Valuation of Utility Corridors:  
Proper Methodology for Appraising Property Rights

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Abstract

This paper describes the ongoing controversy among real estate appraisers concerning the methods used in appraising linear rights-of-way and provides a look at the two competing approaches most often the subject of these debates: at-the-fence valuation and corridor valuation. These methods are examined, analyzed and the most appropriate approach is outlined. The paper also provides a brief look at the ongoing evolution of Texas case law regarding the acceptability of corridor valuation methods.

Introduction

The methods for the appraisal of linear rights-of-way have become increasingly controversial within the appraisal community over the past few years. A growing number of appraisers support an appraisal process that favors evaluating corridors by utilizing market-based data of sales and rentals of linear corridor properties. This approach is similar to the procedures used by the utility industry in evaluating corridors when they sell or rent rights-of-way to each other. This method is called the “corridor valuation method (CVM)”. The other method of appraising linear corridor rights-of-way utilizes the market data of adjacent or near-by properties, which assumes that the value of the corridor is similar to the value of adjacent properties. This method is known as the “at the fence method (ATF)”.

A number of factors – economic, environmental, and legal -- have focused to intensify interest in the appropriate valuation method; the most currently significant of which is the federal...
government’s present debate about whether to employ CVM when analyzing how much to charge would-be easement purchasers for the right to traverse vast expanses of federal property. Appraisal Institute members are divided in their opinions of the most accurate appraisal methodology, and several recent Institute seminars and workshops have underscored the debate.

In Texas, evolving case law certainly indicates that if a claimant appropriately demonstrates that an easement corridor is the highest and best use of his property, and presents otherwise admissible comparable sales of easements, that valuation method is favored.

This paper concludes that CVM is the most appropriate method to use when valuing properties that obviously have a highest and best use of easement corridor. Appraisal theory’s long-standing preference for valuation of property at its true highest and best use is the prevailing reason for that conclusion.

Reasons for Controversy

The evaluation of utility corridors has been around for sometime; probably back to the beginning of the expansion of railroads to the western part of the United States. Proper valuation methodology was no doubt problematic back then, as well as the question of highest and best use. A very early example of a difference of opinion concerning highest and best use occurred in the days when agents were buying land for right of way for a newly formed railroad. As the path of a certain railroad was to cross Indian property, the agents had to negotiate with the tribal elders. They encountered some unexpectedly shrewd bargainers. One Chief was asked whether he would sell a small, eroded piece of land. “Sure, me sell for $50,000,” said the Chief. “$50,000! Why that land is no good for planting or pasture. It is just no good for anything!” the agent exclaimed. The Chief grunted, “It heep good for railroad”.1

1 The Appraisal Journal, October, 1978, pp. 514-515 (Quoted from the April 1963 Newsletter of the American Right of Way Association)
In more recent years, the controversy surrounding appraising contemporary utility corridors has risen to the fore and appraisers are divided on the proper methodology. Demand for new uses within existing rights-of-way has increased while supply has become more limited. Deregulation of many of the nations’ utilities, along with technological advancements in such areas as fiber optics and data bandwidth, have contributed to this new demand. Meanwhile supply has contracted due to environmental concerns, additional users (hike and bike trails, urban rail systems, etc.) and the difficulty in obtaining governmental approvals for virgin rights of way. Utility providers have found that in many cases existing corridors, which already offer the physical, economic, and legal attributes for their needs, provide the best route for installation of the hardware necessary for their products.

**Definition of Corridor**

For purposes of this paper, a corridor will be defined as follows: “A strip of land between two destinations where traffic, topography, environment, land uses, and other characteristics are evaluated for transportation purposes.”\(^2\) This definition, from the Appraisal Institute’s dictionary, plainly omits any reference to adjacent lands or the uses upon them. The definition requires consideration of such factors as traffic (type of product, hardware, etc.), topography, environment, land uses, and other characteristics (location). If a corridor is a strip of land connecting two destinations, and that use is the highest and best use, it seems illogical that an appraisal would consider the value of adjoining lands.

