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AICPA
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AUDIT AND ACCOUNTING GUIDE

GUIDE FOR THE USE OF REAL ESTATE APPRAISAL INFORMATION

PREPARED BY THE REAL ESTATE COMMITTEE

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NOTICE TO READERS

This audit and accounting guide presents recommendations of the AICPA Real Estate Committee for the application of generally accepted auditing standards to audits of financial statements of entities that use real estate appraisals. It represents the considered opinion of the committee on the best auditing practice in the industry and has been reviewed by members of the AICPA Auditing Standards Board for consistency with existing auditing standards. AICPA members may have to justify departures from the recommendations contained in this guide if their work is challenged.

The committee gratefully acknowledges the contributions made to the development of this guide by former chairmen Kenneth A. Mounce and George L. Yungmann; former committee members Marvin L. Baris, Morton Barrows, James F. Boler, David Crumpton, James M. Crosser, Donald R. Davis, Robert C. Fields, Robert E. Fischer, Robert R. Garland, Marvin A. Goldman, Mandel Gomberg, Maritza Gomez, Julian H. Gutterman, Saul Hammerman, John M. Hollenbeck, Nicholas Iacuzio, James J. Klink, Aram G. Kostoglian, James H. Kropp, Arthur J. Miller, Henry J. Murphy, Irwin Lipton, William A. Loscalzo, Gerald M. Lutzky, Gerald Marsden, Leon F. Mayshak, Patrick M. Miniutti, Arthur B. Newman, James J. Ogorek, John H. Stafford, Martin E. Stauffer, Howard L. Stone, Robert R. Threatt, Gary T. Wescombe; and former staff aide Thomas W. McRae.

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Preface

The AICPA Real Estate Committee has prepared this guide to assist independent auditors in—

- Understanding the real estate appraisal process, its valuation concepts, and principles.
- Using real estate appraisal information in examinations of financial statements.
- Applying Statement of Auditing Standards (SAS) No. 11, *Using the Work of a Specialist*, to the work of a real estate appraiser.

The guide may also be useful to preparers of financial statements and others.

Generally accepted accounting principles (GAAP) require financial statements of business enterprises that own interests in real estate or assets related to real estate (real estate assets), such as receivables collateralized by real estate, to disclose information on the carrying amounts of the assets, and, in some circumstances, other financial information concerning the assets. An enterprise may use various specialized procedures and approaches to develop information to satisfy those requirements—procedures and approaches ranging from comprehensive estimates of current market value or replacement cost to the development of general or specific valuation information representing less than a comprehensive estimate of current market value or replacement cost. Information on real estate values provided by appraisers may differ from measurement of value required by GAAP. This guide refers to information obtained through the application of real estate appraisal techniques as *valuation data*.

The third standard of fieldwork requires that the independent auditor obtain sufficient competent evidential matter to provide a reasonable basis for expressing an opinion on the financial statements. The auditor should accumulate that evidence to support an opinion, but the financial statements are the representations of management, which has the primary responsibility for those finan-

cial statements. An appraisal prepared by a real estate appraiser—a person experienced in applying real estate appraisal techniques—may be part of the evidence of value of real estate used by the auditor to support an opinion. The appraisal may already have been prepared or may be commissioned to provide pertinent information not otherwise available. The appraiser may be employed by the entity or be an independent appraiser.

The auditor uses judgment to determine whether an appraisal is needed as audit evidence on financial statement amounts and disclosures. Factors that may influence the auditor's judgment include—

- The materiality of the amounts or disclosures to the financial statements taken as a whole.
- The degree of risk involved, including the possibility that financial statements are misstated.
- The potential magnitude of the adjustments or significance of additional disclosures that could result from obtaining an appraisal.
- Other information available that supports valuations.

Chapter 1

Valuation Concepts

Under generally accepted accounting principles (GAAP), certain transactions or events may require the consideration or recognition of the fair value or net realizable value of real estate assets. Appendix A lists certain accounting pronouncements that may involve the use of real estate valuation data. That literature generally discusses the use of—

- The fair value of assets in nonmonetary transactions, troubled debt restructuring, quasi-reorganizations, and business combinations accounted for by the purchase method.
- The net realizable value of assets in situations involving the evaluation of carrying amounts of properties held for disposition and properties representing collateral.

Fair Value

Fair value is defined in several authoritative accounting pronouncements: FASB Statement No. 13, *Accounting for Leases*; FASB Statement No. 15, *Accounting by Debtors for Troubled Debt Restructurings*; and FASB Statement No. 67, *Accounting for Costs and Initial Rental Operations of Real Estate Projects*. Although the definitions are phrased to fit the circumstances to which the pronouncements refer, fair value is generally defined as the amount that can be reasonably expected to be received in a current sale between a willing buyer and a willing seller, other than in a forced or liquidation sale.

The auditor can generally relate the definition of fair value in the accounting literature to the appraiser's definition of *market value*. The American Institute of Real Estate Appraisers (AIREA) defines market value as the following:

> The most probable 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.[1]

The conditions and assumptions implicit in the AIREA's definition of market value are the fundamental economic concepts of utility, scarcity, desire, and purchasing power. They require—

- A motivated buyer and a motivated seller.
- Well-informed or well-advised parties acting in their best interests.
- A reasonable time for exposure in the open market.
- Payment in cash or its equivalent.
- Financing, if any, on terms that are generally available in the community at the specified date and that are typical for the type of property in its locale.
- Pricing at a normal consideration for the property sold, unaffected by special financing amounts, terms, services, fees, costs, or credits incurred in the transaction.

In addition, the market value of a real estate property is influenced by the following factors:

- *Social*—Population trends, changes in architectural designs, and other changes in social values and preferences
- *Economic*—Quantity, quality, and location of natural resources; commercial and industrial trends; price levels, interest rates, tax burdens; availability of money and credit
- *Governmental*—Zoning, building codes, and ordinances, such as rent controls and special-use permits
- *Physical or environmental*—Climate and topography, land (soil and subsoil characteristics), location, technological advances affecting land use, proximity of transportation and roads

Net Realizable Value

The term *net realizable value* (NRV) is defined in FASB Statement No. 67, *Accounting for Costs and Initial Rental Operations*

1. American Institute of Real Estate Appraisers, and Society of Real Estate Appraisers, *Real Estate Appraisal Terminology*, compiled and edited by Byrl N. Boyce (Cambridge, Mass.: Ballinger Publishing Co., 1982), 160.

of Real Estate Projects, as "the estimated selling price in the ordinary course of business, less estimated costs of completion (to the stage of completion assumed in determining the selling price), holding and disposal."

It may be necessary to determine net realizable value for accounting purposes to provide for losses and to adjust carrying amounts in circumstances such as those involving the voluntary or involuntary disposition of assets. Market values or future selling prices resulting from the appraisal process are generally used as a basis in calculating net realizable value. Adjustments generally required to convert market values or future selling prices to NRV include the current owner's costs to complete the project, if any, disposal costs, and holding costs.[2]

The owner's plans for the disposition of the property should affect the appraiser's approach in determining market value. For example, the owner of a tract of single-family houses under construction may dispose of it before completion or may complete it and market the homes to potential homeowners. If the project is to be sold to another developer before completion, calculation of market value would also be affected (1) by reduction for an estimated profit that a potential purchaser-developer would expect to realize by completing the project and (2) by a discount factor that recognizes an appropriate interest rate and an expected development period. In either circumstance, the owner should make certain adjustments to the appraiser's valuation data to measure the net realizable value of the project. The owner, with the help of the appraiser, identifies the value of the property and is responsible for the valuation. The auditor uses the valuation data to the extent considered necessary to obtain reasonable assurance that the financial statements that are, in part, based on that valuation data are not materially misstated.

2. The AICPA's audit and accounting guide, *Savings and Loan Associations*, and Statement of Position 75–2, *Accounting Practices of Real Estate Investment Trusts*, require interest to be included as a holding cost in determining net realizable value in the industries discussed. The Real Estate Committee believes that there is diversity of practice in other segments of the real estate industry regarding the inclusion of interest as a holding cost in determining net realizable value, and this guide takes no position thereon.

Chapter 2

The Appraisal Process

A *real estate appraisal* is defined as "an unbiased estimate of the nature, quality, value, or utility of an interest in or aspect of, identified real estate."[1] Appraisers generally define an appraisal as either a valuation or an evaluation of real estate. A *valuation* is "the process of estimating market value, investment value, insurable value, or other properly defined value of an identified interest or interests in a specific parcel or parcels of real estate as of a given date."[2] (Estimating a property's market value is an example of a valuation assignment.) An *evaluation*, which is defined as "a study of the nature, quality, or utility of a parcel of real estate or interests in, or aspects of, real estate without reference to a value estimate,"[3] may be an assignment to prepare an economic feasibility study, supply and demand study, or an analysis of highest and best use. For the purposes of this guide, however, the term *appraisal* generally refers to the valuation of real estate.

The purpose for which the appraisal is being obtained and the bundle of rights to be appraised is determined by those whose interest is being appraised (for example, owners in fee simple, lenders, or lessees). The description of the appraisal process in this chapter is intended to assist the auditor in considering appraisals.

Judgment is needed in the appraisal process to select the most reasonable assumptions and appraisal techniques and methods that are based on existing data. Although two or more appraisals may result in different estimates of value for the same real estate rights, significant differences should be reconcilable based on analysis of the underlying assumptions and judgments in each appraisal.

1. American Institute of Real Estate Appraisers, *The Appraisal of Real Estate* (Chicago: AIREA, 1983), 11.
2. Ibid.
3. Ibid.

This chapter gives an overview of the appraisal process for real estate assets. For a more complete description of that process, publications such as those listed in the Selected Bibliography should be consulted.

The Valuation Process

Exhibit 1 lists the steps that the appraiser may perform in analyzing a property to estimate its market value.

Highest and best use is a basic principle used in the valuation process. The concept of highest and best use is based on the assumption that real property will be put to the legal use that will be likely to produce the greatest net return for the property over a reasonable period of time. An appraiser considers the following factors in estimating the highest and best use of a parcel of land:

- Physically possible uses
- Legal alternative uses
- Reasonable and probable uses that are not speculative or conjectural
- Appropriately supported and financially feasible uses that will result in the highest land value
- Profitable demand for alternative uses
- The use that will produce the highest net return

The factors described apply specifically to the highest and best use of land. The highest and best use of a site that has existing improvements may be different from its existing use.

