

What's the Use?—Most Probable Use Versus Highest and Best Use

Steven Thair

In this article, the evolution of the term "highest and best use" to its present wide variety of confusing meanings is examined. The term "most probable use" is also discussed, including an explanation of its superiority over highest and best use stemming from its unambiguous nature and relation to the actual marketplace. The concepts of most fitting use and most probable selling price are discussed as well.

"**M**ost probable use" as a term and as a concept is replacing "highest and best use" for several reasons. Some relate to the name itself and others to changes in the concept, which has outgrown its original label. This article explains these changes and what they mean for lenders, clients, and serious students of appraisal.

BACKGROUND

The beginnings of the term highest and best use can be traced to economics—the study of defining value and what creates value.

It is only in this century that the field of property appraisal has experienced rapid development because lenders, governments, and the public have demanded some method to insure that loans made against property are secure. In its earliest days, appraisal was concerned primarily with the cost approach. Highest and best use was a term that related to land as though vacant. Improvements were handled by estimating reproduction cost less deterioration.

The role of the courts in establishing highest and best use as fundamental to their determination of property value should not be overlooked. This has contributed to the

concept's widespread use of appraisal. Appraisers have been less anxious than other professionals to lay down the definitions of their practice in a formal and legally responsible way. For instance, both the American Institute of Real Estate Appraisers (AIREA) and the Appraisal Institute of Canada (AIC) print disclaimers in their basic textbooks absolving them of responsibility for theories or practices advanced therein.¹

In its earliest days, appraisal was concerned primarily with the cost approach.

In contrast, other professions publish official positions on matters relating to appraisal, such as the Financial Accounting Standards Board's paper on income property. James A. Graaskamp has explained why the appraisal profession is falling behind in this regard.² He points out that the development of appraisal practices and the use of the term highest and best use have basically been carried out by nonappraisers, which partially explains the impediment to growth and change in appraisal theory.

The concept of highest and best use is nonetheless well established in the report writing of many Canadian appraisers. What follows is a realistic examination of the names, definitions, and concepts of highest and best use and most probable use.

LABELS

Names or labels and our reactions to them profoundly influence our thinking and actions. The label highest and best use suggests a superlative degree of use. In fact, highest and best use is neither high nor best. Early use of this term in less sophisticated analyses gave rise to an inaccurate name for what is actually a



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complex situation. This situation involves nothing less than the interaction of all factors that affect how individuals and groups decide to utilize a parcel of land either vacant or developed.

In contrast, the meaning of the term most probable use is more precise. The word probable clearly indicates that a particular use is not a certainty—experience confirms that plans for property are often uncertain. Most probable use, then, means just what it says—that a particular use is most probable among alternatives. Probable does not mean that a shoddy or incomplete study has been done, but that a situation is not fully predictable and that there are other possible uses.

In contrast, highest and best use suggests finality; that there is nothing else. In the courts this nuance of meaning is acceptable, even desirable. In the real estate field, use is a continuous and dynamic process. The concept of most probable use better and more realistically suits this process. Therefore, it is the more appropriate term because it allows both appraiser and client, or instructor and student, to get off on the right foot.³

DEFINITIONS

Three current definitions of highest and best use follow:

That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal.

Alternatively, that use, from among reasonably probable legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and which results in highest land value.⁴

A third definition is found in Lincoln W. North's monograph

published by the AIC and now part of its introductory appraisal text.

The only explicit definition which the author considers self-standing without elaboration is the one which states that highest and best use represents the most probable use of a given property at a particular moment in time.⁵

These definitions of highest and best use necessarily incorporate the words probable or probable use. The definition of most probable use, however, is not contingent on highest and best use. Therefore, most probable use is more parsimonious; it covers the same or more phenomena with a simpler definition.

In response to a changing world, the term highest and best use has

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been continually redefined from that use which is most profitable or results in the highest present value to other various definitions. The original definition barely relates to the present one. Frequently, readers of reports, appraisal students, and sometimes even appraisers do not understand what is meant by highest and best use. Many report readers believe that most profitable use is a good definition of highest and best use. Nothing could be further from the truth.

The adjectives "highest" and "best" suggest only one use. In fact, in what is probably an effort to simplify a complex situation, the AIC's introductory text states:

Fundamental to any appraisal is the selection by the appraiser of that single use that develops the highest value in the subject property.