**Appraisal Institute Interest**

Appraisal Institute members are divided on the evaluation methodology of appraising utility corridors. The magnitude of the controversy has increased correspondingly with the demand for appraisals of these corridors. Traditionally, appraising property rights within a

\(^2\) The Dictionary of Real Estate Appraisal, 3\(^{rd}\) addition
corridor or the corridor itself was accomplished by the ATF (at the fence) method. A review of
the early articles published in the *Appraisal Journal* and *Right of Way* deal primarily with this
methodology and as recently as July 2001, Arthur G. Rahn restated this theory to a combined
Appraisal Institute/International Right of Way Association seminar on the valuation of
transportation corridors. Mr. Rahn concluded:

The ATF methodology for corridor evaluation has a long history, stretching back more
than 80 years. It was first established by the ICC as a means of making railroads account
for their land holdings. Today, it has been promulgated by some of this country’s most
respected appraisers, has been upheld by the courts and is the predominant method used
by both buyers and seller in completing corridor transaction. Like any other property, the
highest and best use determines what methodology is used in corridor evaluation. If the
highest and best use is for a non-corridor use, then the net liquidation approach is correct.
However, in our experience, the great majority of corridor appraisal is for continued
corridor uses and, if the highest and best use is for a corridor, the ATF methodology is
the correct approach.”

Others, including a recognized pioneer in the evaluation of corridors, Charles F. Seymour, MAI,
along with John P. Dolman, MAI, first published their thoughts in 1977. Their conclusions:

1) *Price per acre or per square foot.* This is a traditional measure in many types of
appraising but is probably the least important in corridor valuation because length
and the importance of the end points are much more important than area.

2) *Price per mile.* This unit is in more general use by buyers and sellers of corridors.
However, in using it care must be taken to add value for any useful “bulges” not
needed as part of the corridor, such as yards or terminals.

3) *Enhancement factor.* We find this to be a very useful measure as related to ATF
value”.

It is interesting to note that the Seymour/Dolman 1977 article concluded by expressing their
belief that the appraisal profession was “faced with a challenge and an opportunity to develop
concepts and data for a *type of valuation that is just coming into its own.*” (Emphasis added).
Their opinions expressed the conclusion that a corridor had more elements of value than those
considered in the ATF method. Interestingly, almost twenty-five years later, appraisers are still
contending that the corridor evaluation is “just coming into its own.” One wonders how many

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5 *Ibid*
more years need pass before writers on the subject will acknowledge that corridor valuation, which is essentially just application of the sales comparison approach, is not merely some nascent new theory but rather an accepted, solid and accurate valuation method for appropriate properties.

Sacramento seminar. In April 2001 the Sacramento chapter of the Appraisal Institute sponsored a seminar addressing the issue of appraising corridors entitled “The Law & Value-Communication Corridors, Tower Sites, and Property Rights”. Participants, including attorneys, landowners, appraisers, industry executives, and public agency representatives expressed a broad range of opinions. Perhaps predictably, the opinions expressed were largely along “party lines;” that is, industry, governmental representatives and some appraisers favoring the ATF method. Landowners, condemnee-oriented attorneys, and some appraisers countered with opinions acknowledging that the evaluation of corridors must be based on highest and best and must employ market data of similar uses to the extent such data is available.

Washington workshop. In early December 2001 the Appraisal Institute hosted a workshop in Washington, D.C., to review the rental schedule for rights of way on Bureau of Land Management (“BLM”) and United States Forest Service (“USFS”) public lands. Potential for sharp dispute exists between the government, current users, and would-be easement holders over federal rights-of-way. The government is contemplating proposed changes to federal rental schedules for linear rights of way that recognize the inherent value of a corridor. Some governmental research indicates the BLM and USFS are not receiving fair market rental and that federal agencies may be losing millions of dollars each year because the current rental schedules are not market-based. As a result of this continuing dispute, the Appraisal Institute sponsored a workshop to include representatives of governmental agencies, industry executives, attorneys, right-of-way professionals and real estate appraisers.

In 1987, users of rights-of-way over public lands were mandated to pay fair market value (with annual price indexes). A provision in the 1987 rental schedules required that both agencies review all aspects of the rental schedules when the price index exceeded a certain level. This
event occurred in 1995, prompting the agencies to begin the process of addressing current rental rates for linear right of way users. As expected, the users of utility corridors contend that the ATF method (sometimes even with an enhancement factor) is the only appropriate valid method. Others, including some attorneys, appraisers and governmental representatives contend that if the Congressional mandate is to lease rights-of-way on public lands at fair market value, then a market-based method, similar to the valuation methods used by private industry, should be the standard.

**A Brief Survey of Texas Cases**

Prior to the emergence of true market comparables, the law in Texas disfavored the “comparable sales” approach to the valuation of easements. The case law indicates, however, that the courts then viewed the comparable sales approach as what we now call the ATF method, and correctly rejected it as not accurately reflecting market value. The four Texas cases briefed below provide a snapshot of the continuing evolution of Texas judicial thought regarding proper evaluation technique for easements within (and not within) corridors.