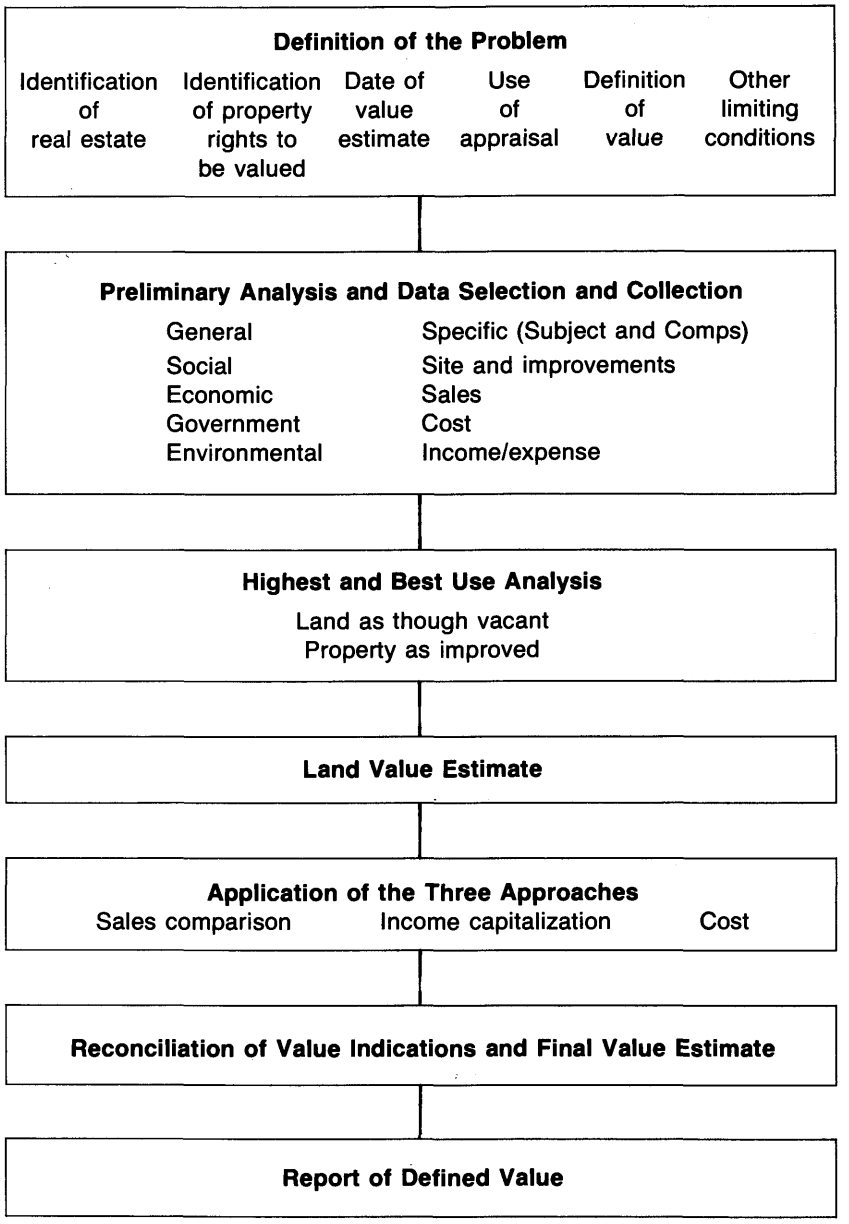
Value of Land

An important element of many appraisals is the determination of land value by site analysis. In many circumstances a future use for the parcel of land is anticipated. Site analysis considers the unique aspects of each parcel of land, such as its location and physical and economic characteristics. Four basic methods are commonly used for the valuation of land:

1. *Market data method*—Sales of similar unimproved parcels are analyzed and related to the parcel being appraised.
2. *Allocation method*—Sales of similar improved properties are analyzed and the prices paid are allocated between land and improvements. The allocated land portion is related to the property being appraised.

EXHIBIT

The Valuation Process



Source: American Institute of Real Estate Appraisers. *The Appraisal of Real Estate.* 8th Edition (Chicago: American Institute of Real Estate Appraisers, 1983), 43. Reprinted with permission of American Institute of Real Estate Appraisers.

3. *Development method*—The ultimate sales value for the property as fully developed to its highest and best use is estimated and adjusted as follows:
   — The anticipated development costs, carrying charges, and developer's profit are deducted from the ultimate sales value.
   — An estimate of future net cash flow is discounted at a rate to recognize the risk and passage of time required to complete the improvements.
4. *Land residual method*—Future cash flow for the improved fully rented site is estimated based on the highest and best use of the land. The net cash flow attributed to the land, after all operating expenses and return to other components have been deducted, is capitalized or discounted to its present value to estimate land value.

Value of Improved Real Property

Three basic approaches are used in appraising the market value of improved real property:

1. *Cost approach*—The cost approach applies the concept of reproducing (considering a depreciation factor) or replacing the existing improvements to which an estimate of land value is added.
2. *Market data or comparable-sales approach*—The market data approach uses information on recent sales of similar properties.
3. *Income approach*—The income approach capitalizes or discounts the property's net cash flows to present value.

Although the application of all three approaches to a particular property may be desirable, one approach—such as using the market data approach to value unimproved land or using the income approach to value operating rental property—may be most appropriate under a given set of circumstances. However, there is a close relationship between the three approaches, and many appraisers apply all, if possible, to obtain sufficient data to corroborate their conclusion of market value.

Cost Approach. Two key concepts underlying the cost approach are (1) the reproduction or replacement cost new and (2) accrued depreciation.

- *Reproduction or replacement cost new*—Reproduction cost new is the current cost of creating a replica improvement by using the same or similar materials. Replacement cost new is the current cost of creating improvements having equivalent utility (productive capacity) by using current technology and materials. The replacement-cost-new approach eliminates the need to consider accrued depreciation for functional obsolescence.
- *Accrued depreciation*—Accrued depreciation is an estimate based on inspection of a property and analysis of a decline in value because of physical deterioration, functional obsolescence, and economic or external obsolescence.

In applying the basic concepts of the cost approach, the appraiser does the following:

1. Estimates the value of the existing improvements in terms of either reproduction or replacement cost new
2. Reduces that value by the applicable amount of accrued depreciation
3. Adds an estimate of the value of land as if vacant and unimproved to the indicated market value of all improvements derived in the first two steps

The difficulty of estimating accrued depreciation may limit the usefulness of the cost approach.

Market Data or Comparable-Sales Approach. The market data approach is used to derive a market value for the property being appraised. The sales prices of similar properties, often referred to as *market comparables*, are used if sales data about a sufficient number of comparable properties are available.

The principle of substitution is used in the market data approach because in most situations a knowledgeable buyer will not pay more for a property when a comparable property is available at a lower price. The three steps used in the market data approach are as follows:

1. *Locating comparable properties*—The property being appraised is inspected, and its characteristics of size, location, and improvements are described. A sufficient number of comparable properties are located and inspected to identify similarities and dissimilarities in size, location, and improvements in relation to the subject property. Sales data are accumulated from

recorded sales, listings, and available rental and option information. The information is verified by interviews, examination of public records, reference to advertisements, examination of multiple listings, and discussions with realtors, bankers, and other knowledgeable individuals.

2. *Comparing each comparable sale with the subject property*—Because no two properties are exactly alike, adjustment of the comparable sales data is necessary to eliminate the effect of dissimilarities. Adjustments may be required for factors such as terms of sale, time of sale, location, physical characteristics (for example, the type of land), dissimilar lease terms, differences in improvements, age, deterioration, zoning restrictions existing at the time of sale, and other conditions influencing each sale (for example, bargained transactions, forced sales, or financing terms).
3. *Determining property value*—The final estimated market value under the market data approach is determined by comparing all indicated values and by giving most weight to values indicated by the most relevant comparable sales.

The primary objective of the market data approach is to obtain a cash-equivalent sales price for a comparable sale, after adjusting the comparable for timing, location, physical characteristics, and other nonfinancial factors (equivalency can also be affected by transactions between related parties or transactions in which one party is compelled to act). *Cash equivalency* is the amount that would be received (or paid) in a cash transaction or in a transaction in which financing was obtained at market rates. It may be difficult (or impossible) to obtain the terms of sale of a comparable property because this information may not be publicly obtainable or available from other sources. If such information is not available, cash equivalency cannot be determined and the appraiser may not be able to give great weight to comparable sales.

The results of the market data approach may not be valid if sufficient recent sales of comparable properties are not available. Although an assumption of this approach is that there are an informed buyer and seller with profit motivation, situations unrelated to the property—such as the relationship of the buyer and the seller, tax considerations, financing at interest rates that differ from market rates, or death of the property's owner—may affect prior sales prices. To arrive at comparable sales value, adjustments will be required to compensate for those factors.

Income Approach. Appraisers consider the income approach to be the most useful method for valuing income-producing properties such as shopping centers, apartment buildings, office buildings, hotels, and industrial buildings, which are usually bought and sold based on their actual earnings, potential earnings, or both. To use the income approach, a property's net income is calculated and converted to an estimate of market value by applying market-derived discount rates, capitalization rates, or both.

The first step in applying the income approach is to determine a property's anticipated annual gross revenues from all sources. That amount consists of contractual rents due on existing leases, including amounts from the leasing of parking spaces and from anticipated overage rents from retail tenants based on percentages of their sales, as well as the appraiser's assessment of the rental value of unleased space based on a market analysis of rents paid on comparable space at the same or comparable locations. The appraiser generally examines and analyzes information about the operations of existing properties during the prior three to five years.

Information about a property's actual and potential revenues is used to calculate its gross income based on full utilization. However, unless a property is fully leased to one or more creditworthy tenants on long-term leases, it typically would not achieve its full gross income potential because of vacancies and collection losses. A vacancy allowance may be estimated from the property's historical operations, neighborhood trends, competitive properties, and expected competitive supply. *Effective gross income* is the term appraisers use for the amount that results when the allowance for vacancy and collection losses is deducted from gross income.

