

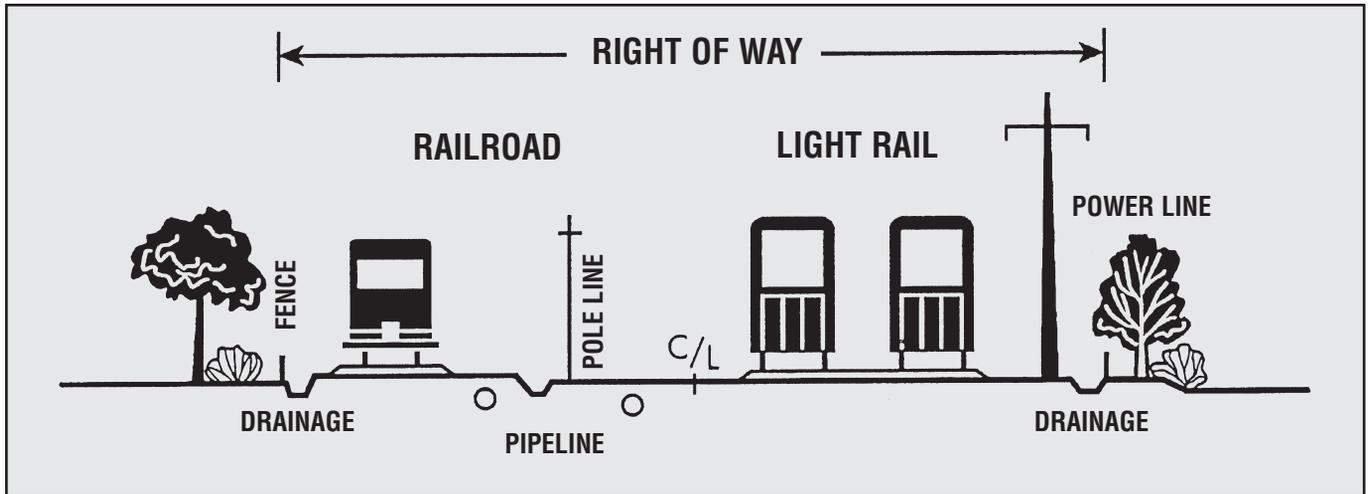
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# Valuing a Corridor Within a Corridor



*By Richard J. Zulaica, SRWA*

**T**he creation of a transportation corridor is a unique process. Assembled by piecemeal acquisition, a corridor is customized and improved, then actively marketed to accommodate potential users. A transportation corridor is a custom made and special purpose property. More than anything else, it is the special purpose that can often complicate the appraisal process of an existing transportation corridor and the value of a corridor within a corridor.



This article briefly reviews valuation methodologies used in appraising a corridor and proposes a new approach to the valuation of a corridor within a corridor. The example used is the installation of a 16-inch water line in a 12-foot wide easement that is within a 100-foot wide railroad transportation corridor (see illustration above).

### What is Value?

The value of a corridor within a corridor consists of several elements. Under the California Code of Civil Procedures, fair market value is defined as, “the value of property taken for which there is no relevant market is its value on the date of valuation as determined by a method that is just and equitable.” (There is similar language in other states).

When appraisers, agents and negotiators inquire about the price of a specific corridor within a corridor, they are usually quoted a percentage of fee value. These percentages range anywhere from 10 to 100 percent of the fee value. Use of the proposed new approach to valuing a corridor within a corridor will better quantify the percentage of fee value.

### Corridor Valuation

Three traditional approaches have been used to value property. They are the Income Approach, Cost Approach and Sales Comparison Approach. However, these do not readily adapt to the valuation of an existing corridor.

Generally, corridor appraisers do not apply the Income Approach on a transportation corridor. This approach is based on the assumption that the present value of the property is related to the income it can produce. If a corridor is not generating any income, then theoretically, it has no value.