*Missouri Pacific Railroad Company v. Midland Independent School District, 647 S.W.2d 62 (Tex. App.—El Paso 1983, no writ).* This is an ad valorem tax case where the railroad protested the District’s valuation methodology for assessing the value of a railroad easement. At trial, the District relied solely upon a “comparable sales” approach. The District’s interpretation of that, however, was merely ATF valuation. The Court noted:

[I]deally, an appraiser would like for comparable sales to involve other property of the same size and shape and be in the same general location as the property being appraised. . . But, in deciding values for properties used by public utilities, pipeline companies and railroads, it is usually impossible to obtain sales of comparable properties because there are few if any sales of high line right-of-ways, pipeline right-of-ways and railroad right-of-ways.
Id. at p. 63. The Court went on to observe that the market approach was of little value when there are no truly comparable sales. Id. at p. 64—65.

However, the Court made plain that in its view, what is commonly now considered traditional ATF valuation is hopelessly incorrect:

...[V]alue cannot be determined by ascertaining the value of the land included in the roadway assessed at the market price of adjacent lands, and adding the value of cross-ties, rails and spikes. The value of land depends largely upon the use to which it can be put, and the character of the improvements upon it. The assessable value, for taxation, of a railroad track can only be determined by looking at the elements on which the financial condition of the company depends.

Id. at p. 64. This case was decided well before the emergence of a robust set of true market comparables for easements, and the Court correctly noted that if there are no comparables, a market approach is procedurally incorrect. Although this case cannot fairly be said to espouse corridor valuation, it may be equally fairly said to discourage “at the fence” appraisal methods.

Bauer v. Lavaca-Navidad River Authority, 704 S.W.2d 107 (Tex. App.—Corpus Christi 1985, writ ref’d n.r.e.). Two years later, however, the Corpus Christi court faced a case involving plain evidence of both the existence of an easement corridor and true corridor comparables. The Court’s reasoning was as consistent with Missouri Pacific as the outcome was different.

In Bauer, the River Authority sought to impose a water pipeline easement across Bauer’s tract. The easement was 50 feet wide and 10,000 feet long, totaling 12.62 acres. The trial court excluded the landowner’s testimony that: (a) he owned the subject property and had 35 years’ experience acquiring and laying rights-of-way, (b) had lived in the relevant market areas all his life, and (c) had negotiated the sale of an electrical power line, a railroad, and three pipeline easements, all upon the land in question before the taking that was the basis of this suit. Id.

Bauer himself testified to the value of the easement sought based upon those he had already sold out of the parent tract, and further testified that he always attempted to sell the easements within a specific strip of his property, and to have the pipelines laid as close as
possible to one another. There was also supporting testimony from an appraiser and an adjoining landowner that other land in the immediate area had been sold as easements.

In holding this evidence should have been admitted and considered, the Corpus Christi court relied heavily on the time-honored rule that “[t]he best evidence of market value of condemned land is the proof of sales of land near the land in question, at the same time as the taking in question, from a willing seller to a willing buyer.” Id. at 110. The Court made plain that where a Texas landowner convincingly demonstrates a corridor highest and best use and presents plain comparables, such evidence must be allowed:

. . . [A]ppellant Bauer offered testimony that the highest and best use of the land in question was the sale of pipeline easements in his “pipeline corridor.” He showed that the corridor was well defined, and he offered testimony regarding the value of the condemned land by showing what he and his neighbor received for the sale of other pipeline easements to private companies. Instead of accepting all this evidence and making his independent fact finding of the value of the condemned land, the trial court specifically refused to consider the testimony offered by Bauer. Bauer’s right to have the fact finder consider the land’s highest and best use in determining its market value was thus denied.

[Emphasis added.] Id. at 112—113. The Bauer case makes plain that corridor valuation is permissible in Texas under certain circumstances. Specifically, where the landowner presents plain evidence of a corridor on his property, and has value evidence based upon comparables of similar corridors, Bauer established in Texas a precedent that a landowner must be allowed to prove to the fact-finder the easement’s value based upon its true highest and best use.

R.H. McAshan v. Delhi Gas Pipeline Corporation, 739 S.W.2d 130 (Tex. App.—San Antonio 1987, no writ). Plain evidence of a corridor, however, is indeed a prerequisite. In this case, Delhi sought to acquire a 3.36-acre tract from the landowner for a pipeline compressor station and appurtenances. Prior to the acquisition, the property sought was pastureland adjacent to an existing Delhi pipeline.