Net operating income (NOI) is calculated by reducing effective gross income by the estimated amount of expenses that will be incurred to provide services to tenants and to maintain the property's income stream and income-producing capability. Those expenses include fixed expenses, such as property taxes and insurance, and variable expenses, such as administrative expenses and maintenance and repairs. The appraisal should support chosen expense levels based on expenses actually incurred for the subject property or expenses for comparable properties. In addition, an allowance for replacement of short-lived assets—such as carpeting, appliances, furniture, and fixtures—is a fixed expense required to sustain a projected income level; it should be deducted in determining net operating income.

The appraiser generally uses one of two techniques—the direct capitalization method or the discounted cash flow method—to convert net operating income, either existing or future, into value. Generally, the discounted cash flow method is used for large properties having complex leasing arrangements and is favored by most large developers and investors. The direct capitalization method is used for other properties having less complex leasing arrangements. Either method might be used to confirm the results of the other. A brief discussion of each method follows.

Direct Capitalization Method. In its simplest terms, value is determined by the direct capitalization method by dividing net operating income by a rate of return known as the capitalization rate. The capitalization rate is determined by the market—that is, the rate used in or derived from comparable sales. Appraisers use various techniques to determine the capitalization rate necessary to convert stabilized net income to an economic value. The appraisal report should support the appraiser's choice of a capitalization rate. The best support, if available, is from an analysis of a number of recent sales of comparable properties.

To use the direct capitalization method, it is necessary to determine the income and expense levels and resulting net operating income for a stabilized year in the property's life, which is the earliest year in which the property reaches its ultimate level of occupancy with rentals at current market levels. New properties may require more than one year to reach a stabilized occupancy level. If stabilized net income is not expected to be achieved until more than one year after the date of the appraisal, the value determined by capitalizing that net income is discounted.

An advantage of the direct capitalization method is that it is simple to apply, particularly if the property's net operating income is not expected to fluctuate greatly. However, the method has many disadvantages, particularly for valuing major properties with staggered lease expirations, properties in the initial leasing phase, properties leased on graduated rental rates, and properties for which the sharing of expenses by the landlord and tenant vary from one lease to another. It is preferable to use the discounted cash flow method to value these types of properties.

Discounted Cash Flow Method. Because a buyer of investment real estate often attempts to forecast a property's future perfor-

mance to estimate the anticipated yield or internal rate of return for the proposed investment, the discounted cash flow method has become a widely used valuation method under the income approach. The method enables appraisers to deal with complex leasing arrangements for which the direct capitalization method is not appropriate.

In using the discounted cash flow method, the appraiser prepares or uses a forecast of the property's income and expenses for each year during the holding period until an assumed sale of the property. Typically, market rents and expenses are assumed to grow at standardized rates. Rental income from existing leases is used in the forecast assuming that options favorable to the tenant will be exercised. Expenses related to the property and the extent of sharing of those expenses by the landlord and tenant are determined for individual leases.

Under the discounted cash flow method, all future receipts or payments of cash are discounted using a market rate. The resulting amount is the value of the property. The discount rate used is the rate of return that investors require as a condition of purchasing the type and class of property being appraised. The rate may vary, depending on economic and other conditions, but generally should be based on market rates, reflecting the rate of return demanded by buyers of comparable properties. In addition, the following factors should be considered in determining the discount rate:

- Recovery of the investment over its estimated economic life
- A safety factor to recognize additional risk, management burden, and lack of the buyer's liquidity
- An investment factor to recognize the property's quality of income, its marketability, and tax advantages

Certain Techniques Under the Income Approach. Appraisers use certain techniques under the direct capitalization or discounted cash flow methods, which include the following:

- The *band-of-investments method*, under which a capitalization or discount rate is derived as a weighted average of the rates applicable to the mortgage debt on the property and the investor's equity in the property. Generally, the method is not used unless financing is available.
- The *mortgage equity method*, also known as the "investor's method," in which the value of the equity in the property is

determined using either the direct capitalization or discounted cash flow method. The capitalization or discount rate is applied to net operating income after debt service to determine equity value. The mortgage balance is added to determine the property's value. The mortgage equity method is used for properties having unconventional financing arrangements. To use this method, the mortgage must be assumable by a buyer. The Ellwood method, which is a specialized version of this method, uses factors from the Ellwood capitalization rate tables. It is used more as a corroborative valuation method than as a primary valuation method.

- The *annuity* or *Inwood method,* under which factors from compound interest annuity tables (Inwood tables) are applied to net operating income and estimated residual value. This method is generally used only in valuing properties subject to long-term leases with fixed, level, periodic payments over a fixed term.
- *Residual techniques*, which are used more often to derive the value of a component of a property, such as land or building, than to determine total property value. Net operating income is allocated separately to the land and to the improvements. The capitalization rate used to value the improvements includes a factor for an eventual loss in value (or return of investment) and differs to that extent from the capitalization rate used to value the land component, which reflects an investment rate of return. The sum of the values of the two components represents the value of the entire property.

Reconciliation of Value

The appraiser's use of several procedures in valuation generally results in several different estimates of a property's value. The final step in the appraisal process, therefore, is to compare, correlate, and reconcile the estimates to arrive at a single estimate of the property's value. The single estimated value is not a weighted average of the results indicated under the different approaches, but it is the appraiser's best estimate of value based on the data. The appraiser considers the purpose of the appraisal, the type of property being appraised, the adequacy and reliability of supporting data, and the reasonableness of assumptions used in making a final determination.

Final Estimate and Report of Defined Value

The form, length, and content of appraisal reports vary, depending on the type of property and the nature of the assignment. (Appendix B discusses in detail the form and content of an appraisal report.)

Chapter 3

Selection and Evaluation of a Real Estate Appraiser

Selecting and Instructing the Appraiser

Financial statements are the representations of management, who are responsible for fair presentation of the statements in conformity with generally accepted accounting principles. When an appraiser determines or assists management in determining the values of real estate assets or assets collateralized by real estate that are included or disclosed in financial statements, management's responsibility does not change, although the appraiser is responsible for the quality of his or her own work.

The auditor may sometimes specifically request that valuation data be prepared for an audit and may become involved in the selection of the appraiser. If so, the auditor, the appraiser, and client representatives responsible for financial accounting and reporting matters should agree on the nature and scope of the work to be performed. (Paragraph 7 of SAS No. 11 provides the auditor with additional guidance.) The appraiser should generally be informed about the owner's plans and intentions for the property and about the eventual intended use of the appraisal report. The auditor should consider what information is required and should ask the appraiser to provide that information in the report. Such information may include, for example, support for significant assumptions, market analyses, comparable sales, and capitalization or discount rates used. If existing financing is considered in the appraisal process, the terms of the debt and their effect on the value conclusion also should be disclosed in the appraisal report. If such support will not be included in the appraisal report, arrangements should be made during the planning phase for the auditor to have access to the appraiser's supporting documentation.

The Auditor's Consideration of the Appraiser's Qualifications

In assessing the adequacy of the audit evidence provided by the appraiser's conclusions, the auditor should consider the appraiser's qualifications, reputation, and professional standing as required in SAS No. 11, paragraph 5.[1] Though not specifically required by SAS No. 11, the auditor should consider inquiring about the appraiser's familiarity with or plans to become knowledgeable about the type of property being appraised, the market in which the real estate is located, and other factors that can affect valuation, such as local laws and regulations on real estate. In addition, the auditor should consider the appraiser's relationship to the client, as discussed in SAS No. 11, paragraph 6.

The work of an appraiser who has an ongoing relationship with the client may provide acceptable audit evidence. For example, many entities that deal in real estate employ personnel qualified to apply real estate appraisal techniques. SAS No. 11, paragraph 8, applies to the work of such an appraiser. It indicates that the auditor should consider performing additional procedures for some or all of the information obtained from a specialist who is related to the enterprise being audited. In the case of valuation data, such procedures may include a more intensive review of some or all of the related appraiser's assumptions, methods, and conclusions to determine whether the findings are not unreasonable or whether the auditor may need to engage an appraiser who is not related to the enterprise.

1. The AICPA's *Professional Standards*, vol. 1, AU section 9336.05, which is an interpretation of SAS No. 11, states that "when a specialist with the auditor's firm provides advisory services to a client and the auditor decides to use the specialist's work as evidential matter, he should follow the guidance in section 336."

Chapter 4

The Auditor's Consideration of Valuation Data

The auditor may use the work of a real estate appraiser as evidential matter supporting valuations of real estate investments and assets collateralized by real estate in the audited financial statements and in special purpose financial statements (such as current-value financial statements) accompanying the financial statements.

The auditor may use an existing appraisal report or may request a report. The auditor may rely, in varying degrees, on appraisals as audit evidence, depending on the auditor's understanding of the purpose of the appraisal, the methods and assumptions underlying its conclusions, the intended use of the information, significant events that may have occurred between the date of the appraisal report and the date of the financial statements, and similar factors. An auditor who relies on an appraiser as a specialist, as defined in SAS No. 11, should refer to the provisions of that statement.

In reviewing the appraiser's findings, the auditor should be aware of the fact that subjective determinations inherent in the appraisal process can affect appraisal values significantly.

The appraiser is responsible for determining and using appropriate and reasonable methods and assumptions. The auditor ordinarily relies on the work of the appraiser unless the auditor's procedures lead to the belief that the appraiser's methods, assumptions, or findings are unreasonable. In reviewing the appraiser's findings, the auditor may consider—

- The purpose of the appraisal.
- Whether the data is based on the required definition of market value.
- Whether the number and quality of market comparables appear reasonable.

- Whether sales prices that are used to determine market comparables have been adjusted to cash equivalency for financing terms that are other than at market.
- Whether capitalization rates, discount rates, financing terms, and projections of net income or loss and cash flow appear reasonable in terms of market conditions.
- Whether assumptions about the rate of future sales, sales prices, selling costs, and costs to complete appear reasonable.
- Whether assumptions about the development or other use of the property appear reasonable.
- Whether the developer's profit has been deducted.
- Whether the computations and the rationale underlying the computations supporting valuation data appear appropriate.

