

# The Florida Real Property Appraisal Guidelines Adopted in 2002

## **NOTICE:** **These Guidelines Are Out-of-Date**

The existing Florida Real Property Appraisal Guidelines were adopted in 2002 and are now out-of-date due to various changes in law. For example, in 2007 the U.S. Supreme Court issued a decision holding that appraisal is an “applied science” (not an art) and that appraisal methodology must be reviewed in ad valorem tax valuations. In another example, 2009 changes in sections 194.301 and 194.3015, F.S., greatly increased the legal standards for developing, reporting, and reviewing just valuations and also enacted the following additional determinative standards for just valuations: 1) compliance with professionally accepted appraisal practices; 2) avoidance of arbitrarily different appraisal practices within groups of comparable property within the same county; 3) avoidance of superseded case law; and 4) correct application of an appropriate appraisal methodology. Accordingly, the 2002 guidelines should not be used as any sort of standard for just valuation development, reporting, or review. The Department has initiated the legal and professional research for updating the guidelines, which will be done using an open and public process with opportunities for public review and comments.

**Florida  
Department of Revenue**

# The Florida Real Property Appraisal Guidelines

Adopted  
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FLORIDA DEPARTMENT OF REVENUE  
PROPERTY TAX ADMINISTRATION PROGRAM

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## 1.0 INTRODUCTION

**1.1 Overview and Specific Authority.** Section 4, Article VII, of the Florida Constitution, requires a just valuation of all real property for ad valorem taxation, with certain exceptions. Section 1(d), Article VIII, of the Florida Constitution, provides for the voters of each county to elect a Property Appraiser every four years. Florida Property Appraisers have the statutory responsibility to list and appraise all real property in each county each year for purposes of ad valorem taxation. The Florida Department of Revenue is a state administrative agency with the statutory responsibility of general supervision of the assessment and valuation of real property for purposes of ad valorem taxation. The functions of Property Appraisers and the Department of Revenue are distinct and separate. Sections 195.062(1), 195.002(1), and 195.032, Florida Statutes, contain a requirement for the Department of Revenue to develop and promulgate real property appraisal guidelines to aid and assist Florida Property Appraisers in the performance of their valuation responsibilities. These statutes describe the specific authority and legislative intent for the development and promulgation of these real property appraisal guidelines, as well as the scope of their legislatively intended use.

Section 195.062(1), Florida Statutes, states the following: *“The department shall prepare and maintain a current manual of instructions for property appraisers and other officials connected with the administration of property taxes. This manual shall contain all:*

- (a) Rules and regulations.*
- (b) Standard measures of value.*
- (c) Forms and instructions relating to the use of forms and maps.*

*Consistent with section 195.032, the standard measures of value shall be adopted in general conformity with the procedures set forth in section 120.54, but shall not have the force or effect of such rules and shall be used only to assist tax officers in the assessment of property as provided by section 195.002.”*

Section 195.002(1), Florida Statutes, states the following: *“The Department of Revenue shall have general supervision of the assessment and valuation of property so that all property will be placed on the tax rolls and shall be valued according to its just valuation, as required by the constitution. It shall also have supervision over tax collection and all other aspects of the administration of such taxes. The supervision of the department shall consist primarily of aiding and assisting county officers in the assessing and collection functions, with particular emphasis on the more technical aspects. In this regard, the department shall conduct schools to upgrade assessment skills of both state and local assessment personnel.”*

Section 195.032, Florida Statutes, states the following: *“In furtherance of the requirement set out in section 195.002, the Department of Revenue shall establish and promulgate standard measures of value not inconsistent with those standards*

*provided by law, to be used by property appraisers in all counties, including taxing districts, to aid and assist them in arriving at assessments of all property. The standard measures of value shall provide guidelines for the valuation of property and methods for property appraisers to employ in arriving at the just valuation of particular types of property consistent with sections 193.011 and 193.461. The standard measures of value shall assist the property appraiser in the valuation of property and be deemed prima facie correct, but shall not be deemed to establish the just value of any property. However, the presumption of correctness accorded an assessment made by a property appraiser shall not be impugned merely because the standard measures of value do not establish the just value of any property.”*

Section 193.011, Florida Statutes, contains the eight factors (see section 2.1.2) that Property Appraisers shall consider in arriving at just valuation as required by the Florida Constitution, and Section 193.461, Florida Statutes, pertains to classified use of agricultural property. In the standard measures of value section of the manual of instructions referenced above, there are four components: 1) the tangible personal property appraisal guidelines; 2) the classified use guidelines for agricultural property; 3) the real property appraisal guidelines; and 4) the real property market area guidelines. The first two of these four documents have been recently updated by the Department of Revenue, and this document is the real property appraisal guidelines. The last of these four documents, the real property market area guidelines, is planned for development after promulgation of the real property appraisal guidelines.

**1.2 Statutory Focus on the Mass Appraisal Process.** Section 193.023(3), Florida Statutes, states the following: *“In revaluating property in accordance with constitutional and statutory requirements, the property appraiser may adjust the assessed value placed on any parcel or group of parcels based on mass data collected, on ratio studies prepared by an agency authorized by law, or pursuant to regulations of the Department of Revenue.”* Section 195.095(2), Florida Statutes, refers to *“mass data reappraisals”* in the context of Property Appraisers contracting with persons or firms for assessment services. These statutory references to *“mass data collected,” “ratio studies,”* and *“mass data reappraisals”* reflect legislative recognition that the valuation activities of Florida Property Appraisers should be focused on the mass appraisal process. See sections 2.2 and 2.3 for additional information on the applicability of mass appraisal.

**1.3 Description of Guidelines.** The term “guideline” is defined as an indication or outline of policy or conduct. Section 195.062(1), Florida Statutes, states that these real property appraisal guidelines shall not have the force or effect of administrative rules. Therefore, these guidelines are not rules as defined by the Florida Administrative Code, and it is not the intent of the Department of Revenue for these guidelines to be interpreted as rules. Other than the applicable provisions of Florida law, manual of instructions, and regulatory requirements, the use of these guidelines is left to the discretion of Property Appraisers.

There is considerable latitude for implementing these real property appraisal guidelines. They are not meant to infringe on the administrative processes necessary to perform the annual real property appraisal process in substantial compliance with

Florida law, administrative rules, and regulatory requirements. There are different ways to achieve valid just valuations of real property without violating generally accepted appraisal methods. The required scope of the components of the appraisal process will vary among the diverse real property markets within Florida's 67 counties. It is recognized that resources (e.g., availability of information, equipment, and personnel) differ among Florida counties and may affect how the appraisal process is specifically applied. However, other factors being equal, general application of these guidelines in Florida counties having different market situations and different resources should yield substantially similar results.

**1.4 Purposes of These Guidelines.** There are three purposes of these real property appraisal guidelines: 1) to aid and assist Florida Property Appraisers in determining just valuations of real property for ad valorem tax purposes; 2) to promote and help facilitate the accuracy and equity of just valuations of real property for ad valorem tax purposes, both within and between counties; and 3) to meet the Florida Department of Revenue's statutory obligation to aid and assist Florida Property Appraisers by promulgating appraisal guidelines as referenced in Sections 195.062(1), 195.002(1), and 195.032, Florida Statutes.

**1.5 Intended Users of These Guidelines.** Based on the provisions in Sections 195.062(1), 195.002(1), and 195.032, Florida Statutes, the primary intended users of these real property appraisal guidelines are Florida Property Appraisers and their staff. Secondary users of these guidelines may include taxpayers, other government agencies, and other interested parties. See sections 1.6, 1.7, and 1.8 below.

**1.6 Intended Uses of These Guidelines.** The primary intended use of these real property appraisal guidelines is for Florida Property Appraisers and their staff to use them as a training document and as aid and assistance to enhance the accuracy and equity of just valuations of real property, both within and between counties, for ad valorem tax purposes. Subject to the provisions and limitations specified in sections 1.7 and 1.8, the secondary intended use is for both primary and secondary users to consider these guidelines as a source of basic knowledge and understanding of real property appraisal for ad valorem tax purposes in the State of Florida.

**1.7 Uses For Which These Guidelines Are Not Intended.** These real property appraisal guidelines were not developed and are not intended to be used as the complete reference source on any of the following or similar subjects: valuation theory, approaches, methods, or procedures; assessment administration; or applicable provisions of Florida law, manual of instructions, or regulatory requirements. Further, these guidelines were not developed and must not be used as the basis for the legal rights and responsibilities of participants in the real property appraisal process for ad valorem tax purposes in the State of Florida.

**1.8 Organization and Content of These Guidelines.** In order to facilitate relevance and understandability, much of this document is organized around the annual real property mass appraisal process as influenced by the applicable provisions of Florida law, manual of instructions, and regulatory requirements. This document is organized into 16 sections addressing the background knowledge and

steps for producing just valuations of real property in substantial compliance with Florida law, administrative rules, and regulatory requirements. These guidelines are not intended to replicate existing textbooks on real property appraisal and, therefore, do not contain all of the knowledge required by the primary intended users. This document should be used in conjunction with other applicable sources of professional knowledge.

**1.9 Sources of Information and Expertise for These Guidelines.** The footnotes and addendum to this document reference the primary sources of published information, from both the appraisal and legal perspectives, used to develop these guidelines. The reference to information from a particular source does not imply that all information from such source is applicable to the appraisal of real property for ad valorem tax purposes in the State of Florida. Other sources of information considered in the development of these guidelines include the following: 1) professional consultants hired by the Department of Revenue; 2) the Property Tax Administration Task Force (included representatives of a wide variety of Florida stakeholders); 3) Florida taxpayers and their representatives; 4) Florida Property Appraisers and their representatives; and 5) Department of Revenue appraisal staff and legal staff.

**1.10 Other Sources of Appraisal Guidance.** Florida Property Appraisers may use other sources of appraisal guidance such as Standard 6 on Mass Appraisal of the Uniform Standards of Professional Appraisal Practice (USPAP), published by the Appraisal Foundation, but only to the extent that such other sources do not conflict with Florida law, manual of instructions, and regulatory activities. Users of USPAP Standard 6 are cautioned that parts of that standard apply only to the mass appraisal of personal property or only to the mass appraisal of real property for purposes other than ad valorem taxation. The distinction between the mass appraisal of real property for ad valorem purposes and for other purposes is relevant because the USPAP Jurisdictional Exception may apply to several sections of Standard 6 and because the mass appraisal reporting provisions within Standard 6 are different for mass appraisals done for ad valorem tax purposes.<sup>1</sup>

## **2.0 FOUNDATIONS OF MASS APPRAISAL IN FLORIDA**

**2.1 Legal and Regulatory Foundations.** Since the annual real property appraisal process in the State of Florida for ad valorem tax purposes is necessarily a governmental function, this process has foundations in Florida law, administrative rules, and regulatory activities.

**2.1.1 Florida Constitution.** The Florida Constitution is an organized system of fundamental principles for the government of the state; it is of a permanent and general nature and originates from the people rather than from the Legislature. Section 1(d), Article VIII, of the Florida Constitution, provides for the voters of each county to elect a Property Appraiser every four years. Section 4, Article VII, of the

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<sup>1</sup> Appraisal Standards Board, *Uniform Standards of Professional Appraisal Practice, 2002 Edition* (Washington, DC: The Appraisal Foundation, 2002), pages 45 and 52.

Florida Constitution, requires a just valuation of all real property for ad valorem taxation.

**2.1.2 Florida Statutes.** The Florida Statutes are a permanent collection of state laws organized by subject area into a code made up of titles, chapters, parts, and sections. Chapters 192, 193, and 195, Florida Statutes, contain provisions relevant to the development and use of these real property appraisal guidelines. As described in section 1.1 of this document, Sections 195.062(1), 195.002(1), and 195.032, Florida Statutes, provide the specific authority and legislative intent for the development and use of these guidelines. Section 193.011, Florida Statutes, provides direction to Florida Property Appraisers for the just valuation of real property for ad valorem tax purposes; this section is presented below in its entirety.<sup>2</sup>

***“Factors to consider in deriving just valuation.--In arriving at just valuation as required under s. 4, Art. VII of the State Constitution, the property appraiser shall take into consideration the following factors:***

*(1) The present cash value of the property, which is the amount a willing purchaser would pay a willing seller, exclusive of reasonable fees and costs of purchase, in cash or the immediate equivalent thereof in a transaction at arm’s length;*

*(2) The highest and best use to which the property can be expected to be put in the immediate future and the present use of the property, taking into consideration any applicable judicial limitation, local or state land use regulation, or historic preservation ordinance, and considering any moratorium imposed by executive order, law, ordinance, regulation, resolution, or proclamation adopted by any governmental body or agency or the Governor when the moratorium or judicial limitation prohibits or restricts the development or improvement of property as otherwise authorized by applicable law. The applicable governmental body or agency or the Governor shall notify the property appraiser in writing of any executive order, ordinance, regulation, resolution, or proclamation it adopts imposing any such limitation, regulation, or moratorium;*

*(3) The location of said property;*

*(4) The quantity or size of said property;*

*(5) The cost of said property and the present replacement value of any improvements thereon;*

*(6) The condition of said property;*

*(7) The income from said property; and*

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<sup>2</sup> This statute requires the Property Appraiser to consider each of these eight criteria, but it does not necessarily require the Property Appraiser to use any particular criteria. These criteria are to be *considered*, but need not be *used*, by the Property Appraiser in just valuations of real property. See Bystrom v. Whitman, 488 So.2d 520, 521 (Fla. 1986).

