

**APPRAISAL STANDARDS
FOR
LAND-SECURED FINANCINGS**

**May 1994
Revised – July 2004**

**California Debt and Investment Advisory Commission
915 Capitol Mall, Room 400
Sacramento, CA 95814
(916) 653-3269**

CDIAC 04-07

ACKNOWLEDGEMENTS

This report was originally written in 1994 by Stephen Shea, Director of Research for the California Debt and Investment Advisory Commission (CDIAC). Mark B. Campbell, a Senior Policy Analyst with CDIAC, updated the report in 2004. CDIAC is indebted to several individuals who provided comments on the revised version of this report. They include: Larry Rolapp, Fieldman, Rolapp & Associates; Sam Sperry, Orrick, Herrington & Suttcliffe LLP; John Murphy, Stradling Yocca Carlson & Rauth; John Gibson, UBS; Bruce Hull and Kitty Sino, Bruce Hull & Associates; Jim Harris and Berri Cannon, Harris Realty Appraisal; Jeff Ridolfi, Clark Wolcott Company; Ursula Hyman, Latham & Watkins LLP; Don Hunt, Fulbright & Jaworski LLP; Scott Ferguson, Jones Hall; Diane Schooler, The Schooler Company; Kevin Ziegenmeyer, Seevers Jordan Ziegenmeyer; Deborah Schulte and Bill Sinclair, City of Sacramento; Joe Janczyk, Empire Economics; and Bob Williams, RBC Dain Rauscher. In addition to some of those already mentioned, contributors to the original version of the report also included: Tom Clark, Clark Wolcott Company; Scott Clinton and Bill Huck, Stone & Youngberg; William Price and Eileen Walsh, County of Orange; David Riach, Schmitz-Riach Associates; David Taussig and Keenan Rice of David Taussig & Associates; and Fran Wolfe, Masson & Mason.

TABLE OF CONTENTS

| | Page |
|--|-----------|
| Executive Summary | i |
| | |
| The Context for Appraisals in Land-Secured Financings | 1 |
| SB 1464 Requirements | 1 |
| The Mello-Roos Act | 2 |
| California Special Assessment Acts | 3 |
| Property Value as Security for Bondholders | 3 |
| Limitations of the Value-to-Lien Ratio | 4 |
| Volatility of Land Values | 5 |
| Average vs. Parcel-by-Parcel Ratios | 5 |
| Lengthy Foreclosure Proceedings | 5 |
| Overlapping Issuance | 5 |
| | |
| Appraisal Standards for Land-Secured Financings | |
| I. The Appraiser - General Requirements..... | 6 |
| Credentials..... | 6 |
| Independence..... | 6 |
| | |
| II. The Framework of an Appraisal..... | 8 |
| Property Rights to be Valued | 8 |
| Fee Simple Estate | 8 |
| Definition of Value..... | 9 |
| Market Value | 9 |
| Retail Value | 10 |
| Bulk Sale Value..... | 10 |
| Date of the Appraisal..... | 11 |
| | |
| III. Valuation Methods..... | 12 |
| Discounted Cash Flow Analysis..... | 12 |
| Number and Type of Buildings and/or Sites | 14 |
| Rate of Absorption | 14 |
| Direct and Indirect Costs | 15 |
| Discount Rate | 16 |
| Technical Requirements | 21 |
| Mass Appraisal Techniques..... | 21 |

| | |
|---|-----------|
| Interpretation and Correlation of Estimates | 21 |
| Value Allocations | 21 |
| Sales Comparison Approach | 22 |
| Data Constraints Limit Application..... | 23 |
| Discounting Retail Values to Reflect Special Tax and Assessment Liens | 23 |
| Technical Requirements | 23 |
| Cost Approach..... | 24 |
| Adjusting Sales Comparison Valuations | 24 |
| Technical Requirements | 25 |
| Income Capitalization Approach..... | 25 |
| Technical Requirements | 26 |
| IV. Contents of Appraisal Report | 27 |
| Appraisal Framework | 27 |
| Area, City and Neighborhood Data | 27 |
| Property Data..... | 27 |
| Title Condition | 27 |
| Improvement Description..... | 27 |
| General Plan Classification | 28 |
| Zoning | 28 |
| Analysis of Highest and Best Use | 28 |
| Statement of Value | 28 |
| Signed Certification..... | 28 |
| V. Appraisal Review | 29 |
| VI. Definitions..... | 29 |

TABLES AND FIGURES

| | |
|--|----|
| Figure 1: Discounted Cash Flow Analysis..... | 13 |
| Table 1: Discounted Cash Flow Method (15 percent discount rate)..... | 17 |
| Table 1a: Cash Flow Analysis (15 percent discount rate) | 18 |
| Table 2: Discounted Cash Flow Method (25 percent discount rate)..... | 19 |
| Table 2a: Cash Flow Analysis (25 percent discount rate) | 20 |
| Figure 2: Overall Capitalization Rate Formula | 26 |

EXECUTIVE SUMMARY

THE CONTEXT FOR APPRAISALS IN LAND-SECURED FINANCINGS

The relationship between the value of land and improvements in a Mello-Roos Community Facilities District (CFD) or an assessment district relative to the amount of public debt secured by liens on property in that district is known as the *value-to-lien* or *value-to-debt* ratio. Senate Bill 1464 (Chapter 772, Statutes of 1992) established a minimum 3:1 value-to-lien requirement for Mello-Roos special tax bond issues, effective January 1, 1994. SB 1464 further required any local agency initiating procedures to form a CFD on or after January 1, 1994 to adopt standards for appraisals undertaken to establish value-to-lien ratios. To assist local agencies in this regard, SB 1464 authorized the State Treasurer to recommend standards for appraisals undertaken to establish value-to-lien ratios.

In 1994, with the input of municipal finance professionals, the California Debt and Investment Advisory Commission (CDIAC), chaired by the State Treasurer, published the *Appraisal Standards for Land-Secured Financings (CDIAC Standards)*. Since that time, many California issuers have recognized the *CDIAC Standards* as a basis for the conduct of appraisals under the Mello-Roos Act. To a less formal degree, the *CDIAC Standards* also have been used to conduct appraisals intended to value properties within assessment districts. Since 1994, however, appraisal practices have changed to reflect new theoretical and methodological approaches. In March 2003, CDIAC held discussions with members of the California public finance community to discuss issues related to the appraisal of real property used to secure Mello-Roos and assessment bonds. The group was composed of issuers, real estate appraisers, attorneys, financial advisors, tax consultants, and underwriters. As a result of those discussions, CDIAC has updated the *Appraisal Standards for Land-Secured Financings* in July 2004.

Local agencies may continue to adopt the standards contained herein to fulfill their obligations under SB 1464 or use these standards as a framework when developing their own guidelines.

Limitations of the Value-to-Lien Ratio

Insofar as most land-secured debt is sold without a credit rating, investment analysts rely on the value-to-lien ratio as the key indicator of the creditworthiness of Mello-Roos special tax bonds and special assessment bonds. A value-to-lien ratio of 3:1 or higher offers investors a “cushion” against future declines in land values, as well as some protection against the vagaries of the appraisal process itself. But a ratio of 3:1 or higher should not be viewed as a guarantee of creditworthiness for the following reasons:

Volatility of Land Values. Land values can be volatile during the early stages of development, reflecting the sensitivity of real estate development to economic cycles. A downturn in economic activity may depress value-to-lien ratios by driving up the risk premium required by real estate investors and lenders and lengthening the absorption period of new development projects.

Average vs. Parcel-by-Parcel Ratios. The value-to-lien ratio cited for a bond issue is only an average. As a result, individual parcels in the district may fall below the average and possibly below a 1:1 ratio.

Lengthy Foreclosure Proceedings. If property ownership is highly concentrated during the early stages of development, the delinquency of a major property owner can deplete the bond reserve fund and threaten the timely payment of debt service even if the value-to-lien ratio is adequate. Though judicial foreclosure proceedings can be initiated rapidly, the entire process can take several years to complete, and the bankruptcy courts may impede foreclosure action.

Overlapping Issuance. Finally, local agencies may form overlapping financing districts without coordinating their bond issuance practices. While the statutory requirement of a 3:1 value-to-lien ratio will provide some protection against dilution, the fact that there are exceptions to that rule and that it does not apply to assessment bonds may result in coverage dilution within a CFD.

For all of these reasons, credit analysts should not focus exclusively on value-to-lien ratios, but also review the adequacy of reserve funds, capitalized interest accounts, special tax coverage, the financial strength of the developer, and other security features of the bonds.

APPRAISAL STANDARDS FOR LAND-SECURED FINANCINGS

I. THE APPRAISER — GENERAL REQUIREMENTS

Appraisals undertaken to establish value-to-lien ratios for land-secured financings can be quite complex, requiring the appraiser to interpret the significance of various financial and demographic data. Because an appraisal is an appraiser's *opinion* of value, it is imperative that the appraiser be qualified to render this opinion. The experience of the appraiser is as important to the successful completion of an assignment as the appraisal standards adopted by a local agency.

Credentials

The appraiser should be licensed by the State of California Office of Real Estate Appraisers and be a Member of the Appraisal Institute (MAI) or have similar training, experience, and qualifications (page 6).

Independence

The appraiser should be an independent contractor retained by the public agency rather than retained by a landowner/developer (page 6).

II. THE FRAMEWORK OF AN APPRAISAL

Given the variety of reasons for which appraisals are undertaken, and the different analytical techniques that may be employed, appraisers typically begin each assignment by defining the *appraisal problem*; that is, a succinct statement of the objective of the appraisal. The appraisal problem should, most importantly, identify (1) the property rights to be valued, (2) the operative definition of value, and (3) the date of the value estimate. Addressing these issues at the outset of the appraisal gives the appraiser the necessary direction to complete the assignment.

Property Rights to Be Valued

Appraisals undertaken to establish value-to-lien ratios in CFDs and assessment districts should value the fee simple interest subject to special tax and special assessment liens. In the event the district includes leased fee or leasehold properties it is important for the appraiser to understand the terms of the lease and the impact of those terms on the market value of those properties.

Definition of Value

Appraisals undertaken to establish value-to-lien ratios in CFDs and assessment districts should estimate the Market Value of the subject property. Since two distinct “markets” may be at work in a CFD or assessment district, the estimate of Market Value should be refined to reflect the Retail Value of fully improved properties that have been sold to homeowners and the Bulk Sale Value of all vacant properties, including both unimproved properties and improved or partially improved properties owned by a developer or builder and not yet sold to homeowners (page 9).