The auditor should test the accounting data provided by the client to the appraiser. In addition, the auditor may sometimes need to inquire further or to perform additional procedures, such as independently verifying significant data contained in the appraisal report, examining documents and other information used by the appraiser, speaking with the appraiser, and correlating the appraiser's findings to other available audit evidence, or engaging another appraiser to evaluate the reasonableness of the valuation data.

Assumptions and Uncertainties in an Appraiser's Report

An appraisal is almost always based on various assumptions about the future use of the property, amount of income to be received, selling price, expenses, and so forth. Some of those assumptions are reasonable estimates. Others, which are referred to in this guide as uncertainties, may involve matters having an outcome that is not susceptible to reasonable estimation. In reviewing an appraisal report, the auditor should be aware of the appraiser's assumptions, especially if they involve material uncertainties. Assumptions and uncertainties may or may not be clearly identified as such in the appraiser's report. Some appraisers may, for example, describe significant uncertainties in a separate section having a descriptive title, such as "Qualifications and Limiting Conditions." Other uncertainties and assumptions may be indicated in various sections of the appraiser's report, and some may not be identified at all.

Because an appraisal is generally based on anticipated future outcomes, virtually all significant factors may involve assumptions and uncertainties. Examples of assumptions and uncertainties include the following:

- Occupancy and revenue levels
- The capability of management to develop, sell, or operate the property
- Increases in certain expenses, such as utilities, insurance and maintenance
- Construction and development costs
- The amount of debt service, or interest on construction loans
- A change in zoning for the use of the property
- The construction of a planned new highway
- The possibility that another property, which could significantly affect the income-producing capability of the subject property, could be developed within the vicinity
- That a specific property necessary for completion of the proposed project will be acquired at an economical cost
- That certain environmental objections will be resolved

The appraiser may or may not be able to make a reasonable estimate for any of those assumptions or uncertainties. For example, the construction of a planned highway may be probable if all approvals have been granted, if there is no opposition, if construction contracts have been agreed on, and if funding is available. The outcome may be unpredictable in other circumstances. The appraiser's conclusions are generally stated in the report.

If an auditor believes that the appraiser's assumptions are not adequately supported or that material uncertainties exist, the auditor should discuss the assumptions with the appraiser to better understand the significance of these uncertainties. In addition, the auditor may be aware of facts that cause a belief that there are significant uncertainties that have not been identified in the appraiser's report. In that circumstance, the auditor should consider communicating directly with the appraiser about the existence of such uncertainties and their effect on the valuation.

The appraiser may have limited the investigative procedures by obtaining data and analyses from the client without independent verification (such as information about costs to complete the project, legal or title considerations, and assumed zoning or development permits). The appraiser generally describes that information

under a separate section identified as qualifying and limiting conditions or in another part of the report (see appendix B). The auditor should evaluate the significance of the qualifications and limiting conditions in the appraisal report. If material to the overall valuation of the property, the auditor should make appropriate tests of the accounting data given to the appraiser by the client, and consider applying other appropriate auditing procedures, for example, engaging the assistance of legal counsel or other professionals.

Alternatively, the auditor may also ask the appraiser to extend the scope of his or her work. In addition, the auditor should consider whether, based on the appraiser's defined procedures, the information about the property available to the appraiser and the reasoning by which an estimate or final opinion of value was reached, appear sufficient in scope to support the reported conclusions.

Conditions That May Affect the Validity of Valuation Data

As discussed in chapter 6, "Reporting Considerations," the auditor's inability to obtain relevant and meaningful data may limit the scope of the examination. A scope limitation or uncertainties about available information may cause the auditor to modify the report. The following are examples of conditions that may affect the validity of valuation data.

Market and Economic Conditions. Real estate valuation is based on the assumption that there is a willing seller and a willing buyer. However, the appraiser's opinion may be acceptable even if there is no willing buyer immediately available at other than distress prices if the auditor is satisfied about the following:

1. The valuation method is reasonable.
2. The entity intends to and has the financial strength to hold the property for a reasonable period of time.
3. The lack of buyers is the result of a temporary condition, such as the lack of financing at reasonable costs.

A determination of what is a reasonable period of time to realize the appraised value of the assets requires the auditor to consider all relevant circumstances, such as whether the property is currently ready for sale or whether the entity intends to and is capable of

completing development of the property and carrying it until the time of sale. The estimated selling price should reflect the expectations of a sale in the reasonably near future—not in an indefinite future period.

The Entity's Financial Condition. The entity's financial condition is a significant consideration in the auditor's evaluation of valuation data. For example, an analysis of a rental property based on an assumed increase in the occupancy level through necessary improvements or repairs that will attract new tenants may not be acceptable if the entity cannot raise or internally generate the necessary funds to make those improvements. Similarly, an assumed increase in the occupancy level over an extended period during a time of economic decline may not be acceptable if the entity's financial condition indicates that an earlier disposal may be required. If a disposal of the property is probable, it should be valued on the basis of existing conditions.

Undeveloped Land. The market-comparables approach is usually the most reliable approach for estimating the value of undeveloped land. When few sales are available for comparison or when indications of value through sales comparisons need substantiation, other valuation approaches, such as the allocation, development, or land residual methods, may be used. (Those methods are discussed in chapter 2.) The appropriateness of the data may be affected by certain conditions, such as the lack of a need for such a development in the vicinity, absence of required zoning for the proposed improvement, indications that environmental constraints would create problems in obtaining building permits, or other contractual obligations that limit the development of the project for certain uses. The auditor should also consider whether the assumptions used for costs of construction, revenues, operating costs, risk rate of return, and an adjustment for developer's profit are reasonable. In addition, the auditor should consider the effect on the value of undeveloped land of assumptions about the rate of market demand used for long-term projects. If a method other than the market-comparables approach is used to value undeveloped land, special care is required to be sure that properties are not overvalued.

If large tracts of undeveloped land are held for sale by retail subdividers and sales volume has significantly declined, the owner may intend to sell the land to alternative users, such as residential

builders or commercial and industrial developers. In those circumstances, the land value should be based on the probable near-term alternative use.

Proposed Condominium Conversions. An entity may decide to convert a rental property into a condominium and propose to value the property on the basis of the total anticipated selling prices of the units, less estimated cost of conversion. Valuation of that property should be based on its rental features unless the proposed conversion is probable. Events to be considered as evidence that the conversion will be accomplished include—

- Availability of feasibility or market studies that indicate a demand for condominiums in the vicinity.
- Notification of tenants.
- Availability of conversion financing.
- Availability of commitments for loans to qualified buyers.
- Approval of filings with regulatory agencies.
- Offering units for sale.

Properties Subject to Foreclosure Proceedings. If a property subject to a mortgage is in default and the lender has started foreclosure proceedings, valuation of the property may be affected. In place of foreclosure, a lender may take possession of a property in accordance with rights under the lien and may collect rents from tenants and make the required disbursements. A government body may also institute foreclosure proceedings for nonpayment of real estate or other taxes under similar circumstances. However, if it is probable that the entity can regain its rights of ownership, foreclosure proceedings may not affect the valuation of the property. The auditor should consider costs, if any, of reacquiring the property, which may affect the valuation of the property.

Troubled Loans and Receivables Collateralized by Real Estate. Operating or other data applicable to collateral property, which may be required for valuation purposes, may not be available in troubled debt situations. In addition, the lender may be unable to gain timely possession of the collateral, a fact that can adversely affect its value.

Chapter 5

Estimates of Value Not Involving Appraisals

Approaches to Value Not Requiring Appraisals

To minimize the time, effort, and expense of the valuation process, an entity may use various approaches to estimate value or measure performance without using the services of an appraiser. For example, an entity may determine value by capitalizing current cash flows from its operating properties. The rates of return and cash flows that the entity uses for specific properties are critical to the overall conclusion of value because variations in assumed rates of return or cash flows can significantly affect the resulting valuation.

However, estimated values derived by using the capitalization approach may not reflect possible negative or positive factors that an appraiser would normally consider in the valuation process (for example, vacant space). Accordingly, alternative methods of estimating value should be considered.

An entity may also be able to value a property without using an appraiser by referring to a written purchase offer that has been rejected by the entity or that is still outstanding. Before accepting such evidence as a basis for valuation, the auditor should consider the following: relationships between the parties, if any, whether the offer is at arm's length, the offer's terms, the reasons for its rejection, the creditworthiness of the offeror, and the necessity to confirm the current status of the offer with the offeror.

In evaluating internally derived valuation data as audit evidence, the auditor should understand the methods and assumptions used by the entity and should be aware of inherent subjective determinations in estimating value that may be significant to the valuation process. The auditor should consider the reasonableness of the following:

- Assumptions about the future use of the property
- The entity's development or investment plans, based on the auditor's knowledge of the entity's financial condition
- The entity's estimates of future operations of the project by comparison with historical results for the project or available independent data for comparable real estate
- Capitalization rates or discount rates used to convert income or future benefits to value, as indicated by a comparison with market rates considering risk

The auditor should also consider—

- Testing a purchase offer by using procedures such as examining supporting documentation, evaluating the terms of the offer and the creditworthiness of the offeror, determining whether the transaction is at arm's length, confirming the current status of the offer with the offeror, and inquiring of management why an offer was rejected.
- Testing information about sales prices, selling costs, and costs to complete used in determining value by comparing the amounts to corroborative evidence, such as sales contracts, commission contracts, estimates to complete, budgeted costs, and the entity's previous performance.
- Comparing the data with recent comparable sales by the entity or with recent sales prices for comparable properties in the market, as determined from information obtained from real estate agents or brokers. This comparison includes an evaluation of financing terms, adjustments that may be necessary for below-market interest rates, downpayment terms, and other contractual relationships that may affect the sales price.
- Testing the mathematical accuracy of computations supporting the valuation data.

The auditor may also decide to engage an appraiser independent of the client for the following purposes:

- To perform a market-comparable analysis
- To evaluate certain assumptions, such as capitalization rates or discount rates
- To advise on how the property's value may be affected by significant events that may have occurred since the date of the report

Developers, consultants, and appraisers may also conduct economic feasibility studies. Such studies are generally used to determine the estimate of value of a proposed project and whether the project meets investment requirements, including the investors' desired characteristics, construction costs, financing alternatives, absorption rates, and other factors. In addition, other evaluations of real estate, such as supply and demand studies and land utilization studies may be available. The auditor should understand the purpose of those studies, which generally include considerations about the value of real estate assets, but are not full valuations.

