and February 11 of 2015. During the site visit photographs of the subject's proximal HVTL were taken and an interview with the homeowner was attempted. Corridor visibility was classified into one of three categories:

- Clearly visible – clear view of conductors and or clear view of that portion of structure to which conductors are attached.
- Partially visible – obstructed view of conductors or structures or view of a portion of a structure.
- Not visible – neither structures nor conductors are visible.

If the homeowner was available and willing to answer questions, they were asked about specific motivating factors influencing their decision to purchase the home.

Telephone and email surveys were conducted with all real estate brokers party to the case study sales transactions including both listing and selling agents. A two-phase questioning method was employed. The first email inquiry purposefully avoided discussing the presence of HVTL to determine potential broker sensitivity to HVTL. The second follow-up call, or question set, specifically brought up presence of HVTL to determine the brokers perceived sensitivity to HVTL.

Physical Relationship of Transmission Lines to the Property & GIS map development: Each property was analyzed for four criteria – distance from the single-family residence to the HVTL corridor, distance from the single-family residence to the nearest utility pole, distance from the single-family residence to the most visible utility pole, and the size of the area encumbered by the HVTL corridor on the property. The distance was then measured from the nearest point of the single-family residence to the HVTL corridor, to the center of the nearest utility pole, and to the center of the most visible pole if this differed from the nearest pole. Due to the absence of digitized parcel data for the state of NH, parcels were drawn in the ArcGIS software program and georeferenced with the most recent aerial imagery and municipal tax maps. Aerial photogrammetry was provided through the UNH GRANIT data catalog. Each HVTL corridor was then drawn over the property by utilizing the width measurements provided by PSNH, from which the encumbered area was calculated.

Results and Conclusion

The primary factors driving the conclusion included the exterior property inspection, homeowner interviews, broker interviews and independent appraisal evidence presented in appraisal reports by the Stanhope Group.

Exterior property inspections were used to illustrate the physical relationship of the improvements to the encumbering or abutting HVTL. The homeowner interview (if available) was utilized as a basis for understanding buyer motivation. Broker interviews illustrated perceived influence, if any, of HVTL on sales price for marketing period of the case studies, and appraisal evidence considering the retrospective value opinions which provide a benchmark of the subjects potential value absent influence by HVTL. Subsequent to reconciling the aforementioned data, conclusions were made and one of the three possible outcomes was concluded

- There was no effect of the HVTL on the Case Study sales price or marketing period, T
- There was a possible effect attributable to the HVTL on the Case Study's sales price and or marketing period, and
- There was an effect attributable to the HVTL on the Case Study's sales price and or marketing period.

Eight Case studies have been developed and are divided into seven sections – Property Identification & Description, Physical Relationship of Transmission Line to the Property, Property Sale Data, Interview Data, Appraised value on Date of Sale Absent Influence of HVTL, Property Assessment Related to HVTL, and Conclusions.