Highest and Best Use is defined as "that use which, at the

time of the appraisal, is most likely to produce the greatest net return in money or amenities over a given period of time."⁶

While the intent of this statement may reinforce the principle of consistent use, which states that building and land must be valued according to the same use, it suggests that there is no possibility that one of two or three different uses are equally likely to be selected, even though they do not yield an equivalent net return. Nor does it suggest that one use is more probable than others, while other uses are clearly possible. Nonetheless, users of the term highest and best use continue to expand the concept to the point where most probable use is employed as a

definition of highest and best use.⁷ If anything, the reverse is true: highest and best use is a specific and highly theoretical kind of most probable use.

In the frequently quoted Real Estate Appraisal Terminology, most probable use is defined, but under the heading highest and best use.

In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use.⁸

It is time that most probable use has its own definition. Efforts to categorize everything under the umbrella of highest and best use are producing confusion among students, lenders, and others. The term has finally worked itself out of a job—it suffers from functional obsolescence.

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How HIGH IS HIGHEST?

It is confusing when several concepts have the same name. Highest and best use is such a concept, the effect of which is confusing to both appraisers and lay persons. This variety of concepts leads to the question, how high is highest?

Top Level: The Mythical Shangri-La

The current literature indicates that the highest of highest is defined by maximization of profit. In such cases, the selection of use is some-

3. There must be a demand for such use.
4. The use must be profitable.
5. The use must provide the highest net return.
6. The use must deliver the return for the longest period of time.⁹

The perspective of this concept is long-term, whereas development decisions in the real world are usually based on short- and medium-term considerations. The critical failing of this approach is that the method of analysis tends to be linear.

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times dictated by the most intense, legally allowed development. This is an unrealistic, ideal situation that is never achieved and the concept has no practical value for the appraiser.

Second level: Land-As-If-Vacant

Users of the land-as-if-vacant concept adhere to the following traditional list of factors:

1. The use must be legal.
2. The use must be within the realm of probability; that is, it must be likely, not speculative or conjectural.

It emphasizes each factor and assigns it a certain weight, denying interaction with other factors, particularly time.

More recently, social scientists have coined several terms and developed models that could be applied to the process of use selection. Some include conflict resolution, feedback loops, "satisficing," and, the more common terms, compromise and feasibility.

In the second conceptual level, land-as-if-vacant, the interactions involved are not recognized and it is

assumed that the best possible reconciliation of group goals is reached along with the maximization of profit. This is a rare achievement and when it does occur, it is usually for a newly developed property and for a short period of time.

Third level: Current Use is Highest and Best Use

This level is typically applied to land and buildings as they are. Readers of appraisal reports will recognize this as the concept in which the current use is frequently given as highest and best use.

The conceptual confusion arises from using the same name in the second and third levels. Such confusion could obviously be avoided by using two different labels.

Appraisal theorists ought to consider coining new names for their concepts rather than using common words with a variety of meanings. Quirks and quarks, or electrons and parsecs, for example, are not burdened with a variety of meanings.

In conclusion, three difficulties exist with the conceptual level of highest and best use. First, the different concepts are confusing because they have the same labels. Second, the focus is on factors involved in use selection, rather than



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their interaction, which determines use by conflict resolution, compromise, and feasibility studies. These latter processes are the "right stuff" for the appraisal profession and will lead to the "right use." Third, the several concepts frequently use the word probable, whereas the concept of most probable use does not require the use of the confusing adjectives highest and best.

MOST PROBABLE USE

While it may be true that the definition of most probable use is merely a renaming of the highest and best use definition, the concept of most probable use is much more.

As might be expected, most probable use focuses on the interaction of the factors determining use and recognizes that determining use rests on conflict resolution, compromise, and feasibility. Because the concept of most probable use is rooted in reality, let us look at a realistic determination of use.

First, use is not determined primarily by maximization of profit. For example, when a developer is contemplating potential site uses, his or her decision is influenced by a range of factors—current cash flow position, credit limit, current projects, perception of the short term market, and experience and success in particular types of property development.

Sometimes even developers may feel conflicted. While they may be fully aware that what they want to build is not what consumers want, they may also feel somewhat uncomfortable building to suit consumer desires.

The developer is also aware of the conflicting goals of various infrastructures, including lenders, government, and interest groups. He or she may expect a struggle over a discretionary use controlled by a city council and anxious moments with a banker over interim financing, which may result in a more modest development than desired.

Richard U. Ratcliff has stated that:

There seems to be little doubt that most investors optimize or satisfy and that few of them rely on the single classical criterion of maximizing net income. To the extent that this is true, the "highest and best use" determined by the maximization of net income is an unrealistic concept because it does not reflect actual human behavior.