*(8) The net proceeds of the sale of the property, as received by the seller, after deduction of all of the usual and reasonable fees and costs of the sale, including the costs and expenses of financing, and allowance for unconventional or atypical terms of financing arrangements. When the net proceeds of the sale of any property are utilized, directly or indirectly, in the determination of just valuation of realty of the sold parcel or any other parcel under the provisions of this section, the property appraiser, for the purposes of such determination, shall exclude any portion of such net proceeds attributable to payments for household furnishings or other items of personal property.”*

The weight given to each of these factors is left to the discretion of Property Appraisers.<sup>3</sup> The addendum to this document contains descriptions of Florida case law applicable to each of the eight factors listed above. Other relevant statutes are presented elsewhere in this document where appropriate.

**2.1.3 Florida Administrative Code.** The Florida Administrative Code is a compilation of the rules and regulations of state agencies that have been filed with the Department of State pursuant to the provisions of Chapter 120, Florida Statutes. Section 195.027(1), Florida Statutes, requires the Department of Revenue to prescribe rules and regulations for Property Appraisers, who must substantially comply with these rules and regulations. Chapter 12D, Florida Administrative Code, pertains to the administration of the ad valorem property tax.

**2.1.4 Florida Case Law.** Florida lawsuits over the issue of property valuation for ad valorem tax purposes sometimes result in legal decisions known as case law. Florida case law may offer useful guidance for the just valuation of real property for ad valorem tax purposes in the State of Florida. Applicable Florida case law is addressed and footnoted where appropriate within this document. Additionally, the addendum to this document contains descriptions of Florida case law applicable to each of the eight factors which Property Appraisers must consider in the just valuation of real property. These case law discussions are summaries of court rulings. Care should be taken to consult the actual cases, along with legal advice where necessary, in their application.

**2.1.5 The Florida Real Property Appraisal Guidelines.** These guidelines supersede previous real property appraisal guidelines other than classified use real property guidelines. This document is intended by statute to provide aid and assistance to Florida Property Appraisers for producing annual just valuations of real property in substantial compliance with Florida law, administrative rules, and regulatory requirements. Also, see sections 1.5, 1.6, 1.7, and 1.8. These guidelines are advisory. By Florida law they are not intended to be binding or determinative, nor should they be so interpreted. Other than the applicable provisions of Florida law, manual of instructions, and regulatory requirements, the use of these guidelines is left to the discretion of Property Appraisers.

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<sup>3</sup> See Valencia Center Inc. v. Bystrom, 543 So.2d 214 (Fla. 1989). Also, see Bystrom v. Bal Harbour 101 Condominium Association, Inc., 502 So.2d 1312 (Fla. 3d DCA 1987).

**2.2 Comparison of Single-Property Appraisal and Mass Appraisal.** Single-property appraisal is the valuation of an individual property as of a specified date. Mass appraisal is the valuation of groups of properties as of a specified date, using standardized procedures and statistical testing.<sup>4</sup> Single-property appraisal and mass appraisal are similar and follow a similar process; they differ primarily in scope and quality control. *“Both mass and single-property appraisal are exercises in applied economic analysis. They represent logical, systematic methods for collecting, analyzing, and processing data to produce intelligent, well-reasoned value estimates.”*<sup>5</sup> Through the use of computers, many single-property appraisal techniques may be used effectively within the mass appraisal process and vice versa.

Mass appraisal has an organizational context since teams of people are generally required to complete a mass appraisal project. Mass appraisal for ad valorem tax purposes is concerned with equity of values and systematically considers the just values of other property within groups for equity reasons, subject to variation in property characteristics within such groups. Since the just valuations of real property for ad valorem tax purposes in the State of Florida are generally performed using the mass appraisal process, these guidelines are focused on the real property mass appraisal process. Also, see the discussion on legislative recognition in section 1.2. However, at their discretion and depending upon the circumstances and available resources, Florida Property Appraisers may use single-property appraisal techniques for individual properties. The methods and procedures in these guidelines are also generally applicable to single-property appraisal of real property for ad valorem tax purposes in the State of Florida. The references to single-property appraisal in this document are for informational purposes only and do not imply and must not be interpreted as the Department’s specific recommendation for the use of single-property appraisal for purposes of ad valorem taxation.

**2.3 History and Evolution of Mass Appraisal.** Mass appraisal started in the United States in the 1920s, and continues to evolve.<sup>6</sup> The following excerpts from a recent mass appraisal handbook provide a useful perspective on the current state of mass appraisal as viewed from both within and outside the ad valorem appraisal profession.

*“There has long existed a dichotomy within the appraisal profession: essentially the partitioning of the appraisal worldview between mass appraisal and single-property appraisal. Both disciplines, to some extent, have been myopic with respect to the techniques and perspectives of the other. In many ways, this partitioning inhibits the transference of knowledge between the two. Assessment practitioners, charged with the simultaneous valuation of thousands of commercial and residential properties, have had to develop perspectives and techniques that enable them to process myriad data points into a reasonable and defensible framework. Conversely, fee appraisers have traditionally focused on fewer data points to develop their estimates of value.*

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<sup>4</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), page 12.

<sup>5</sup> *Ibid*, page 13.

<sup>6</sup> *Ibid*, pages 24-27.

*There is clear evidence that the roles of the two disciplines are rapidly converging with the integration of statistical techniques and data availability.”*

*“Assessment practitioners were among the very first to realize the benefits and potentials of technology, and the first to embrace it, as much out of necessity as desire. Technology became the bridging mechanism, allowing for the timely and accurate valuation of the assessment database, often totaling hundreds of thousands of properties. Assessment practitioners made significant advances in computer-assisted mass appraisal (CAMA) in the 1970s and 1980s, technologies that are now referred to in the field as automated valuation models, and they continue to be leaders in the field through innovative and ever more accurate valuation methodologies. In addition, they have also made significant advances in other related areas such as public databases and cadastral mapping/GIS.”*

*“The need for mass appraisal techniques in the private sector has never been more prevalent. Current uses range from instantaneous property valuations for lending purposes to portfolio valuations for asset management.”<sup>7</sup>*

**2.4 The Four Forces That Influence Real Property Value.** There are four interactive forces that generally influence real property value. These are legal/regulatory, physical/environmental, economic, and social forces. These four forces provide a useful analytical framework for data collection and analysis, highest and best use considerations, valuation applications, and quality assurance. The combined influence of these four forces is reflected in real property market activities such as land sales, improved sales, rentals, new subdivisions of land, new construction, renovation, maintenance, demolition, annexations, and changes in zoning or future land use classifications.

**2.4.1 Legal/Regulatory Forces.** These forces include items such as zoning codes, future land use classifications, and building codes.

**2.4.2 Physical/Environmental Forces.** These forces include significant natural or man-made features that characterize a geographic area. Examples of these forces include the following: land uses; bodies of water; public improvements such as roads; building type and quality; and building age and condition.

**2.4.3 Economic Forces.** Economic forces include items such as employment, personal income trends, and business revenue and earnings. Economic influences on real property value are revealed in the costs, prices, rents, and expenses paid for real property.

**2.4.4 Social Forces.** Social forces are reflected in market transactions through the perceptions, expectations, and preferences of market participants. Social influences on real property value are revealed in the costs, prices, and rents paid for real property.

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<sup>7</sup> Appraisal Institute, *A Guide to Automated Valuation Modeling* (Chicago: Appraisal Institute, 2000), Preface.

**2.5 Education and Training of Assessment Personnel.** The proper education and training of personnel involved in the real property mass appraisal process is essential to a reliable mass appraisal system. Ideally, training programs would be tailored to the needs of each function within the process. Within each local jurisdiction, it is desirable to have widespread knowledge of Florida law, manual of instructions, and real property mass appraisal processes and procedures. *“Each appraiser must continuously improve his or her skills to remain proficient in mass appraisal.”*<sup>8</sup>

## **3.0 IMPORTANT DEFINITIONS AND CONCEPTS**

**3.1 Important Definitions.** This section is not intended to represent a complete glossary of related terms, but rather is intended to include those most applicable.

**3.1.1 Ad Valorem Tax.** An ad valorem tax is one based on the value of property. Ad valorem is a Latin term meaning “according to value.”

**3.1.2 Assessment Roll.** For purposes of these guidelines, an assessment roll is a systematic listing of information pertaining to the just valuation of all real property within each county in the State of Florida for purposes of ad valorem taxation.

**3.1.3 Real Property.** Section 192.001(12), Florida Statutes, defines real property as: *“land, buildings, fixtures, and all other improvements to land.”* See section 5.1.

**3.1.4 Personal Property.** Section 192.001(11), Florida Statutes, defines personal property as being divided into the following four categories: 1) household goods, 2) intangible personal property, 3) inventory, and 4) tangible personal property. Generally, personal property is property other than real property. See section 5.1.

**3.1.5 Just Value.** Rule 12D-1.002(2), Florida Administrative Code, defines just value as: *“The price at which a property, if offered for sale in the open market, with a reasonable time for the seller to find a purchaser, would transfer for cash or its equivalent, under prevailing market conditions between parties who have knowledge of the uses to which the property may be put, both seeking to maximize their gains and neither being in a position to take advantage of the exigencies of the other.”*

**3.1.6 Fair Market Value.** The Florida Supreme Court has ruled that just value and fair market value are legally synonymous, and that fair market value is defined as: *“The amount a purchaser willing but not obliged to buy, would pay to one willing but not obliged to sell.”*<sup>9</sup>

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<sup>8</sup> Appraisal Standards Board, *Uniform Standards of Professional Appraisal Practice, 2002 Edition* (Washington, DC: The Appraisal Foundation, 2002), page 45.

<sup>9</sup> See *Walter v. Schuler*, 176 So.2d 81 (Fla. 1965). In situations where value definition is an issue, this definition prevails over any other definition, including that in section 3.1.5 above.

**3.1.7 Market Value.** The two preceding sections contain legal definitions specific to Florida. Included here for informational purposes only, the following is a current economic definition of market value used by federally regulated financial institutions: *“The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:*

1. *buyer and seller are typically motivated;*
2. *both parties are well informed or well advised, and acting in what they consider their best interests;*
3. *a reasonable time is allowed for exposure in the open market;*
4. *payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and*
5. *the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.”<sup>10</sup>*

**3.1.8 Arm’s-Length Transaction.** This means a sale or lease transaction for real property where the parties involved are not affected by undue stimuli from family, business, financial, or personal factors.

**3.1.9 Distinctions Between Cost, Price, and Value.** Cost, price, and value are different economic concepts. Cost is the total dollar amount required to create an improved parcel of real property. Cost may be an actual historical amount or may be a determination by an appraiser. To exist, the cost of real property requires the action of only a single person or entity. Price is the actual total amount of consideration paid from one party to another in exchange for real property in an actual transaction. Price is a historical fact that can exist only after the specific interaction of two persons or entities. Value is not a fact; it is the present worth, as of a specified date, of the collective market expectations of the future benefits of owning a specified interest in real property. See section 3.1.10. Such anticipated future benefits may include personal use, business use, or investment income and resale.

**3.1.10 Market Participants.** Market participants are persons who directly participate in the decision-making process for developing, buying, selling, leasing, renovating, demolishing, or financing real property. This group includes developers, buyers, sellers, owners, tenants, lenders, and those who directly and substantially advise these persons in their decision-making on the stated activities. Real property value is heavily influenced by the collective perceptions, expectations, and preferences of market participants.

**3.1.11 Stratification.** Stratification is the division of real property populations or samples into two or more groups based on some defined criteria. The main criteria for

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<sup>10</sup> Appraisal Standards Board, *Uniform Standards of Professional Appraisal Practice, 2002 Edition* (Washington, DC: The Appraisal Foundation, 2002), page 219.

stratification are property use code, location, and property characteristics. Stratification results in property groups with one or more shared characteristics. These groups, or strata, are useful for data collection and management, appraisal analysis, and quality assurance. The appropriate level of stratification may range from general with only one criterion to detailed with several criteria. In mass appraisal, the term “stratum” means one group, and the term “strata” means more than one group. For regulatory analysis by the Department of Revenue, Section 195.096(3)(a), Florida Statutes, specifies seven real property classes, or strata. See section 16.7.6.

