The Cost Approach: *It Does Not Indicate Fee Simple Market Value!*

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One of the more hotly debated issues within the real property appraisal and banking industries, as well as within those tax assessing jurisdictions required to base real property assessments upon *Market Value*, is the topic of whether or not the Cost Approach is appropriate for use in appraisal assignments of existing building improvements, regardless of their age (including brand-new structures), when the purpose of the assignment is to estimate *Market Value*, as defined in the **Uniform Standards of Professional Appraisal Practice (USPAP)**, of the Fee Simple estate.

On the one side, we have a majority of real estate appraisers who have been educated in the application of this methodology, either directly or indirectly, in accordance with the text and teachings of the Appraisal Institute which states, ***"the result [of the Cost Approach] is an indication of the value of the fee simple interest in the property."***.[1]

On the other side, we have a broad diversity of real estate professionals, including builders, developers, professional cost-estimators, contractors, real estate brokers, as well as the overwhelming majority of the buying and selling population who fail to act in accordance with those teachings. These groups, both knowingly and unknowingly, conduct their business activities consistent with fundamental economic principles, and do not regard the results from the use/application of the Cost Approach as an indication of *Market Value*, contrary to those teachings.

This paper is intended to 1) provide the reader with an examination of the differences between the current academic teachings and factual market activities, and 2) provide the practicing appraiser factual economic and USPAP based support with which to educate their clients to the fact that the use of the Cost Approach within *Market Value* appraisals of the Fee Simple or a lesser/partial estate is inappropriate.

In order to grasp the inherent problems with the common belief that the results of the Cost Approach provides an indication of the *Market Value* of the Fee Simple property rights, one must first know and understand that there is a substantial difference between **real estate**, which is the tangible aspect of the land and whatever structures are intended to be permanently affixed thereto, if any, and **real property**, which are the intangible, man-made ***rights*** to the use of the real estate, typically referred to as the ***Bundle of Rights***, which include the rights to own, use, occupy, rent, reversion, sell, give away, or to do none of these things. **It's absolutely essential** to understand the fact that, when an appraiser is given an assignment to estimate *Market Value* of the Fee Simple or a partial/lesser interest, the ***"thing"*** being valued is **<u>not</u>** the tangible **real estate**, but the intangible **<u>real property rights</u>** inherent to that specific parcel of real estate.

The next fact that must be recognized is that, when estimating either the **reproduction cost-new** (the estimated cost to create an exact duplicate of the subject improvements, including the exact building materials used in its construction as well as its exact design, including its functional deficiencies) OR the **replacement cost-new** (the estimated cost to create a new building of the same use [warehouse, office building, multi-family, single family, etc.] using the latest, most modern building materials and optimum functional design features), the result of such an estimate **is merely an accounting** of all of the expenses necessary to create a physical structure, hence its former name *The Summation Approach*. The result of this **accounting procedure** which ***is*** the Cost Approach, **<u>does not mean</u>**, nor should it be mistaken to mean, that the typical market participant will pay the amount of that cost estimate, or any amount relative to it in exchange for the rights to that parcel of real estate.

In order to believe that this **accounting procedure** indicates the *Market Value* of the Fee Simple property rights requires one to ignore a number of fundamental economic laws, including the 4 specific essential components which must exist simultaneously in order for anything to be considered to have value, being: 1) **Utility**; it must serve a useful purpose, 2) **Desirability**; it must be desired by those to whom it has a use, 3) **Scarcity**; its supply must be less than its relative demand, and 4) **Affordability**; it must be affordable to those to whom it has utility and desirability.

Further, to believe that the Cost Approach **accounting procedure** can provide an indication of the *Market Value* of the Fee Simple, or any partial interest in those property rights, is also to ignore the ***Principle of Contribution*** which states that an item only has value to the extent that it contributes to the value of the whole, OR by the amount that the value of the whole is diminished by the absence of that item.

Let us now consider the actions of typical market participants. It doesn't matter if we were to consider typical investor types involved in sophisticated income producing properties, or the typical first home buyer; when it comes to deciding the price to pay for the property rights associated with a specific parcel of real estate their ***"appraisal"*** methodology is virtually identical in that, **<u>neither</u>** considers the Cost Approach accounting methodology.