Date of the Appraisal

The date of the value estimate should clearly be identified in the appraisal report. The period between the date of the appraisal and the financing should be kept as short as possible, preferably no more than three months, to accurately represent land values to prospective investors (page 11).

III. VALUATION METHODS

Appraisers valuing properties in a CFD or assessment district rely on either the Discounted Cash Flow (DCF) Analysis or the Sales Comparison Approach. The DCF Analysis is the most appropriate method for assessing the market value of unimproved land while the Sales Comparison Approach offers the best indication of the value of improved properties. The other methods discussed here, including the Cost Approach and the Income Capitalization Approach, may be useful in determining developer revenues for use in the DCF Analysis or for valuing finished homes or fully-improved properties.

Discounted Cash Flow Analysis

A DCF Analysis is appropriate for Bulk Sale Valuations of unimproved properties and improved or partially improved but unoccupied properties. DCF valuations should rely on an absorption study to estimate how quickly properties can be developed and sold to end-users, (i.e. land sales to merchant builders or commercial builders or completed home sales to homeowners). The expense of converting raw land to finished homes or improved lots must be deducted from gross cash flow to derive net cash flow prior to discounting. The discount rate selected by the appraiser should be based upon existing market conditions and reflect the rates of return, profit, and risk needed to attract debt and equity participation in the project (page 12).

Sales Comparison Approach

Because it is based on actual sales data, the Sales Comparison Approach offers the best indication of the market value of the subject property. This methodology is appropriate for most improved properties, but the absence of comparable sales data usually constrains its application to appraisals of unimproved CFDs and assessment districts. The Sales Comparison Approach, however, provides the analytical basis for estimating future retail value of presently unimproved

properties that may be incorporated into a DCF Analysis. Values estimated under the Sales Comparison Approach should be discounted to reflect the present value of future special tax and special assessment payments (page 22).

Cost Approach

The Cost Approach may not always be appropriate for appraisals undertaken to establish value-to-lien ratios in CFDs and assessment districts. The Cost Approach may be useful, however, for adjusting for physical differences between properties under the Sales Comparison Approach. It is also helpful in the valuation of special purpose properties where no market exists or is very limited. The cost of publicly financed infrastructure should not simply be tacked on to value estimates, however, if comparable sales data fully reflects infrastructure improvements (page 24).

Income Capitalization Approach

The Income Capitalization Approach is appropriate for retail valuations of income-producing properties. It also may be appropriate for estimating the future retail values of incoming-producing properties for use in a DCF Analysis (page 25).

Mass Appraisal Techniques

When an entire tract or project has been built and fully absorbed, the appraiser may employ mass appraisal techniques, utilizing conservative per dwelling unit estimates (page 21).

IV. CONTENTS OF AN APPRAISAL

The form and content of an appraisal report should reflect recognized appraisal practices, including those set forth by the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation. Borrowing from the latter, the appraisal report must, at a minimum: (1) clearly and accurately set forth the appraisal in a manner that will not be misleading; (2) contain sufficient information to enable the intended users of the appraisal to understand the report properly; and (3) clearly and accurately disclose any extraordinary assumption, hypothetical condition, or limiting condition that directly affects the appraisal and indicate its impact on value (page 27).

V. APPRAISAL REVIEW

Issuers who conduct formal independent reviews of completed appraisal reports can determine that such appraisals meet these *Appraisal Standards* or those adopted by the local agency and were competently performed. Issuers that choose to review appraisal reports should give consideration to the review process in their debt issuance policies, including the selection and minimum qualifications of review appraisers (page 29).

VI. DEFINITIONS

This document concludes by defining terms common to the appraisal of properties within CFDs and assessment districts (page 29).

THE CONTEXT FOR APPRAISALS IN LAND-SECURED FINANCINGS

Mello-Roos special tax bonds and special assessment bonds are payable from special taxes and assessments levied on real property. These taxes and assessments are not a personal debt of property owners: the land itself together with any improvements thereon provides the ultimate security for bondholders. For this reason, Mello-Roos special tax bonds and assessment bond issues are referred to as *land-secured financings*. The relationship between the value of land and improvements in a Mello-Roos community facilities district (CFD) or an assessment district relative to the amount of public debt secured by liens on property in that district is known as the *value-to-lien* or *value-to-debt* ratio. The value-to-lien ratio provides bondholders a general sense of the security underlying Mello-Roos special tax bonds and assessment bonds. However, the property, generally, is not collateral in the sense that a default results in the transfer of title to bondholders.¹ It is simply the case that adequate land values (in excess of liens) offer the best assurance that property owners have an incentive to make special tax or assessment payments and bondholders will receive all principal and interest payments due or, if necessary, new buyers will acquire the properties through the foreclosure and sale of delinquent properties and resume making installment payments. Special tax and special assessment liens have no intrinsic value independent of property values.

SB 1464 Requirements

Senate Bill 1464 (Mello, Chapter 772, Statutes of 1992) established a minimum 3:1 value-to-lien requirement for Mello-Roos special tax bond issues, effective January 1, 1994.² The 3:1 value-to-lien requirement had served as an informal issuance standard for land-secured financings in California for many years. SB 1464 elevated this requirement to state law to address investor concerns arising from the collapse in real estate values in many CFDs during the early 1990s. Special assessment bonds, which share much in common with Mello-Roos special tax bonds from a financial and legal perspective, were not subjected to the 3:1 value-to-lien requirement of SB 1464.

The value-to-lien ratio, though widely accepted as an analytical tool, conveys meaningful information only if it is derived from a reasonably accurate appraisal. Indeed, the appraisal profession itself is not of one mind when it comes to valuing tracts of land in the early stages of development even though this typically is the assignment for CFD and assessment district appraisals. As a result, investors should be attentive to the appraisal report when making investment decisions pertaining to Mello-Roos special tax bonds and assessment bonds.

¹ Bondholders holding bonds issued under the Improvement Act of 1911 [(Part 5 (commencing with Section 6400) of Division 7 of the California Streets and Highways Code)] may force the sale of properties against which an assessment was levied in the event the property owner defaults on the payment of principal or interest.

² Gov. Code Sec. 53345.8 (a). The legislative body of a local government may disregard this value-to-lien requirement by making a finding that the proposed bonds do not present any unusual credit risk due to the availability of credit enhancements, or because a sufficient portion of the principal amount has been deposited into a self-financing and self-liquidating escrow account, or for other reasons specified by the legislative body. Furthermore, the legislative body may disregard the requirement if, by a vote of four-fifths of its members, it determines that the bond sale should proceed because of specified public policy reasons (see Government Code Section 53348 (b) and (c)).

Conventional appraisal methodologies are not well suited to such assignments, which usually call for the preparation of a Discounted Cash Flow (DCF) Analysis. If the margin for error in an appraisal corresponds to its complexity, appraisals employing DCF Analysis are among the most complex since the analysis incorporates assumptions about interest rates, employment growth, housing demand, and other variables that are impossible to predict with certainty. An appraisal of value reflects the appraiser's understanding and application of these assumptions; a fact that may be lost amidst the market research and data analysis incorporated into the appraisal report.

If accuracy is an elusive goal in CFD and assessment district appraisals, consistency need not be. For credit analysis purposes, what is most important is for appraisals to employ a *standardized* approach toward the analysis of cash flows, the derivation of discount rates, and the application of other techniques that contribute to the development of value estimates. Clearly, investors would be better equipped to make decisions if they had some assurance that a 3:1 value-to-lien ratio meant the same thing in Santa Clara County as in San Bernardino County.

To encourage greater standardization in appraisals undertaken to establish value-to-lien ratios in CFDs, SB 1464 authorized the State Treasurer to "recommend definitions, standards and assumptions to be used for these appraisals"³. Though SB 1464 specified that the State Treasurer's appraisal standards are to be advisory only, any local agency initiating procedures to form a CFD on or after January 1, 1994 is required to adopt a statement of definitions, standards and assumptions to be used in its appraisals prior to issuing debt.⁴ In 1994, with the input of municipal finance professionals, the California Debt and Investment Advisory Commission (CDIAC), chaired by the State Treasurer, published the *Appraisal Standards for Land-Secured Financings (CDIAC Standards)*. Since that time, many California issuers have recognized the *CDIAC Standards* as a basis for the conduct of appraisals under the Mello-Roos Act. To a less formal degree, the *CDIAC Standards* also have been used to conduct appraisals intended to value properties within assessment districts. These *Appraisal Standards for Land-Secured Financings* offer a set of general guidelines for appraisers to follow when valuing land and improvements in CFDs and assessment districts. Local agencies may adopt these standards, beginning with Section I on page 7, to satisfy their obligations under SB 1464.

The Mello-Roos Act

The Mello-Roos Community Facilities Act of 1982⁵ authorizes cities, counties, school districts, special districts, joint powers authorities or other municipal corporations or districts to form CFDs for the purpose of financing infrastructure and for annual funding of certain services.⁶ CFDs are formed for funding purposes only and are governed by the legislative body that authorizes their formation. CFDs are authorized to issue bonds secured by special taxes to finance both localized improvements, such as streets and sewers, and more regional facilities, such as schools and freeway interchanges. The formation of the CFD, the levy of the special tax, and the issuance of bonds require two-thirds voter approval. If fewer than 12 registered voters reside in a proposed CFD, the landowners vote on a one-acre-per-vote (or portion thereof) basis. If a special tax proposal receives two-thirds voter approval, a special tax lien attaches to all nonexempt property in the CFD. The vast majority of CFDs are authorized through a landowner

³ California Government Code Section 53345.8(a)

⁴ California Government Code Section 53312.7(a)(5)

⁵ Chapter 2.5 (commencing with Section 53311) of Part 1 of Division 2 of Title 5 of the California Government Code

⁶ Charter cities may enact their own procedural ordinances for CFD financings

vote for the purpose of financing the installation of public infrastructure in real estate development projects.

California Special Assessment Acts

California laws authorize the formation of assessment districts for a variety of purposes. Special assessments are charges imposed on property to pay for the construction, acquisition or maintenance of public improvements that provide a special benefit to that property. Special assessments are legally distinct from taxes, in that taxes do not have to be levied on the basis of the benefit received by the taxpayer. The most common assessment acts include the Improvement Act of 1911 (Streets and Highways Code Section 5000 et seq.) (1911 Act) and the Municipal Improvement Act of 1913 (Streets and Highways Code Section 10000 et seq.) (1913 Act). In addition, the Improvement Bond Act of 1915 (Streets and Highways Code Section 8500 et seq.) (1915 Act) provides local agencies the ability to issue bonds secured by property assessments created through one of the assessment acts. Most assessment bonds are issued under the authority of the 1915 Act. Charter cities and counties may enact their own procedural ordinances for assessment district financings.