Actual decisions are complex with the primary skill of the appraiser to predict human behavior in terms of the probable outcome. The "highest and best use" thus becomes the "most probable use" and the prediction of market behavior in general, for whatever purpose, must be founded on the manner in which real people arrive at decisions rather than the other unreal assumption of the single maximization test.¹⁰

To Ratcliff and others, the reality of determining use lies in actual human behavior, conflict resolution, prediction of peoples, actions, and probability. Compare these ideas to maximization of profit insofar as they comply with the real world.

Graaskamp has categorized the various interests affecting real estate use into three major groups: space users (consumers), space producers (suppliers), and various agencies (infrastructures, such as lenders, planning departments, environmental groups, etc.).¹¹ He observes that each of these groups functions under budgetary constraints and regular cash flow restrictions and concludes that the concept of most probable use better reflects the idea of feasibility which is critical to any development. Ratcliff's remarks seem particularly directed at the mystical Shangri-La concept of highest and best use, which relies almost exclusively on maximization of profit.

Previous mention was made of the confusion caused between highest

and best use for the site-as-if-vacant and for the site-as-improved. The difference between these concepts is not only that they are applied to different situations.

Contemporary theory eliminates this confusion by using different names for the two concepts. Most probable use applies to both vacant and improved sites and is exactly what it says it is; the most probable of alternatives. Most probable use of the site-as-if-vacant is not similar to highest and best use of the site-as-if-vacant. The former yields a more practical, probable solution to the question.

Clients and lenders want to know the most probable and likely use, rather than what use totally satisfies all groups but is very unlikely. This idealized concept which is less practical and rarely achieved has been named "most fitting use" by some contemporary theorists.

Occasionally a new property may actually achieve this effective synthesis of various group goals within the constraints imposed, although it is rarely the most probable use.

For comparison, most fitting use (of the site-as-if-vacant) will yield a solution that is the same or similar to highest and best use of the site-as-if-vacant. By using the term most fitting use, the term most probable use remains the only concept applicable to land-as-if-vacant and land-as-developed, thus eliminating confusion for the appraisal report reader.

Graaskamp has written a functional definition of most probable use. Because it refers to his description of most fitting use, both are stated below:

Most fitting use:

1. It is an optimal reconciliation of the goals and objectives of various groups.
2. The reconciliation is concerned with the constraints imposed by:
 - a. effective consumer demand;

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- b. the cost of production;
- c. the fiscal and environmental impact of third parties;
- d. a, b, and c operating within the physical constraints of the land; and
- e. financial-impact analysis on "who pays" and "who benefits."

The most probable use is something less than the most fitting use, depending upon topical constraints imposed by current political factors, the state of real estate technology, and short term solvency pressures on consumer, producer, or public money.¹²

The confusion of highest and best use can now be left behind. The name, definition, and concept of most probable use have been developed to the point where they fit comfortably into appraisal theory and the majority of today's appraisal reports. Most important, these ideas better represent behavior in the real world.

SPECIFIC SITUATIONS— MOST PROBABLE USE

Four specific situations are discussed using the concept of most probable use. The first three are actual appraisal situations and the fourth is a discussion of market value—expressed as most probable selling price.

Special-purpose property

Occasionally, developed property and, less frequently, vacant land can have a special purpose that results in a value-in-use substantially higher than would otherwise be the case. One example is a church, another is a golf course site, which is marginal agricultural land.

Typically, if property is sold for the original special purpose, the price is substantially higher than if it were sold for an alternate use. For example, a church may be converted to a storage warehouse, or a golf course site to grazing land.

In both cases, only an examination of the dynamics of the forces affecting the property will give an indication of which use is the more probable. In one locale, purchase of the church by another congregation may be the most probable use; in another locale,

purchase for storage purposes may be the most probable use.

In any event, the concept of most probable use handles the situation neatly by selection of the most likely use. In such a situation it is appropriate for the appraiser to indicate the possibility of an alternate use. In many instances, the appraiser is able to indicate the probability of each use.

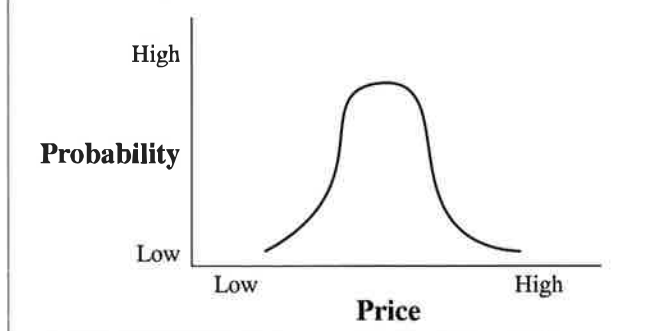
Let us assume that churches are in low demand, but that there is a need for storage space and use of a church building to fill such a need is permitted use under current development controls. In fact, the appraiser is able to discuss with potential purchasers the property's use as a warehouse.