Why not? Primarily because, in their eyes **it's irrelevant!** The fact that **the building is already there** eliminates the need to know what it would cost to build new and depreciate it to present value. **The investor only cares about** the amount of return from a subject property as an investment compared to returns from competitive investments, AND **the home buyer only cares about** the purchase price of house ***A*** relative to the purchase price of house *B*, plus consideration of the *Contributing Value*, if any, from any differences between the two houses that they, the typical buyer, may consider to be of value and in such subjective dollar amount(s), as they, the typical buyer, may attribute to such differences as the differences are perceived to contribute to the overall utility and desirability of each house. **As for the typical seller,** they are solely concerned with obtaining the highest price possible relative to the sales prices obtained by sellers of what they perceive to be competitive properties.

POINT OF FACT: The very premise of the Cost Approach accounting methodology is totally foreign to the typical buyer and seller of real estate which is supported by the virtual absence of such activity being undertaken in the market by those typical buyers and sellers of existing building improvements.

POINT OF FACT: In addition to their apparent recognition of the irrelevance of indications from the Cost Approach accounting procedure, the typical buyer and seller of real property haven't the technical knowledge nor the practical experience required to undertake the construction of a building in a competent, cost-effective, timely manner, thus, cannot possibly be considered capable of undertaking the development of the Cost Approach.

IT SHOULD BE OF SERIOUS CONCERN to every appraiser and every user of an appraisal report to ensure that the person providing estimates of cost-new has sufficient technical knowledge and practical experience in the disciplines of building design, construction and cost-estimating to be considered in compliance with the ***Competency Provision*** of USPAP when the use of the Cost Approach is appropriate.

Adding to the absence of economic support, thus, further undermining the credibility in the belief that the Cost Approach accounting procedure can provide an indication of the *Market Value* of the **real property rights** associated with a specific parcel of **real estate** is the topic of the currently taught and accepted methods by which appraisers ***"depreciate"*** cost-new estimates in order to theoretically obtain an indication of the present ***"value"*** of the already existing building and site improvements.

Most appraisers have been taught that buildings ***"depreciate"***, or lose ***"value"*** 1) by means of the aging process, 2) through changes in standards of functional utility, as well as 3) from ***"externalties"***; negative influences from outside the boundaries of a property.

Above all, ***"depreciation"*** as it is currently taught and practiced, is just another accounting procedure, which reinforces the distinct difference between the Cost Approach methodology, which is conducted in isolation from *"Market Forces"*, and the Sales Comparison and Income Capitalization methodologies which are solely and wholly the direct result of market activity. This is supported by the fact that there would be no need to obtain indications of ***"depreciation"*** from the other 2 true *Market* approaches, such as using the capitalized rent loss from the income approach; just one of many examples.

An analysis of the practice of ***"Physical Depreciation"*** due to the aging process finds the cost-new estimate is most commonly ***"depreciated"*** by either the economic or actual age/life method, both of which are based upon an **accountant-like Straight-Line depreciation model** developed by dividing the age (actual or effective) of the improvement by the estimate of its remaining life (physical or economic). In addition to the **fact** that this ***"depreciation"*** estimate is **not** derived from *"Market"* evidence, is the major problem that it assumes that all things within the structure, as well as any and all site improvements, ***"depreciate"*** at the same, constant, average annual straight-line rate.

Example: A building with an actual age of 15 years and an estimated remaining life expectancy of 45 years has depreciated, according to this model, by a total of 25%, implying an **average annual Straight-Line rate** of 1.67% annually. Since markets simple don't work this way, this **accountants methodology** cannot reasonably be considered *"Market"* based nor *"Market"* related, therefore, it cannot possibly reach a conclusion nor provide an indication of *"Market Value"*.

Another contributing problem in this **accountants method of depreciation**, are the typically unsupported statements of estimated actual life expectancies. It seems, according to virtually every real estate appraisal report I've ever read, there isn't a house structure in the USA that will last longer than 50-60 years, nor an industrial building that will last longer than 40-50 years, with similarly short actual life expectancies stated for all other types of building improvements.