**3.1.12 Quality Assurance.** Quality assurance denotes systems, processes, and procedures for ensuring the accuracy, equity, consistency, and reliability of mass appraisal data and just valuations of real property, both within and between counties, for ad valorem tax purposes in the State of Florida.

**3.2 Relevant Concepts.** This section is not intended to represent a complete listing of related concepts, but rather is intended to include those most applicable.

**3.2.1 Concept of Fairness in Real Property Ad Valorem Taxation.** The best assurance for fairness in real property ad valorem taxation in the State of Florida is to facilitate accurate and equitable just valuations, both within and between counties.

**3.2.2 Concept of Anticipation.** The concept of anticipation means that real property value is heavily influenced by the collective expectations of market participants of receiving future benefits of owning real property. Such future benefits may include personal use, business use, or investment income and resale. The concept of anticipation is embodied within all arm’s-length activities, and some non-arm’s-length activities, involving real property.

**3.2.3 Concept of Substitution.** The concept of substitution means that real property value may be influenced by the cost of developing a substitute parcel of real property, less accrued depreciation, or by the price of acquiring existing substitute real property of similar personal, business, or economic utility. The concept of substitution may be reflected in real property cost and depreciation, arm’s-length transactions involving real property, and investment decisions regarding real property.

**3.2.4 Concept of Change.** The concept of change means that real property markets are constantly responding to the forces of change. Change may occur at a rate anywhere on the spectrum between relatively fast and very slowly and, at times, may be practically imperceptible. The rates of change in real property markets generally are much slower than in other economic markets such as the stock or commodities markets. The four major stages of change in real property markets are growth, stability, decline, and revitalization. Different real property markets experience different degrees of the four stages of change. The Florida annual mass appraisal cycle facilitates frequent response to the forces of change.

**3.2.5 Concept of Real Property Markets.** Economic markets may be efficient, inefficient, or somewhere in between. An efficient market is one with the following general characteristics: all assets are very similar; information relating to the legal,

physical, and economic characteristics of the assets is available quickly and inexpensively; such information is quickly reflected in the market prices paid for the assets; there are few regulations; assets are bought and sold easily, quickly, and inexpensively; assets are easily and quickly mobile; buyers and sellers are brought together by an organized market such as the New York stock exchange; and, there are a large number of buyers and sellers for a given asset class at a particular point in time.

In contrast to efficient economic markets, real property markets are inefficient economic markets.<sup>11</sup> Real property markets reflect the following general characteristics: each asset is unique; information relating to the legal, physical, and economic characteristics of the assets generally may not be available quickly and inexpensively; such information is not quickly reflected in the market prices paid for the assets; there are many regulations affecting the development and use of real property; assets are not bought and sold easily, quickly, or inexpensively; assets are not mobile because each real property parcel has a unique location; there is no central, organized market to bring buyers and sellers together; and, typically, there is a limited number of buyers and sellers for a given real property type in a given location at a particular point in time.

The relevance of real property market inefficiencies to both single-property appraisal and mass appraisal is that neither can be an exact science because the market processes of determining real property cost and price are inefficient and inexact. These factors may contribute to inefficiencies in the decision-making behavior of market participants. The following excerpts describe market price and some of the inefficiencies of market participants that may be reflected in market prices.

*“Market price is the amount actually paid in a particular transaction.”<sup>12</sup>*

*“Market price can, and often does, result from caprice, carelessness, desperation, egotism, ignorance, pressure, sentiment, social ambition, whim, and many other factors.”<sup>13</sup>*

However, any unusual transactions do not prevent the market as a whole from being good evidence of value.<sup>14</sup> See sections 6.12, 6.12.1, and 6.12.2. The process of determining whether particular real property market prices are indicative of just value involves appraisal judgment.

**3.2.6 Concept of Appraisal Judgment.** The Florida Supreme Court has ruled that appraisal is an art, not a science, and that appraisal involves the exercise of

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<sup>11</sup> Appraisal Institute, *The Appraisal of Real Estate, Twelfth Edition* (Chicago: Appraisal Institute, 2001), page 99.

<sup>12</sup> International Association of Assessing Officers, *Property Appraisal and Assessment Administration* (Chicago: International Association of Assessing Officers, 1990), page 53.

<sup>13</sup> *Ibid*, page 53.

<sup>14</sup> See *Southern Bell Telephone and Telegraph Company v. County of Dade*, 275 So.2d 4 (Fla. 1973).

judgment.<sup>15</sup> This concept is also widely recognized in the appraisal profession. Appraisal judgment is defined as the process, using imperfect information, of reaching a reasoned conclusion within a reasonable range of alternatives by differentiating between and comparing alternatives. Even quantitative appraisal analysis requires the use of appraisal judgment.<sup>16</sup> Appraisal judgment is essential for quality assurance throughout the mass appraisal process. The following excerpt describes the need for appraisal judgment in the context of sale ratio studies, one of the most important mass appraisal tools.

*“Judgment is essential when conducting a ratio study or when evaluating or using the results. Ratio studies reduce uncertainty about appraisal accuracy by providing an objective basis for evaluating appraisal level and uniformity. Nevertheless, real estate markets consist of many individual properties, each unique in some way, and market participants who are imperfectly informed and not always rational. This, together with the statistical errors inherent in any sampling process, makes judgment essential when evaluating a ratio study and acting on the results.”<sup>17</sup>*

The application of appraisal judgment is generally preceded by diligence in the two areas of data collection and management and exploratory data analysis, although both may also involve the use of appraisal judgment.

## **4.0 THE MASS APPRAISAL PROCESS IN FLORIDA**

**4.1 Overview.** Sections 5.0 through 16.0 below address the steps for an effective mass appraisal process for just valuations of real property within the State of Florida. The steps in the mass appraisal process are not necessarily done in the sequence listed below since many of these steps are ongoing and may be performed not only sequentially, but also concurrently and interactively.

**4.2 Mass Appraisal Systems.** As used in the phrase “mass appraisal system,” the term “system” does not represent a computer system; rather it represents a system of processes and procedures organized according to functional groups. For purposes of these guidelines, the mass appraisal system is considered in place and operational. Otherwise, the implicit time required to design and implement the mass appraisal system and produce the annual just valuations would exceed the Florida one-year revaluation cycle.

**4.3 Computer-Assisted Mass Appraisal Systems.** Computer-assisted mass appraisal is a term developed around the United States a few decades ago when computerized mass appraisal systems became useful and affordable, and received widespread acceptance. Computer-assisted mass appraisal systems are widely

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<sup>15</sup> See Powell v. Kelly 223 So.2d 305 (Fla. 1969).

<sup>16</sup> Appraisal Institute, *The Appraisal of Real Estate, Twelfth Edition* (Chicago: Appraisal Institute, 2001), page 441.

<sup>17</sup> International Association of Assessing Officers, *Standard on Ratio Studies* (Chicago: International Association of Assessing Officers, 1990), page 11.

referred to as CAMA systems, a term denoting a computer system as distinguished from the mass appraisal system described in section 4.2. CAMA systems are used in all 67 Florida counties. The CAMA systems currently employed vary in their capability to store, retrieve, analyze, and report mass appraisal data. However, all Florida CAMA systems must be capable of storing and maintaining the data necessary to produce the reports and files required by the Department of Revenue.

**4.4 Market Variation Between Counties.** These guidelines must be flexible to allow for Florida's variation from county to county regarding factors such as: local economic conditions; local governmental regulation; local market standards and practices; number of real property parcels; mix of real property types; local land use patterns; and quantity and quality of available data. These guidelines are intended to avoid unwarranted degrees of specificity that would be inconsistent with the well-documented inefficiencies inherent in real property markets.

**4.5 The Annual Just Valuation Cycle for Florida Property Appraisers.** There are many deadlines and significant dates in the annual operations of Florida Property Appraisers, several of which apply to operations other than the just valuation of real property. The items described in this section are limited to those involving just valuation. This is a limited description provided only as a brief overview, and should not be relied upon for regulatory compliance. Real property appraisal for ad valorem tax purposes in the State of Florida is a repetitive annual process. Consequently, the scope of the mass appraisal in any given year includes the activities necessary to update the just values of the previous year, and to produce just values for newly platted land, new construction, parcels with changes in land use regulations, new parcels resulting from splits and combinations, and the like.

Florida Property Appraisers respond to inquiries from taxpayers on a daily basis throughout the year. The effective date of the annual real property appraisal is January 1<sup>st</sup>. Unless an extension is granted, all counties under in-depth review are required to submit to the Department of Revenue, by January 31<sup>st</sup>, a file containing real property transfer data current to December 31<sup>st</sup>. Unless an extension is granted, Property Appraisers are required to substantially complete just valuations and submit preliminary assessment rolls to the Department of Revenue by July 1<sup>st</sup> each year. Truth in millage (TRIM) notices typically are mailed to taxpayers in mid to late August. TRIM notices notify taxpayers of preliminary just values as determined by the Property Appraiser, and also list the names and addresses of taxing authorities for taxpayer reference. Property Appraisers are not involved in the determination of property taxes. During the approximate one month period after taxpayers receive TRIM notices, Property Appraisers respond to typically very high volumes of taxpayer inquiries regarding just values, both over the telephone and in person. This is an opportunity for taxpayers to ask questions, express concerns, and provide verifiable information regarding the preliminary just valuation of real property. Value Adjustment Board hearings typically begin a few weeks after TRIM notices are mailed. These hearings are another opportunity for taxpayers to express concerns and provide verifiable evidence in support of changes to preliminary just values.

## **5.0 DEFINING THE MASS APPRAISAL PROCESS**

**5.1 Identification of Real Property.** The first step in the appraisal process is to identify the real property that is to be appraised. Only real property, as defined in section 3.1.3, should be included in just valuations of real property. Any personal property, as defined in section 3.1.4, should be excluded from just valuations of real property. See section 2.1.2. There are different purposes for identifying real property for ad valorem taxation in the State of Florida, including regulatory, administrative, and mass appraisal purposes. Some identifiers may be required for more than one purpose in the annual assessment roll production cycle.

**5.1.1 Regulatory Identification of Real Property.** Rule 12D-8.008(2)(a), Florida Administrative Code, requires Property Appraisers to classify each parcel of real property to indicate its use as determined for valuation purposes. According to Rule 12D-8.008(2)(c), Florida Administrative Code, this use must be reflected in property use codes applied to each real property parcel on assessment rolls.

**5.1.2 Administrative Identification of Real Property.** For administrative purposes within each county, the following identifying items should be maintained for each real property parcel: parcel identification number; property address; property owner's name and address; legal description; and parcel map.

**5.1.3 Identification of Real Property Groups for Mass Appraisal.** For mass appraisal purposes, the most important identifiers of real property include the following: property use code as described in section 5.1.1; parcel identification number; parcel map; geographic unit; and other property characteristics.

**5.2 Real Property Rights to be Appraised.** For ad valorem tax purposes in the State of Florida, the real property rights to be appraised are the unencumbered fee simple estate, unless specified otherwise.<sup>18</sup> The fee simple estate in real property is the unencumbered ownership limited only by the four powers of government: taxation, police power, eminent domain, and escheat.

**5.3 Purpose and Intended Use of the Appraisal.** The purpose of the annual real property appraisal is to produce just valuations of the unencumbered fee simple estate in real property, as of the date of appraisal. The intended use of the annual real property appraisal is to provide a basis for ad valorem taxation of real property according to Florida law, administrative rules, and regulatory activities. This annual appraisal of real property is not intended and should not be used for any other purpose.

**5.4 Intended Users of the Appraisal.** The intended users of the annual real property appraisal performed by Florida Property Appraisers include the following: the real property taxpayers of each county; the Tax Collectors and taxing authorities; the Department of Revenue; and the Auditor General.

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<sup>18</sup> See Schultz v. TM Florida-Ohio Realty Ltd Partnership, 577 So.2d 573 (Fla. 1991). Also, see Valencia Center, Inc. v. Bystrom, 543 So.2d 214 (Fla. 1989).

**5.5 Date of Appraisal.** Section 192.042(1), Florida Statutes, requires that all real property be assessed according to its just value as of January 1<sup>st</sup> of each year. Each year's assessment stands on its own, unconnected with the assessment for any prior year.<sup>19</sup>

## **6.0 COLLECTING AND MANAGING MASS APPRAISAL DATA**

**6.1 The Importance of Data Completeness and Accuracy.** All data used in the mass appraisal process must be as complete, accurate, and consistent as possible. The following four excerpts emphasize both the relative and absolute importance of data quality in the mass appraisal process.