Property Value as Security for Bondholders

Mello-Roos special taxes and most special assessments usually are collected on the same tax bill as general property taxes (1911 Act special assessments are billed separately). If not paid in full, the entire tax bill becomes delinquent. If the tax bill is delinquent for five years, the property may be sold at a public tax sale auction. The Mello-Roos Act and the assessment acts also provide for an expedited judicial foreclosure process at the option of the local agency (discussed below). Mello-Roos special tax liens are coequal to and independent of general property tax liens and superior to all private liens. Subsequent special tax liens, unless subordinated by the resolution authorizing the special tax, also enjoy first lien position. Special assessment liens also are coequal to and independent of general property tax liens and superior to all private liens. Bond issues of assessment districts, however, are prioritized in chronological order.

Bond resolutions authorizing Mello-Roos special tax bonds or special assessment bonds typically include a covenant requiring the agency to initiate judicial foreclosure proceedings after special tax or assessment payments have been delinquent for a specified number of days.⁷ To pursue this remedy, the issuer must first file a lawsuit in Superior Court to request a judgment to foreclose on the delinquent lien. Even in an uncomplicated case, the judgment action may take one or two years. If the property owner files for bankruptcy, the judgment action may take longer, as a court-ordered stay preventing the disposition of the property owner's assets may impede the CFD's efforts to foreclose on the delinquent lien. Upon receiving a judgment action, the property may be sold at a foreclosure sale. The foreclosure sale itself must conform to detailed procedural requirements and may take another six months to execute. Absent bondholder consent, the minimum bid at the foreclosure sale must be equal to the amount of the delinquency plus penalties, court costs, and attorney's fees. Bondholders are due only the amount of delinquent principal and interest payments from the foreclosure and sale of property. The lien

⁷ Statements regarding the local agency's responsibilities in the event of default also appear in the fiscal agency agreement or bond indenture.

may not be accelerated. Other proceeds from the sale may be used to replenish reserve funds and extinguish any other liens on the property.

Bonds issued under the Mello-Roos Act and assessment acts other than the 1911 Act are secured by the aggregate of liens in the district and represent a portion of the total debt incurred. Bonds issued under the 1911 Act, by contrast, are issued in the amount of the unpaid assessment (of \$150 or more) on each parcel. Foreclosure under the Mello-Roos Act and the other assessment acts does not result in bondholders taking title to delinquent properties. If the foreclosure sale does not produce a bid satisfying the minimum requirements, bondholders can vote to accept a lower bid, or simply wait and try again. Through foreclosure under the 1911 Act, however, a bondholder can acquire the property on which the delinquent assessment was levied by assuming the remaining assessment lien.

Judicial foreclosure proceedings often do not result in the sale of property at a foreclosure sale. If the subject property has value in excess of its tax liabilities, those parties with financial interests in the property likely will pay off the delinquencies to protect those interests and forestall a foreclosure sale. In a typical scenario, a cash-strapped developer falls behind on both taxes and private mortgage installments due on a property. To protect its mortgage interest, the bank holding the mortgage forecloses its deed of trust, assumes title to the property (in most cases), pays off the delinquencies and puts the property back on the market. Alternatively, the bank may choose not to clear up the delinquencies until closing the sale of the property to a third party, to minimize its holding costs. Technically, the bank could transfer title without resolving the delinquencies, but realistically, the third party buyer would insist that the delinquencies be resolved at the close of escrow. If not, the third party would risk losing its newly acquired property through a foreclosure sale. The initiation of judicial foreclosure proceedings, therefore, can be thought of as the “stick” that prods property owners to remedy special tax and assessment delinquencies.

If judicial foreclosure proceedings progress all the way to a foreclosure sale, quite possibly the value of the property is such that no one believe it to be a sound investment. Perhaps it is worth less than its tax liability, or its land use entitlements have been rescinded or no longer are appropriate for current market conditions. Such a property may not attract a bid satisfying the minimum legal requirements at a foreclosure sale. Moreover, a foreclosure sale would not appear to meet the requisite criteria for a competitive market called for by most definitions of *market value*. Though the sale must be advertised, an obscure notice in a local newspaper will not attract as much interest as real estate brokers working on commission. Besides, the terms of sale must be in cash only. One or more of these conditions may very well depress the sale price. The *foreclosure value* of a property, though impossible to estimate, would almost certainly be less than its market value.

Limitations of the Value-to-Lien Ratio

Insofar as most land-secured debt is sold without a credit rating, investment analysts rely on the value-to-lien ratio as a key indicator of the creditworthiness of Mello-Roos special tax bonds and special assessment bonds. Certainly, a value-to-lien ratio derived from an accurate appraisal conveys useful information to potential investors. A parcel falling below a 1:1 value-to-lien ratio, for example, would be worth less than the principal component of its special tax and assessment liability (that is, its special tax and assessment liability without regard to the interest to become due on that principal over time), which might cause the owner to simply abandon the property. Foreclosing the delinquent lien on such a property would not likely produce a bid at a

foreclosure sale satisfying the minimum legal requirements. A value-to-lien ratio of 3:1 or higher offers investors a theoretical “cushion” against future declines in property values subsequent to the date of value. But a ratio of 3:1 or higher should not be viewed as a guarantee of creditworthiness, for the following reasons:

Volatility of Land Values. Land values can be volatile during the early stages of development, reflecting the sensitivity of real estate development to economic cycles. A downturn in economic activity can cause real estate investors to seek higher rates of return, which will depress value-to-lien ratios (by increasing the discount rate used to discount future cash flows to present value). Volatility may affect the rate of absorption. As the actual rate differs from the rate incorporated into the developers/owners’ financing plan, he or she may experience a cash flow crisis. The “excess coverage” embedded in the 3:1 minimum value-to-lien requirement offers investors some protection from declining land values.

Average vs. Parcel-by-Parcel Ratios. The value-to-lien ratio often cited for a bond issue is only an average: individual parcels in a CFD or an assessment district may fall below the average — possibly even below a 1:1 ratio. For bonds issued during the early stages of development, analysts should review value-to-lien ratios on a parcel-by-parcel basis, if possible, or at least by parcels grouped together under common ownership. As property ownership in a CFD or an assessment district becomes diversified, such an analysis of course becomes infeasible—but also unnecessary, as timely debt service payments become less dependent on individual property owners.

Lengthy Foreclosure Proceedings. If property ownership is highly concentrated during the initial stages of development the delinquency of a major property owner can deplete the reserve fund and threaten the timely payment of debt service, even if the value-to-lien ratio is adequate. Though judicial foreclosure proceedings can be initiated rapidly, the entire process can take several years to complete, and the bankruptcy courts may impede foreclosure action. Adequate value-to-lien ratios do not guarantee uninterrupted debt service payments.

Overlapping Issuance. Finally, local agencies may form overlapping financing districts without coordinating their bond issuance practices. While the statutory requirement of a 3:1 value-to-lien ratio will provide some protection against dilution, the fact that there are exceptions to that rule and that it does not apply to assessment bonds may result in dilution within a CFD.

For all of these reasons, credit analysts should not focus exclusively on value-to-lien ratios, but also review the adequacy of reserve funds, capitalized interest accounts, special tax coverage, the track record and financial resources of the developer, and other security features of the bonds.

APPRAISAL STANDARDS FOR LAND-SECURED FINANCINGS

I. THE APPRAISER - GENERAL REQUIREMENTS

Appraisals undertaken to establish value-to-lien ratios for land-secured financings can be quite complex, requiring the appraiser to interpret the significance of various financial and demographic data. Because an appraisal is an appraiser's *opinion* of value, it is imperative that the appraiser be qualified to render this opinion. The experience of the appraiser is as important to the successful completion of an assignment as are the appraisal standards adopted by a local agency.

Credentials

The Appraiser should be licensed by the State of California Office of Real Estate Appraisers and be a Member of the Appraisal Institute (MAI) or have similar training, experience, and qualifications.

The appraiser undertaking the assignment should be licensed by the State of California Office of Real Estate Appraisers as a Certified General Appraiser and be a Member of the Appraisal Institute (MAI) or have similar training, experience and qualifications. The appraiser should certify that he or she is thoroughly familiar with the recognized and acceptable appraisal methods, techniques and Standards of Professional Practice and Code of Professional Ethics as set forth by the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation.

The appraiser should follow those professional appraisal practices for determining value as are appropriate for the specific property being appraised. Should certain approaches to value, or requirements covered in these *Appraisal Standards* not be applicable to the assignment at hand, the appraiser can fulfill the obligation herein with a brief explanation of its omission. In reports relating to the formation of a CFD or an assessment district, the appraiser should support in the appraisal report all assumptions relating to the existence of infrastructure, utilities, improvements, grading, access, soil conditions, topography, etc., and the highest and best use of the property.

Independence

The appraiser should be an independent contractor retained by the public agency, rather than a landowner/developer.

Even though a public agency usually bears no contingent liability to pay debt service on land-secured debt, these bonds carry the public agency's name, and a default could damage the agency's reputation in the bond market, making future borrowing more difficult or more expensive. The appraisal is central to the credit analysis of land-secured financings. It, therefore, is imperative for the appraisal to be objective, and for the appraiser's compensation not to be tied to the value estimate. To ensure that the public interest is served, the appraiser should be an independent contractor retained by the public agency, rather than by the landowner/developer.

The public agency should, however, require that the landowner/developer provide an advance deposit to pay for the appraisal and any other studies incidental to the financing that can be reimbursed upon the sale of bonds.

II. THE FRAMEWORK OF AN APPRAISAL

Given the variety of reasons for which appraisals are undertaken, and the different analytical techniques that may be employed, appraisers typically begin each assignment by defining the *appraisal* problem. The appraisal problem is a succinct statement of the objective of the appraisal. The appraisal problem should, most importantly, identify (1) the property rights to be valued, (2) the operative definition of value, and (3) the date of the value estimate. Addressing these issues at the outset of the appraisal gives the appraiser the necessary direction to complete the assignment.