In the above situation, circumstances have created two potential uses, each with its own probability and most probable selling price. In such a situation, the appraiser is obliged to process the two streams almost like two appraisals. To do anything less is to deny the nature of value of the subject property.

Most probable selling price can be expressed graphically. Figure 1 shows a normal curve for a property with basically one use. This type of curve is generated when there is a large supply and a large demand.

Figure 2 shows the curve generated by a property with two alternative uses. The range of value for each use is quite broad, caused by few buyers and sellers in the marketplace. (For further discussion of the special purpose situation, consult Eric T.

Figure 1 Most Probable Selling Price for Similar Properties (Large Supply, Large Demand)



Reenstierna's discussion.¹³)

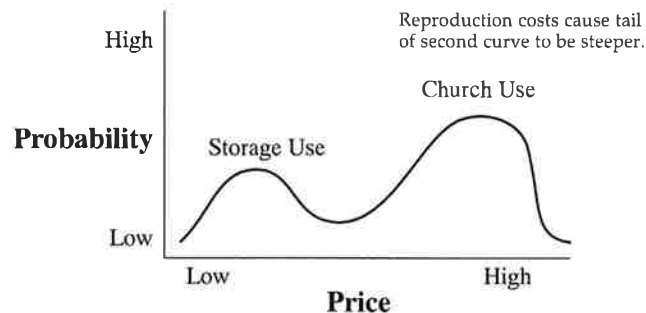
Multiple-probable-use property

This situation is similar to the special-purpose property because there is more than one potential use. In this case, the uses are each feasible.

The appraiser should follow a procedure similar to that for determining highest and best use; first various improvements (or uses of existing improvements) must be projected onto the site, then the net residual income to the site must be estimated.

There is a major departure from the concept of highest and best use at this point because most probable use recognizes how decisions are actually made. The use (and hence the value) of the land may not be set by the most profitable use, but by something as fickle as which local developers are busy and which are not. Thus, several uses result in residual land values, which may vary from 10% to 20% or even more. Which one is the most probable is predicated on factors other than profit. Similar to special-purpose property, more than one use will be explored in the appraisal process to yield more than one value. Again, graphic representation of market value is the best method, often augmented by the value estimate given as a range or group of ranges, each with its own probability. Such information is just as valuable as other facts that the appraiser carefully gathers and analyzes for a

Figure 2 Most Probable Selling Price for Special Purpose Property with Alternate Use (Small Supply, Small Demand)



report. All this careful work is for naught if the final conclusion itself is not well developed.

For instance, the most probable selling price of a property in a market characterized by few buyers and sellers may be represented numerically as:

Range	Probability
\$99,500-\$101,500	2%
\$97,000-\$102,000	10%
\$95,000-\$106,000	30%
\$85,000-\$112,000	80%

Anytime appraisers give a point estimate (which is most of the time), what they are really doing is selecting the most probable point within a range, although the range or the probability that market value is within the range is rarely stated. Thus, the report reader is only getting a small portion of the necessary information.

The reasons for the point estimate without any explanation of its dynamics are primarily because most clients—lenders and the courts in particular—like to see a “number” (point) on which to base their judgment.

Fee appraisal is a competitive field and most appraisers cannot justify extra time to develop appropriate value ranges and probabilities because they cannot set their fees at a level that pays for the additional time. Clients requiring point estimates should realize that they are not appropriate in other contexts. Appraisers need to educate their clients

about this issue.

Interim-use property

Interim use is defined as the situation in which there is a speculative value of the property. The existing improvements remain, usually for a short term, until the site is ripe and redeveloped.

Speculation is the most probable use of such a property. The speculative use includes using the existing improvements (to defray carrying costs) until the property is developed or resold. Although the existing improvements may be used in the same way as they were before, the use has changed.

The concept of most probable use better fits reality than does highest and best use—the latter indicates that the improvements will remain until their contribution to overall property value is nil.

This is rarely the case because the real world does not function as a mathematical equation. Buildings are often torn down by developers before they reach the zero-contribution level because other forces are at work, including the season, the developer’s work load, his or her hunch about interest rates, and other factors. Sometimes properties are prematurely redeveloped because developers like to do what they do best: develop.