The auditor should determine whether the approaches to value discussed in this chapter are sufficient for his purposes considering the factors discussed in chapter 4.

Chapter 6

Reporting Considerations

In connection with an examination in accordance with generally accepted auditing standards, the auditor may conclude that required valuation information necessary for the expression of an opinion on the financial statements is not available because (1) management has not provided adequate information, (2) the auditor is unable to obtain it, or (3) significant uncertainties exist affecting the appraiser's opinion of value. The auditor should consider whether such limitations affect the report.

SAS No. 11 (included as appendix D) states that if an auditor determines that a specialist's findings support the related representations in the financial statements, the auditor may reasonably conclude that he or she has obtained sufficient competent evidential matter. However, the auditor may believe that there is a material difference between the appraiser's findings and management's assertions in the financial statements, that the appraiser's findings are unreasonable, or that information material to the overall opinion of value is not obtainable from management or available from independent sources. If any of the above conditions cannot be resolved by applying additional auditing procedures, the auditor should obtain another appraiser's opinion, unless it appears to the auditor that the matter cannot be resolved. A matter that has not been resolved would ordinarily cause the auditor to conclude that he or she should qualify or disclaim an opinion because the inability to obtain sufficient competent evidential matter about an assertion of material significance in the financial statements constitutes a scope limitation.

If after performing additional procedures (including the possibility of obtaining the opinion of another appraiser) the auditor concludes that representations in the financial statements are not in conformity with generally accepted accounting principles, the auditor should express a qualified or adverse opinion.

Though the scope of the auditor's work has not been limited, significant uncertainties about future outcomes affecting the valuation of real estate assets may exist. Such uncertainties may be indicated in the appraiser's report. The auditor should consider the effect of such uncertainties on the auditor's report.

Paragraph 11 of SAS No. 11 states that "when expressing an unqualified opinion, the auditor should not refer to the work or findings of the specialist. Such reference in an unqualified opinion may be misunderstood to be a qualification of the auditor's opinion or a division of responsibility, neither of which is intended. Further, there may be an inference that the auditor making such reference performed a more thorough audit than an auditor not making such reference." However, some companies choose to refer to the appraiser or the appraiser's work in the notes to the financial statements. An auditor who modifies the opinion as a result of the appraiser's report or findings may refer to the appraiser and the appraiser's work if the auditor believes that a reference will help users understand the reason for the modification.

Appendix A

Certain Accounting Pronouncements That May Involve the Use of Real Estate Valuation Data

This appendix lists certain accounting literature that may require the consideration or recognition of fair value or net realizable value of real estate assets and that may include the use of real estate valuation data.

Accounting Research Bulletin No. 43, chapter 7A, *Quasi-Reorganization or Corporate Readjustment*

Accounting Principles Board Opinion No. 16, *Business Combinations*

Accounting Principles Board Opinion No. 21, *Interest on Receivables and Payables*

Accounting Principles Board Opinion No. 29, *Accounting for Nonmonetary Transactions*

Accounting Principles Board Opinion No. 30, *Reporting the Results of Operations*

FASB Statement No. 5, *Accounting for Contingencies*

FASB Statement No. 13, *Accounting for Leases*

FASB Statement No. 15, *Accounting by Debtors and Creditors for Troubled Debt Restructurings*

FASB Statement No. 33, *Financial Reporting and Changing Prices*

FASB Statement No. 35, *Accounting and Reporting by Defined Benefit Pension Plans*

FASB Statement No. 66, *Accounting for Sales of Real Estate*

FASB Statement No. 67, *Accounting for Costs and Initial Rental Operations of Real Estate Projects*

Statement of Position (SOP) 75–2, *Accounting Practices of Real Estate Investment Trusts*

SOP 78–9, *Accounting for Investments in Real Estate Ventures*

Personal Financial Statements Guide, including SOP 82–1, *Accounting and Financial Reporting for Personal Financial Statements*

In addition to the above pronouncements, Accounting Standards Executive Committee issues papers, *Joint Venture Accounting* and *Accounting for Allowances for Losses on Certain Real Estate and Loans and Receivables Collateralized by Real Estate*, have been submitted to the FASB by the AICPA for consideration in future projects.

Appendix B

Contents of an Appraisal Report

The form and content of appraisal reports are discussed and illustrated in this appendix. The objective of an appraisal report is to communicate the appraiser's conclusions and supporting reasoning. If that objective is accomplished, a considerable amount of latitude is acceptable in the report's format. Depending on the user's requirements, the type of property, and the nature of the appraiser's assignment, an appraisal report may contain all or some of the following sections:

Introduction
—Purpose of Report or Objectives of Appraisal
—Property Rights Valued
—Definition of Significant Terms
—Assumptions and Limiting Conditions
—Scope of Investigation
Area Data
Site and Improvement Descriptions Analyses
Description and Analysis of Legal Documents Defining Fractional Interests
Highest and Best Use
Valuation Methodology
Description and Analysis of Market Data
Reconciliation and Conclusion
Certification
Addenda

Introduction

The introduction section of an appraisal report generally includes (1) a discussion of the purposes and objectives of the appraisal, (2) an identification of the property and the property rights appraised, and (3) a definition

Note: The discussion in this appendix has been adapted from American Institute of Real Estate Appraisers, *Valuation Analysis and Reporting Writing: Student Outline* (Chicago: American Institute of Real Estate Appraisers, 1981).

and explanation of important concepts that are fundamental to the report. In this section, many appraisers list the assumptions and limiting conditions that must be considered by the user of the report. The date of valuation is usually stated in this section of the report and in the concluding valuation statement.

The section discussing the property rights valued normally states whether an appraisal is of a fee simple estate interest that is free from easements and other encumbrances or is of a more complex fractional interest. The property may be identified by a variety of means, such as a legal description, assessor's parcel number, street address, nearest intersection, and property type. The current ownership, date of acquisition, and other pertinent information may also be mentioned in this section. Appraisal terms and legal concepts are defined in the introduction. The appraiser usually states the definition of market value used, as well as other terms that may be relevant to the particular appraisal.

Some appraisers refer to the discussion of assumptions and limiting conditions as "Contingent and Limiting Conditions" or "Premises, Assumptions, and Limiting Conditions."

The following illustrate assumptions and limiting conditions that are sometimes used in an appraisal report:

- The date of the opinion is set forth in the report. The appraiser assumes no responsibility for economic or physical factors occurring at a later date that may affect the opinion stated in the report.
- No opinion is intended to be expressed on legal matters or on matters that would require specialized investigation or knowledge beyond that ordinarily employed by real estate appraisers, although such matters may be discussed in the report.
- No opinion about title is rendered. Data on ownership and legal description was obtained from sources generally considered reliable. Title is assumed to be marketable and free and clear of all liens and encumbrances, easements, and restrictions except those specifically discussed in the report. The property is appraised with the assumption that it is under responsible ownership and competent management and is available for its highest and best use.
- No engineering survey has been made by the appraiser. Except as specifically stated, data relative to size and area was taken from sources considered reliable, and no encroachment of real property improvements is assumed to exist.
- Maps, plans, and exhibits included in this report are for illustration only, as an aid in visualizing matters discussed within the report. They should not be considered as surveys or relied on for any other purpose.
- No opinion about the value of subsurface oil, gas, or mineral rights is expressed, and the property is not subject to surface entry for the exploration or removal of such materials except as expressly stated.

Other conditions that may be presented in an appraisal report may apply to—

- Court or hearing testimony.
- Disclosure of personal interest.
- Questionable soil or geological conditions.
- A limited appraisal.
- Proposed construction.
- Possible unlawful conduct.
- Agricultural property.

Some appraisers may add a section in the introduction to present details of the scope of the investigation. For example, the appraiser may have made a number of independent investigations and analyses but may have also relied on other major external data sources that would be described in this section of the report.

Area Data

The area data may be included in one section or in separate sections containing descriptions of the region, city, or neighborhood that are relevant to the subject property. The extent of the information varies, depending on the nature of the appraisal problem and the user's familiarity with the area. The following illustrate the kind of information that may be included in this section:

- *Location*—Descriptions of streets bounding the subject property and general location within cities and counties
- *Access*—Descriptions of access to the property, including dedicated streets already installed and to be installed and freeway access to the property
- *Surrounding land use*—Descriptions of zoning and existing or planned developments of the property and of surrounding land
- *Neighborhood data*—Descriptions of local industries, area developments, schools, and other available services
- *Summary of area trends*—Descriptions of current and future population trends for the subject area
- *Public services*—Descriptions of existing schools, houses of worship, and police and fire protection, and whether they are considered adequate
- *Utilities*—Descriptions of telephone, electricity, natural gas, sewer service, and domestic water supplies, and the timing of their availability to the property being developed

Site and Improvement Descriptions Analyses

The amount of detail describing the site and improvements is dictated by the nature of the appraisal, but some descriptive information about size, services, and site features is appropriate for almost every report.

The following is an example of a site and improvement description that may be used for an appraisal of a vacant land parcel.

Site Description. The subject property is an assemblage of thirteen separate parcels totaling 255 net acres. This land was assembled between 19XX and 19XZ and is owned by Land Corporation. The gross size of the assembled parcels is 305 acres; the net acreage has been calculated by deducting acreage for streets and other public areas. A representative of the ABC Company, for whom this appraisal is being prepared, provided us with the 255-net-acre number. The 305 gross acres correspond to the 1979–80 XYZ county assessor's parcel maps. [A detailed legal description of the subject property would follow in this section.]

Assessed Valuation. The XYZ county assessor indicates that in the fiscal year 19XX–19XY the subject property consisted of thirteen parcels. The total assessed value for the thirteen parcels was $1,360,463. [A detailed table showing the composition of assessed value between land and improvements could also be presented.]

Zoning and Planned Use. The subject property is annexed to the City of Star. The property is zoned "I–Industrial District" by the City of Star. The zoning district allows for various light industrial uses, such as research and engineering laboratories.

The owner, Land Corporation, has proposed and received preliminary approvals for an industrial park on the 255 net acres. The industrial park is planned to be a series of business estates that will conform to development guidelines contained in the declaration of covenants, conditions, and restrictions.