I'm certain, as I'm sure you are, that there are vast numbers of buildings throughout the United States that exceed 80-100 years of age being put to all types of uses. In fact, there probably isn't a building structure being built today in accordance with minimal building codes that will not physically last for at least 100 years, assuming normal ongoing maintenance. And, while it may not continue to provide ***Contributing Value*** to the land/site for that long a time period, it's more likely than not that it will physically stand **at least** that long, again, assuming normal maintenance.

This brings us to the next major topic when discussing the applicability of the currently applied and accepted methods of ***"depreciation"***, which is the concern that many appraisal reports fail to demonstrate a working understanding of the implications from the term ***"remaining economic life"***, which, if you're not an appraiser, is the estimated amount of time into the future that the existing improvement(s) will continue to provide ***Contributing Value*** to the ***Market Value*** of the vacant land/site.

This problem begs the obvious question, ***"How can an appraiser reasonably support their prediction of the amount of years that a structure is going to continue***

to provide Contributing Value to the Market Value of the vacant land/site?". With the most reasonable answer being, ***"It probably can't be done."***.

While one can argue the merits and/or demerits of various methods of measuring ***"depreciation"***, logic dictates that even the consideration of ***"depreciating"*** cost-new estimates is, by its very nature, dealing solely with the physical aspect of the real estate, totally outside of and apart from the parameters required of the appraisal of the ***Market Value*** of property rights.

A reasonable test, or challenge to this premise is to ask, ***"What evidence links physical aging/depreciation to lower 'Market Value'?"***, which might reasonably be analyzed as follows.

Consider a common occurrence; a 100 year-old dwelling at an adequate level of maintenance which has currently been sold for $150,000 which, for the sake of this example, is typical ***Market Value*** in its market. Its actual cost-new in 1893 may reasonably have been $3,500 with the ***Market Value*** of its site having been $300 with an overall ***Market Value*** of $4,200. And, while changes in the economic forces of supply and demand have increased the ratio of the ***Contributing Value*** of the land to the overall ***Market Value***, the original question remains, ***"What evidence links physical aging/depreciation to lower 'Market Value'?"***, with the answer having to be, ***"There is no such evidence."***.

Thus, it would appear reasonable to conclude that, neither the accepted methods for measuring physical ***"depreciation"*** nor for forecasting ***remaining economic life***, have a relationship to market reality, thus, cannot result in an indication of ***Market Value***.

Observation and experience provide the conclusion that most appraisers who develop a cost-new estimate of existing building improvements in ***Market Value***, as well as appraisal assignments for other types of value, use data provided by national cost estimating services.

When using such a service, appraisers typically develop the cost-new estimate using the data which provides an estimate of **replacement cost-new**; seemingly an unreasoned selection which leads one to believe that this selection results from a lack of understanding of its definition and value implications as evidenced when, almost invariably, the appraiser applies a negative charge against the cost-new estimate of the ***replacement*** building citing, ***"functional inadequacies contained within the existing subject building improvement."*** which, by the very definition of ***"replacement cost-new"***, cannot possibly be considered because the replacement building is built to current optimal functional standards. If, in fact, the building whose cost-new is being considered **has** functional inadequacies, the only appropriate methodology for estimating its cost-new would be to calculate **reproduction cost-new** which would literally reproduce an exact duplicate of the subject, including all of its functional inadequacies, which, **again**, **would not provide for consideration of a negative charge against cost-new for functional inadequacies because they are already considered in the cost-new estimate,** leaving us with the question, ***"Should functional depreciation caused by such inherent things as floor plan layout, ceiling height, etc., even be considered as 'depreciable' items in a cost-new estimate?"***, to which the answer must reasonably be ***"No. Because using the appropriate cost-new estimate eliminates that consideration."***.

Another major concern is the notion that the cost-new estimate of an existing building improvement should have a negative charge taken against it for ***"economic/external obsolescence"***, a fictitious premise since, as all appraisers are required to know, when estimating the value of the land/site ***as if vacant***, an appraiser is responsible to consider all social, economic, governmental, and environmental influences upon the vacant land/site in order to determine both its value and its **highest and best use**. This includes all **external**, or **locational** factors.

