Notes & Issues
by Michael McKinley

Building the Body of Knowledge: An Introduction to The Dictionary of Real Estate Appraisal, Seventh Edition

Abstract

The Appraisal Institute releases its seventh edition of The Dictionary of Real Estate Appraisal in early 2022. In this article, the dictionary’s technical editor provides a behind-the-scenes look at what’s inside the latest edition.

In 2021, cartographers at the National Geographic Society concluded that the earth has five oceans, not the four oceans whose names many of us learned in childhood and held onto for decades without question. To be precise, future maps created by the society will label a portion of what was once considered the Pacific Ocean around Antarctica as the Southern Ocean. The rationale set forth by the society’s experts was that the Southern Ocean is now understood to be a distinct body of water with unique characteristics, a categorization accepted by the scientific community long ago but only recently recognized more broadly by political bodies.

Adding a new name to a familiar and seemingly definitive list of oceans, like subtracting the name of Pluto from the traditional list of planets in the Earth’s solar system, can require some conscious reprogramming of a person’s memory. Eventually the existence of that fifth ocean—which was always there but only recently recognized officially by experts—will not seem like a piece of geographical trivia foisted upon us by an ostensible authority. Rather, it will be considered common knowledge. This process of reenvisioning what is currently known and working toward a new

1. For more information on the National Geographic Society’s recognition of the Southern Ocean as a distinct body of water, see Sarah Gibbens, “There’s a New Ocean Now—Can You Name All 5?” (June 8, 2021), https://bit.ly/2021ocean.
understanding of the world and the things in it is how a body of knowledge evolves.2

Every five to seven years, the body of knowledge of the appraisal profession is scrutinized and refreshed—sometimes uncomfortably—with the publication of a new edition of The Appraisal of Real Estate. That textbook is customarily followed in relatively quick succession (in book development terms) by a new edition of The Dictionary of Real Estate Appraisal. So, in early 2022, a new edition of the dictionary will arrive to complement the 2020 publication of the fifteenth edition of The Appraisal of Real Estate. Many longtime users of these reference works may suffer through a period of adjustment, questioning what has changed and why. But remapping the content of the textbook and dictionary serves to move the body of appraisal knowledge forward for the benefit of the profession as a whole and to provide a new, clearer understanding of familiar concepts.

Dictionary Development Process

The Dictionary of Real Estate Appraisal is a core component of the Appraisal Institute’s body of knowledge, as defined by the organization’s board of directors. In the past, an ad hoc project team of reviewers was assembled to serve as subject matter experts to assist in developing the dictionary, but this time around the standing Body of Knowledge Committee was recruited to handle the review and revision of existing definitions and to suggest new entries. One of the Body of Knowledge’s primary duties is ensuring consistency among the components of the body of appraisal knowledge, making this committee the logical group to compare The Appraisal of Real Estate, the Appraisal Institute’s educational materials, and the dictionary terms and definitions for consistency.

The task of developing the new dictionary was not a straightforward manuscript review because a dictionary has a unique quality. Reviewing and revising content for a textbook like The Appraisal of Real Estate is like writing prose, whereas working on The Dictionary of Real Estate Appraisal is like wrestling with poetry. That is, the ordeal of combining words to create a concise definition of a dictionary term requires intense scrutiny of syntax and semantics. Every word in a definition carries an inordinate amount of weight in explaining what a particular term or combination of words is understood to mean within the specific context of professional practice. This type of close reading is not for the faint of heart, but it can be a welcome challenge for those who like to scrutinize the details and argue fine distinctions in potential interpretation and misinterpretation.

Over the course of 2021, competing suggestions for dictionary revisions were debated by members of the Body of Knowledge Committee in numerous online meetings conducted over Zoom as well as on their own time. In fact, all the formal interaction among the core dictionary contributors occurred virtually, both by necessity given the travel restrictions imposed by the pandemic and in the interest of efficiency of working through pages and pages of potential changes. The professional experience and personal commitment of the committee members and the disciplined leadership of the committee chair allowed the review and revision processes to proceed smoothly and, for the most part, pleasurably for all involved despite the physical challenges.

Between the Book Covers

Differences in the content of the sixth and seventh editions of the dictionary can be categorized in three ways:

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2. For an interesting examination of how knowledge evolves over time, see Chuck Klosterman, But What If We’re Wrong? Thinking about the Present as if It Were the Past (New York: Penguin, 2017).
1. New dictionary entries
2. Deleted entries
3. Revisions to existing definitions

This last category includes dictionary entries in which the existing definition did not change substantively, but the term itself was changed for clarity’s sake. For example, the weighted rate entry in the sixth edition was relabeled weighted capitalization rate in the seventh edition.

Unsurprisingly, many changes in definitions relate to consistency between The Appraisal of Real Estate and The Dictionary of Real Estate Appraisal. For example, during the development of the fifteenth edition of The Appraisal of Real Estate, the Body of Knowledge Committee proposed a significantly revised definition of market rent. That wording was adopted by the Appraisal Institute Board of Directors and then integrated into the fifteenth edition of The Appraisal of Real Estate and now into the new edition of the dictionary. Other content changes made in the latest edition of the textbook were similarly integrated into the appropriate entries of the dictionary.