Property Rights to Be Valued

Appraisals undertaken to establish value-to-lien ratios in CFDs and assessment districts should value the fee simple interest subject to special tax and special assessment liens. In the event the district includes leased fee or leasehold properties it is important for the appraiser to understand the terms of the lease and the impact of those terms on the market value of those properties.

An appraisal is always a valuation of specified rights in the subject property, not of the physical real estate itself. According to the “bundle of rights” theory derived from English common law that underlies modern real estate appraisal practices, real property ownership consists of a group of distinct rights in the subject property, each of which can be separated from the others and conveyed to another party. The transfer of legal and financial rights to another party, through a mortgage or a lease, for example, creates a partial or fractional interest in the property. The property rights to be valued, therefore, must be clearly identified at the outset of any appraisal assignment.

The property rights to be valued largely depend upon how the client intends to use the information contained in the appraisal report. At a minimum, appraisals are commissioned in conjunction with land-secured financings for the purpose of establishing value-to-lien ratios. The value-to-lien ratio essentially measures the collateral of bondholders, much like the *loan-to-value* ratio measures a lending institution’s collateral in a commercial loan. Property is not collateral in the sense that bondholders assume title to delinquent properties to remedy a default. But the value-to-lien ratio implies the contingency that property may have to be sold to satisfy the claims of bondholders whether through foreclosure action or, more likely, private sale. Because special taxes and, in most cases assessments, enjoy a first lien position, delinquencies jeopardize all legal and financial interests in the subject property. The appraisal should therefore value the entire “bundle of rights” in the subject property, all of which would be transferred upon sale.

Fee Simple Estate. Appraisals undertaken to establish value-to-lien ratios should value the ownership interest *subject to special tax and special assessment liens*. A fee simple estate represents absolute ownership unencumbered by any other interest or estate subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat. Owners in fee simple retain the entire bundle of rights in the subject property permitted under law. They may choose to improve or sell their property and the property becomes part of their estate to be passed on to their heirs.

The rights of real property ownership in large development projects may be mortgaged, further dividing the property rights into debt and equity interest. Nonetheless, the appraiser is not interested in valuing individual ownership or other financial interest in the subject property, but rather the entire legal estate – the fee simple estate – that provides the ultimate security for bondholders.

These standards qualify the concept of an ownership interest with the phrase “*subject to special tax and special assessment liens*.” Empirical evidence (and common sense) suggests that the selling prices of properties encumbered by such liens are discounted compared to properties free and clear of such liens. In new development projects, annual Mello-Roos special tax and/or special assessment payments can be substantial, and prospective purchasers should take this added tax burden into account when formulating their bid prices. But historically, appraisers have not adjusted value estimates to reflect special tax and assessment liens in a consistent manner. Sometimes they add the amount of these liens to value estimates, sometimes they subtract the amount, and sometimes they ignore it altogether. Taxes, including special taxes, are legally distinct from assessments. Because fee simple ownership is subject to the governmental power of taxation, but not the power to levy assessments, appraisers sometimes treat special tax and assessment liens differently. Although reasonable arguments can be made in defense of different approaches toward valuing properties encumbered by special tax and assessment liens, what is needed is a standardized approach. The discussion on the *Sale Comparison Approach*, which begins on page 22, describes one method for discounting value estimates to reflect these liens.

Definition of Value

Appraisals undertaken to establish value-to-lien ratios in CFDs and assessment districts should estimate the Market Value of the subject property. Since two distinct “markets” may be at work in a CFD or assessment district, the estimate of Market Value should be refined to reflect the Retail Value of fully improved and occupied properties and the Bulk Sale Value of all vacant properties, including both unimproved properties and improved or partially improved properties owned by a developer or builder and not yet sold to homeowners.

Market Value. Appraisals of real estate in CFDs and assessment districts should estimate the *market value* of the subject property, which is the definition of value implicit in the value-to-lien ratio. As long as the property securing a bond issue has *market value* in excess of its liens (i.e. a value-to-lien ratio greater than 1:1) property owners have a financial interest in honoring their special tax and/or assessment obligations. A property owner/developer that holds real estate with a *market value* in excess of its liens may attempt to avoid resolving delinquencies in a timely manner, such as filing and withdrawing bankruptcy petitions to obstruct the foreclosure process or paying delinquencies then allowing new installments to go delinquent. But ultimately, the owner does not want to risk losing such a property through a foreclosure sale, where it likely would sell for something approaching its liquidation value and leave the owner with no compensation. Instead, the delinquent owner would prefer to sell the property privately, where it could fetch its *market value* (less any “fire sale” discount) and generate some remuneration (after subtracting the delinquencies, which the new buyer would want resolved). For this reason, *market value* represents the security of bondholders in a land-secured financing, and should be the operative definition of value in CFD and assessment district appraisals.

Market value is defined as follows:

The most probable price in cash or in terms equivalent to cash for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress.

This definition of *market value*, though helpful, does not adequately reflect the dynamics of the real estate development industry which affect value. The market for detached single-family houses is very different from the market for large tracts of undeveloped land. At any point in time, one or both of these markets will be at work in a CFD or assessment district. The appraiser's estimate of *market value*, therefore, needs to be further refined into *retail value* and *bulk sale value*. The development status of the subject property at the time of the appraisal will determine which definition applies.

Retail Value. *Retail value* should be estimated for all fully improved and occupied properties. *Retail value* is an estimate of what an end user would pay for a finished property under the conditions requisite to a fair sale. Appraisers estimate *retail value* through the conventional appraisal methods discussed in the following section (principally the Sales Comparison Approach). Investment bankers or other parties to the financing may request from the appraiser the *aggregate retail value*, which simply is the sum total of the retail values estimated for each parcel.

Bulk Sale Value. *Bulk sale value* should be estimated for all vacant properties, including both unimproved properties and improved or partially improved owned by a developer or merchant builder and not yet sold to homeowners. *Bulk sale value* is derived by discounting retail values to present value by an appropriate discount rate, through a Discounted Cash Flow (DCF) Analysis, which is discussed in the following section. *Bulk sale value* is defined as follows:

The most probable price, in a sale of *all* parcels within a tract or development project, to a single purchaser or sales to multiple buyers, over a reasonable absorption period discounted to present value, as of a specified date, in cash, or in terms equivalent to cash, for which the property rights should sell after reasonable exposure, in a competitive market under all conditions requisite to a fair sale, with buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue stress.

The credit risks of land-secured financings are greatest during the initial stages of development, when property ownership is highly concentrated, and the delinquency of a major property owner could deplete the reserve fund and threaten the timely payment of debt service. Conceivably, *all* properties in a CFD or an assessment district may need to be sold at once, if ownership is concentrated in the hands of a single delinquent owner or, alternatively, in the hands of a few owners, each of whom is delinquent. The *bulk sale value*, therefore, assumes the sale of *all* properties in the CFD or assessment district (or, in some cases, all properties in a subunit or phase, as described below under "Value Allocations"). It really is a hypothetical definition of value, as a forced sale of the entire property most likely will never occur. Nonetheless, the assumptions embedded in *bulk sale value* can and should be market-driven.

Date of the Appraisal

The date of the appraisal should clearly be identified in the appraisal report. The period between the date of the appraisal and the financing should be kept as short as possible, preferably no more than three months, to accurately represent land values to prospective investors.

An appraisal is an estimate of value as of a specific date that is valid only for that date. The economic conditions that give rise to an appraiser's estimate of value are subject to change and may render the estimate obsolete. The date of the value estimate, therefore, should clearly be identified in the appraisal report. The period between the date of the appraisal and the financing should be kept as short as possible, preferably no more than three months, to accurately represent land values to prospective investors. It is not appropriate to apply a prospective estimate of value to a financing executed in the present.

III. VALUATION METHODS

Appraisals of unimproved CFDs and assessment districts usually employ a DCF Analysis. Although favored for the valuation of land development projects, the DCF Analysis can be applied to developed properties, as well. The DCF Analysis is an appraisal method that converts future cash flows into a present value. As such, it incorporates principles used to evaluate other financial projects, including investing and capital budgeting. In the case of large land development projects, discounting future cash flows provides an estimate of land values. In theory, the amount that a developer would be willing to pay for an unimproved property should be equivalent to the present value of the net cash flows that would be generated by the development and sale of that property less the cost of developing it to its highest and best use, taking into consideration the cost of carry, risk, profit, and the time value of money.

The remaining three valuation methods discussed in this section, the Sales Comparison Approach, the Cost Approach, and the Income Capitalization Approach, form the core of modern real estate appraisal practices. These valuation methods are appropriate for conventional appraisal assignments, but are less well suited valuing multiple properties located in CFDs and assessment districts. These methods, however, are instrumental to the DCF Analysis as they provide a base value for the subject property from which the cash flow model is derived. There is a wealth of information available on these appraisal methods, and CDIAC has little to contribute to this body of knowledge. This section merely provides a broad overview of these approaches to value, and addresses the issues that arise when applying these methods to CFD and assessment district appraisals.

Discounted Cash Flow Analysis

DCF Analysis is appropriate for bulk sale valuations of unimproved properties and improved or partially improved but unoccupied properties. DCF Analysis should rely on an absorption study to estimate the length of time required to develop and sell properties to end-users, (i.e., land sales to merchant builders or commercial builders or completed home sales to homeowners). The expense of converting raw land to finished homes or improved lots must be deducted from gross cash flow to derive net cash flow prior to discounting. The discount rate selected by the appraiser should be based upon existing market conditions and reflect the rates of return, profit, and risk needed to attract debt and equity participation in the project.

Appraisals undertaken to establish value-to-lien ratios for land-secured financings typically value property that is in an unimproved or partially improved condition.⁸ The appraiser is not likely to find comparable sales data for unimproved property within CFDs and assessment districts, which are unique in many respects and do not change hands frequently enough to establish credible pricing patterns. As a result, these appraisals typically rely on a DCF Analysis to estimate land values (which also is called the *Subdivision Development* or *Land Development Approach* in the appraisal literature). The DCF Analysis is a financial analysis technique for evaluating any investment that produces cash flows in future years, not just real estate

⁸ Bonds issued after a CFD or an assessment district is substantially developed and the real estate is put into final use (i.e. occupied residential housing) may rely on assessed value, rather than commission another appraisal even though assessed valuation sometimes understates market value under Proposition 13 assessment practices or, alternatively, overstates market value in a down economic cycle.

investments. The DCF Analysis offers a more precise method of evaluating the future cash flows generated by real estate development projects or other income-producing properties than the more simplistic capitalization rate formulas and gross rate multipliers traditionally employed by professional appraisers.