In this undertaking, the appraiser is required to contrast the ***Market Value*** of the land/site **as if it was vacant**, against the estimated ***Market Value*** of the property as it is currently improved. In estimating the ***Market Value*** of the theoretically vacant land/site by the most appropriate method, every such method must include consideration of the ***Contributing Value*** influence upon the subject land/site from **LOCATIONAL FACTORS**, including any and all negative **external** influences upon the subjects **location**.

Further, if there is a negative influence upon the subject parcel of land/site from a source outside of its boundaries that would be so substantial as to render its land value at zero (or below zero, so as to have to carry the remainder of the negative value impact onto the proposed [actually existing] building improvement), **at that point in the valuation process**, an appraiser **must** conclude that the **highest and best use** of the subject land/site, **as if vacant**, is for it to **remain vacant** until such time as the source of the negative influence is removed or its impact is sufficiently diminished to the point where there would be measurable market demand for the development of the land/site with improvements that would meet all 4 tests for highest and best use at that future point in time.

This leads to, perhaps, the most important question to be asked, ***"Is the use of the Cost Approach in appraisal assignments for the purpose of estimating the 'Market Value' of the Fee Simple estate of existing building improvements, regardless of their age, in compliance with USPAP Provisions and Standards?"***.

Upon examining USPAP, we find that The ***Appraisal Foundations*** Preamble to the Provisions & Standards states, ***"It is essential that a professional appraiser arrive at and communicate his or her analyses, opinions, and advice in a manner that will be meaningful to the client and will not be misleading in the marketplace."***

The ***Conduct*** portion of USPAP's ***Ethics Provision*** states, ***"An appraiser must perform ethically and competently in accordance with these standards and not engage in conduct that is unlawful, unethical, or improper."***. The clarifying comment regarding this statement of proper conduct says, ***"The development of an appraisal, review, or consulting service based upon a hypothetical condition is unethical . . ."***, which begs the question, ***"What can be more hypothetical than pretend-***

ing that an existing building isn't there?".

However, a terribly more disturbing question is, ***"What could possibly be <u>more misleading, hypothetical, and further from the reality</u> <u>of the activities in the market</u> than having the appraiser develop a so-called "valuation" methodology which is virtually <u>NEVER</u> used by typical market participants?"***

And, to those who would ask, ***"What about the Principle of Substitution?"***, be reminded, while it states that, if there are 2 items of equal utility the item with the lowest price will gain the widest distribution, this basic economic principle is based upon the premise **<u>that both items currently exist!</u>**

Further, to put forth the concept that the ***<u>typical</u>*** buyer would ***<u>typically</u>*** build a substitute building if it was more economical is only ***"supported"*** by a number of unreasonable hypotheticals, including 1) ignoring consideration of the highest and best use of the vacant site, 2) ignoring the economic supply/demand issues in an over-supplied market, 3) the assumption of the availability of a substitute parcel of vacant land able to be purchased at the same price as the ***Market Value*** of the subject site, 4) the ability and willingness of the typical buyer to pay normal front-end expenses for site plan engineering, architectural services and environmental evaluations, **all before negotiating the purchase price of the land** which may prove undesirable subsequent to these preliminary studies, in addition to considering 5) whether or not this ***typical*** market participant has the expertise to successfully conduct such an undertaking, which is quite unlikely, evidenced by the virtual absence of such undertakings in the market.

Therefore, based upon the realities of fundamental economic principles, as well as the actions of the virtual entirety of typical market participants, I believe that:

1. The results of developing a cost-new estimate of a tangible physical structure cannot possibly provide an indication of the ***Market Value*** of intangible **real property rights**, and
2. To develop a methodology during an appraisal assignment which is virtually **<u>never</u>** used by typical market participants, and to include that **<u>never used</u>** methodology in reporting that appraisal, is a gross misrepresentation of actual market activities, therefore, is misleading to the user of the report, and should reasonably be considered a serious violation of the USPAP Ethics Provision and Standards Rule 1 and 2.■

[1] ***The Appraisal of Real Estate***, 10TH Edition, Appraisal Institute, Chicago, Illinois, p 313