Description of Improvements. As of January 1, 19XX, the date of appraisal, the subject property was vacant, unimproved land. None of the planned improvements associated with the industrial park, including interior streets, utilities, and improvements to major arteries, has been started. As of the date of appraisal, the subject property was not serviced with water, sewers, or electricity. Water and sewer lines are readily available for hookup along Busy Expressway. Electrical lines service the property south of the subject; therefore, service can be extended to the subject site.

Description and Analysis of Legal Documents Defining Fractional Interests

A lease is a common legal document requiring description and analysis in an appraisal report. Usually, a copy of the lease with only a brief synopsis is included in the addenda to the report; if necessary, an analysis is given in the body of the report. Fractional interests can also be created by other instruments, such as easements, deed reservations, and perpetual permits. Those property rights may be described in this section of the report.

Highest and Best Use

This section usually begins with a definition of the term *highest and best use* because its specific meaning in the appraisal profession should be understood by the reader of the appraisal report. Concepts such as demand and legally permitted or probable uses of the site, including likely changes in zoning, and other matters supporting the basis for the appraiser's conclusions are listed in this section of the appraisal report.

The American Institute of Real Estate Appraisers defines highest and best use as "that reasonable and probable use that supports the highest present value, as defined as of the effective date of the appraisal."[1]

The concept of highest and best use also considers (1) the use of the land that may reasonably be expected to produce the greatest net return over a given period of time and (2) the legal use that will yield the highest present value, sometimes called *optimum use*.

The highest and best use of the land or site, if vacant and available for use, may be different from the highest and best use of the improved property. It would be different if the improvement is not appropriate and yet contributes to the total property value in excess of the value of the site. The appraiser may describe the various tests that were applied to the subject property to arrive at the estimate of highest and best use and as presently improved, assuming the site was vacant and available for development.

Valuation Methodology

Many users of the appraisal report may not be familiar with the mechanics of the appraisal process, particularly the rationale behind the three approaches. To explain the process, appraisers may include a section describing the valuation methodology.

Description and Analysis of Market Data

Market data is presented and discussed in all the valuation approaches. The cost approach requires a presentation and analysis of data to develop a land value as well as market support for cost and depreciation factors. The income approach requires market data presentation and analysis for rent levels, vacancy indications, expenses, and capitalization rates. The comparable-sales approach requires the presentation and analysis of market data for similar properties. There are a variety of formats and discussion techniques for the presentation and analysis of market data. However, this section usually includes a discussion of the principal approach used in valuing the subject property, the factors considered, and a detailed analysis of the necessary data to support the reasoning leading to the conclusion of value.

1. American Institute of Real Estate Appraisers and Society of Real Estate Appraisers, *Real Estate Appraisal Terminology*, compiled and edited by Byrl N. Boyce (Cambridge, Mass.: Ballinger Publishing Co., 1982), 126.

Reconciliation and Conclusion

A final estimate of value is reported in this section. The appraiser may restate the value estimates resulting from the various approaches and may also state the reasoning for choosing the one approach that leads to the final estimate of value. The date of the appraiser's opinion is also stated and correlates to that expressed in the introductory section of the appraisal report.

In certain circumstances, depending on the nature of the appraisal, the total value of the estimate may be allocated by the appraiser to the various applicable categories, such as land, buildings, furniture, fixtures, and equipment.

Certification

The appraiser's certification of the appraisal report generally includes various representations about the correctness of the factual statements contained in the appraisal report, the appraiser's disclosures of the report's limiting conditions, and the professional standards followed.

Addenda

Some appraisal reports include certain additional information, such as special analyses or discussions that are supplemental to other information in the report. If included, these sections are cross-referenced to the specific sections of the report. In addition, the appraiser may also include pertinent maps, subject property plans, photographs, a summary of professional qualifications, and similar materials.

Appendix C

Illustration of the Calculation of Net Realizable Value

The auditor may need to consider differences between an opinion of market value (MV) provided by an appraiser and the net realizable value (NRV) of real estate assets.

Generally, NRV differs from MV or future selling price to the extent of costs that must be incurred and, in some cases, revenues that may be realized by the property's current owner. The NRV is based on the current owner's intentions, assuming that such intentions are realistic. NRV may be based on either of these assumptions: (1) the current owner will do very little development and the property will be sold to another developer, or (2) the current owner will complete construction of the property for sale to an end user.

If the owner decides not to develop the property for sale to an end user, the appraiser calculates MV by considering all of the following characteristics of the property:

- End use
- End selling price
- All costs of the purchaser-developer, including all actual and imputed costs of capital
- Profit required by the purchaser-developer

If the current owner intends to complete development of the property for end use, the calculation of NRV would not be affected by an owner's profit or discount factor. In this circumstance, the owner will incur the development and selling costs and, therefore, the total estimated cost should be based on the current owner's experience and plans.

The following is an example of the relationship between MV and NRV.

Facts

- Company A has a development project of 290 single-family homes under construction; units are sold as completed.
- The carrying value of the land and construction costs to date is $6 million. The appraiser has determined that the plan represents a realistic development program.

- Information selected from the appraiser's report (amounts are in thousands):

Selling price for 290 units	$29,000
Costs to be incurred by a *new* owner-developer	
Costs to complete	(16,600)
Disposal costs	(2,100)
Total deductions	(18,700)
Estimated nominal value of property	10,300
Net owner-developer's profit	(1,300)
	9,000
Discount to provide for realization of value by new owner-developer over 5 years	(2,300)
Market Value (MV)	$ 6,700

- Interest costs are factored into the appraiser's estimate of MV because the appraiser determines MV from the perspective of the next purchaser of the property.

NRV Calculations

Case I: Current owner sells project to new developer (amounts are in thousands)		*Case II:* Current owner intends to complete development and sell individual units (amounts are in thousands)	
MV (from appraisal report)	$6,700	Selling price for 290 units	$29,000
Adjustments to compute NRV (costs to be incurred by *present* owner)		Adjustments to compute NRV (costs to be incurred by *present* owner)	
		Costs to complete, including interest to be capitalized in accordance with SFAS No. 34	(16,600)
		Postcompletion interest*	(1,950)
Disposal costs, including broker commissions	(400)	Disposal costs, including broker commissions	(2,100)
Total deductions	(400)	Total deductions	(20,650)
NRV	6,300	NRV	8,350
Current carrying amount of property	(6,000)	Current carrying amount of property	(6,000)
NRV in excess of carrying amount	$ 300	NRV in excess of carrying amount	$2,350

*The AICPA audit and accounting guide entitled *Savings and Loan Associations* and SOP 75–2, *Accounting Practices of Real Estate Investment Trusts,* require interest to be included as a holding cost in determining NRV in the industries discussed. The Real Estate Committee believes that there is diversity of practice in other segments of the real estate industry regarding the inclusion of interest as a holding cost in determining net realizable value, and this guide takes no position thereon.

Appendix D

SAS No. 11
Using the Work of a Specialist*

1. The purpose of this statement is to provide guidance to the auditor who uses the work of a specialist in performing an examination of financial statements in accordance with generally accepted auditing standards.[1] For purposes of this statement, a specialist is a person (or firm) possessing special skill or knowledge in a particular field other than accounting or auditing. Examples of such specialists include actuaries, appraisers, attorneys, engineers, and geologists.[2]

Decision to Use the Work of a Specialist

2. The auditor's education and experience enable him to be knowledgeable about business matters in general, but he is not expected to have the expertise of a person trained for or qualified to engage in the practice of another profession or occupation. During his examination, however, an auditor may encounter matters potentially material to the fair presentation of financial statements in conformity with generally accepted accounting principles that require special knowledge and that in his judgment require using the work of a specialist.

3. Examples of the types of matters that the auditor may decide require him to consider using the work of a specialist include, but are not limited to, the following:

a. Valuation (e.g., works of art, special drugs, and restricted securities).

b. Determination of physical characteristics relating to quantity on hand or condition (e.g., mineral reserves or materials stored in piles above ground).

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1. This Statement does not apply to using the work of a specialist who is a member of the auditor's staff, or to the form or content of letters of audit inquiry concerning litigation, claims, or assessments and lawyers' responses thereto.

2. For purposes of this Statement, a person whose special skills or knowledge relate to the internal affairs or business practices of the client, such as a credit or plant manager, is not considered a specialist.

c. Determination of amounts derived by using specialized techniques or methods (e.g., certain actuarial determinations).

d. Interpretation of technical requirements, regulations, or agreements (e.g., the potential significance of contracts or other legal documents, or legal title to property).

4. In performing an examination of financial statements in accordance with generally accepted auditing standards, the auditor may use the work of a specialist as an audit procedure to obtain competent evidential matter. The circumstances surrounding the use of specialists differ. Although the familiarity of individual auditors with the work performed by certain types of specialists may differ, the auditing procedures necessary to comply with generally accepted auditing standards need not vary as a result of the extent of the auditor's knowledge.

Selecting a Specialist

5. The auditor should satisfy himself concerning the professional qualifications and reputation of the specialist by inquiry or other procedures, as appropriate. The auditor should consider the following:

a. The professional certification, license, or other recognition of the competence of the specialist in his field, as appropriate.

b. The reputation and standing of the specialist in the views of his peers and others familiar with his capability or performance.

c. The relationship, if any, of the specialist to the client.

6. Ordinarily, the auditor should attempt to obtain a specialist who is unrelated to the client. However, when the circumstances so warrant, work of a specialist having a relationship to the client may be acceptable (see paragraph 8). Work of a specialist unrelated to the client will usually provide the auditor with greater assurance of reliability because of the absence of a relationship that might impair objectivity.

7. An understanding should exist among the auditor, the client, and the specialist as to the nature of the work to be performed by the specialist. Preferably, the understanding should be documented and should cover the following:

a. The objectives and scope of the specialist's work.

b. The specialist's representations as to his relationship, if any, to the client.

c. The methods or assumptions to be used.

d. A comparison of the methods or assumptions to be used with those used in the preceding period.

e. The specialist's understanding of the auditor's corroborative use of the specialist's findings in relation to the representations in the financial statements.

f. The form and content of the specialist's report that would enable the auditor to make the evaluation described in paragraph 8.