*“The quality of the available data will, more than anything else, determine valuation accuracy.”<sup>20</sup>*

*“The data management system is the heart of the mass appraisal system and should be carefully planned and designed.”<sup>21</sup>*

*“Because the quality of the data, more than anything else, will determine the reliability of values generated in the reappraisal, the data collection program requires organization, planning, and close supervision. In-office preparation, selection and training of staff, entry and validation of collected data, and quality control should all be carefully planned.”<sup>22</sup>*

*“The findings of a ratio study can only be as accurate as the data used in the study. No matter what the purpose of the study, the data must be as accurate as possible.”<sup>23</sup>*

Assuring data completeness and accuracy should be an ongoing task in the mass appraisal process. It is the responsibility of all participants in the annual mass appraisal process to take all reasonable steps to verify and assure the completeness and accuracy of all applicable legal, physical, and economic data.

**6.2 Legal, Physical, and Economic Data.** Awareness and understanding of the basic categories of mass appraisal data facilitates clear thinking, consistency, and quality assurance in the mass appraisal process. The three basic and interactive categories of mass appraisal data are legal, physical, and economic. Examples of legal data include zoning information, deeds, subdivision plats, and building permits.

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<sup>19</sup> See *Keith Investments, Inc. v. James*, 220 So.2d 695 (Fla. 4th DCA 1969).

<sup>20</sup> International Association of Assessing Officers, *Property Appraisal and Assessment Administration* (Chicago: International Association of Assessing Officers, 1990), page 309.

<sup>21</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), page 32.

<sup>22</sup> *Ibid*, page 41.

<sup>23</sup> International Association of Assessing Officers, *Standard on Ratio Studies* (Chicago: International Association of Assessing Officers, 1999), page 9.

Examples of physical data include property characteristics such as building type, building size, or neighborhood. Examples of economic data include costs, sale prices, rents, and operating expenses.

**6.3 Considerations for the Scope of Data Collection.** Data collection and management is the most expensive and time-consuming part of the mass appraisal process. Decisions on what data to collect and how to manage these data should be carefully weighed. The considerations for making these decisions may include the following:

- 1) the number and type of real property parcels involved,
- 2) the quality and quantity of available data,
- 3) the quality and quantity of available resources,
- 4) the requirements of the valuation approach(s) used,
- 5) the capabilities of the computer-assisted mass appraisal (CAMA) system used, and
- 6) Florida law, manual of instructions, and regulatory activities.

The appropriate decisions on data collection will vary both within and between counties, depending on the situation. See sections 1.3, 4.3, 4.4, 8.2, and 11.2.

**6.4 General Data.** General data useful for the real property mass appraisal process may include the following: articles from local news publications; economic reports; planning information; and real property market reports. Local news articles may contain information such as the following: proposed developments; proposed changes in zoning or land uses; demolitions of real property; real property rentals, vacancies, listings, and sales; information on real property expenses; market and neighborhood trends; and the perceptions, expectations, and preferences of market participants. Some of these data may not be applied directly in the appraisal process, but it is helpful to be aware of them. Other of these data may be applied directly in the appraisal process. News articles may sometimes be incomplete or inaccurate for appraisal purposes, but still provide useful leads for additional research.

**6.5 Specific Categories of Real Property Appraisal Data.** The specific categories of real property appraisal data include: title transfer documents; cadastral mapping data; aerial photography; regulatory data; physical characteristics; cost and depreciation data; sale data; and income capitalization data. One or more categories of data may not apply to a particular group of property. Sources and methods for collecting and managing the specific types of real property appraisal data are described below.

**6.6 Collecting and Managing Title Transfer Documents.** In order to maintain accurate ownership and other basic information on real property parcels such as

addresses, legal descriptions, and assessment maps, Property Appraisers must continually collect source documents transferring title to real property. These documents may also provide information on sales of real property. Title transfer documents primarily include deeds, but also may include other types of documents such as articles of agreement, judgments, and certificates of title. The primary source for these documents is the clerk's office in each county, which is responsible for recording and maintaining public records. Florida Property Appraisers should facilitate the timely receipt of all recorded documents pertaining to real property transfers, as well as all orders of taking from public agencies. The information from title transfer documents should be processed completely, accurately, and timely.

**6.7 Collecting and Managing Cadastral Mapping Data.** Rule 12D-1.009, Florida Administrative Code, requires each Property Appraiser to maintain property ownership maps (cadastral maps). Cadastral maps are scale maps showing the legal description boundary, parcel identifier, and related information on each parcel of real property in each county for assessment purposes. These maps also should show items such as roads, streets, and major bodies of water. Cadastral maps allow the location and size of each real property parcel to be determined for assessment purposes. The primary sources of information used to produce cadastral maps are title transfer documents, survey books, and subdivision plats recorded in the public records of each county. The cadastral mapping process should be designed to meet the needs of end-users such as field staff and appraisal analysts. The following excerpt illustrates an important consideration in the mapping process for users of sale ratio studies. *"Parcels that have been split or combined should have new identifiers assigned; otherwise they may be matched against the previous sale of a physically different parcel."*<sup>24</sup> Property Appraisers should facilitate the timely receipt and processing of all documents and information required to maintain complete, accurate, and neat cadastral maps in accordance with the Florida Cadastral Mapping Guidelines and with Rule 12D-1.009, Florida Administrative Code. There should be an established and continuous quality assurance process to effectively resolve errors, omissions, and other problems that may arise during the ongoing maintenance of cadastral maps.

**6.8 Collecting and Managing Aerial Photographs.** Rule 12D-1.009, Florida Administrative Code, requires each Property Appraiser to maintain aerial photography suitable for appraisal needs. Section 195.022, Florida Statutes, requires the Florida Department of Revenue to furnish aerial photographs of each county to Property Appraisers at least once every three years to help assure that all real property is listed on assessment rolls. Some counties have opted to obtain aerial photography from private vendors, often by agreement with other local governmental entities. Aerial photography is useful for locating and analyzing real property, especially vacant land, and can be used to identify previously undiscovered improved property by comparing recent photographs with those of a prior period. For field inspections and appraisal research, it is very helpful to have aerial photographs accurately overlaid with cadastral maps.

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<sup>24</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers), page 222.

**6.9 Collecting and Managing Regulatory Data.** Regulatory data relevant to mass appraisal includes the following: building permits (new construction and renovation); demolition permits; zoning ordinances, maps, and any changes; future land use elements, maps, and any changes; annexations; and the like. All of these data should be available from county or municipal agencies. Property Appraisers should work with local governmental agencies to assure the establishment of continuous processes for the timely receipt of all regulatory data required by law, regulations, and the annual real property appraisal process. All relevant regulatory data should be processed completely, accurately, and timely.

**6.10 Collecting and Managing Data on Physical Characteristics.** In order to substantially comply with Florida statutory and administrative requirements, Property Appraisers must collect and maintain appraisal data on certain physical characteristics of real property within each county. The starting point for the collection of these data is the activities described above in sections 6.6, 6.7, 6.8, and 6.9. Rule 12D-8.008(2)(a), Florida Administrative Code, requires Property Appraisers to classify each parcel of real property to indicate its use as determined for valuation purposes. According to Rule 12D-8.008(2)(c), Florida Administrative Code, this use must be reflected in property use codes applied to each real property parcel on the assessment roll. See section 9.0. Physical data collection sources may include field inspections, building plans, cadastral maps, aerial photographs, multiple listing services, and property owner records.

The basic land information required on assessment rolls is listed and described in Rule 12D-8.011(1)(f), Florida Administrative Code. This required land information includes the following: the property use code; a code indicating the unit of measurement (per acre, per square foot, etc.) used as the basis for valuing the land; and the number of units of land (acres, square feet, front feet, etc.). Based on consideration of the factors listed in section 6.3, Property Appraisers may collect and consider additional land characteristics in the mass appraisal process.

The basic building information required on assessment rolls is listed and described in Rule 12D-8.011(1)(g), Florida Administrative Code. This information generally includes year built or effective year built, construction type, and size as measured by square footage. Section 193.023(2), Florida Statutes, requires inspection of real property by Property Appraisers every three years. Based on consideration of the factors listed in section 6.3, Property Appraisers may collect and consider additional building characteristics in the mass appraisal process.

**6.11 Collecting and Managing Cost and Depreciation Data.** Cost and depreciation data for improved real property are direct inputs to the cost less depreciation approach to valuation. The collection of cost and depreciation data has two components: those data collected by field inspection of the property, described above in section 6.10, and those data collected from other sources, described below.

Cost data should be current and include all direct and indirect costs of construction, including reasonable contractor's profit and developer's profit. Sources for cost data on real property may include published cost manuals, market-adjusted base rates and

other costs developed from sale ratio studies, and recent, actual, and verified cost data. Available cost data should be collected, analyzed, and considered anew each year as applicable. Within CAMA systems, replacement costs for real property are directly impacted by the physical characteristics collected by field staff since applied costs vary with the real property type and construction grade recorded by field staff.

Depreciation data for mass appraisal may be in the form of depreciation tables applicable to a property group, or may be specific to individual property. However, any depreciation separately applied to individual property should be justified by verified and documented evidence. Sources for depreciation data may include published manuals and market-based depreciation developed from sale ratio studies or other appraisal analyses. Depreciation tables from published manuals may be tested for reasonableness using any available local market data. Within CAMA systems, depreciation rates applied to real property are directly impacted by the property characteristics collected by field staff, since applied depreciation varies with the effective age or effective year built recorded by field staff.

**6.12 Collecting and Managing Sale Data.** Sale data are the legal, physical, and economic characteristics of real property parcels that have been sold and of the corresponding sale transaction, all as of the date of sale. The primary source of sale data for Florida Property Appraisers is the title transfer documents recorded in the public records in each county (see section 6.6).<sup>25</sup> A supplementary source of real property sale information is the Department of Revenue Form DR-219, Return Transfers of Interest in Real Property. These forms are provided to the county clerk's office at the time of recording the title transfer document, but are not recorded since the DR-219 is not legislatively intended to be a part of the public record. Property Appraisers may conduct additional sale data collection activities such as the following: physical inspections of properties that have been sold; researching multiple listing services; interviewing market participants by telephone or in person; and sending sale verification forms to buyers and/or sellers and processing such forms upon their return.

**6.12.1 Arm's-Length Transactions.** An arm's-length transaction is a sale or lease transaction for real property where the parties involved are not affected by undue stimuli from family, business, financial, or personal factors. An informed determination should be made of whether each sale was an arm's-length transaction and whether the sale was for vacant land or improved property; this process is called sale qualification. Section 195.0995, Florida Statutes, requires Property Appraisers to properly qualify or disqualify sale transactions and to document the reason for any disqualification in a manner prescribed by the Department of Revenue. The Department of Revenue rule implementing this statute is described in section 6.12.2 below.

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<sup>25</sup> Unless a sale is found to be not arm's length, Property Appraisers may presume that the sale prices indicated by documentary stamps on deeds are prima facie evidence of the just value of the sold property. See Southern Bell Telephone and Telegraph Company v. County of Dade, 275 So.2d 4 (Fla. 1973). Also, Property Appraisers may presume there are no unusual terms of sale if the form provided for in Section 195.027(6) is not presented to the county recorder at the time the instrument is recorded.

**6.12.2 Sale Coding and Reporting Requirements.** Rule 12D-8.011(1)(m), Florida Administrative Code, requires Property Appraisers each year to post certain information on the two most recent transfers of real property to the records of each parcel. This required information includes items such as the following: the date of sale; a transfer code for each sale; the sale price as indicated by documentary stamps paid on the transfer document; and a one-digit code indicating whether the sale was for a vacant (V) or an improved (I) parcel. The transfer code must be one of the following when the annual assessment roll is submitted to the Department of Revenue: (00) sales which are qualified; (01) sales which are disqualified as a result of examination of the deed; (02) deeds which include more than one parcel; or, (03) other disqualified sales. These codes are minimum requirements. The rule also states that Property Appraisers may use other coding schemes, provided these are translated to the prescribed coding system on the assessment roll submitted to the Department of Revenue. This rule also provides certain criteria for considering whether a sale should be disqualified.

**6.12.3 Additional Sale Coding.** During the processing and qualification of sale data, additional coding may be applied to each sale transaction to denote information such as the following: 1) the document type used to transfer title; 2) whether the sale was an arm's-length transaction; 3) the reason for disqualifying a sale, if applicable; and, 4) the source of information used to disqualify a sale, if applicable. This coding system may be useful for accountability and quality assurance in sale data management.