The DCF Analysis considers the shortage of comparable sales data for large land development projects by valuing a subject property according to projections of the cash flows that would be generated by its development and the sale of improved lots or finished homes. An *absorption* or market demand study may be commissioned for the purpose of estimating the length of time in which the properties can be developed and sold. If an independent consultant carries out the study, the appraiser must consider the rate of absorption projected by the study and comment on any differences in the rate incorporated into the DCF Analysis. The cash flows generated in each year of the absorption period are then discounted to present value by an appropriate discount rate. The appraiser's estimate of land value equals the sum total of the present values of these cash flows. In theory, a developer would be willing to pay this amount for the property in return for the opportunity to develop it and earn the cash flows derived through the sale of finished homes to homeowners or improved lots to merchant builders.

In conducting a DCF Analysis, appraisers must begin with a base value that reflects the master developer's gross revenues or what the developer will receive as the property is absorbed by the market. Appraisers may differ in their assumptions concerning the manner in which the property is absorbed. Gross revenues, as a result, may be a function of the sale of finished homes (for residential development projects) to homeowners or of the sale of improved lots to merchant builders. To determine the value of the land, the appraiser who assumed the sale of finished homes must deduct the cost of building these homes, including all associated site improvements, from gross revenues. The appraiser who assumed the sale of parcels to merchant builders must deduct the cost of developing the site, short of building homes. In this way, the final cash flows applied to the DCF Analysis reflect net revenues resulting from the future sale of the property. The value assigned to the sale of finished homes or improved lots is determined by comparing similar sales or similar products using the Sales Comparison Approach.

Figure 1

Discounted Cash Flow Analysis

$$PV = CF_0 + \frac{CF_1}{1+r} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n}$$

Where:

- PV = Present Value
- CF = Net Cash Flow (per absorption period)
- r = Discount Rate
- n = Final Absorption Period

The key variables in a DCF Analysis are discussed below and illustrated in the hypothetical DCF analyses presented in Tables 1 and 2. The two values derived from this

exercise differ with respect to the discount rates used. All other assumptions used in the analysis are identical. Different discount rates generate different valuations. As discussed below, the discount rate, while a objective determination of the appraiser based upon empirical evidence, must be based upon conditions pertaining to the development process, including, among others, the status of current development entitlements (Specific Plan, tentative tract or final tract map), or other approvals such as environmental permits and the timing and requirements of future entitlements and approvals.

Number and Type of Buildings and/or Sites. The DCF Analysis values unimproved land as if it were subdivided, developed, and sold. The first step in preparing a DCF Analysis, therefore, is to determine the mix of residential, commercial and industrial development to occur. For most appraisals undertaken to establish value-to-lien ratios for land-secured financings, the development plan will already have been prepared and most, if not all, necessary land use approvals secured. In the hypothetical DCF Analysis illustrated in Tables 1 and 2, the development consists of 2000 residential units.

Rate of Absorption. It should be considered good practice for issuers to have an *absorption* or market demand study performed to estimate the dates of sale of finished properties to homeowners and improved lots to merchant builders. The study involves a detailed examination of economic and demographic data in order to estimate how quickly a development project can be *absorbed* or sold to end-users. An independent consultant or the appraiser may conduct the study. Steps in the analysis include: 1) a review of economic indicators such as employment growth to project regional population growth and the likely demand for residential, commercial, and industrial development; 2) an estimate of the proportion of overall demand that will be captured by the development project in question by product type; and 3) an assessment of the supply of existing inventory and product under construction relative to anticipated demand, and to reach a judgment as to the competitiveness of the subject property. Finally, the study should establish an *absorption schedule* that estimates the dates of sale and sale prices of finished properties to homeowners (sometimes referred to as “Price Points”). In the example illustrated in Tables 1 and 2, the 2000 units will be absorbed at a rate of 400 units per year during Years 2 through 6.

Among those projects that a market absorption study can most benefit are:

- a) **Moderate to large number of residential units (i.e. 500 to 1000+) or master planned communities.** Large projects require more time to sell out and are, consequently, more subject to future changes in economic and demographic forces that drive sales. Given market conditions at the time of the appraisal, however, it is likely that an independent market absorption study may be warranted on projects of fewer units. For example, projects composed of 300 to 500 units of the same product type may have an absorption time, assuming four units per month, of six to 10 years. A 300- to 500-unit project composed of four non-competing products is likely to sell out in two to three years.
- b) **Projects that are not expected to commence escrow closings to homeowners for a year or more.** The longer the time to market-entry, the more significant future economic and demographic changes are likely to be.
- c) **A project that represents a unique market offering.** Niche products, such as condominiums in an area that favors single-family homes, may require a longer absorption horizon.

- d) **Projects located in rural areas at the fringe of development.** In the event of an economic recession or slowdown, projects located in rural areas at the fringe of development are typically impacted to a greater degree as compared to projects situated in established urbanized areas.

Direct and Indirect Costs. The expense of converting raw land to finished product or improved lots must be deducted from gross cash flow to derive net cash flow before discounting to present value. Direct costs, or *hard costs*, which must be deducted from cash flow, include the cost of developing the site, including infrastructure such as streets, water, sewer, grading, and developer costs attributable to development fees and permits. Other expenditures that must be deducted from cash flow are referred to as indirect or *soft costs*, and include items such as administrative overhead, sales and marketing costs, financing costs, taxes, and insurance.

- a) **Land Improvements.** Either a licensed civil engineer or others possessing similar expertise should estimate all land improvement (i.e., infrastructure) costs and they should be presented in the report in sufficient detail so that they may be reviewed by a licensed civil engineer. Estimates based on rules of thumb are not acceptable. While the appraiser should review these costs it is unlikely they possess the professional expertise necessary to validate these estimates. They should, however, undertake a diligent review of these estimates to identify unusual or unrelated costs.
- b) **Cost of Structures.** If the appraiser is valuing the project based upon the assumed sale of finished homes he or she should check the reasonableness of the developer's construction costs for the work in progress or already completed and cite comparative sources used to review the developer's costs.
- c) **Indirect Costs.** The appraiser should include reasonable estimates for indirect costs such as marketing, overhead, taxes, and construction financing (for land improvements and proposed structures). This includes any special tax and assessment obligations that the master developer has during the absorption period. The appraiser needs to consider the Rate and Method of Apportionment for the CFD or assessment district and should apply it to the projected sales of lots or homes to determine the master developer's outstanding obligation.
- d) **Infrastructure Financed through Special Taxes and Assessments.** Privately financed infrastructure improvements represent a direct cost to the developer that should be deducted from gross cash flow, as these costs depress the return on the initial land investment. If improvements are financed through special taxes and assessments levied on the property in the development, the appraiser should address the process of funding these improvements from the proceeds of the CFD or assessment district bonds and list them as a limiting condition of the appraisal report. In other words, the value of the land should take into consideration the funding for the improvements that are financed by improvement bonds paid from special taxes or assessments levied on the property. In as much as the value of the land is augmented by the value of the improvements funded through special taxes or assessments, the developer's revenues must be adjusted to account for these costs. In doing so, the appraiser should take into consideration the absorption schedule. As finished homes or improved lots are being sold, the special tax obligation or the assessment obligation of the master developer is decreasing. In calculating the developer's special tax obligations (i.e. the adjustment to gross revenues as a result of improvements financed through special tax bonds), the appraiser must integrate the Rate and Method of Apportionment with the absorption schedule. Again,

the value of finished homes or improved lots is derived from the sale of comparable properties possessing similar special tax rates.

Discount Rate. The discount rate is perhaps the single most important but frequently misunderstood variable in a DCF. The *Appraisal of Real Estate Twelfth Edition* describes *Discount Rate* as “any rate to convert future cash flow over time to a present value.”⁹ The discount rate should reflect (a) the time value of money, (b) profit, and (c) risk. Risk can be nonspecific, such as that resulting from the development process or the uncertainty that specific cash flows materialize as assumed by the appraiser. Other factors that may influence the selection of a discount rate are perceived rates of return for alternative investments, the availability of debt financing, and prevailing tax laws. There are a number of ways that an appraiser may use to select a discount rate, however, the resulting rate must reflect current market conditions. One method of calculating a discount rate, referred to as a “built up” rate, takes into consideration the theoretical factors composing the discount rate.¹⁰ The discount rate also may be based on the rate used by other master developers in their proforma statements when acquiring tracts of undeveloped land for development. Regardless of the method used to set the discount rate, the appraiser should provide a full discussion of the method in the appraisal report.

The appraiser may choose to include developer profit as a separate line item in the DCF Analysis, including it as an indirect cost against revenues. This approach is in contrast to incorporating developer profit into the discount rate. While either method is valid, the market tends to evaluate large development projects based upon their total return and does not separate out profit in this calculation. In smaller projects, those typically less than 200 lots in which a merchant builder purchases lots from a master developer, it is more common to break out profit from total revenues.

Because the DCF Analysis attempts to simulate, or “mirror” the market, it emphasizes the use of market-derived data in the analysis. In a perfect world the appraiser would have *both* the value derived from a comparison of sales of large tracts of land designated for master planned communities and carrying a similar infrastructure financing burden and the value derived through a DCF Analysis using market values for finished products arrive at the same conclusion. However, the difficulty in obtaining comparable sales of undeveloped properties necessitates the use of the DCF Analysis to determine market value.

⁹ *The Appraisal of Real Estate*, 12th edition, The Appraisal Institute, Chicago, 2001

¹⁰ A “built up” rate often begins with a “safe” or “risk-free” rate of return and adds to it a premium for inflation and risk.

This table is provided for demonstration purposes only. To use this method correctly, sales data and economic drivers such as inflation rates must be determined from current market conditions.