Using the Findings of the Specialist

8. Although the appropriateness and reasonableness of methods or assumptions used and their application are the responsibility of the specialist, the auditor should obtain an understanding of the methods or assumptions used by the specialist to determine whether the findings are suitable for corroborating the representations in the financial statements. The auditor should consider whether the specialist's findings support the related representations in the financial statements and make appropriate tests of accounting data provided by the client to the specialist. Ordinarily, the auditor would use the work of the specialist unless his procedures lead him to believe that the findings are unreasonable in the circumstances. If the specialist is related to the client (see paragraph 6), the auditor should consider performing additional procedures with respect to some or all of the related specialist's assumptions, methods, or findings to determine that the findings are not unreasonable or engage an outside specialist for that purpose.

Effect of the Specialist's Work on the Auditor's Report

9. If the auditor determines that the specialist's findings support the related representations in the financial statements, he may reasonably conclude that he has obtained sufficient competent evidential matter. If there is a material difference between the specialist's findings and the representations in the financial statements, or if the auditor believes that the determinations made by the specialist are unreasonable, he should apply additional procedures. If after applying any additional procedures that might be appropriate he is unable to resolve the matter, the auditor should obtain the opinion of another specialist, unless it appears to the auditor that the matter cannot be resolved. A matter that has not been resolved will ordinarily cause the auditor to conclude that he should qualify his opinion or disclaim an opinion because the inability to obtain sufficient competent evidential matter as to an assertion of material significance in the financial statements constitutes a scope limitation (see SAS No. 2, paragraphs 10 and 11).

10. The auditor may conclude after performing additional procedures, including possibly obtaining the opinion of another specialist, that the representations in the financial statements are not in conformity with generally accepted accounting principles. In that event, he should express a qualified or adverse opinion (see SAS No. 2, paragraphs 15–17).

Reference to the Specialist in the Auditor's Report

11. When expressing an unqualified opinion, the auditor should not refer to the work or findings of the specialist. Such a reference in an unqualified opinion might be misunderstood to be a qualification of the auditor's opinion or a division of responsibility, neither of which is in-

tended. Further, there may be an inference that the auditor making such reference performed a more thorough audit than an auditor not making such reference.

12. If the auditor decides to modify his opinion (see paragraphs 9 and 10) as a result of the report or findings of the specialist, reference to and identification of the specialist may be made in the auditor's report if the auditor believes such reference will facilitate an understanding of the reason for the modification.

Appendix E

Certain Real Estate Terms Common to Appraisal Information

allowance for vacancy and income loss. An amount deducted from potential annual gross income to reflect the effect of probable vacancy, turnover, or nonpayment of rent by tenants, commonly expressed as a percentage of potential annual gross income and converted to a monetary amount.

anticipated-use method. A method of estimating the value of vacant land, also known as the development method. The usual application is to raw, unsubdivided land by deducting from the estimated gross selling price the direct expenses of development, such as cost of streets, utilities, sales, advertising, and overhead (taxes, carrying charges, inspection). Profit and "time lag" (interest on the money invested for the time needed to complete the project) are also deducted.

appraisal date. The date as of which the value estimate is applicable and valid. The date of appraisal identifies the market conditions that existed when the appraisal was made.

assessed valuation. The amount at which the property is recorded on the assessment roll and, unless altered by a higher authority, the basis on which the property tax levy is distributed among the property owners. Assessed values may differ from market values because of fractional assessment laws, partial exemption, and problems in keeping assessed values current.

band of investment. A widely used and conceptually defensible approach to estimating a discount (risk) rate. It is based on the premise that financing is usually used in a real estate transaction and that equity investors seek to obtain the best available financial package in order to maximize the potential benefits of leverage. The rate developed is a weighted average of the return on investment required to cover mort-

Note: The definitions included in this glossary are adapted from AIREA, and SREA, *Real Estate Appraisal Terminology*, 10–239.

gage interest and the return on investment required to provide a competitive equity return.

In simple mortgage-equity analysis, the band-of-investment technique is used to derive the overall rate. In this circumstance, the overall rate is a weighted average of the mortgage constant and the equity rate. Simple mortgage-equity analysis assumes no change in the value of the equity position over the holding period—for example, the equity dividend rate and equity yield rate are equal.

building capitalization rate. A rate that includes return on and return of capital invested in improvements that is separate from capital invested in the underlying land. It is used in the residual techniques that separate property income into components attributable to land and to improvements.

building residual technique. The process of estimating the contribution of improvements to the present worth or value of the entire property over and above the value of the site, in which the following occur:

- Return attributable to the land, valued independently of the building, is deducted from net operating income.
- The residual income, representing return to the building including recapture, is capitalized to indicate the building's value.

bundle-of-rights theory. Ownership of a parcel of real estate may include a great many rights, such as the following: the right to its occupancy and use; the right to sell it in whole or in part; the right to bequeath it; and the right to transfer, by contract, for specified periods of time, the benefits to be derived from occupancy and use of the real estate. The rights of occupancy and use are called *beneficial interests*.

capitalization. The process of converting to present value (or obtaining the present worth of) a series of anticipated future periodic installments of net income. In real estate appraisals, it is usually accomplished by discounting.

capital recovery (recapture). The return to investors of the portion of their property investment expected to be lost over the income-projection period. Capital recovery may be viewed in either a physical sense, as reflected in the traditional physical residual techniques of capitalization, or in a financial sense, as reflected in mortgage-equity analysis. It is not interchangeable with the term *depreciation*.

consistent-use theory. The consistent-use theory affirms that a property in transition to another use cannot be valued on the basis of one use for land and another for improvements (that is, improvements must contribute to the value of the land to have value attributed to them). If the transition to highest and best use is deferred, the element of interim use should be considered.

contribution, principle of. A valuation principle that states that the value of an agent of production or of a component part of a property depends on how much it contributes to the value of the whole or how much its absence detracts from the value of the whole. The principle of contribution is also known as the *principle of marginal productivity.*

contributory value of improvements. The monetary amount that a building adds to the market value of a given property, based on the building reproduction cost less accrued depreciation.

cost approach. An approach in appraisal analysis based on the proposition that an informed purchaser would pay no more than the cost of producing a substitute property with the same utility as the subject property. This approach is particularly applicable when the property being appraised involves relatively new improvements that represent the highest and best use of the land, or when relatively unique or specialized improvements are located on the site and therefore no comparable properties exist on the market.

cost-of-development method. A method of valuing undeveloped acreage by deriving an estimate of the maximum amount an investor-developer would be warranted in paying for land, given the cost of developing it, the probable proceeds from the sale of the developed sites, and appropriate discounting techniques. This is also called the *subdivision method* or the *subdivision-analysis method.*

direct capitalization. The conversion of anticipated net income into present value by dividing the income by an appropriate rate reflecting the prevailing relationship of net income to selling price for comparable properties being sold in the open market. An alternate form of direct capitalization is the use of an appropriate "time earnings" multiplier instead of a rate—that is, the reciprocal of the appropriate rate. Direct capitalization for land uses the discount rate, whereas direct capitalization for land and improvements combined uses an overall rate.

direct sales-comparison approach. The approach in appraisal analysis based on the proposition that an informed purchaser would pay no more for a property than the cost of acquiring an existing property with the same utility. This approach is applicable when an active market provides sufficient quantities of reliable data that can be verified from authoritative sources. However, the direct sales-comparison approach is relatively unreliable in an inactive market or when estimating the value of properties for which no real comparable sales data are available. This approach is also questionable when sales data cannot be verified with principals to the transaction. It is also referred to as the *market comparison* or *market data approach.*

discount rate. In appraising, the rate of return on investment in the physical components of land and buildings.

easement. A nonownership interest held by one person in land of another person whereby the first person is accorded partial use of such land for a specific purpose. An easement restricts but does not abridge the rights of the fee owner to the use and enjoyment of the easement holder's rights. Easements fall into three broad classifications: surface easements, subsurface easements, and overhead easements.

effective gross income. (1) The estimated potential gross income less an allowance for vacancy and income loss plus other income; (2) the anticipated income from all operations of the property after allowing for vacancy and income loss.

Ellwood premise. An extension of basic mortgage-equity analysis involving certain additional assumptions concerning income flows and the nature of the claims against those income flows. These assumptions include the following:

1. The purchaser-investor is typically interested in the cash income that the property will produce to support an equity investment.
2. The typical purchaser-investor is sensitive to income taxes and will behave in a manner allowing maximum tax avoidance.
3. The purchaser-investor typically seeks to take maximum advantage of leverage to enhance return on equity.
4. The purchaser-investor typically retains the investment only as long as there is a cash income advantage to do so.
5. The purchaser-investor typically anticipates a level income flow over the income projection period because it is relatively short.
6. The purchaser-investor has determinable expectations about the reversion (the most probable resale price of the property) at the end of the income projection period.

eminent domain. The right by which a sovereign government, or a person acting in its name and under its authority, may acquire private property for public or quasi-public use for reasonable compensation and without consent of the owner. It is the right or power of the government to take private property for public use after making just compensation.

equity participation. The right of a lender to share in whatever the equity investor-borrower receives, without reference to loan contract terms—that is, the lender's right has an indefinite term and may endure beyond the maturity of the loan. Equity participation may appear in any one or all of the following forms: (1) percentage of equity reversion (proceeds from periodic refinancing or proceeds of property resale, or both); (2) percentage of equity interest (annual income and reversionary receipts) that may occur in the future; and (3) percentage of tax shelter (a portion of the depreciation associated with the mortgaged property).

escalation clause. A clause in an agreement providing for adjustment of price based on an event or index. For example, in a lease, it may be a provision to increase rent if operating expenses increase.

feasibility. A real estate project is feasible if analysis indicates a reasonable likelihood of satisfying explicit objectives and if a selected course of action fits a context of specific constraints and limited resources. Feasibility of a real estate project is normally related to its probable economic potential.

fee simple. (1) An absolute fee; (2) a fee without limitations to any particular class or heirs or restrictions, but subject to the limitations of eminent domain, escheat, police power, and taxation.