The landowner’s position at trial was that the highest and best use of the land was for a compressor site, and the landowner and an expert witness offered evidence of several leases of compressor sites in the area that had occurred in the open market. This evidence was excluded.
The San Antonio Court of Appeals upheld the trial court’s ruling, reasoning essentially that McAshan had failed to demonstrate that the highest and best use of the land was for anything other than pastureland. In rejecting McAshan’s argument that the highest and best use was for a compressor site, the Court observed that the market for such a site was limited to Delhi:

“Market value is defined as the amount of money that a purchaser willing, but not obligated, to buy the property would pay an owner willing, but not obligated, to sell it, taking into consideration all uses to which the land can be adapted and might in reasonable probability be applied.”

*Id.* at 131. The Court’s reasoning here is consistent with *Bauer*. Since the condemnation was for an appurtenance to the existing pipeline, rather than a new pipeline, the Court correctly concluded that the only buyer for the location of this particular appurtenance was the owner of the original pipeline. Viewed differently, it is much more difficult to conceive of a “corridor” of compressor sites than one of continuously-running pipelines. If the highest and best use is not use as a corridor, then utilizing sales of corridor easements is inappropriate.

*Exxon Pipeline Company v. Zwahr*, 35 S.W.3d 705 (Tex. App.—Houston [1st Dist.] 2000, writ pending). The most recent and arguably most controversial Texas case on this subject, however, is the *Zwahr* case out of Fort Bend County, decided by the Court of Appeals in November of 2000 and currently pending (December 2001) in the Supreme Court.

The *Zwahr* facts largely parallel those of *Bauer*. The servient estate is a 49-acre parcel, the northeast corner of which was encumbered before the taking by a 50-foot wide 30” natural gas pipeline easement. Exxon sought to condemn an additional 50-foot wide strip for an ethane pipeline; the new pipeline would encumber a total of 1.01 acres, 82% of which was already encumbered by the existing pipeline. *Id.* at 708.

Unlike Bauer, however, the landowner in this case could not testify that he had taken steps to develop and market easements upon the property to help establish such as the highest and best use. The requirement of establishing a corridor, however, was apparently satisfied in the evidence by the existence of the prior pipeline:
... Exxon’s project engineer ... testified that, in deciding where to place pipelines, Exxon prefers to lay new lines next to existing ones. He testified that Exxon chose to follow the existing Koch pipeline which made the Zwahrs’ property attractive to Exxon. Thus, it was not the Zwahrs’ actions or inactions that determined the placement of the Exxon pipeline easement; rather, it was the existing Koch pipeline.

Id. at 711. At trial, all of the Zwahrs’ proposed testimony concerning both the highest and best use and value – based on easement comparables – was admitted. The Houston Court reasoned that the landowner had properly demonstrated a corridor highest and best use and that the evidence was properly admitted.

While of course all in the field await the Supreme Court’s pronouncement on this case, its reasoning and result firmly support the precedent established by Bauer.

**Proper Methodology**

In spite of the apparent judicial acceptance of corridor valuation, some have questioned whether looking at easements this way involves some new valuation technique. In reality, appraising a linear right-of-way corridor or the property rights within a corridor does not require new methodology. *The Appraisal of Real Estate, 12th Edition* (as well as the eleven prior additions), have always guided appraisers through the appraisal process, and have always included the provision that the fair market value of real property is to be based on its highest and best use. The appraisal process generally is generally outlined as follows:

1. **Definition of the Appraisal Problem**
   a. Identification of client/intended users
   b. Intended use of the appraisal
   c. Purpose of appraisal (definition of value)
   d. Date of opinion of value
   e. Identification of characteristics of property (including location and property rights to be valued)
   f. Extraordinary assumptions
   g. Hypothetical conditions

2. **Data Collection and Property Description**
   a. Market area data
   b. Subject property data
   c. Comparable property data
3. Data Analysis  
   a. Market analysis  
   b. Highest and best use analysis  

4. Application of the approaches to value  
   a. Cost approach  
   b. Market or Sales Comparison approach  
   c. Income approach  

5. Reconciliation of value Indications and Final Opinion of Value  

6. Report of defined value  

An appraisal of a linear right-of-way corridor or property rights within a corridor should include the various steps in the appraisal process. This includes defining the problem, description of the property, data collection, data analysis, application of the applicable approaches to value, and reconciliation of that data into an opinion of value. The CVM precisely follows this process. When the highest and best use of a property is a linear corridor, the market data collected should be of the same use. “In all valuation assignments, opinions of value are based on use. The highest and best use of a property to be appraised provides the foundation for a thorough investigation of the competitive position of the property in the minds of market participants. Consequently, highest and best use can be described as the foundation on which market value rests.”\(^6\) Considering the actual use of most corridors, a conclusion of highest and best use other than the existing use is probably not possible.