ASSUMPTIONS MATRIX

Table 1

----- Parcel's Land-Use Designations -----

| PRODUCT TYPE | PLANNING AREA | PRICE PER LOT | NET LOTS | LOT SIZE SQ. FT. |
|----------------------------------|---------------|---------------|-------------|------------------|
| Low Residential | | | | |
| | 1 | 200,000 | 100 | 10,000 |
| | 2 | 200,000 | 100 | 10,000 |
| | 3 | 200,000 | 100 | 10,000 |
| | 4 | 200,000 | 100 | 10,000 |
| Low Residential Totals | | | 400 | |
| Medium Residential | | | | |
| | 5 | 150,000 | 100 | 6,000 |
| | 6 | 150,000 | 100 | 6,000 |
| | 7 | 150,000 | 100 | 6,000 |
| | 8 | 150,000 | 100 | 6,000 |
| Medium Residential Totals | | | 400 | |
| Medium High Residential | | | | |
| | 9 | 100,000 | 100 | 4,000 |
| | 10 | 100,000 | 100 | 4,000 |
| | 11 | 100,000 | 100 | 4,000 |
| | 12 | 100,000 | 100 | 4,000 |
| Medium High Resi Totals | | | 400 | |
| High Residential | | | | |
| | 13 | 50,000 | 100 | 3,000 |
| | 14 | 50,000 | 100 | 3,000 |
| | 15 | 50,000 | 100 | 3,000 |
| | 16 | 50,000 | 100 | 3,000 |
| High Residential Totals | | | 400 | |
| Apartment lands | | | | |
| | 17 | 35,000 | 200 | |
| | 18 | 35,000 | 200 | |
| Apartment lands Totals | | | 400 | |
| Grand Total | | | 2000 | |

Gen Dev Costs (before finance costs)..... 25,000,000

----- Inflation Rates Annually -----

Appreciation of Property..... 3.00%
 Cost Increases..... 2.00%

----- Indirect Costs -----

Admin./Conting..... 1.00%
 Sales & Marketing Costs..... 5.00%
 Taxes (See schedule)

----- Other Assumptions -----

Annual Discount Rate..... 15.00%
 Each time period = Annual

CONCLUSIONS

Present Value of the Property (millions)..... \$126.111

Table 1a
CASH FLOW ANALYSIS (USING TABLE 1 ASSUMPTIONS)

| | -----PERIOD----- | | | | | TOTAL |
|--|------------------|-----------------|-----------------|----------------|----------------|------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| PROJECT REVENUES: | | | | | | |
| Revenues | \$35.000 | \$50.000 | \$57.000 | \$50.000 | \$22.000 | \$214.000 |
| Adjusted Revenues | \$36.050 | \$53.045 | \$62.285 | \$56.275 | \$25.504 | \$233.160 |
| Price Inflation (Annually) | 3.00% | | | | | |
| PROJECT COSTS: | | | | | | |
| DIRECT COSTS | | | | | | |
| Direct Construction Costs (W/OUT Land): | | | | | | |
| Total Backbone costs | \$5.000 | \$5.000 | \$5.000 | \$5.000 | \$5.000 | \$25.000 |
| Cost Inflation (Annually) | 2.00% | | | | | |
| Cost Inflation - Annual | 2.00% | 1.0200 | 1.0404 | 1.0612 | 1.0824 | 1.1041 |
| Total Adjusted Direct Costs | \$5.100 | \$5.202 | \$5.306 | \$5.412 | \$5.520 | \$26.541 |
| INDIRECT COSTS | | | | | | |
| Ad Valorem Prop Tax | \$1.395 | \$1.020 | \$0.579 | \$0.100 | \$0.050 | \$3.144 |
| CFD Tax | \$0.800 | \$0.600 | \$0.400 | \$0.200 | \$0.100 | \$2.100 |
| Admin./Conting. | 1.00% | \$0.361 | \$0.530 | \$0.623 | \$0.255 | \$2.332 |
| Sale & Marketing | 5.00% | \$1.803 | \$2.652 | \$3.114 | \$2.814 | \$11.658 |
| Total Indirect Costs | \$4.358 | \$4.803 | \$4.716 | \$3.677 | \$1.680 | \$19.234 |
| TOTAL DIRECT & INDIRECT COSTS | \$9.458 | \$10.005 | \$10.022 | \$9.089 | \$7.201 | \$45.774 |
| TOTAL COSTS | \$9.458 | \$10.005 | \$10.022 | \$9.089 | \$7.201 | \$45.774 |
| REVOLVING LOAN FUND | | | | | | |
| Loan Draw on Direct Costs - reimbursements | | | | | | |
| Loan Repayment | | | | | | |
| Loan Balance | | | | | | |
| Total Period Loan Interest | | | | | | |
| TOTAL COSTS | \$9.458 | \$10.005 | \$10.022 | \$9.089 | \$7.201 | \$45.774 |
| CASH FLOW ANALYSIS | | | | | | |
| Nominal Dollars: | | | | | | |
| Cash Flow - Year | \$26.592 | \$43.040 | \$52.263 | \$47.187 | \$18.303 | \$187.386 |
| Cumulative | \$26.592 | \$69.632 | \$121.896 | \$169.082 | \$187.386 | \$187.386 |
| Mid Annual Period Discount Factor | 1.000 | 2.000 | 3.000 | 4.000 | 5.000 | |
| Discount Factor: | 15.00% | 0.8696 | 0.7561 | 0.6575 | 0.5718 | 0.4972 |
| Discounted Cash Flow | \$23.123 | \$32.545 | \$34.364 | \$26.979 | \$9.100 | \$126.111 |
| Cumulative | \$126.111 | \$23.123 | \$55.668 | \$90.032 | \$117.011 | \$126.111 |

Note: Columns may not sum due to rounding

This table is provided for demonstration purposes only. To use this method correctly, sales data and economic drivers such as inflation rates must be determined from current market conditions.

ASSUMPTIONS MATRIX

Table 2

----- Parcel's Land-Use Designations -----

| PRODUCT TYPE | PLANNING AREA | PRICE PER LOT | NET LOTS | LOT SIZE SQ. FT. |
|--------------------------------|---------------|---------------|----------|------------------|
| Low Residential | | | | |
| | 1 | 200,000 | 100 | 10,000 |
| | 2 | 200,000 | 100 | 10,000 |
| | 3 | 200,000 | 100 | 10,000 |
| | 4 | 200,000 | 100 | 10,000 |
| Medium Residential | 5 | 150,000 | 100 | 6,000 |
| | 6 | 150,000 | 100 | 6,000 |
| | 7 | 150,000 | 100 | 6,000 |
| | 8 | 150,000 | 100 | 6,000 |
| Medium High Residential | 9 | 100,000 | 100 | 4,000 |
| | 10 | 100,000 | 100 | 4,000 |
| | 11 | 100,000 | 100 | 4,000 |
| | 12 | 100,000 | 100 | 4,000 |
| High Residential | 13 | 50,000 | 100 | 3,000 |
| | 14 | 50,000 | 100 | 3,000 |
| | 15 | 50,000 | 100 | 3,000 |
| | 16 | 50,000 | 100 | 3,000 |
| Apartment lands | 17 | 35,000 | 200 | |
| | 18 | 35,000 | 200 | |

Gen Dev Costs (before finance costs)..... 25,000,000

----- Inflation Rates Annually -----

Appreciation of Property..... 3.00%
 Cost Increases..... 2.00%

----- Indirect Costs -----

Admin./Conting..... 1.00%
 Sales & Marketing Costs..... 5.00%
 Taxes (See schedule)

----- Other Assumptions -----

Annual Discount Rate..... 25.00%
 Each time period = Annual

CONCLUSIONS

Present Value of the Property (millions)..... \$100.904

Table 2a
CASH FLOW ANALYSIS (USING TABLE 2 ASSUMPTIONS)

| | -----PERIOD----- | | | | | |
|--|------------------|-----------------|-----------------|----------------|----------------|------------------|
| | 1 | 2 | 3 | 4 | 5 | TOTAL |
| PROJECT REVENUES: | | | | | | |
| Revenues | \$35.000 | \$50.000 | \$57.000 | \$50.000 | \$22.000 | \$214.000 |
| Adjusted Revenues | \$36.050 | \$53.045 | \$62.285 | \$56.275 | \$25.504 | \$233.160 |
| Price Inflation (Annually) | 3.00% | | | | | |
| Period Inflation - Annual | 3.00% | 1.0300 | 1.0609 | 1.0927 | 1.1255 | 1.1593 |
| PROJECT COSTS: | | | | | | |
| DIRECT COSTS | | | | | | |
| Direct Construction Costs (W/OUT Land): | | | | | | |
| Total Backbone costs | \$5.000 | \$5.000 | \$5.000 | \$5.000 | \$5.000 | \$25.000 |
| Cost Inflation (Annually) | 2.00% | | | | | |
| Cost Inflation - Annual | 2.00% | 1.0200 | 1.0404 | 1.0612 | 1.0824 | 1.1041 |
| Total Adjusted Direct Costs | \$5.100 | \$5.202 | \$5.306 | \$5.412 | \$5.520 | \$26.541 |
| INDIRECT COSTS | | | | | | |
| Ad Valorem Prop Tax | \$1.395 | \$1.020 | \$0.579 | \$0.100 | \$0.050 | \$3.144 |
| CFD Tax | \$0.800 | \$0.600 | \$0.400 | \$0.200 | \$0.100 | \$2.100 |
| Admin./Conting. | 1.00% | \$0.361 | \$0.530 | \$0.623 | \$0.563 | \$2.332 |
| Sale & Marketing | 5.00% | \$1.803 | \$2.652 | \$3.114 | \$2.814 | \$11.658 |
| Total Indirect Costs | \$4.358 | \$4.803 | \$4.716 | \$3.677 | \$1.680 | \$19.234 |
| TOTAL DIRECT & INDIRECT COSTS | \$9.458 | \$10.005 | \$10.022 | \$9.089 | \$7.201 | \$45.774 |
| TOTAL COSTS | \$9.458 | \$10.005 | \$10.022 | \$9.089 | \$7.201 | \$45.774 |
| REVOLVING LOAN FUND | | | | | | |
| Loan Draw on Direct Costs - reimbursements | | | | | | |
| Loan Repayment | | | | | | |
| Loan Balance | | | | | | |
| Total Period Loan Interest | | | | | | |
| TOTAL COSTS | \$9.458 | \$10.005 | \$10.022 | \$9.089 | \$7.201 | \$45.774 |
| CASH FLOW ANALYSIS | | | | | | |
| Nominal Dollars: | | | | | | |
| Cash Flow - Year | \$26.592 | \$43.040 | \$52.263 | \$47.187 | \$18.303 | \$187.386 |
| Cumulative | \$26.592 | \$69.632 | \$121.896 | \$169.082 | \$187.386 | \$187.386 |
| Mid Annual Period Discount Factor | 1.000 | 2.000 | 3.000 | 4.000 | 5.000 | |
| Discount Factor: | 25.00% | 0.8000 | 0.6400 | 0.5120 | 0.4096 | 0.3277 |
| Discounted Cash Flow | \$21.274 | \$27.546 | \$26.759 | \$19.328 | \$5.998 | \$100.904 |
| Cumulative | \$100.904 | \$21.274 | \$48.819 | \$75.578 | \$94.906 | \$100.904 |

Note: Columns may not sum due to rounding

Both Tables 1 and 2 illustrate how dramatically the choice of the discount rate affects land value estimates under a DCF Analysis. The two discounted analyses differ only in terms of the discount rate used to derive a present value from the same series of cash flows. In Table 1, those cash flows discounted by a factor of 15%, indicate a present value of approximately \$126 million. The same cash flows in Table 2, discounted by a factor of 25% indicate a value of approximately \$100 million.