final reconciliation. The application of the process of evaluating alternative conclusions and selecting value indications derived from each of the approaches used to arrive at a final estimate of value. Appraisers weigh the relative significance, applicability, and defensibility of the value indication derived from each approach, and they place most weight and reliance on the one that, in their professional judgment, best approximates the value being sought in the appraisal. Appraisers reconcile the facts, trends, and observations developed in their analyses and review their conclusions and the probable validity and reliability of those conclusions.

final value estimate. An appraiser's opinion or conclusion resulting from the application of appraisal analysis, including reconciliation of findings, to the appraisal problem at hand. The estimate reflects the definition of value sought. For market value, the final estimate is the value that most nearly represents what the typical, informed, rational purchaser would pay for the subject property if it were available for sale on the open market as of the date of the appraisal, given all the data used by appraisers in their analyses.

fractional appraisal. (1) An appraisal of one of the component parts of a property—for example, the land regardless of the building, or the building regardless of the land; (2) the appraisal of a lessee's or a lessor's interest.

functional utility. The ability of the property to perform the function for which it is intended, in terms of current market tastes and standards. Elements of functional utility in a residence include architecture, design and layout, traffic pattern, size and type of rooms, and performance standards.

going-concern value. The value existing in a proven property operation—that is, as an entity with business already established, rather than the value of real estate only, which is ready to operate but without a going business.

gross income. The scheduled income from the operation of a business or the management of a property, usually stated on an annual basis.

gross income multiplier (GIM). The relationship (ratio) between sales price (value) and either potential gross income or effective gross income in income-producing properties. These relationships are not to be intermingled—that is, the method of computing multipliers used for analysis should be consistent. The GIM is used to estimate value as a multiple of annual gross income (potential or effective).

gross income (rent) multiplier analysis. An approach in appraisal analysis that is based on the proposition that an informed purchaser would pay no more for a property than the cost of obtaining a return (in income or amenities) for the same amount at the same risk as in the subject property. This approach is applicable when sufficient numbers of comparable properties are rented at the time of sale. The gross-income (rent) multiplier approach is not applicable when few or no comparable properties are rented in the competitive market. This approach is also questionable in market situations when market rent and sales prices do not bear a constant relationship to each other.

gross rent multiplier (GRM). The relationship (ratio) between sales price (value) and monthly rental income for single-family residential properties.

income approach. The procedure in appraisal analysis that converts the anticipated benefits (dollar income or amenities) to be derived from the ownership of property into a value estimate. The income approach is widely applied in appraising income-producing properties. Anticipated future income or reversions, or both, are discounted to a present value amount by the capitalization process.

income participation. The right of the mortgagee to share in some portion of future income to be generated by a property, usually over the term of the underlying mortgage.

Inwood annuity. (1) A contraction of "Inwood annuity capitalization" or "Inwood annuity tables"; the name *Inwood* is popularly used to identify the traditional technique of using present value factors (Inwood coefficients) from standard compound interest tables to capitalize or discount a stream of level income to present value; (2) an annuity that can be capitalized with an Inwood factor (coefficient).

land-residual technique. A valuation technique that assumes that income can be split between land and improvements and that the residual to land can be capitalized into value. Typically, the building is valued independently of the land, and the annual return on the building value (return on investment and provision for capital recapture) is deducted

from the anticipated net operating income to the property (land and building). The residual amount is said to be attributable to the land and is capitalized at an appropriate risk (discount) rate to indicate the land value. For new structures, the value assigned to the building is cost, which assumes no accrued depreciation and construction at a proper current cost. If the structure is reasonably new and subject to minimal depreciation that can be satisfactorily estimated, the assigned value is the depreciated value as of the date of appraisal. For an old structure, it is preferable to assume the construction cost and rental income for a hypothetical new structure as the basis for estimating the net income attributable to the land.

market data approach. Traditionally, an appraisal procedure in which the market value estimate is based on prices paid in actual market transactions and current listings, the former fixing the lower limit of value in a static or advancing market (pricewise) and fixing the higher limit of value in a declining market, and the latter fixing the higher limit in any market. It is a process of analyzing sales of similar recently sold properties to derive an indication of the most probable sales price for the property being appraised. The reliability of this technique depends on (1) the availability of comparable sales data, (2) verification of the sales data, (3) the degree of comparability or extent of adjustment necessary for time differences, and (4) the absence of nontypical conditions affecting the sales price.

market price. An amount actually paid or to be paid for a property in a particular transaction. It differs from market value because it is an accomplished, or historic, fact, whereas market value is and remains an estimate until proved. Market price involves no assumption of prudent conduct by the parties, absence of undue stimulus, or any other condition basic to the market value concept.

market rent. The rental income that a property would most probably command on the open market, as indicated by current rents paid for comparable space (as of the effective date of the appraisal). This term is preferred over the term *economic rent,* which has traditionally been used in appraisal analysis.

master plan. A comprehensive, long-range plan officially recognized as a guide for the physical growth and development of a community, together with the basic regulatory and administrative controls needed to attain the physical objectives. Basic components of the plan for physical development are a land-use plan, thoroughfare plan, community facilities plan, and public improvements program.

net lease. A lease in which, in addition to the stipulated rent, the lessee assumes payment of all property charges, such as taxes, insurance, assessments, and maintenance.

net operating income (NOI). Annual net income after all fixed and operating expenses have been deducted but before deducting financial charges, such as recapture or debt service; NOI is the same as *annual dividend.* It is sometimes referred to as *net income before recapture (NIBR)* or *net income before depreciation (NIBD).*

net present value (NPV). The difference, if any, between the cost of an investment and the discounted present value of all anticipated future benefits to that investment. Generally, if NPV is positive, the proposal (investment) is acceptable; if NPV is zero, the proposal is marginally acceptable; and if NPV is negative, the proposal is unacceptable.

occupancy ratio. The relationship between income received from rental units of a property and income to be received if all units were occupied. It is derived by multiplying the number of units by the number of days rented and dividing by the number of rentable units multiplied by the days of the year.

operating expenses. All expenses necessary to maintain the production of income from operation of a property; the difference between effective gross income and net operating income (NOI). It is also used to denote a category of expense exclusive of fixed expense, debt service, depreciation allowance, and reserves for replacements.

operating income. Income from the general operation of a business—that is all direct costs of operation and all direct income from operation.

plat. A plan, map, or chart of a city, town, section, or subdivision indicating the location, boundaries, and ownership of individual properties.

plat book. A record showing the location, size, and ownership of each plot of land in a stated area.

purchase money mortgage. A mortgage given to the seller by a buyer of real property as partial payment of the purchase price.

rate of return. (1) The current year's annual net income from the operation of an enterprise as it relates to the capital invested, the appraised value, or some other selected capital sum; or (2) the net yield during investment life, considering a finite period of economic life (of buildings) or limiting time factors (such as the maturity period of a bond).

rental value. A monetary amount reasonably expected for the right to the agreed use of real estate. It may be expressed as an amount per month or other period of time; as per dollar of sales; or as per room, per front foot, or per other unit of property. Usually, it is established by competitive conditions.

replacement cost. The current construction cost of a building having utility equivalent to the building being appraised but built with modern materials and according to current standards, design, and layout. The use of the replacement cost concept presumably eliminates all functional obsolescence; the only depreciation to be measured is physical deterioration and economic obsolescence.

reproduction cost. The current construction cost of an exact duplicate or replica using the same materials, construction standards, design, layout, and quality of workmanship and embodying all the deficiencies and obsolescence of the subject building.

risk factor. The portion of any given return or rate of return from capital that is invested in an enterprise and that is assumed to cover the specific risks of the particular investment. It differs from and is greater than the return or rate obtainable for funds invested if the safety of the principal is virtually certain.

risk rate. (1) An annual rate of return on capital that is commensurate with the risk assumed by the investor; (2) a rate of interest or yield necessary to attract capital.

site. An improved parcel of land ready to be used for its intended purpose.

site analysis. An identification and analysis of the characteristics that create, enhance, or detract from the utility and marketability of a site.

substitution, principle of. A valuation principle, which states that a prudent purchaser would pay no more for real property than the cost of acquiring an equally desirable substitute on the open market. The principle of substitution assumes that the purchaser will consider the alternatives available, that he will act rationally or prudently on the basis of the information about those alternatives, and that reasonable time is available for the decision. Substitution may be in the form of the purchase of an existing property with the same utility as the subject property or of acquiring an investment that will produce an income stream of the same size with the same risk as that of the subject property.

tenancy by the entirety. Tenancy by a husband and wife so that, except through joint action, neither has a disposable interest in the property during the lifetime of the other. The property passes to the survivor upon the death of either.

tenancy in common. The holding of property by two or more persons, each of whom has an undivided interest, which passes to the heirs of the deceased property-holder and not to the survivor or the survivors.

Selected Bibliography

Books

Akerson, Charles B. *Capitalization Theory and Techniques.* Chicago: American Institute of Real Estate Appraisers, 1984.

American Institute of Real Estate Appraisers. *The Appraisal of Real Estate.* 8th ed. Chicago: AIREA, 1983.

American Society of Appraisers. *Appraisal and Valuation Manual.* Annual volume. Washington, D.C.: ASA, 1956.

American Institute of Real Estate Appraisers. *Dictionary of Real Estate Appraisal.* Chicago: AIREA, 1984.

American Institute of Real Estate Appraisers and Society of Real Estate Appraisers. *Real Estate Appraisal Terminology.* Compiled and edited by Byrl N. Boyce. Cambridge, Mass.: Ballinger Publishing Co., 1982.

Conroy, Kathleen. *Valuing the Timeshare Property.* Chicago: AIREA, 1981.

Ellwood, L. W. *Ellwood Tables for Real Estate Appraising and Financing.* 4th ed. Cambridge, Mass.: Ballinger Publishing Co., 1977.

Friedman, Edith J. *Encyclopedia of Real Estate Appraising.* 3rd ed. Englewood Cliffs, N.J.: Prentice-Hall, 1978.

Garrett, Robert L., Hunter A. Hogan, Jr., and Robert M. Stanton. *The Valuation of Shopping Centers.* Chicago: AIREA, 1976.

Periodicals

The Appraisal Journal. AIREA. Chicago. Quarterly.

The Real Estate Appraiser and Analyst. Society of Real Estate Appraisers. Chicago. Quarterly.

Real Estate Issues. American Society of Real Estate Counselors. Chicago. Biannually.