Similarly, many properties are left as is, long after the contribution of the improvements is zero. Many of the reasons for inaction are the same as for premature development. The concept of most probable use places greater importance on the interaction of these factors than does the traditional concept of highest and best use. The result is a more accurate analysis of the situation and a better synthesis of the conclusions in the

report.

Most probable selling price

In the foregoing discussion, the terms most probable selling price and market value are used interchangeably. The two terms are the same or different, depending on how they are defined. The term market value is used here with care because frequently the following definition is still seen:

The highest price in terms of money Which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller’ each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus . . . ¹⁴

It is not necessary to give the remainder of the definition to realize that it falls into the same trap as highest and best use, namely the confusing use of “highest.” Taken literally, there is no better reason to use the highest price rather than the lowest price that a property will bring. Obviously the word highest is used in a different context. Unfortunately, readers of reports on appraisals are often unclear on this point.

Harold D. Albritton has reviewed this definition of market value and tackles several inappropriate terms including “highest price” and “will bring.”

This part of the definition often has been misunderstood, because it implies that value is a fact. The property will bring a specific price, but it is the appraiser’s task to estimate what the property should bring.

An appraisal is always an estimate and should not be construed as a scientific process resulting in a totally predictable price. Therefore, it is my opinion that market value is an estimate of the price which a property should bring. ¹⁵

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The scientific community left the idea of certainty behind 50 years ago. Both the location of an electron as of a specific time (a rather small bit of real estate) and the prospect of life in other galaxies are measured in terms of probabilities. The budding social science of appraisal needs to adapt its concepts as well so that its models reflect reality.

1. Lincoln W. North, *The Concept of Highest and Best Use* (Winnipeg, Manitoba: Appraisal Institute of Canada, 1981). Both North's monograph, which is part of the AIC appraisal course, and American Institute of Real Estate Appraisers' textbooks carry a disclaimer that indicates that the opinion and views in their texts are not necessarily the views of the institute or its members.
2. James A. Graaskamp, "Institutional Constraints on, and Forces for, Evaluation of Appraisal Precepts and Practices," *The Real Estate Appraiser and Analyst* (Spring, 1986): 23-34.
3. Astute readers will recognize that "right foot" may sometimes mean left foot and cause confusion. Because the vast majority of people are right-footed,

I have considered changing the manuscript to read, "get off on the most probable foot."

4. Byrl N. Boyce, ed. *Real Estate Appraisal Terminology* (Cambridge, Mass.: Ballinger Publishing Company, 1975), 126-127.
5. North, 2.
6. Appraisal Institute of Canada, *An Introduction to Real Estate Appraising*, 4th ed. (Winnipeg, Manitoba: Appraisal Institute of Canada, 1984), 3-2, 3-3.
7. North, *ibid.*
8. Boyce, 27.
9. Appraisal Institute of Canada, 6-2.
10. Richard U. Ratcliff, *Valuation for Real Estate Decisions* (Santa Cruz, Calif.: Democrat Press, 1972), 69.
11. James A. Graaskamp.
12. James A. Graaskamp, *The Appraisal of 25 N. Pinckney: A Demonstration Case for Contemporary Appraisal Methods* (Madison, Wis.: Landmark Research, 1977).
13. Eric T. Reenstierna, "Alternatives to Point Estimates," *The Appraisal Journal* (January 1985): 115-126.
14. Boyce, 160.
15. Harold D. Albritton, "A Critique of the Prevailing Definition of Market Value," *The Appraisal Journal* (April 1980): 199-205.

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Landfills Become Landscapes

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individual basis. We're not going out and promoting this to communities, but where it does make sense, it should be strongly considered because there will always be a need for park space.

"I hope what will eventually happen is that the maximum number of (landfill) sites possible will be examined for their recreation potential," Stewart says. "The first test of this potential is whether the present demand is there, or whether local officials are able to predict future demand."

"There are some parks out there whose designers didn't plan for methane gas collection," says Hickman. "There are some who had no understanding of settling. But if they plan ahead, there really shouldn't be a problem with these issues."

A combination of rising land values and a growing population and their need for recreational activities, may force more local governments to turn an unpopular necessity into an attractive asset. As stricter regulations and new technology make landfill-to-park conversion more feasible and popular, planning ahead, as Evanston did in the 1960s, is one way cities and counties are participating in the American park revolution.

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Recent Court Decisions

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Finally, the court reversed the trial court's determination that laches barred Hay's action. It was very possible that applications by Hay earlier than 1986 would have been futile, considering the sewer needs of Andover during that time. Since Hay did show at trial that sewer access and needs have changed, the court reasoned that Hay should be allowed to pursue his claim for immediate sewer connection.

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