**6.12.4 Using Sale Data.** The uses of sale data are twofold: one is for sale ratio studies and reporting to the Department of Revenue, and the other is for appraisal and related uses. Sale data are used throughout the administrative and mass appraisal processes and systems within a Property Appraiser's office. Sale data may be used in the following: all three approaches to value; sale ratio studies for mass appraisal planning and quality assurance; explaining real property values to taxpayers; and defending values in quasi-judicial and judicial proceedings. Complete, accurate, and timely sale data are part of assessment administration and the mass appraisal process. Sale data are also an integral part of the assessment roll evaluation function of the Department of Revenue.

**6.12.5 Separate Maintenance of Sale Characteristics.** For each qualified sale transaction, it may be appropriate to have a separate sale file, preferably computerized, that preserves a snapshot, as of the date of sale, of the relevant legal, physical, and economic characteristics of both the sold property and the sale transaction.<sup>26</sup> This may help to assure that such characteristics are accurately maintained for appraisal analysis.

**6.12.6 Special Considerations in Sale Data Management.** Special considerations in sale data management may include the following: sales of improved property with improvements demolished after the sale; sales of vacant land with improvements

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<sup>26</sup> Appraisal Standards Board, *The Uniform Standards of Professional Appraisal Practice, 2002 Edition* (Washington D.C.: The Appraisal Foundation), page 50.

constructed after the sale; sales involving multiple parcels; sales involving splits; sales involving combinations; and sales of land tracts subsequently developed with subdivisions or condominiums. See section 12.7.2.

After the date of sale, real property improvements are occasionally demolished to make way for new construction. These sales may represent land sales. Since these sold properties typically will have improved property use codes at the time of sale, special care should be taken to identify them and apply proper coding for use in valuation activities and sale ratio studies. Field inspections and review of demolition permits are helpful in identifying these sales, which may be very useful in highly developed areas where land sales are scarce.

A common real property market scenario is the purchase of a vacant land parcel and the subsequent construction of a building on the site. This frequently results in a mismatch between property characteristics at the time of sale (vacant land) and those on the date of appraisal (improved property). These sales of vacant land may be arm's-length transactions and as such should be preserved for appraisal purposes, but should be removed from sale ratio studies of improved property. Sales must be accurately coded as either vacant land or improved property.

Sales involving multiple parcels are typically excluded from sale ratio studies due to the technical difficulty in matching the relevant legal, physical, and economic characteristics of all sold parcels with those of the assessed parcels. For these reasons, the Department of Revenue excludes all multiple parcel sales from sale ratio studies. However, such sales may be arm's-length transactions and useful to Property Appraisers for appraisal purposes and for explaining just values, and these sales should be preserved for such uses.

Splits typically occur when the title to a portion of an existing parcel is transferred, creating new physical parcels for both the split-out parcel and for the remainder portion of the original parent parcel. If a separate sale file is not a part of a mass appraisal system, special consideration is required for accurately maintaining any prior sales of the original parent parcel. Any such prior sales should be assigned a special disqualification code indicating a change in property characteristics since the date of sale. This prevents mismatching data on sold property as of the date of sale and as of the date of appraisal, and any resulting errors in appraisals or sale ratio studies. Also, consideration should be given to saving the relevant data, as of the date of sale, on any such prior sales of the original parent parcel.

Combinations typically occur when title to all or part of more than one parcel is transferred on a single transfer document, creating at least one new physical parcel. Combinations may have the characteristics of both splits and subdivisions regarding parcel and sale data maintenance. Appropriate steps should be taken to prevent inaccurate sale data and to maintain accurate sale data. The accurate maintenance of both property data and sale data is much easier if the affected parcels are assigned new parcel identification numbers during the processing of splits and combinations.

Relevant data on sales of land tracts subsequently developed with subdivisions or condominiums should be preserved in a separate file since, typically, the tract parcel identification numbers become inactive when the newly developed parcels are placed on the assessment roll. These sale data may be scarce and should be preserved for appraisal purposes and for explaining just values.

**6.13 Collecting and Managing Income Capitalization Data.** Income capitalization data are necessary for the application of the income capitalization approach to value. When available, these data may include market rent, vacancy and collection loss, operating expenses, capitalization rates, and income multipliers. Methods of collecting the first three items from property owners and managers include conducting surveys in person or by telephone using rent survey forms, or mailing rent survey forms and processing them upon return. In some cases, the collection of capitalization rates and income multipliers from market participants requires sales of income-producing property.

Other useful sources of income capitalization data may include the following: locally published surveys; investor surveys such as the Korpacz Real Estate Investor Survey? ; and market reports published by various professional organizations such as the Building Owner's and Manager's Association (BOMA), the Institute of Real Estate Management (IREM), the Urban Land Institute (ULI), and the International Council of Shopping Centers (ICSC).

When sufficient income capitalization data are available, a computerized database for these data may be created and organized into similar property groups for reference. These income capitalization data should be reviewed for completeness, accuracy, and consistency, and then reconciled within and between property groups. The reconciliation process is necessary since the information received from the various sources may be unclear, incomplete, inaccurate, inapplicable, or unreasonable. The relative comparison process and good appraisal judgment are part of effectively managing income capitalization data. Available income capitalization data should be reviewed and updated each year as applicable.

**6.13.1 Accessibility and Confidentiality of Financial Records.** Rule 12D-1.005(1), Florida Administrative Code, states the following: *"The property appraiser of each county, duly authorized representatives of the Department, and duly authorized representatives of the Auditor General shall have the right to inspect and copy financial records relating to non-homestead property which are reasonably necessary to determine the property assessment of the property in question."* Rule 12D-1.005(3) states the following: *"All records produced by the taxpayer under this rule shall be deemed to be confidential in the hands of the property appraiser, the Department, and the Auditor General and shall not be divulged to any person, firm, or corporation."*

**6.14 The Role of Property Owners in Data Collection.** Section 6.1 explains the relative importance of data quality to the mass appraisal process. Owners of real property have an important societal role in the Property Appraiser's collection of complete, accurate, and consistent appraisal data. Providing complete and accurate

information in response to interviews and surveys regarding property, sale, cost, and income capitalization data fulfills this role. Such cooperative responses from property owners and their agents are essential to the equitable and fair administration of the Florida ad valorem property tax for all taxpayers, both within and between counties. Property Appraisers and the Department of Revenue are required to keep confidential certain types of information received from property owners. See section 6.13.1.

**6.15 The Coding of Mass Appraisal Data.** Accurate coding of mass appraisal data is part of effective stratification of real property within a county. Coding means to assign a unique identifier to major characteristics of real property such as property use, geographic unit, quality grade, effective age, and the like. Coding schemes should be both exhaustive and mutually exclusive. As described in section 6.10, the coding of real property begins with inspecting, classifying, and coding the use of real property for valuation purposes. See sections 6.12.2 and 6.12.3 for information on coding of sale data.

**6.16 Quality Assurance for Data Collection and Management.** There should be constant attention to data completeness, accuracy, and consistency at all levels of the mass appraisal organization. There should be continuous, two-way feedback mechanisms between departments, teams, individuals, and management and staff addressing problems discovered and implementing steps to correct the root causes of the problems, not simply treating the symptoms. Specific items that may be used to assure the quality of mass appraisal data include those listed and described below.

**6.16.1 Data Collection Manuals.** A data collection manual is a well-documented manual describing in detail all aspects of collecting and coding data on physical characteristics of improved real property. It is a useful tool that provides a readily-available reference for staff on items such as: field conduct; collection and measurement methods; how to apply sound judgment to qualitative determinations such as construction grade, effective year built, and effective age; and how to apply accurate and consistent coding of property characteristics. The manual should explain available codes for various property types and building features and how to properly choose amongst them. Data collection manuals should be current, complete, clearly written, and well illustrated with examples and photographs of construction grades and building features for each property type.

**6.16.2 Education and Training for Management and Staff.** Given the relative importance of complete, accurate, and consistent data for producing accurate and equitable just valuations of real property, a primary focus of these guidelines is to describe the components of an effective data collection and management program. Effective education and training for management and staff are part of such a program. Effective means that the education and training are appropriate and used throughout the data collection and management process. Management and staff should understand how the data are used in the mass appraisal process and why the data should be collected and maintained in a certain way. The data collection manual may be the primary training tool for management and staff involved in field data collection. Training for field data collection should include training in the classroom, in the field, and on-the-job.

**6.16.3 Internal Procedural Reviews.** It may be helpful to implement quality teams selected from management and staff to review cross-functional processes and procedures to help assure the complete, accurate, and consistent collection and management of mass appraisal data. Quality assurance is a never-ending task and should be a part of all considerations and communications relating to mass appraisal data.

**6.16.4 Internal Quality Audits.** Internal quality audits should be a part of every mass appraisal system, especially for field data collection. The procedures specified in a data collection manual and any other documentation should be used in the audit. If performed consistently, supervisory review may also accomplish this function. Recurring opportunities for improvement identified by the audits may be addressed in training programs.

**6.16.5 Data Entry Edits Within CAMA Systems.** Programmed data entry edits within CAMA systems may help to prevent the entry of erroneous data. The entry of invalid data into CAMA systems should be disallowed by the programmed edits. The entry of unusual data should be questioned and not accepted on the first entry attempt, and should require manual override by the person entering the data. Examples of programmed data entry edits within CAMA systems may include the following: hard edits; soft edits; exception edits; range edits; consistency edits; data-type edits; value or table edits; cross edits; and check digits.<sup>27</sup>

**6.16.6 Data Edit Reports From CAMA Systems.** After mass appraisal data are entered into the CAMA system, programmed edit reports may be produced to identify and list any missing, unusual, inaccurate, or inconsistent data, which should be corrected. These reports may be useful tools for assuring the accuracy and consistency of a mass appraisal database.

**6.16.7 Exploratory Data Analysis.** Exploratory data analysis may be useful for discovering potential problems in a mass appraisal database. Exploratory data analysis is described in section 8.0.

## **7.0 GEOGRAPHIC STRATIFICATION FOR MASS APPRAISAL**

**7.1 Description and Importance.** Geographic stratification means to divide, or stratify, the real property parcels within a county into groups, or strata, based on geographic influences. Terms used to describe these influences may include market areas, sub-market areas, neighborhoods, and corridors. Terms such as these may be referred to collectively as geographic units. Geographic stratification is useful as part of a mass appraisal system. Additionally, market area codes are required items on assessment rolls. See section 7.3.

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<sup>27</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), pages 66-67.

**7.2 Geographic Stratification for Mass Appraisal.** In this document, geographic stratification is discussed in the context of mass appraisal, which may be somewhat different from the discussions of market areas and neighborhoods found in the single-property appraisal literature. Single property appraisers are concerned with the time-distance relationships, or linkages, between different types of real property. Mass appraisers are more concerned with geographically stratifying groups of real property to allow more detailed analysis of specific property groups.

**7.3 Market Areas.** Section 193.114(2)(a), Florida Statutes, requires that Property Appraisers have a market area code on each real property parcel on the assessment roll. Since the Florida Department of Revenue is required to promulgate market area guidelines, the discussion of geographic stratification within these real property appraisal guidelines is limited.

**7.4 Other Levels of Geographic Stratification.** Market areas are generally considered to be the first level of geographic stratification. Other levels may include sub-market areas and neighborhoods. A corridor is a geographic unit that may be applied to situations such as all commercial property located along a major street.

**7.5 Types of Geographic Units.** The question of whether geographic units should be comprised of different types or similar types of real property will be addressed in the market area guidelines.

**7.6 Boundaries for Geographic Units.** Depending on the situation, geographic unit boundaries may be based on natural features, man-made features, or legal boundaries. Examples of natural boundaries may include rivers and oceans. Examples of man-made boundaries may include the following: major streets; expressways; subdivisions; canals; changes in real property type; changes in real property construction quality; and changes in the quality of real property maintenance. Examples of legal boundaries may include future land use classifications, zoning classifications, city limits, and county lines. The considerations for determining geographic unit boundaries may vary by the property types within the geographic unit.

**7.7 Uses of Geographic Stratification in the Mass Appraisal Process.** There may be different uses for geographic stratification in the mass appraisal process. These uses may include the following:

- 1) to create modeling areas, independent locational variables, or analysis units for mass appraisal applications,
- 2) to create specific property groups for quality assurance activities such as sale ratio studies and evaluating assessment performance for unsold properties,
- 3) to provide a useful criterion for appraisal research, and
- 4) to serve as a work allocation tool for mass appraisal field operations.

## 8.0 EXPLORATORY ANALYSIS OF MASS APPRAISAL DATA

**8.1 Description and Importance.** Exploratory data analysis means to analyze the mass appraisal data, which have already been collected, coded, and computerized, in order to identify and understand the following: the number, type, and classifications of parcels within real property groups; the legal, physical, and economic characteristics within real property groups; and the tendencies and relationships within and between real property groups. The following excerpt describes the importance of data analysis for ratio studies, one of the most important mass appraisal tools.

