



APPRAISING RAILROAD CORRIDORS

Misconceptions about Across-the-Fence Methodology

BY JOHN SCHMICK

Across-the-fence methodology (ATF) is an appraisal tool frequently used in valuation assignments where the subject is part of railroad property or a corridor. Appraising excess railroad land is challenging and, over the last 40 years, much has been written about the process. The modern dialogue on the appropriateness of using this methodology dates back to the late 1970s when the *Appraisal Journal* published an article on the “Valuation of Transportation/Communications Corridors.” Even today, the valuation of railroad property remains one of the most controversial issues in the appraisal industry. This article will not end the ongoing debate as to

the best valuation methodology, but it will address some common misapplications and misinterpretations of the ATF methodology.

Although rail and other corridors are, by nature, unusual or special purpose properties, appraisers who identify exactly what it is being valued are more likely to apply the ATF methodology appropriately. However, more often than not, the ATF method is being used incorrectly. As a result, hundreds of thousands of dollars are changing hands in transactions based on the misapplication of this valuation model.

UNDERLYING VALUE CONCEPTS

General industry principles require that the appraiser develop an opinion of value using one or more of the standard methodologies, which include the cost approach, the income approach and the sales comparison approach. The ATF method is essentially a variation of the sales comparison approach. Regardless of the approach used, certain considerations must be addressed during the valuation process. One of these considerations is the subject's highest and best use, which calls for an analysis of the subject's physical, legal and economic characteristics.

With railroad property, appraisers and users of the appraisals need to be aware of how underlying value concepts impact the valuation process and conclusion. As defined by the 2010 Dictionary of Real Estate Appraisal, ATF Methodology "...is used to develop a value opinion based on comparison to abutting land."

When used for corridor valuation, ATF Value is defined as, "...a value opinion based on comparison with adjacent lands including consideration of adjustment factors such as market conditions, real property rights conveyed and location." This definition establishes the concept of adjusting



An abandoned corridor situated between a state highway and a street was valued as if it was still part of the corridor.

comparables to reflect differences between the subject and comparable sales. While three adjustment categories are mentioned, there are many others to consider as with any appraisal of land.

However, over the years, the application of ATF has moved from a textbook definition of comparison and adjusting land sales to the common practice of using an applied definition where the appraiser assumes ATF actually means, "...its [corridor land] value should be worth at least as much as the land through which the corridor passes."

By adopting this applied ATF definition, the appraiser is essentially declaring, "I am going to assume a minimum valuation." Referred to as Assumed Minimum Valuation (AMV), it is this assumption that creates the fatal flaw in most railroad corridor appraisals. Corridor land may not have the same supply and demand profile or economic characteristics as the land across the fence, and using ATF in this fashion essentially endorses the concept of AMV. But AMV disregards the subject's physical, legal and economic characteristics – all essential elements for determining value. Property characteristics such as market demand, shape, topography, access and size, which are common to most land appraisals, are ignored. As a result, the ATF/AMV model produces a value that has no relationship to the subject's "as is" value.

At best, the concept of AMV produces an inflated valuation conclusion. At its worst, it implies the appraiser has license to ignore property characteristics and the need for a basic supply and demand analysis. Appraisers who take the time to identify supply and demand differences will gain a clearer understanding of the railroad land's value in relationship to non-railroad land sales in the area. It is that knowledge that enables them to analyze the railroad land from several different perspectives and recognize the need for common adjustment factors that produce a credible valuation conclusion.

APPRAISING EXCESS RAILROAD LAND

In the past year, I was presented with two appraisals involving excess railroad land that used the ATF methodology. In one case, the use was improper, and in the other, the seller required it as part of the transaction. In both cases, the land sold at a premium based on the appraisals, and the sale price was in excess of the value of the land in its "as is" condition.

Case Study #1:

Just because it is railroad land doesn't mean ATF applies.

In 2010, a large city in the Midwest purchased roughly one acre of excess railroad property for \$641,000. It was a triangular-shaped parcel that was to be separated from the remaining operating railroad line. A portion of the site was under a major interstate highway bridge, and a bike trail easement ran the length of the property. The appraisal report indicated that assignment conditions required that the trail easement be ignored. The subject property had no access to a public street and would not have access for many years.

The Stage was Set

At the beginning of the assignment, the appraiser made three important decisions that impacted the value conclusion. First, the appraiser declared the subject excess land. Second, the site's HBU based on long-range planning was as a future mixed-use development. Third, because the property was part of a railroad line, the appraiser concluded that the ATF method should be applied to determine value. As a result, the stage was set for misusing the ATF methodology.