The conclusion of highest and best use will dictate the data to be analyzed in forming an opinion of value. Typically, the Sales Comparison approach is the applicable method for analyzing the value of a right-of-way corridor. “In the sales comparison approach, an opinion of market value is developed by comparing properties similar to the subject property that have recently sold, are listed for sale, or are under contract (i.e., for which purchase offers and a deposit have been recently submitted). A major premise of the sales comparison approach is that

\(^6\) The Appraisal of Real Estate, 12th Edition, pg. 305
the market value of a property is related to the prices of comparable, competitive properties.” A corridor is a specific use, which use is almost never related to the uses of adjacent properties. Buyers and sellers do exist for this type use, as there are hundreds of miles of rights-of-way bought and sold each year in Texas and around the country. Many of the railroads, power line companies, and pipeline companies advertise their rights-of-way for sale or lease and these transactions are available to the appraiser. This data is “comparable” and “competitive” when properly adjusted, and is exactly the type information that should be analyzed in the appraisal of a corridor or property rights within a corridor. Sales or leases of adjoining lands seldom have any relevance to the appraisal of a linear corridor.

Arguments against. The popular argument against the corridor valuation method (“CVM”) is that part of the business component of the enterprise is included in the value. Further, those arguments contend that CVM does not fully consider economic differences along the route (a location adjustment). An additional argument is that CVM takes into account “project influence.” This argument actually distorts the valuation formula by confusing existing highest and best use with project influence. If a utility corridor exists and the best use of that corridor is for utility rights of way, then that existing use must be considered. Consideration of the highest and best use is appropriate in appraising a corridor and this does not include the proposed use or project influence.

Class-action litigation. CVM is becoming a focal point in a growing type of litigation -- class-action lawsuits. These suits are based on the alleged non-recognition by easement holders of property rights retained by underlying landowners in linear corridors. Examples of these corridors include railroad rights of way, electric transmission lines, and pipelines. In most states, easements are obtained for defined purposes and give the holder only the specifically-limited rights acquired in the easement document. As the need increases for new uses within existing rights-of-way that were not contemplated when the original easement was obtained, the question

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7 Ibid, pg. 417
of whether or not a new or different use is permissible under the originally acquired rights is becoming hotly debated.

Fiber optic lines being installed along the various rights of way are the focus of a majority of these suits. *Hinshaw v. AT&T* was one such suit. In this case, the plaintiffs alleged that AT&T maliciously trespassed on private property and slandered the title of landowners in Indiana when it purchased the right to install fiber optic cable in railroad easements from the railway easement holders rather than negotiating appropriate easement rights from the underlying landowners themselves.

The case was never tried, settling in advance. The judge hearing the case, Steven Nation of Hamilton County, Indiana, had however concluded prior to settlement that the plaintiffs had offered evidence showing “AT&T knew that its right to occupy the right of way land was ‘precarious’ and ‘far from sound.’ ”

The *Hinshaw* settlement agreement is impressive: AT&T agreed to pay landowners $3.6 million and court costs, or an average payment of $45,000 per mile for an estimated 80 miles of its Indiana network that was covered by the settlement.

The *Hinshaw* case was typical of these growing class action claims, which usually involve valuation of the fair market value of the underlying fee owner’s remaining property rights together with the obviously resulting trespass damages. CVM is probably the only method of evaluating the owner’s rights within the corridor as the ATF method simply fails to address the relevant appraisal question.

**Conclusion**

This so-called controversy is really not controversial at all. CVM is the most accurate and reliable approach to evaluating a right-of-way corridor or the property rights within the corridor. This method conforms to the principle of highest and best use, the unquestioned bedrock for appraising real property. Market data reflecting highest and best use ought *always* be
used in analyzing the appraised property, regardless of the resulting value conclusion, as long as careful consideration is given to the differences as a basis for adjustment of the market data. The ATF method may have some applicability to appraising property not located in a corridor. ATF methods seem inherently inconsistent with accepted appraisal practice when evaluating an established corridor property because it employs data that plainly does not reflect the subject’s highest and best use.