*“It is essential to know the type of properties, market conditions, and composition of the population in terms of age, size, value range, and so forth. Such information is needed to make informed decisions in designing the study and interpreting the results.”<sup>28</sup>*

The analysis of mass appraisal data may help to facilitate sound appraisal judgment and effective decision-making during the mass appraisal process.

**8.2 Variation in Applicability.** The application of the analysis techniques presented in this section may vary significantly, both within and between counties, based on factors such as the number of real property parcels of each type, the availability of market data, and the availability of resources. The efficient application of these analytical tools requires adequate technical resources, adequate computer skills, and basic mass appraisal knowledge. These analyses may be programmed and performed within CAMA systems, or the mass appraisal data may be downloaded from CAMA systems and analyzed using spreadsheet or statistical software. Not all of the analytical methods presented here will apply in a particular situation. The application of these techniques should result in a useful level of knowledge regarding real property inventory and market tendencies. Such a useful level of knowledge may also be achieved through the diligent work experience of county management and staff.

**8.3 The Importance of Coding and Stratification.** The complete, accurate, and consistent coding of the factors having the most influence on the value of real property allows useful stratification, which is required for effective exploratory data analysis. Stratification is the division of real property populations or samples into two or more groups based on some defined criteria. Stratification results in property groups with one or more shared characteristics that are useful for data analysis.

**8.4 Data Analysis Techniques.** The tools available for analyzing mass appraisal data within properly stratified real property groups may include the items listed and described below.

**8.4.1 Measures of Central Tendency.** Measures of central tendency are descriptive statistics that reflect the average or typical item within a data set. Measures of central tendency may be calculated for items such as building size,

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<sup>28</sup> International Association of Assessing Officers, *Standard on Ratio Studies* (Chicago: International Association of Assessing Officers, 1999), page 11.

building age or year built, quality grade, land size, price per square foot, price per acre, price per lot, rent per square foot, and operating expenses per square foot. The three common measures of central tendency are the mean, median, and mode.<sup>29</sup> Measures of central tendency may be compared among real property strata to help develop an understanding of market tendencies.

**8.4.2 Measures of Dispersion.** Measures of dispersion, also called measures of spread, are descriptive statistics that generally reflect the degree of dispersion or variation within a data set. These indicators may be calculated for the same items listed in section 8.4.1. Measures of dispersion for mass appraisal may include ranges, quartiles, percentiles, average deviations, coefficients of dispersion, standard deviations, and coefficients of variation.<sup>30</sup> Measures of dispersion may be compared among real property strata to help develop an understanding of market tendencies.

**8.4.3 One-Variable Profiles, Charts, and Graphs.** These analytical tools include arrays, frequency distributions, bar charts, pie charts, and histograms.<sup>31</sup> They may be used to visually depict the data set for a single variable such as building size or price per square foot. For some, these tools may provide a more understandable picture of the distribution of a data set than relying solely on measures of central tendency and dispersion.

**8.4.4 Two-Variable Profiles, Charts, and Graphs.** These analytical tools include cross tabulations, box plots, scatter plots, and line charts.<sup>32</sup> They may be useful for analyzing the relationship between two variables.

**8.5 Uses of Exploratory Data Analysis.** Exploratory data analysis may be helpful for a variety of uses within the mass appraisal process. Some of these uses may include the following:

- 1) to help facilitate the accurate and efficient design and interpretation of sale ratio studies,
- 2) to develop indicators for items such as property type, quality grade, size, age, unit rents, unit expenses, unit prices, and unit values within real property strata for use as training and research references by management and staff involved in data collection, sale analysis, valuation analysis, and quality assurance activities,
- 3) to determine typical combinations of property characteristics within strata to use as references for training, research, and data cleaning,

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<sup>29</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), page 85-87.

<sup>30</sup> Ibid, pages 90-96.

<sup>31</sup> Ibid, pages 96-101.

<sup>32</sup> Ibid, pages 101-104.

- 4) to reveal characteristics of a property population against which to compare a sample's (such as sold properties) characteristics to help determine the degree of representativeness for appraisal analysis, and
- 5) to facilitate good understanding of local real property inventory and market tendencies, and provide a basis for sound appraisal judgment in the mass appraisal process.

## 9.0 CONSIDERATION OF HIGHEST AND BEST USE

**9.1 Overview of Highest and Best Use.** As specified in Section 193.011(2), Florida Statutes, the highest and best use and the present use of real property comprise the second of the eight factors that Florida Property Appraisers must consider in arriving at just valuation of real property. Specifically, this statute describes: *"The highest and best use to which the property can be expected to be put in the immediate future and the present use of the property,..."*. See section 2.1.2. Also, refer to the second page of the Addendum to this document and see the case law under the second factor regarding highest and best use. A common definition of highest and best use is: *"The reasonably probable and legal use of property that is physically possible, appropriately supported, and financially feasible, and that results in the highest value."*<sup>33</sup> Standard 6 of the Uniform Standards of Professional Appraisal Practice states that mass appraisers must consider existing land use regulations and reasonably probable modifications to such land use regulations.<sup>34</sup>

The Florida case law referenced above provides guidance for considering uses that are not allowed by current land use regulations. In valuation matters where highest and best use is an issue, care should be taken to consult the actual cases, along with legal advice where necessary, in their application. Generally, Florida case law allows Property Appraisers to consider expected uses that are not allowed under current land use regulations when such regulations are not expected to be permanent, but only to the extent that such expected uses would influence the just value of the property as of the date of appraisal. In the event of any conflict, the law, administrative rules, and public policy within the State of Florida prevail over any external standard such as Standard 6.

**9.2 The Two Components of Highest and Best Use.** The two components of highest and best use analysis are: highest and best use of land as though vacant, and highest and best use of property as improved. Land is appraised as though vacant and available for development to its highest and best use, and improvements are appraised based on their actual contribution to the site. The principle of consistent use requires that land value not be based on one use while improvement value is based on another use.

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<sup>33</sup> Appraisal Standards Board, *The Uniform Standards of Professional Appraisal Practice, 2002 Edition* (Washington D.C.: The Appraisal Foundation), page 218.

<sup>34</sup> *Ibid*, page 48.

**9.3 The Tests of Highest and Best Use.** Florida law and administrative rules influence the scope of highest and best use analysis in the just valuation of real property for ad valorem tax purposes. See sections 2.1.2, 9.1, 9.4, 9.5, and the Addendum to this document. There are four sequential tests for highest and best use considerations. These tests involve consideration of the legally permissible uses, physically possible uses, financially feasible uses, and maximally productive uses within real property groups. Consideration of these four tests is reflected in the annual real property mass appraisal activities performed by Florida Property Appraisers. These activities may include data collection and management, geographic stratification, exploratory data analysis, application of appraisal judgment, highest and best use considerations, and substantial compliance with Florida law and administrative rules. See sections 6.6, 6.7, 6.8, 6.9, 6.10, 6.12, 7.0, 8.0, and 9.0.

When applied to appraisals performed for some private sector purposes, the third and fourth tests may involve in-depth market and/or feasibility studies. Such studies are beyond the scope of highest and best use considerations required by Florida law.

**9.4 Market Activity and Highest and Best Use.** Market activity refers to items such as changes in zoning and future land use classifications, new subdivisions, improvements to infrastructure, new construction, substantial renovation, demolition, sales, and rentals. Market activity may be observed directly through field inspection of real property, or indirectly by reviewing permits, ordinances, and market transactions and tendencies. Depending on the situation, it may be helpful to map such market activity to enhance research and analysis. Along with exploratory data analysis (see section 8.0), this type of research may reveal market trends reflecting the perceptions, expectations, and preferences of market participants as to the highest and best use of real property groups. Since this type of research and analysis is directly focused on the observed behavior of market participants, it is a useful method for considering the highest and best use “*in the immediate future*” as required by Florida law.

**9.5 Present Use and Highest and Best Use.** For just valuation purposes in the State of Florida, present use means the existing use of real property as of the date of appraisal. The data collection and management activities described in sections 6.6, 6.7, 6.8, 6.9, 6.10, and 6.12 are the primary mechanisms by which the present use of real property is considered. Rule 12D-8.008(2)(a), Florida Administrative Code, requires Property Appraisers to classify each parcel of real property to indicate its use as determined for valuation purposes. According to Rule 12D-8.008(2)(c), Florida Administrative Code, this use must be reflected in property use codes applied to each real property parcel on the assessment roll. Unless a change in highest and best use is reasonably probable within the immediate future, the present use may represent the highest and best use of real property.<sup>35</sup> In such cases, the highest and best use consideration may be obvious and require no further research or analysis. There may be cases where the present use is not the highest and best use. For example, if a

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<sup>35</sup> See Lanier v. Overstreet, 175 So.2d 521 (Fla. 1965).

property is subject to a below-market lease, the present use should be disregarded since it is not the highest and best use of the unencumbered fee simple estate.<sup>36</sup>

**9.6 Changes in Highest and Best Use.** Within real property groups, there may be changes in highest and best use. The activities referenced in sections 9.4 and 9.5 are useful ways of detecting any changes in highest and best use. Changes occurring in one area may influence the just value or highest and best use of real property in nearby areas. It is typical for many changes in just value to occur without resulting changes in highest and best use. Changes in the highest and best use of real property may be revealed by changes in the legal or actual use.

## 10.0 VALUATION PLANNING

**10.1 Description and Importance.** Valuation planning is part of quality assurance for the annual real property mass appraisal process. It helps to determine the scope of the required appraisal activities for the annual appraisal cycle. Valuation planning also helps to determine the resources needed, and to prioritize and maximize the use of limited resources. Property Appraisers must have the resources necessary for substantial compliance with Florida law, administrative rules, and regulatory requirements, and should plan accordingly. Valuation planning is useful as a way of meeting regulatory deadlines and other time sensitive requirements for the annual production of real property assessment rolls. Project management tools and methods may be useful for valuation planning.

**10.2 Internal Communication.** Effective internal communication systems between departments or functional units in a Property Appraiser's office may reveal specific data or appraisal items requiring attention. Especially important is effective communication between valuation staff and CAMA system staff.

**10.3 Sale Ratio Studies.** Sales ratio studies are useful planning tools for the mass appraisal process. However, they may not provide complete information on the appropriate scope of appraisal activities in a given year; additional market research and analysis may be required. Selective reappraisal must be avoided. See section 16.7.2. In sale ratio studies, just value-to-sale price ratios are adjusted upward by dividing by one minus any aggregate percentage adjustment for the first and eighth criteria, resulting in adjusted sale ratios. Any adjustments for the first and eighth criteria apply in the aggregate to specified strata of real property and to real property assessment rolls as a whole.<sup>37</sup> Sale ratios may be expressed as percentages. Sale ratio studies may be programmed and performed within CAMA systems, or the mass appraisal data may be downloaded from CAMA systems and the sale ratio studies performed using spreadsheet or statistical software. There are two primary

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<sup>36</sup> See *Valencia Center, Inc. v. Bystrom*, 543 So.2d 214 (Fla. 1989). Also, see *Bystrom v. Valencia Center, Inc.*, 432 So.2d 108 (Fla. 3d DCA 1983) review *denied* 444 So.2d 418 (Fla. 1984).

<sup>37</sup> *Technical Opinion OPN 95-0018*, July 10, 1995, Property Tax Administration, Florida Department of Revenue. Also, see *Technical Opinion OPN 90-0039*, August 20, 1990, Property Tax Administration, Florida Department of Revenue.

considerations for designing sale ratio studies for mass appraisal planning purposes. The first is to determine the criteria for selecting the sales to appear on the report, and the other is to select the data fields to appear on the report.

**10.3.1 Matching Property Data on Sale Date and Appraisal Date.** The relevant legal and physical characteristics of the sold property, as of the date of sale, should be accurately matched with the same characteristics as of the date of appraisal. This may be accomplished by excluding from the ratio study all sales where any of the following changes were made to the sold parcels between the date of sale and the date of appraisal: new construction; significant renovation or demolition; changes in zoning or future land use classification significantly affecting value; combinations; and splits.

**10.3.2 The Importance of Stratification.** The usefulness of sale ratio studies is greatly enhanced by proper stratification of sold properties into groups with one or more characteristics in common. Ratio studies are first stratified using general criteria and then may be further stratified depending on the data available and the indications reflected in the initial study.