Having declared the land was excess, the appraiser was free to analyze the property outside the umbrella of an operating rail line. Excess land is defined as "...land that is not needed to serve or support the existing improvement. The HBU of the excess land may or may not be the same as the HBU of the improved parcel. Excess land may have the potential to be sold separately and is valued separately." In this case, although the appraiser stated the land was excess, it was valued as if it were still part of the corridor.

When the appraiser determined the property's HBU was for future mixed-use development, he clearly established an alternative, non-corridor use. Appraisers often opine/assume that the HBU of railroad property is for a transportation and communication corridor. However, the appraiser deviated from that common practice and essentially stated the subject had more economic value as an independent development site. Thus, it was no longer appropriate to use a corridor methodology such as the AMV form of ATF. Rather, since the subject's stated HBU was ordinary (non-railroad) excess land without public access, the appraiser would be expected to proceed with the typical land valuation process by applying the usual adjustment factors, such as size, shape and access, to arrive

at a credible valuation conclusion. However, the appraiser proceeded with the ATF/AMV method.

At this point, the appraiser could still have arrived at a credible value conclusion. Yet, in applying the ATF method, he did not adjust for the lack of access, poor shape and small size of the property. In contrast to the subject, the comparable sale properties were all fully usable, mostly rectangular sites that were developed into multi-family housing. Additionally, the appraiser did not discount for the anticipated lengthy delay in reaching an economic climate that would support development of the site.

The Result: An Unusable Parcel

The concluded value was inconsistent with the appraiser's stated assignment to determine market value without any disclosed extraordinary assumptions. Subsequently, the subject sold at full ATF value, and the city received an unusable parcel with no public street access and no prospect for access for many years.

If this appraiser had been aware of the AMV in applying the ATF method and fully considered the subject's HBU "as is," including measuring market demand and zoning limitations and adjusting for all measurable differences between the subject and comparable sales data, the ATF method would have produced an entirely different value conclusion that could be supported in the market. Unfortunately, the appraiser was unable to recognize



This valuation did not include an adjustment for limited access, poor shape, topography and small size of the property.

how far off the ATF/AMV value was from its “as is” value. The misapplication of the ATF method resulted in a transaction value not supported by the market, and the buyer entered into a transaction based on a faulty premise. As a result, hundreds of thousands of dollars changed hands based on a non-existent assumed minimum value and a taxpayer-paid subsidy to the seller (railroad).

Case Study #2:

Value must reflect demand.

In 2012, a non-profit organization purchased three miles of an abandoned railroad line in a small Midwestern city. The railroad had been granted permission to abandon the line and was in the process of removing the rails, ties, other improvements and equipment. The three miles were partially in town and partially outside the city limits. There were several street crossings in the downtown area that were not part of the railroad ownership and not included in the transaction. Curiously, the railroad sold a small strip of land that ran through the downtown area, but retained excess land on both sides for sale to other users. Several of these sites were in a redevelopment area. The sale also included a railroad bridge over a small river.

Missing the Market Clues

During the negotiations, the buyer requested an appraisal. One of the seller's conditions was that ATF methodology be used in the appraisal. The buyer, assuming this was standard procedure, agreed. The appraisal report contained the usual breakdown by property zoning and adjacent uses. Comparable sales of usable land and lots were compared to the various sections of railroad land with adjustments for market conditions (time) only. After arriving at a full ATF or AMV value, the appraiser addressed the issue of a corridor-enhancement factor, citing several other

abandoned rail line sales, most of which were also based on ATF/AMV values.

However, there was one abandoned corridor sale in which the ATF method was not used. This property sold at a 77.4% discount to ATF, or 22.6% of ATF. Unaware that this one abandoned rail line sold at a steep discount to ATF, the appraiser simply stated there was no evidence of an enhancement factor in any of the cited corridor sales.

Ultimately, the buyer paid an AMV of \$1,298,000 for three miles of abandoned rail line that had no identifiable current economic demand for longitudinal uses other than for a bike trail. Those parts that could be assembled into a commercial development were retained by the seller. The seller also retained the right to rent land and receive all future rents from a large outdoor advertising sign on the property. In the final analysis, all current revenue streams stayed with the seller, while all future costs of ownership were paid by the buyer.

