



The Enhancement Factor

A corridor is a narrow strip of land for which the highest and best use is transportation and/or communication purposes. The ATF approach is a variation of the sales comparison approach that has been adopted by the right-of-way industry as an equitable way to value corridors. It is based on the premise that the corridor land should be worth at least as much as the land through which it passes. This article explores the concept of “enhancement” as it applies to the current corridor appraisal practices in the industry.

When preparing a corridor appraisal report, appraisers usually search for sales of other corridors to determine if an enhancement factor is present in those transactions. They then decide if the factor is appropriate for the corridor that they are considering. Once having deter-

mined that an enhancement factor is applicable to the subject, most appraisers justify the use of an enhancement factor by citing the advantages gained by the buyer. They may stress the amount of time and money the buyer would have to expend to acquire and construct a replacement corridor as opposed to locating on or acquiring an existing corridor. Other appraisers may emphasize the cost savings that an existing corridor provides by eliminating the need for the entitlement and permit process that a new corridor would require, not to mention the environmental considerations.

There is no question that the use of an existing corridor can provide significant time and money savings over developing a new corridor. Those factors certainly motivate the actions and influence the mindset of the potential buyer. However,

neither cost avoidance nor time and money savings are necessarily germane to the appraisal problem at hand.

Those are issues that only address the buyer’s advantages and do not deal directly with the inherent physical and economic characteristics that are unique to the corridor and for which the owner is entitled to compensation.

There have been four recent court or arbitration decisions in which the concept of enhancement was an issue. The cases involved condemnation proceedings instituted by government agencies or regulated public utilities seeking to gain property rights on a transportation corridor. In two of those cases, the appraisers attempted to justify the concept of enhancement by emphasizing the notion of time and cost avoidance to the buyer.² In both cases the concept of

THE ENHANCEMENT FACTOR

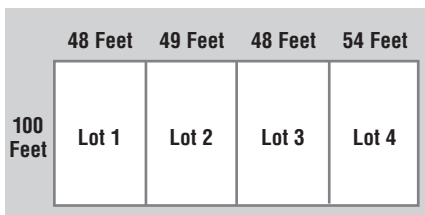
enhancement was not allowed. The judges/arbitrators ruled that under the law, just compensation is based on the loss that the landowner suffers, not the benefits gained by the buyer.

A stronger case can be made for an enhancement factor by showing that it is an inherent characteristic of the corridor, as surely as size and location are. This is demonstrated clearly using a basic principle of appraisal theory: plottage. The *Dictionary of Real Estate Appraisal* defines "plottage" as "the increment of value created when two or more sites are combined to produce greater utility."³

Plottage refers to the added value that is generated when two or more parcels are combined to provide greater utility. However, not all assemblages of lots result in a plottage increment; such added value depends on an economic need for the larger unit. Plottage is the reason why appraisers are cautioned about using assemblage sales as comparables when appraising individual land parcels. The extra increment present in the assemblage sale may cause the value of the individual parcel to be overstated.

As an example of plottage, recently in a Northern California community, four almost identical lots were assembled into a single parcel by a local investor.

Lots 2 and 4 sold first at \$10,000 and \$10,500 respectively. Lot 1 was acquired for \$12,000 three months later. Finally, after six months, Lot 3 was purchased for \$14,000. The individuals were compensated for their properties at least partly on the ultimate value of the assembled parcel. As is often the case, the last properties sold at higher prices than the first



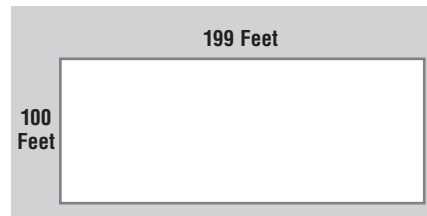
ones did. A landowner that becomes aware that a developer is assembling parcels around or next to his property is more likely to raise his price. Sometimes the price is raised so high that the origi-

nal project is redesigned around the high-priced parcel.

At the conclusion of the assemblage process and after obtaining the necessary entitlements to develop the site to its highest and best use, the investor owned a 19,900-square-foot parcel, shown below, which could be developed into a six-unit apartment complex.

The assembled parcel was then sold to a local construction company for \$62,500. The completed transaction is summarized as follows:

Assembling four individual parcels into one with greater utility creates a plottage value of \$8,500, which is measurable in the marketplace. It is important to note that the plottage value (or



enhancement of the original parcel values) is an inherent characteristic of the assembled parcels. It is not merely a benefit or cost avoidance factor to the

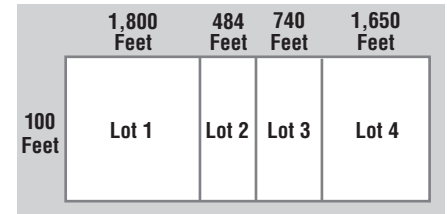
Sales price of the assembled parcel	\$62,500
Cost of the individual lots	\$46,500
Cost of obtaining entitlements	\$7,500
Total costs	(\$54,000)
Plottage increment	\$ 8,500

next potential buyer or condemnor, but is an indispensable feature of the site just as topography, shape or access is. It is something for which the parcel owner is entitled compensation.

Now consider a situation where the orientation of the lots is changed from abutting at the sides to abutting at the ends.

To further complicate the problem, assume that there are 175 lots, each different in size and zoning, with some commercial, others residential and still others industrial. Those 175 individual

lots will be assembled into a single parcel that will be used for the transportation of desirable goods and services from one end of the assembled parcel to the other.