The Cost Approach, however, can be applied based on the cost of the corridor as a finished product (see Ladder of Value diagram, page 8). Valuation of transportation corridors using the cost approach was made case law in the decision of the *State of California Department of Transportation v. Southern Pacific Transportation Company* (84Cal. App.3D315: 148Cal.rptr.535) in Sacramento, California. The jury ruled in favor of Southern Pacific, but awarded an amount close to the original negotiated value.

This award was much less than the value indicated by the Replacement Cost Approach. The Replacement Cost Approach

is the top rung of the Ladder of Value and indicates the highest value. This approach usually amounts to as much as five or six times the Across the Fence (ATF) value. In the opinion of many corridor appraisers, corridors have not successfully sold on the basis of this method. Therefore, it is not an appropriate method to value a corridor.

A more just and equitable method than the cost approach is ATF plus an enhancement factor. ATF, which is the third method on the ladder, is a methodology used effectively to value a transportation corridor. This methodology assumes that the corridor has value consistent with the value of typical adjacent land, as if vacant. It is based upon sales of nearby or adjacent land, without adjustments for size, shape, topography or access. For these reasons, many corridor appraisers believe that ATF is the correct methodology to value a transportation corridor. It is also a methodology endorsed by the Appraisal Institute.

If applicable, an enhancement factor should be applied to ATF. In essence, a corridor is as valuable as (89Cal.App.344). To value the corridor using ATF methodology, the corridor is first split into various parcels in order to create zones of value consistent with adjacent land use.

In the example, the corridor passes through an industrial area where there are several vacant land sales indicating \$5 per square foot. The adjacent segment of the corridor should have similar value. The corridor then passes through farmland with

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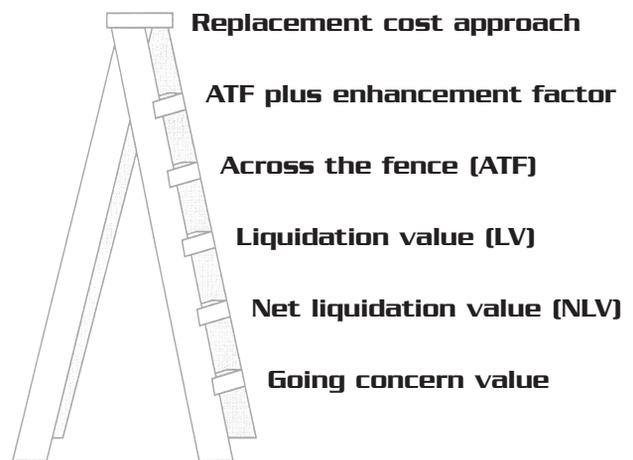
a land value of \$5,000 per acre and the adjacent corridor has similar value. This would continue for all the value segments created. However, the corridor should not be split down the middle since that was not how it was originally created. It was created, as we create corridors today, to impact as few parcels as possible. In addition, negative deductions should not be made for corridor improvements such as cuts and fills, which can change the elevation of the corridor from adjacent development.

Conversely, the Sales Comparison Approach to value transportation corridors is rarely, if ever, used by experienced appraisers. The weaknesses in this approach are the adjustments that must be made to a corridor. These adjustments (location, time, physical encumbrances, existing corridor encumbrances, corridor widths, density of development comparison attempts to use an overall weighted acre or square foot unit of value) become arbitrary and not supportable in the marketplace.

However, when there are sales of other transportation corridors, one can abstract an enhancement factor from the sale. The sales price over and above the estimate of ATF indicates the enhancement factor. Corridor appraisers have analyzed sales across the country to see what these factors may be. Applied to different areas of a corridor, these factors could be whether the corridor passes through the middle of unimproved land, a small community or a heavily developed area. Enhancement factors can range from a low of 1.1 to a high of about 2.5 times ATF as indicated from other sales corridors.