In this situation, the misapplication of ATF involved the failure to consider supply and demand factors. Railroads obtain permission to abandon a rail line for a reason. Typically, the rail line is no longer economically viable for rail transportation, the land's primary use. Economic viability of the primary use can be determined by calculating the number of trains, rail cars and/or customers still using the line. If the primary use is no longer viable, the appraiser must determine what types of revenue streams a secondary user would produce and whether there is any identifiable demand from secondary users who are currently in the market or might be in the near future. Too often, appraisers rely on a reference to an unknown future demand for new users without any support from longitudinal users in the current economic environment. As a result, the economic analysis within the HBU analysis is questionable.



The sale included a railroad bridge that crossed over a river and into the downtown development area.

Hierarchy of Demand

If no current or near term market demand from longitudinal users can be identified when determining the HBU, the appraiser must consider an alternative analysis. Using the hierarchy of demand, starting with longitudinal users such as pipelines, fiber optic lines or high voltage power lines, the appraiser should seek to identify others interested in the subject corridor. Lacking any identifiable demand at this level, the appraiser should look for demand from adjacent users. At the bottom of the hierarchy is liquidation, or the breakup and sale of individual pieces of the corridor including addressing absorption issues.

While holding land for an unknown future use is a valid reason to purchase an abandoned rail line, it is inconsistent with current land values as reflected by the ATF method unless the appraiser discounts for an anticipated holding period. More importantly, if that future use occupies only a portion of the site (partial occupancy), as is typical of most utility easements, or the future use is a non-profit use with no revenue stream, there is little to no economic justification for purchasing at full ATF prices. The misuse and/or misunderstanding of the ATF methodology resulted in an inflated purchase price resembling “hostage” pricing rather than market value.

In this case, an alternative analysis might include analyzing the three-mile abandoned corridor for its potential for development of independent lots or for assemblages that would create or support value. For example, in one residential area there was potential for a street extension that would permit two residential lots with city utility services. In another location, commercial users would need more land for parking and outdoor display areas. However, a significant portion of the corridor was located between a highway and the back of the adjacent lots with noticeable elevation differences. Thus, there was limited demand for assemblage. An alternative analysis would have alerted the appraiser to any inconsistency between lack of identifiable demand and the AMV produced by the ATF methodology.

SUPPLY AND DEMAND DRIVE PRICE

General economic principles state if there is high supply and low demand, prices fall and vice versa. For example, a U.S. company renewing a lease on railroad property needed a ten-foot width for an underground cable easement. There was one active track (economically viable) and 40 feet of excess land on either side of the tracks. In the past 25 years, this tenant was the only secondary user to occupy space in this area. With a capacity of potentially eight similar underground easements (each ten feet wide and four on each side of the tracks) and a demand for one easement in 25 years, the available supply based on current demand equates to 175 years.

In addition, financial records for the railroad landowner indicated that only 2.7 percent of operating income came from other rent from secondary users on the owner’s rail corridors. The economic profile of that lease situation was one of high supply of excess land and low demand from secondary users. Furthermore, if non-economic motives, such as public trails, are the basis for purchasing excess railroad property, then a comparison to land sales in the area may require an adjustment for atypical buyer motivations. Certainly, when the sale of the subject involves the seller

retaining potential development land and all current revenue streams from secondary uses, existing atypical buyer motivations are inconsistent with full ATF value or AMV.

SUMMARY

Under the Uniform Standards of Professional Appraisal Practice, each appraiser is responsible for correctly applying the appropriate methodologies for each assignment. Yet, when appraising railroad land, many appraisers are unclear as to how to use the ATF model and end up using the AMV model instead. In some cases, non-profit groups and government entities that entered into transactions were uninformed and spent scarce dollars based on questionable market valuations.

Land sales that are relevant to the subject property’s location and type can be used if all the appropriate adjustments are made to reflect the appraiser’s supply and demand analysis. However, recent case studies indicate that using comparable sales data when sale prices were based on ATF/AMV to support a valuation using the same methodology lacks partiality and perpetuates its misuse. These case studies also reveal that the appraisal industry has not yet addressed the shift from textbook definition to applied definition as it relates to the ATF/AMV methodology.

Each appraisal assignment carries with it the requirement to discuss the scope of the assignment with the client. That involves evaluating the client’s knowledge level in real estate valuation, identifying the appraisal problem and setting forth the assignment conditions (scope of work). A client who does not fully understand the impact of using, or misusing (the AMV model), ATF methodology cannot make an informed decision on the scope of work.

Resources

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- Dictionary of Real Estate Appraisal, Fifth Edition
Charles F. Seymour and John P. Dolman, “Valuation of Transportation/Communications Corridors,” Appraisal Journal, October, 1978
 - Dr. George Karvel, “Public Utility Easements in Railroad Rights-of-Way,” Appraisal Journal, January, 1989



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