**10.3.3 Statistical Indicators in Sale Ratio Studies.** Measures of central tendency and dispersion are calculated for the sale ratios to evaluate the accuracy and equity of appraised values as reflected by the sales. The most important statistics for sale ratio studies for planning purposes are the mean, weighted mean, median, coefficient of dispersion, and price-related differential. If these indicators do not fall within the ranges of acceptability, then additional research, and perhaps reappraisal, is required.

**10.3.4 Sale Ratio Study Applications.** Sale ratio studies for planning purposes may begin with using sales that occurred during the 12-month period immediately preceding the January 1<sup>st</sup> date of appraisal. Initially, sale ratio studies may be run by groups of real property use codes, sorted by sale ratio, and then analyzed to identify any correlation between high or low ratios and other major property characteristics such as property use code, geographic unit, or size. In order to obtain more information on the required scope of the appraisal project, more detailed studies may be conducted based on any specific trends identified. To increase sample size for a particular analysis, these detailed studies may include sales that occurred more than 12 months prior to the date of appraisal. In cases where no specific trends are identified between high or low sale ratios and property characteristics, more detailed research and analysis of each sale and the corresponding sold property may be required. Also, in addition to sale ratio studies, other market research and analysis may be required to determine the appropriate scope of appraisal for properly stratified real property groups. Once such scope is determined, value changes should be made to all property affected by the factor causing need for the change, not just to individual properties that may appear on a sale ratio study.

## 11.0 CONSIDERATION OF VALUATION APPROACHES

**11.1 Overview of Valuation Approaches.** There are three basic approaches to the valuation of real property: the cost less depreciation approach, the sales comparison approach, and the income capitalization approach. Each of these three basic approaches has variants, depending in part on whether the subject property is vacant land or improved property, and depending on the considerations listed in section 11.2. The methods available for appraising vacant land are variants of these three approaches, as described in section 12.0. The approaches available for appraising improved real property have variants and are described in sections 13.0, 14.0, and 15.0. There may be acceptable variants of these approaches that are not addressed in this document and that may be used to produce just valuations of real property in substantial compliance with Florida law, administrative rules, and regulatory requirements. See section 1.3.

**11.2 Considerations for Selecting a Valuation Approach.** The particular method of valuation is left to the discretion of Property Appraisers.<sup>38</sup> The considerations for selecting a valuation approach may include the following:

- 1) the number and type of real property parcels involved,
- 2) the applicability of each approach to the property type involved,
- 3) the quality and quantity of available data,
- 4) the quality and quantity of available valuation resources,
- 5) the capabilities of the computer-assisted mass appraisal (CAMA) system used,
- 6) the approach that gives the best measures of appraisal level and appraisal uniformity, and the most consistency and reasonableness within and between properly stratified real property groups, and
- 7) Florida law, manual of instructions, and regulatory activities.

The selection of a valuation approach will vary both within and between counties, depending on the situation. See sections 1.3, 4.3, 4.4, 6.3, and 8.2. The core issue in the just valuation of real property for ad valorem tax purposes is the amount of the valuation, not the method of valuation.<sup>39</sup>

**11.3 Mass Appraisal Model Structure, Specification, and Calibration.** In the mass appraisal courses and publications produced by the International Association of Assessing Officers, the terms model structure, model specification, and model calibration are used to denote academic and highly quantitative perspectives on mass

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<sup>38</sup> See Valencia Center Inc. v. Bystrom, 543 So.2d 214 (Fla. 1989). Also, see Bystrom v. Bal Harbour 101 Condominium Association, Inc., 502 So.2d 1312 (Fla. 3d DCA 1987).

<sup>39</sup> See Bystrom v. Whitman, 488 So.2d 520 (Fla. 1986).

appraisal. These terms are technical alternatives for describing the application of one or more of the three approaches to real property valuation. These three approaches are generally accepted and understood within the appraisal and non-appraisal sectors in the State of Florida. The three approaches to value are discussed in Standard 6 on Mass Appraisal of the Uniform Standards of Professional Appraisal Practice.<sup>40</sup> In this document, the three approaches to value and their variants are described in sections 12.0, 13.0, 14.0, and 15.0.

## **12.0 LAND VALUATION**

**12.1 Land Valuation Overview.** All land parcels, both vacant and improved, must be valued each year for ad valorem tax purposes in the State of Florida. Rule 12D-8.011(1)(h), Florida Administrative Code, requires separate land values on assessment rolls submitted to the Department of Revenue. Accurate and equitable land values are part of a reliable mass appraisal system.

**12.2 Stratification for Land Valuation.** Land valuation relies upon proper stratification of land parcels, which, in turn, relies upon accurate coding of the primary influences on land value. Land data should be stratified into groups based on three key factors: property use code, location, and size. Stratification of land data into groups based on these three factors allows useful land market analysis. Additional stratification may be appropriate depending upon the complexity of the appraisal situation and the amount of market data available.

**12.3 Units of Comparison for Land Valuation.** As applied to land valuation, units of comparison are the economic units into which the prices or value indications of land may be divided for appraisal analysis. There are two primary criteria for selecting the appropriate land unit of comparison for mass appraisal purposes. One is that unit of comparison most frequently used by market participants in their decision-making for the land type under analysis, and the other is that unit of comparison resulting in the lowest measures of dispersion within land sale data sets. Before valuation analysis, all land sale data should be reduced to the appropriate unit of comparison.

**12.4 Land Market Analysis.** After land market data have been appropriately stratified and reduced to units of comparison, analysis of these data may reveal relationships affecting land value. Useful land market analysis techniques may include the following: plotting and reviewing land sale data on maps; calculating and considering measures of central tendency and measures of dispersion; and performing graphic analyses.<sup>41</sup>

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<sup>40</sup> Appraisal Standards Board, *Uniform Standards of Professional Appraisal Practice, 2002 Edition* (Washington, DC: The Appraisal Foundation, 2002), pages 45 and 50.

<sup>41</sup> International Association of Assessing Officers, *Property Appraisal and Assessment Administration* (Chicago: International Association of Assessing Officers, 1990), pages 184-186.

**12.5 Factors to Consider in Just Valuations.** Section 193.011, Florida Statutes, lists the factors that Florida Property Appraisers must consider in the just valuation of real property for ad valorem tax purposes. See section 2.1.2.

**12.6 Land Valuation Methods.** Acceptable land valuation methods may include the following: the sales comparison approach; the abstraction or extraction method (including sale ratio studies); the allocation method; the capitalization of ground rent method; and the land residual technique.<sup>42</sup>

**12.6.1 The Sales Comparison Approach to Land Valuation.** The sale comparison approach is a set of procedures where the results of arm's length transactions within properly stratified land groups are analyzed for just value indications, which then may be applied to all properties within such groups. This approach has variants, the most common of which are the base lot method, the comparative unit method, and the relative comparison method.

The base lot method begins with the results of land market analyses as described in section 12.4. It involves establishing the value of a typical, or base, lot within properly stratified land groups using single property applications of the sales comparison approach, and then using this base lot value as a benchmark to determine values for other parcels within these land groups.

After performing the land market analyses described in section 12.4, the comparative unit method involves determining an appropriate unit value, or comparative unit, for properly stratified land groups. The selected comparative unit values for land groups may be based on measures of central tendency, and should be tested for reasonableness and consistency using relative comparison analysis.

Reliable land valuation involves both quantitative and qualitative analyses. Certain quantitative analyses are part of land market analysis as described in section 12.4. Other quantitative techniques such as paired data set analysis and regression analysis may be used to derive quantitative adjustments within the sales comparison approach, but these tools have specific data requirements that often are not met within available land market data sets. Therefore, these types of quantitative techniques are rarely used in land valuation. Market participants may not follow a quantitative adjustment process in their decision-making. Quantitative appraisal analysis requires the use of appraisal judgment.<sup>43</sup> Any quantitative adjustments or conclusions should be reviewed for reasonableness, consistency, and stability and, if necessary, overridden by relative comparison analysis. Qualitative analysis is useful for land valuation, and may be used to consider the overall significant differences within and between land groups. Relative comparison analysis, a common application of qualitative analysis, is described as:

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<sup>42</sup> Appraisal Standards Board, *Uniform Standards of Professional Appraisal Practice, 2002 Edition* (Washington, DC: The Appraisal Foundation, 2002), page 50.

<sup>43</sup> Appraisal Institute, *The Appraisal of Real Estate, Twelfth Edition* (Chicago: Appraisal Institute, 2001), page 441.

*“Relative comparison analysis is the study of the relationships indicated by market data without recourse to quantification. Many appraisers use this technique because it reflects the imperfect nature of real estate markets.”<sup>44</sup>*

Ranking analysis, a variant of relative comparison analysis, is useful in mass appraisal.<sup>45</sup> As applied in the mass appraisal of land, relative comparison analysis may involve stratifying, sorting, ranking, and bracketing land sale data in order to arrive at reasonable and explainable conclusions. It requires good market knowledge and sound appraisal judgment. In applying relative comparison analysis, the data may first be stratified, sorted, and considered based on the overall significant differences and then ranked based on overall relative desirability. From this, reasonable ranges (brackets) and point indicators may be developed for the unit values of land groups. Then, these ranges and point indicators may be compared with each other to determine relative reasonableness within and between land groups. Finally, reasonable and supportable conclusions may be made regarding the unit values for the properties within each group. There may be several useful variants of this method.

**12.6.2 The Abstraction or Extraction Method.** The first step is to collect and analyze sales of improved property within the subject or similar areas. These improved sold properties should have land use regulations similar to those of the subject land group. The next step is to estimate the contributory value of the improvements to each of the improved sale prices, and then subtract this indicated improvement value from the improved sale prices for an indication of the price paid for the land. The last step is to use these extracted land prices in the sales comparison approach to land valuation. A useful variant of this method is to employ sale ratio studies of improved property. This variant involves assuring the reasonableness of the other value determinants of improved property included in the study, and then making market changes to the land values of all affected parcels within a group (including both sold and unsold property) to obtain reasonable just valuation results as indicated by the improved sale ratio analysis.

**12.6.3 The Allocation Method.** The first step is to research and develop typical ratios of land value to total value for an improved property group with land use regulations similar to those of the subject land group. Then, these ratios may be applied to the improved sales in the subject area for an indication of the prices paid for the land. The last step is to use these extracted land prices in the sales comparison approach to land valuation.

**12.6.4 The Capitalization of Ground Rent Method.** This method of land valuation requires market rental rates for a land group similar to that under appraisal. These comparable rented properties are compared to the subject land group, and an indication of the net market ground rent for the subject land group is developed. The last step is to divide the net market ground rent for the subject land group by a land capitalization rate for an indication of land value for the subject group.

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<sup>44</sup> Ibid, page 445. Also, this type of methodology is listed and described as “*per unit value analysis*” in the student reference manual of the IAAO Course 300 (Fundamentals of Mass Appraisal).

<sup>45</sup> Ibid, pages 445-446.

**12.6.5 The Land Residual Technique.** The first step is to determine the highest and best use of the subject land groups as though vacant. From this, the market net operating income for the hypothetical improved property may be estimated and then divided by an overall capitalization rate, resulting in a value indication for the improved property. The replacement cost new of the hypothetical improvements is then subtracted from the estimated value of the improved property, resulting in an indication of value for the subject land group. There may be variants of this method.

**12.7 Special Considerations in Land Valuation.** Some situations in land valuation vary from normal reappraisal activities involving existing parcels and may require special attention. Each year, some land parcels may undergo economic change resulting from changes in legal and physical characteristics.

**12.7.1 Legal Changes to Land.** The most common examples of legal changes to land include changes to zoning and future land use classifications. When these legal changes occur, the just value of the affected land parcels may be impacted. The just value of each affected parcel should be reviewed and any required just value changes made for the effective and subsequent years.

**12.7.2 Physical Changes to Land.** The most common examples of physical changes to land include splits, combinations, and new subdivisions. See section 6.12.6. Splits typically occur when the title to a portion of an existing parcel is transferred, creating new physical parcels for both the split-out parcel and for the remainder portion of the original parent parcel. Combinations typically occur when title to all or part of more than one parcel is transferred on a single transfer document, creating at least one new physical parcel. When splits and combinations occur, the just values of the affected land parcels may be impacted. The just value of each affected parcel should be reviewed and any required just value changes made for the effective and subsequent years. New subdivisions of land typically create at least several new parcels physically different from the original parcel. The just values of the subdivided parcels should be reviewed and appropriate just values applied for the effective and subsequent years.

## **13.0 THE COST LESS DEPRECIATION APPROACH**

**13.1 Description of the Approach.** The collection and management of cost and depreciation data is described in section 6.11. In its basic applications, the cost less depreciation approach is a set of procedures where the replacement cost new of the improvements is determined, the accrued depreciation within these improvements is determined and subtracted, and the land value is determined and added, for an indication of the just value for the real property.