Many of the entries new to the seventh edition of the dictionary can be found in the specialized glossaries in the book’s addenda (Exhibit 1). These glossaries cover areas of practice where subject matter experts have been seeing growth and an accompanying need for more explanatory material. For example, new terms related to energy efficiency and the health of building occupants, which continue to grow in importance to property owners and investors, were added to the Green Building Glossary, including the following:
- air changes per hour (ACH)
- benchmarking regulations
- bifacial solar panels

Similarly, with statistical analysis gaining traction among real property investors and other appraisal clients, many new terms related to statistical modeling were added to the Mathematics and Statistics Glossary, including the following:
- average percentage error (APE)
- calibrated model
- cross-sectional data
- decision rule
- explanatory variable
- forecast standard deviation (FSD)
- holdout sample
- model specification
- omitted variable problem
- panel data
- prediction interval
- quadratic relationship
- random effects model
- spline regression
- type I statistical error
- type II statistical error

Another significant addition to the dictionary is the Appraisal Institute’s Property Use Classification System (PUCS), which is included as a freestanding resource in the addenda.\(^3\) The PUCS content replaces the taxonomy of property types included in previous editions, which originated in a database project almost twenty years ago. That listing of property types was reimagined recently and published as a comprehensive and complete system of classifying real property based on its use.

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3. To download the Property Use Classification System document, go to https://www.appraisalinstitute.org/professional-practice/pucs/.
Exhibit 1  The Dictionary of Real Estate Appraisal, Examples of New Glossary Definitions

Green Building Glossary Examples

air changes per hour (ACH). A measure of how many times an HVAC device can fill up the full volume of a room with air; especially useful when comparing different air purifiers or air conditioners.

engineered wood. A range of derivative wood products that are manufactured by binding or fixing the strands, particles, fibers, or veneers or boards of wood together with adhesives or by other methods of fixation to form composite material; also called mass timber, composite wood, man-made wood, or manufactured board.

net metering. A solar incentive program that allows property owners to store energy in the electric grid; also known as net energy metering (NEM). When solar panels produce more electricity than needed, that energy is sent to the grid in exchange for credits. Then, at night or other times when solar panels are underproducing, the system pulls energy from the grid and uses these credits to offset the costs of that energy.

Mathematics and Statistics Glossary Examples

average percentage error (APE). The computed arithmetic average of percentage errors found by computing the percentage differences between forecasts from a model and the corresponding actual values of the variable analyzed.

decision rule. A formal statement that indicates the circumstances under which a null hypothesis would be rejected.

holdout sample. That portion of a dataset not used in fitting a model but later is used to assess the performance of a model. The holdout sample does not influence the process of fitting a model and is therefore used to independently test the fitted model. See also testing sample.

model specification. A process to determine which independent variables should be included in or excluded from a regression equation. Regression model specification should be based on a theoretical rationale rather than empirical or methodological ones to prevent illogical results.

spline regression. A type of nonlinear regression. A typical regression model results in forcing a global functional relationship for a variable over the entire range of the dataset. To overcome this restriction, a spline model segments the data into unique and separate partitions and different functional relationships for the variable are estimated within each portion of the dataset. The boundary between each unique and separate partition is called a knot, and these knots can be joint (the global spline function is continuous) or these knots can be disjoint (the global spline function is not continuous).
Using the New Edition of the Dictionary

A longtime debate in the dictionary world has been the tension between descriptivism, i.e., defining words as they are used out in the world, and prescriptivism, i.e., defining words as the primary authority in a top-down manner. By its nature, The Dictionary of Real Estate Appraisal falls more into the prescriptivist camp, because it serves as an authoritative reference on what a technical term means to the valuation profession first and foremost.

Indeed, many dictionary users seem to prefer a single, authoritative definition than a list of multiple definitions from various sources. However, a certain level of descriptivism is sometimes necessary when the context of the usage of the term in question dictates what definition is most appropriate. The most obvious example of unavoidable descriptivism is the presentation of the various definitions of market value that may be appropriate in different appraisal situations. Despite the efforts of the dictionary reviewers to eliminate excess verbiage (and sometimes extraneous definitions such as in the existing fair value and standard depth entries) in the interest of clarity and conciseness, sometimes multiple definitions are necessary, and users of the dictionary have to make informed decisions for themselves of which definition to use.

Optimizing the experience of users of the dictionary was a significant goal of the development process. The digital version of the dictionary, which has been extremely popular with users, has not changed radically with the new edition. The dictionary was the first Appraisal Institute text to be made available digitally back in 2002, and the digital version has evolved with the available technology, from CD-ROMs to Web-based applications to a searchable PDF version. Dictionary users familiar with its PDF version will have a smooth transition to the digital version of the seventh edition because the PDF functionality is largely the same.

As always, The Dictionary of Real Estate Appraisal will likely remain the most cited reference work in an appraiser’s library. Users of the book should expect to see some familiar definitions and some exciting new content, and to experience an occasional mental stumbling block along the way because the body of knowledge does continue to shift the tectonic plates underneath the feet of appraisers, sometimes at a glacial pace and in rare instances volcanically. Please be reassured that the learning curve for adapting to the latest edition of The Dictionary of Real Estate Appraisal should be manageable for serious practitioners, and soon enough the evolving language of valuation will be as familiar as the names of the nine—no, eight—planets of the solar system.

About the Author

Michael McKinley has been a book editor at the Appraisal Institute since 1998. He served as technical writer for the development of the four most-recent editions of The Appraisal of Real Estate, the third and fourth editions of Appraising Residential Properties, the four most-recent editions of The Dictionary of Real Estate Appraisal, as well as Review Theory and Procedures: A Systematic Approach to Review in Real Property Valuation, Real Property Valuation in Condemnation, and Rural Property Valuation. He has also edited numerous Appraisal Institute monographs and handbooks. Contact: mmckinley@appraisalinstitute.org