Both Table 1 and 2 begin with total developer revenues of approximately \$233 million dollars. By deducting direct and indirect costs and using a discount rate that takes into consideration the time value of money, risk, and developer profits, the appraiser arrives at the value the market would pay for a group of finished homes or improved lots (either \$126 million (Table 1) or \$100 million (Table 2)) rather than their aggregate retail value (\$233 million).

Technical Requirements. Cash flow projections should include both sales of finished homes to homeowners and improved lots to merchant builders. Any product (improved lots, residential units or an unleased income property) which will have unsold or unleased inventory for one year or longer should be discounted. Subdivision layouts or the anticipated size of merchant builder land sales should conform to reasonably anticipated configurations and site yields considering the characteristics of the property appraised. If both direct Sales Comparison valuation and DCF are provided, the values should be reconciled.

Mass Appraisal Techniques

When an entire tract or project has been built and fully absorbed, the appraiser may employ mass appraisal techniques, utilizing conservative per dwelling unit estimates.

It may be appropriate for large projects that have built-out and occupied product to use mass appraisal techniques. When an entire tract or project has been built and fully absorbed, the appraiser may use an aggregate value estimate based upon conservative per dwelling unit estimates. These estimates may be the actual base selling prices of each plan, provided resales in the tract do not indicate a downward price trend. If price reductions have occurred, these indications must be considered.

Interpretation and Correlation of Estimates

The appraiser's estimate of value should be explained and supported by relevant information.

Appraisers should reconcile their estimates of value and state their reasons why the conclusions reached under the chosen valuation method(s) are indicative of the market value of the property.

Value Allocations

To the extent that the development plan is composed of subunits or phases owned by different parties, the appraiser should seek to determine the value of each such subunit or phase independently. To the extent that the project is composed of different subunits or phases owned by a single party, the appraiser should not allocate these different subunits or phases separately,

but value the project as a single property. In rare cases and for financial disclosure reasons, it may be appropriate to allocate value to different subunits of the project. The appraiser must assume a single owner and be able to separate costs associated with completing each component prior to doing so.

To the extent that appraisers are valuing projects on undeveloped land composed of subunits or phases, the allocation of the cost of improvements can affect the project's overall value-to-lien ratio. To remove any uncertainty in this process, appraisers using the DCF Analysis, should use the lien values determined by the special tax consultant responsible for developing the Rate and Method of Apportionment to identify and adjust comparable sales prices. To the extent that the development plan is composed of subunits or phases owned by different parties, the appraiser should seek to determine the value of each such subunit or phase independently. However, to the extent that the project is composed of different subunits or phases owned by a single party, the appraiser should not allocate these different subunits or phases separately, but value the project as a single property.

Having once determined that the development plan is feasible and conforms to the highest and best use of the property, appraisers should seek to determine the value of the project in a manner that reflects that plan. To address differences between subunits or phases within a master development owned by a single owner the appraiser should select a discount rate that reflects the risk introduced by these different components to the project as a whole. In doing so, appraisers should provide sufficient detail within the appraisal report to allow readers to understand the selection of the discount rate, particularly information pertaining to differences between subunits or phases that may affect the development process.

For financial disclosure reasons it may be important to allocate the project's value to subunits or phases. Doing so may provide a means to assign financial risk to these different components. Assume, for instance, a master planned community composed of a less risky, single family development on one side of a freeway and a more risky, commercial development on the opposite side. The issuer may wish to disclose in the bond offering documents the values attributable to these two subunits. To do so, the appraiser must be able to obtain accurate costs that can be assigned to these different uses and that account for the needed improvements to deliver these components to a developed lot or finished home state. In addition, the appraiser must conduct the evaluation based upon the assumption that a single owner owns the subunits.

Sales Comparison Approach

When sufficient data are available, the Sales Comparison Approach offers the best indication of the market value of the subject property, because it is based on actual sales of finished homes or improved lots. Value estimates under the Sales Comparison Approach should be adjusted to reflect differences in special tax and special assessment liens encumbering the subject property as compared to the sales data.

Many people gain their first exposure to professional appraisal practices when originating or refinancing a home mortgage, since financial institutions typically require a Sales Comparison appraisal as part of the application process to ensure that the amount of the loan does not exceed a specified portion of value. The Sales Comparison Approach derives an estimate of value by comparing the subject property to recent sales data for identical or similar properties. Since this approach relies on actual sales data, it offers the best indication of the market value of property in a CFD or assessment district.

Data Constraints Limit Application. Application of the Sales Comparison Approach to appraisals of unimproved CFDs and assessment districts typically may be constrained by a lack of comparable sales data. In smaller residential tracts of land (e.g. 100 or 200 lots), there may be an adequate number of recent sales to estimate the market value of lots or parcels. However, an appraiser attempting to estimate the bulk sale value of a 500 acre tract of unimproved land is not likely to find recent comparable sales data, for two reasons: 1) properties of this scale are not likely to be comparable in terms of topography, proximity to highways, zoning, and other factors affecting value and 2) transactions of this magnitude simply occur too infrequently to establish pricing patterns. Comparable sales data is much more readily available for a finished product ready for sale to end users (for example, a 2,200-sq. foot single family detached house with four bedrooms and two bathrooms). As a consequence, appraisals of unimproved land typically require the preparation of a DCF Analysis. The Sales Comparison Approach, however, is integral to DCF Analysis, since it provides the analytical basis for estimating the retail values of finished homes or improved lots from which cash flows are derived.

Discounting Retail Values to Reflect Special Tax and Assessment Liens.¹¹ Appraisals under the Sales Comparison Approach should be adjusted to reflect the differences between the subject of the appraisal and the comparable properties that affect value. These differences include not only physical differences in location, square footage, and construction quality, but also differences in tax burdens. The modern California real estate market is characterized by wide disparities in tax burdens between communities, many of which have resulted from the innovations in public finance that followed the passage of Proposition 13. Market research indicates that these tax differences, if not matched by equally valuable differences in service levels, result in different housing prices. Adjustments made in response to differing tax burdens vary considerably by location and type of housing product segments. Consequently, generalizations about the amount of adjustment required to make two different properties comparable may not be appropriate.

In those cases that an appraiser is not able to identify comparable properties, appraisals for residential, commercial and industrial properties should be adjusted on a case-by-case basis to reflect the special tax and special assessment liens encumbering the subject property. Since assessment liens are a fixed amount, the appraiser can determine, based upon an analysis of comparable sales data, how much of this fixed amount to deduct from the value estimate of the subject property. Special tax liens, however, are "floating" liens that are recalculated annually, which complicates the valuation adjustment. The appraiser must adjust for such liens in a manner that incorporates prevailing market conditions. Doing so may require the appraiser to compare similar sales that differ only in terms of tax rates, interview builders to assess the market's response to different tax rates, and review the structure of the bond issue to identify the term, the interest rates, and the presence of prepayment penalties.

Technical Requirements. The appraiser's opinion of the value of the property should be confirmed by sales prices of comparable, or nearly comparable, properties having similar highest

¹¹ When applying the Sales Comparison Approach, the appraiser seeks to use properties that have sold as a base for estimating the value of the subject property. The sales price of the comparable property is adjusted to reflect differences between the comparable and the subject. To the extent that the appraiser is able to identify comparables that are similar as possible to the subject, including benefits provided through CFD or assessment financing, improves the accuracy of the Sales Comparison Approach.

and best uses. The appraisal report should support all adjustments, including other-than-market financing, and set forth the analysis that resulted in the value of the land being appraised. Detailed data sheets should be included either in the body or the addenda of the report.

- a) **Attached and detached residential.** When valuing residential complexes with completed and sold units, standing inventory or newly completed units, the appraiser must identify the source of the data (in-tract or outside projects), base selling price for dwelling units, premiums, concessions or incentives, unit sizes, costs to complete (carpets, appliances, etc.) and support adjustments to the data.
- b) **Income properties.** The appraiser must identify the sources of data, sales prices, terms, comparability to subject property, and support adjustments to the data.

Cost Approach

The Cost Approach may not be appropriate for appraisals undertaken to establish value-to-lien ratios in CFDs and assessment districts. The Cost Approach may be useful, however, for adjusting for physical differences between properties under the Sales Comparison Approach. The cost of publicly financed infrastructure should not simply be tacked on to value estimates, however, if comparable sales data fully reflect the value contributed by comparable infrastructure improvements.

The Cost Approach derives an estimate of value by estimating the replacement or reproduction costs of structures and improvements. The amount that a buyer would be willing to pay for an improved property is assumed to approximate what it would cost that buyer to purchase a similarly located parcel of vacant land and erect comparable structures and improvements. To estimate value under the Cost Approach, the appraiser should first evaluate the site as though vacant, then add the cost of structures and improvements, and finally deduct estimated accrued depreciation.

The Cost Approach commonly is used for appraisals undertaken in conjunction with the funding of construction loans, and underwriting of insurance policies, where the financial liability of replacing damaged structures and improvements is at issue. But the Cost Approach may not be well suited to appraisals of CFDs and assessment districts. Appraisals employing the Cost Approach must value land separately with the Sales Comparison Approach, since land cannot be reproduced or replaced. The Cost Approach obviously will not work for an unimproved CFD or assessment district appraisal, where raw land is the only thing to value. Even if the district is improved, and the costs of the improvements are known, the utility of the Cost Approach is limited. Although the value added to a development project by infrastructure improvements usually *exceeds* the cost of those improvements, there have been some real estate projects that are spectacular busts which never recover development costs for investors (some of the resort developments financed through aggressive savings and loan lending during the 1980s would fall into this category). For these reasons, appraisals undertaken to establish value-to-lien ratios for land-secured financings should not solely rely on the Cost Approach. (An exception to this rule may be made for “special use” properties for which an open market does not exist, such as schools, jails, and fire stations.)