In short, two or more sites are being combined into a single parcel, which will have greater utility than the aggregate of each of the individual lots when separately considered. Thus, an increment of value is created. That is the essence and definition of plottage value or enhancement value as it known in the appraisal of transportation corridors. As in the previous example, that increment of value is inherent to the created parcel or corridor and cannot be considered just a benefit to the buyer. It is a characteristic unique to the corridor and can be measured in the marketplace.

As mentioned, not all assemblages have plottage or enhancement increments. Several factors must be present in a

corridor transaction before there can be a plottage or an enhancement increment created.

First, the buyer, not the seller, is the principal driver in determining whether there is an enhancement factor. For example, the owner of a corridor has an appraisal showing the ATF value of the corridor to be \$12 million. Believing the value of the intact corridor is 20 percent better than the total value of the unconnected individual lots, he establishes a listing price of \$14.4 million. However, unless he finds a buyer who is willing to

pay more than the ATF value, there is no market recognition of an enhancement factor. There has been no acknowledgment by a buyer that the assembled corridor is more valuable than the sum of its component parts. Since a typical corridor purchaser would be knowledgeable and well informed in real estate matters, one can assume that he or she would employ valuation experts to determine the ATF for themselves, rather than rely on the seller's input.

As another example, a Northern California city wished to purchase a 40-foot-wide easement running 7.2 miles eastward on a transportation corridor owned by an active railroad. The city hired two independent fee appraisers who provided ATF value estimates of \$5.739 million and \$5.757 million respectively. After discussions with the landowner, the city agreed to pay \$6.5 million or 14 percent above the average ATF value. The city knew what the ATF value was and made a decision to pay more in recognition of the value of the intact corridor. That sale supports the concept of enhancement in corridor sales.

Another factor that must be present in a corridor transaction is that the sales price should exceed the ATF value. In one transaction, the buyer was able to negotiate the purchase price down to 50 percent of the ATF value. Then 25 percent of the ATF was added back to recognize the value of the assembled corridor. The net result of that sale was that the corridor owner received 75 percent of ATF or, said a different way, the owner received 75 percent of the value of the sum of the individual unassembled parcels. That sale can be argued several ways but, using the definition of plottage or enhancement referenced in this article, that sale does not provide good evidence of the concept of enhancement.

The third factor is that a sale used to demonstrate corridor enhancement must be market driven. The sale referred to in the previous example could be classified as a nonmarket transaction because of the weak financial condition of the seller and the resulting heavily dis-

counted selling price. Recently, a Gulf Coast state acquired several corridors for which it paid 1.65 to 2.09 times the ATF value established by an appraisal. The state had been hard hit by a severe hurricane the previous year and according to the sale document, had a "unique and urgent" need to acquire evacuation routes before the onset of the next hurricane season. The state officials did not know or care what the ATF value was. They were under strong pressure by federal agencies and citizens to establish new evacuation routes and the corridors in question would go a long way towards meeting their needs. Normal marketing time or procedure was not a consideration. Such sales may not meet the definition of arm's length transactions and should not be used to support the concept of corridor enhancement.

The same state also acquired a corridor leading into one of its major cities for commuter rail purposes. The corridor was 26.7 miles long and the ATF value was \$69.323 million, as shown by an independent appraisal. The state paid \$88 million or 27 percent over the ATF value. That sale has all the necessary factors and is a good example of the existence of an enhancement factor in corridor sales. There was a second sale nearby between the state and a different seller. That sale was also for commuter rail purposes and was 57.72 miles long. The independent fee appraiser's ATF value was \$40.415 million and the agreed upon sales price was \$45 million or 11 percent more than the ATF value. That sale is also a good example of the existence of an enhancement factor in corridor transactions.

The corridor enhancement factor has gained tremendous acceptance in the past 15 years. Considered an oddity at first, it is now discussed in most corridor transactions and is even used in lease negotiations. Recently, a pipeline owner in Southern California wished to lease a portion of a corridor to connect offshore unloading facilities with distribution units near Los Angeles. The formula used to compute the lease payment was: the ATF value of the land multiplied by

an easement factor (a percent of the bundle of rights affected by the easement) multiplied by the corridor enhancement factor multiplied by an appropriate rate of return. In another instance, a major utility proposed to lease a corridor for gas and oil lines and their rental formula included a corridor enhancement factor.

Conclusion

The enhancement factor represents the recognition of a tried and true appraisal principle-plottage-and requires that the underlying sale meet certain conditions:

- There must be a demand for the created or combined site
- The buyer is aware of the ATF value and decides to pay more than the ATF value
- The sales price should be more than the total value of the unconnected sites
- The sale should qualify as an arm's length market sale

The enhancement factor is a way of recognizing the inherent economic and physical characteristics of a transportation corridor and cannot be considered just a benefit to the buyer. It is a factor unique to transportation corridors and measurable in the marketplace. ■

1. Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 3rd ed.; (Chicago: Appraisal Institute, 1993) p. 5.

2. *Southern Pacific Transportation Co. v. City of Vallejo*, California Public Utility Commission Decision 89-06-056 (June 21, 1989); *Southern Pacific Transportation Co. v. Pacific Gas and Electric*, Judicial Arbitration and Mediation Service 950511296 (October 4, 1996).

3. Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 3rd ed.; (Chicago: Appraisal Institute, 1993) p. 269.

Arthur Rahn is an appraisal consultant in Fairfield, California. He retired from Union Pacific Railroad in San Francisco where his title was Manager of Appraisals. He holds a bachelor's degree in accounting from California State University in Sacramento and an MBA in real estate from Golden Gate University in San Francisco.