A relatively inexpensive but limited method on the Ladder is Liquidation Value. This views the transportation corridor on the basis that it has lost its economic life. The corridor returns to its original state- a piecemeal acquisition that will be broken

## LADDER OF VALUE



into parcels and sold individually. However, attempting to resell these parcels can often be very difficult, since some of them may not have frontage. Owners on both sides of the right-of-way parcels may not want the property due to an increase in taxes or perhaps they have already “got their fences up.” As a result, this approach should not be used to value a transportation corridor. It can be used when a corridor is no longer a corridor and will be disassembled.

An even more limited method of corridor valuation is Net Liquidation Value, which takes the already low (liquidation) value and discounts it for holding costs. When a corridor ceases to be a corridor, it can no longer be marketed as one. Take for example a 12-mile corridor serving a lumber mill. The lumber mill was operating since 1938, but in 1990, the mill went out of business leaving behind a corridor that nobody needs. At this point, the corridor can be valued using the liquidation or net liquidation approach.

Lowest on the Ladder is Going Concern Value. This is considered a weak, speculative approach to value a corridor within a corridor. When this method is used, it is normally applied to only a portion of the corridor since many uses of the corridor are non-income producing (drainage ditches, fencing and areas reserved for future railroad tracks). For these reasons, this method is unsuitable for valuing a corridor.

### Developing a New Methodology

The key to this new methodology is to view the corridor as a cross section (see page 7). The corridor within the corridor as stated for this example is a 16-inch water line. To estimate its value as a percentage of fee, the accepted appraisal methodology of the “before and after” rule is applied. Normally this approach is used to measure severance damage. However, when placing a corridor (pipeline) use within a corridor, severance damages should not be an issue. The engineer and the potential user can work together to place the pipe so that it will not affect existing or potential uses.

If there is the necessity to move or relocate an existing improvement, its relocation can be valued on the Cost to Cure basis. The Valuation Calculator below indicates the cross section of the subject 16-inch pipeline within the subject 12-foot easement.

Applying the before and after rule to the 16-inch pipeline area results in the following: another pipeline cannot be placed here nor penetrate this area with poles, towers or other permanent surface and subsurface uses. The diagram also shows the 16-inch pipeline surrounded by “risk areas.” The 24-inch risk area dimension on either side of the pipeline was established over many years.

An engineering study recently confirmed that working any closer than 24-inches to an existing corridor improvement requires extreme caution. Shoring and hand excavation of the property may be necessary to attempt to prevent subsidence. The risk area may become very expensive and dangerous to develop. Therefore, the impact on the corridor for the 16-inch pipeline and the risk areas are the same.

Applying the “before and after” rule to the pipe and risk (64 inches) results in a condition where most of the rights in this portion of the corridor are gone. The impact in the area of the example is estimated to be 85 percent, not 100 percent, because some rights remain. The 64 inches of the corridor can be used for spur tracks serving adjacent industries. This area can also be used for the temporary storage of railroad materials such as rail and ties. It could even be a part of the maintenance roadway

for the entire 100-foot wide corridor. Therefore, 15 percent use remains.

The remaining 80 inches (the outer 40 inches of the easement) is impacted less than the pipe and the risk area. This portion of the corridor in the example can be used as an overlap, or buffer zone to other corridor uses. This area has a value equal to one half of 85 percent or 42.5 percent.

### Calculating Value - A Percent of Fee

$$64" (16" + 24" + 24") [ 144" (12 \text{ ft.}) ] = 44.4 \% \times 85 \% = 37.8\%$$

$$80" (40" + 40") [ 144" (12 \text{ ft.}) ] = 55.6 \% \times 42.5 \% = 23.6\%$$

**TOTAL 61.4% (% of Fee)**

### Value of Corridor Within a Corridor

$$\text{ATF} \times \text{Enhancement Factor} \times \% \text{ of Fee} = \\ \text{Value of Corridor Within a Corridor}$$

By use of this methodology, corridor appraisers can better quantify the percentage of fee and arrive at a value that is just and equitable for the corridor within a corridor. ■

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***Use of the proposed new approach to valuing a corridor within a corridor will better quantify the percentage of fee value.***

### VALUATION CALCULATOR