Adjusting Sales Comparison Valuations. The Cost Approach can be useful for adjusting for physical differences between properties under the Sales Comparison Approach. If, for example, a subject property is otherwise identical to comparable properties save for a few

additional infrastructure improvements, the cost of those improvements may be added to the value estimate of the subject property to reflect that difference. In this manner, Sales Comparison appraisals can be adjusted to reflect not only differences in infrastructure improvements, but also products under construction and newly completed structures. The cost of publicly financed infrastructure should not simply be tacked on to value estimates, however, if comparable sales fully reflect comparable infrastructure improvements. It only is appropriate to adjust value estimates to reflect *differences* in infrastructure between the subject and comparable properties.

Technical Requirements. Cost valuations should conform to the following technical requirements:

- a) **Data Presentation.** Data should be arranged in sequence beginning with reproduction or replacement cost.
- b) **Source of Estimates.** The name of the source of all cost estimates should be clearly stated (i.e., engineering firm, contractor, cost estimating service, etc.)
- c) **Unit Costs.** Unit costs and the number of units should be provided so that the reader can determine how the costs were calculated. The dollar amounts of physical depreciation and functional and economic obsolescence, or its omission, should be explained in narrative form. This procedure may be omitted on improvements for which only a salvage or scrap value is estimated.

Income Capitalization Approach

The Income Capitalization Approach is appropriate for retail valuations of income-producing properties. It also may be appropriate for estimating the future retail values of income-producing properties for use in a Discounted Cash Flow Analysis.

The Income Capitalization Approach is used for appraisals involving income-producing properties (i.e., rentals). Like the DCF Analysis, the Income Capitalization Approach translates a stream of future benefits into an estimate of present value. The difference between the two is that the DCF Analysis discounts to present value the cash flow derived from the one-time sale of finished properties to end users, whereas the Income Capitalization Approach applies a market-derived capitalization rate to the annual stream of net income generated by income-producing properties on an ongoing basis, usually commercial, industrial and residential rental properties. The Income Capitalization Approach is not well suited to owner-occupied residences, which do not generate income (though, if necessary, a fair market rental can be imputed for this purpose).

If income and sales data for comparable income-producing properties are readily available, an overall capitalization rate can be derived rather easily. Suppose, for example, that a series of commercial structures that have been generating, on average, \$1 million annually recently sold for an average of \$10 million each. Figure 2 below presents the overall capitalization rate formula:

Figure 2

Overall Capitalization Rate Formula

Net Income/Value Indicated by Comparable Sales

$$\text{\$1M/\$10M} = 10\%$$

To value a comparable structure generating \$2 million annually, the appraiser would divide this net income by the capitalization rate of 10 percent to arrive at an estimated value of \$20 million.

Technical Requirements. Appraisals relying on the Income Capitalization Approach should include a discussion on the leasing (rental) status of subject property (e.g., percent occupied, rental rates, concessions, terms, rental adjustments).

- a) **Rental Estimates.** Appraisers should use rental comparisons to estimate market rental rates and include a discussion of market to actual rentals in existence. A summary of the rental data should be included in the report.
- b) **Vacancy Rates.** Allowance for vacancy and collection costs should be market-related and not an industry rule of thumb. If a project is partially occupied, the appraisal should indicate the time period to reach stabilized occupancy, and the value should reflect the rental loss until such time as stabilized conditions are achieved.
- c) **Operating Expenses.** Estimated operating expenses should consist of an itemized estimate of annual operating expenses, including reserves for replacements. The support for these estimates should be cited.
- d) **Capitalization Rate.** The capitalization of net income should be at the rate prevailing for the property type and location. The capitalization technique, method and rate used should be explained with sources and reasoning.

IV. CONTENTS OF APPRAISAL REPORT

The form and content of an appraisal report should reflect recognized appraisal practices, including those set forth by the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation. Borrowing from the latter, the appraisal report must, at a minimum, 1) clearly and accurately set forth the appraisal in a manner that will not be misleading; 2) contain sufficient information to enable the intended users of the appraisal to understand the report properly; and 3) clearly and accurately disclose any extraordinary assumption, hypothetical condition, or limiting condition that directly affects the appraisal and indicate its impact on value. For the purposes of reporting the value of properties secured by special tax or assessment bonds, the appraisal report may contain the following items. Some, but not all, of these items are required by recognized appraisal practices.

1. **Appraisal Framework.** This information should include the reason for the appraisal, a definition of value, the property rights appraised, the date of estimated value, the identity of the client and intended users, and the intended use of the appraisal.
2. **Area, City and Neighborhood Data.** These data should include such information as directly affects the appraised property together with the appraiser's conclusions as to significant trends.
3. **Property Data.** This information should include a detailed physical description of the property, its size, shape, soil conditions, topography, improvements, and other physical characteristics which affect the property being appraised. The availability, capacity of, and proximity to, utilities and other infrastructure should also be discussed.
4. **Title Condition.** The condition of title of the property appraised should be discussed in the appraisal report based upon examination of a title report to be furnished by the property owner, a copy of which may be included in the report addenda. In those instances where numerous homes, units, lots, etc., are being appraised (within a single tract or planned unit development), a title report of a sample property maybe reviewed as opposed to a title report for each parcel. The appraiser should discuss in the appraisal report those title issues which impact the value of the property being appraised (for example, property within a flood zone).
5. **Improvement Description**
 - a) Land parcels which have been developed with residences and subsequently sold should at a minimum indicate land parcel size, number of lots, density, number of plans, square footage, room counts, year construction was initiated, year of completion, and when sales were initiated.
 - b) Land parcels with residential product under construction or with standing inventory should be described as in (a) above and include a summary of the stage of development regarding the number of units completed, the number of models, the status of units under construction, finished lots and mass-graded or

raw lots. In addition, a comment on the marketability of the units (architecture, size, etc.) is appropriate.

- c) Land parcels which have been developed with income-producing (or owner-occupied) commercial, industrial, apartments, offices, etc., should be described as follows:

(i) *Commercial-Retail*. Land parcel size; basic construction type; typical tenant improvements (and who is responsible for their construction); leasable area, when construction was initiated; and date of completion.

(ii) *Industrial*. Land parcel size; basic construction type, whether single or multi-tenant; typical office build-out as percentage of total area, when construction was initiated; and date of completion.

(iii) *Apartments*. Land parcel size; basic construction type; total number of units; unit mix; total rentable area, when construction was initiated; and date of completion.

(iv) *Office*. Land parcel size; basic construction type; typical tenant improvements/allowance; net rentable area, when construction was initiated; and date of completion.

6. **General Plan Classification.** Describe the General Plan classification of the subject and comparable properties. By California Law, the General Plan supersedes zoning and requires amendment concurrent with a zone change.
7. **Zoning.** Describe the zoning for the subject and comparable properties. Note any discrepancy between General Plan classification and zoning. If the two are not in conformance and rezoning is necessary for the project to proceed, substantial delays may result. If rezoning is imminent, discuss further under Item 8 below.
8. **Analysis of Highest and Best Use.** The report should state and support the highest and best use to which a property can be put and recognize that land is appraised as though vacant and available for development to its highest and best use, and the improvements are based on their actual contribution to the site. If the highest and best use is based on a "Land Use" study provided the developer, the appraiser's investigation and study supporting the conclusion that said land use is reasonable must be included in the report.
9. **Statement of Value.** The appraiser's opinion of the value of the specified property rights, prepared according to one or more of the valuation methods specified in the previous section.
10. **Signed Certification.** A signed certification from the appraiser in conformance to Uniform Standards of Professional Appraisal Practice Rule 2-3 includes, among other things, a statement that the facts contained in the report are true and correct, that the analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are the appraiser's analyses, opinions, and conclusions, and that the appraiser has not bias with respect to the property and their findings were not contingent upon developing or reporting a predetermined result.

V. APPRAISAL REVIEW

Issuers that review completed appraisal reports can determine whether those appraisals meet these *Appraisal Standards* or those adopted by the local agency and were competently performed. Issuers that choose to review appraisal reports should acknowledge the importance of the review process in their debt issuance policies for CFD and assessment districts by providing for a standardized review process, including the selection and the minimum qualifications of review appraisers.

VI. DEFINITIONS

Appraisal — An appraisal is a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

Bulk Sale Value — The most probable price, in a sale of *all* parcels within a tract or development project, to a single purchaser or sales to multiple buyers, over a reasonable absorption period discounted to present value, as of a specified date, in cash, or in terms equivalent to cash, for which the property rights should sell after reasonable exposure, in a competitive market under all conditions requisite to a fair sale, with buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue stress. The bulk sale is executed in lieu of the seller proceeding with development and/or marketing of the individual parcels or tracts to end users or merchant builders over a market-oriented absorption period for the type of project.

Capitalization Rate — The rate of return by which the market values an income-producing property. Net income is divided by the capitalization rate to derive a value estimate.

Comparable Property — A property with the same value elements as the property being appraised, though not necessarily in the same proportions.

Cost Approach — A valuation method that involves estimating the replacement or reproduction costs of structures and improvements. This approach cannot be used for valuing unimproved land, because land cannot be reproduced or replaced.

Developer — A person or firm who organizes the various activities required to construct a real estate project, including (1) acquiring the site, (2) obtaining necessary land use entitlements, (3) arranging financing, (4) awarding construction contracts, and (5) selling or managing the completed property.

Discounted Cash Flow Analysis — A valuation method under which the dates of sale and prices of finished properties are estimated to derive a cash flow which is discounted to present value by a market-derived discount rate. This valuation method also is referred to as the *Subdivision Development* or *Land Development Approach to Value* in the appraisal literature.

Exactions — Fees or land dedications required as a condition of development approval.

Income Capitalization Approach — A valuation method applied to income-producing properties (i.e., rentals). This method requires forecasting the earning expectancy of the subject property and calculating the present value of this net income according to a capitalization rate.

MAI — Member of the Appraisal Institute.

Market Value — The most probable price in cash or in terms equivalent to cash for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress.

Mass Appraisal — The process of valuing a universe of properties as of a given date utilizing standard methodology, employing common data, and allowing for statistical testing.

Sales Comparison Approach — A valuation method that derives an estimate of value from the analysis of prices paid for comparable properties.

Value Element — Any attribute or quality which contributes to market value. Value elements may be stated in both quantitative (i.e., square footage, number of bedrooms and bathrooms) and qualitative (i.e., location, architecture, topography, access to transportation) terms.