**13.2 The Importance of Stratification.** The cost less depreciation approach relies upon proper stratification of real property into strata, or groups, with similar characteristics. Stratification criteria may include property type, construction grade,

structural type, or number of stories. The appropriate level of stratification may vary based on the property type involved.

**13.3 Units of Cost.** As applied in the cost less depreciation approach, units of cost are the economic units into which the costs of real property may be divided for appraisal analysis. The most common unit of cost is cost per square foot, although other units of cost such as lineal feet or cubic feet may apply in some cases.

**13.4 Factors to Consider in Just Valuations.** Section 193.011, Florida Statutes, lists the factors that Florida Property Appraisers must consider in the just valuation of real property for ad valorem tax purposes. See section 2.1.2.

**13.5 Replacement Cost New.** *“Costs used in mass appraisal are usually replacement costs, which represent the cost of constructing a substitute structure of equal utility based on current construction standards and materials. Replacement costs should include all direct and indirect costs, including materials, labor, supervision, architect’s and legal fees, administrative expenses, overhead, and reasonable profit.”*<sup>46</sup> The two components of profit in replacement cost new are contractor’s profit and developer’s profit. Developer’s profit is sometimes referred to as entrepreneurial incentive. Contractor’s profit may be included in the cost data from published cost manuals, but developer’s profit typically is not. However, both should be included in all determinations of replacement cost new of real property. The two methods of deriving replacement cost new that are commonly applied in mass appraisal are the comparative unit method and the unit-in-place method.

**13.5.1 The Comparative Unit Method.** The following excerpts describe the comparative unit method for deriving replacement cost new within the mass appraisal process.

*“Comparative unit costs are typical costs for benchmark structures expressed on a per-unit basis, usually per square foot.”*<sup>47</sup>

*“Mass appraisal uses the comparative unit method of cost estimation, with comparative unit or unit-in-place adjustments to account for differences from base specifications.”*<sup>48</sup>

**13.5.2 The Unit-in-Place Method.** *“Unit-in-place costs represent total costs of structural components, such as the foundation, roof, walls, heating and cooling systems, and fireplaces.”*<sup>49</sup>

**13.6 Published Cost Manuals.** These are cost manuals that may be purchased from various vendors specializing in tracking real property construction costs and

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<sup>46</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), page 144.

<sup>47</sup> Ibid, page 145.

<sup>48</sup> Ibid, page 145.

<sup>49</sup> Ibid, page 145.

maintaining databases of cost information. Such cost manuals are useful for mass appraisal because they provide standardized and flexible cost systems that reflect relative costs between items such as property types, construction grades, and building components. The relative costs of such items may be useful for deriving cost adjustments.

**13.7 Application of Replacement Cost New.** There may be many types of replacement cost models applied within mass appraisal systems. One that is commonly used is an adjusted base rate model where the replacement cost new of real property improvements is determined primarily by multiplying the adjusted base rate times the adjusted building area. This model type begins with an unadjusted base rate, which is defined as the base cost per unit for the effective building area of a main improvement structure. The unadjusted base rate may be adjusted to account for different construction grades within a building type. The base rate grade adjustment factor may be based on sources such as a relative comparison of construction grade costs from a published cost manual, or an index calculated from a point system for building structural elements within a CAMA system. Additional adjustments to a base rate may be made for characteristics such as building size, perimeter shape, number of stories, and floor height. After all applicable adjustments, the result is the adjusted base rate. Since the adjusted base rate is largely determined by the construction grade of a building, effective training and diligence are required to assure the accurate and consistent determination of construction grade. This determination is typically made during field inspections.

The adjusted building area may be measured in square feet and begins with the base area of the building, which represents the major area for the building type. Percentage factors may be applied to the square footages of other building areas such as attached garages, attached carports, porches, utility rooms, and offices. Such percentage factors may be less than or greater than one, depending on the unit cost of the other area relative to that of the base area. For example, the percentage factor for a garage attached to a single family home typically would be less than one, while the percentage factor for an enclosed office area in a warehouse typically would be greater than one. After percentage factors are applied to the square footages of all other attached building areas, the results are summed and added to the square footage of the base area to obtain the adjusted building area. Multiplying the adjusted building area times the adjusted base rate yields the replacement cost new for the main building.

The replacement costs new for extra features such as pools, detached garages, detached buildings, and fireplaces are typically determined by multiplying the number of measurement units by the unit cost for each extra feature. The results are added to the replacement cost new of the main building to obtain the total replacement cost new of the improvements.

**13.8 Market Adjustments to Replacement Cost New.** Any available local market data may be used to test the accuracy of published cost data. One example of such testing is to compare replacement costs from a published manual to any known, reliable, and current local costs and either validating or adjusting the published costs

as appropriate. If adequate sale data are available, sale ratio studies may be useful for adjusting cost data to the local market. Sale ratio studies with a property type stratified by quality grade may reveal needed adjustments to base rates or problems with the determination of the quality grade, or may validate the rates and data applied. Such studies with a property type stratified by size may reveal needed cost adjustments for economies of scale, or may validate the costs used.

**13.9 Description of Accrued Depreciation.** Accrued, or total, depreciation represents the difference between the replacement cost new and the just value of real property improvements. Accrued depreciation may result from physical deterioration, functional obsolescence, or external obsolescence.

**13.9.1 Actual Age and Effective Age.** Actual age is the chronological age of real property improvements. Effective age is the age indicated by the physical condition of real property improvements. Effective age is determined by consideration of the actual age of the property, the quality of maintenance, any renovation, and any observed deferred maintenance. Deferred maintenance means any significant items that market participants would likely perceive as requiring repair. As applied in mass appraisal, effective age may, but does not typically, consider other forms of depreciation such as any functional obsolescence or any external obsolescence.

**13.9.2 Physical Deterioration.** This is a loss in value resulting from normal wear and tear and any deferred maintenance. Physical deterioration resulting from normal wear and tear exists in all real property except newly constructed property. Normal wear and tear and any deferred maintenance should be reflected in the determination of effective age made during field inspections and, thus, also should be reflected in the normal depreciation applied from the depreciation tables within the CAMA system. Any unusual physical deterioration such as fire or storm damage typically is not reflected in the effective age. It may be useful to have a separate line within a CAMA system with data fields to record any unusual physical deterioration along with a reason code. This feature would allow the periodic production of reports from the CAMA system to help manage the application of any unusual physical deterioration. Any unusual and separately applied physical deterioration should be justified by verified and documented evidence.

**13.9.3 Functional Obsolescence.** This is a loss in value resulting from a decrease in the functional utility of real property. Functional obsolescence may be caused by a deficiency or a superadequacy. Generally, the use of replacement cost excludes functional obsolescence from appraisal models. It may be useful to have a separate line within a CAMA system with data fields to record any additional functional obsolescence along with a reason code. This feature would allow the periodic production of reports from the CAMA system to help manage the application of any additional functional obsolescence. Any additional functional obsolescence applied should be justified by verified and documented evidence.

**13.9.4 External Obsolescence.** This is a loss in value resulting from factors outside the real property. External obsolescence may be caused by economic or locational factors, and may be temporary or permanent. It may be necessary to

allocate external obsolescence between land and improvements. It may be useful to have a separate line within a CAMA system with data fields to record any external obsolescence along with a reason code. This feature would allow the periodic production of reports from the CAMA system to help manage the application of any external obsolescence. Any applied external obsolescence should be justified by verified and documented evidence.

**13.10 Application of Accrued Depreciation.** In mass appraisal, accrued depreciation is applied primarily through the use of depreciation tables or their complement, percent good tables. Depreciation tables may be obtained from published cost manuals. To the extent possible, these depreciation tables should be tested for reasonableness as described in section 13.11. The effective age determined by field appraisal staff is the link between each improved parcel and the appropriate field in the depreciation table. Effective training and diligence are required for the accurate and consistent determination of effective age necessary for depreciation calculations. Before application of any other types of depreciation not reflected in the effective age or depreciation table, such depreciation should be justified by verified and documented evidence, as described in sections 13.9.2, 13.9.3, and 13.9.4.

**13.11 Market Adjustments to Depreciation Tables.** Assuming availability of adequate sale data, sale ratio studies may be useful for adjusting published depreciation schedules to the local market. Sale ratio studies with a property type stratified by age of improvements may reveal needed adjustments to depreciation rates or problems with the determination of effective age, or may validate the rates and data applied.

**13.12 Land Valuation.** The just value of land is required for the cost less depreciation approach to value. Land valuation is described in section 12.0.

**13.13 Just Valuation From the Cost Less Depreciation Approach.** The just valuation of real property by the cost less depreciation approach is calculated by subtracting accrued depreciation from replacement cost new and then adding the just value of the land.

**13.14 Quality Assurance in the Cost Less Depreciation Approach.** If this approach is used, its effectiveness may depend in part on the following: reliable data collection and management; effective exploratory data analysis; good market knowledge; sound appraisal judgment; and application of mass appraisal quality assurance tools.

## 14.0 THE SALES COMPARISON APPROACH

**14.1 Description of the Approach.** The collection and management of sale data is described in section 6.12. The sales comparison approach is a set of procedures where the results of arm's length sale transactions within properly stratified real property groups are analyzed for just value indications, which then may be applied to all properties within such groups. If a Property Appraiser uses the sales comparison approach to value property, the eight criteria inherently have been considered.<sup>50</sup>

**14.2 The Importance of Stratification.** The sales comparison approach relies upon proper stratification of real property. Stratification criteria may include property use code, location, quality grade, effective age, or size. The appropriate level of stratification may vary based on the number and type of real property parcels involved and the amount of market data available.

**14.3 Units of Comparison.** As applied in the sales comparison approach, units of comparison are the economic units into which the prices or value indications of real property may be divided for analysis. An example of a unit of comparison would be price per square foot. There are two primary criteria for selecting the appropriate unit of comparison for mass appraisal purposes. One is that unit of comparison most frequently used by market participants in their decision-making for the property type under analysis, and the other is that unit of comparison resulting in the lowest measures of dispersion within sale data sets. In most cases, sale data should be reduced to the appropriate unit of comparison before valuation analysis. However, some quantitative valuation models may directly employ total sale prices and produce total just value indications.

**14.4 Factors to Consider in Just Valuations.** Section 193.011, Florida Statutes, lists the factors that Florida Property Appraisers must consider in the just valuation of real property for ad valorem tax purposes. See section 2.1.2.

**14.5 Applications of the Sales Comparison Approach.** Sales comparison analysis may involve both quantitative and qualitative analyses. After sale data have been appropriately stratified and reduced to units of comparison, analysis of these groups may reveal relationships affecting just value. Useful quantitative analyses may include calculating and considering measures of central tendency and measures of dispersion for unit prices, and conducting other exploratory data analyses as described in section 8.0.

Other quantitative techniques such as multiple regression analysis and adaptive estimation procedure may be useful for deriving quantitative adjustments within the sales comparison approach. However, since these tools have specific data requirements that may not be met within available sale data sets, their use may be

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<sup>50</sup> See Bystrom v. Bal Harbour 101 Condominium Association, Inc., 502 So.2d 1312 (Fla. 3d DCA 1987) which states that where an appraisal is based on sales of comparable properties the appraiser "*necessarily considers all, and uses some, of the factors set forth in section 193.011.*" Also, see Vero Beach Shores, Inc. v. Nolte, 467 So.2d 1041, 1044 (Fla. 4th DCA 1985).

somewhat limited. Market participants may not follow a quantitative adjustment process in their decision-making. Quantitative appraisal analysis requires the use of appraisal judgment.<sup>51</sup> Any quantitative adjustments or conclusions should be reviewed for reasonableness, consistency, and stability and, if necessary, overridden by relative comparison analysis. Qualitative analysis is useful in the mass appraisal process, and may be used to consider the overall significant differences within and between real property groups.

**14.5.1 Relative Comparison Analysis.** Relative comparison analysis, a common application of qualitative analysis, is described as:

*“Relative comparison analysis is the study of the relationships indicated by market data without recourse to quantification. Many appraisers use this technique because it reflects the imperfect nature of real estate markets.”*<sup>52</sup>

Ranking analysis, a variant of relative comparison analysis, is useful in mass appraisal.<sup>53</sup> As applied in mass appraisal, relative comparison analysis may involve stratifying, sorting, ranking, and bracketing sale data in order to arrive at reasonable and explainable conclusions. It requires good market knowledge and sound appraisal judgment. In applying relative comparison analysis, the data may first be stratified, sorted, and considered based on overall significant differences and then ranked based on overall relative desirability. From this, reasonable ranges (brackets) and point indicators may be developed for the unit values of appraised property groups. Then, these ranges and point indicators may be compared with each other to determine relative reasonableness within and between the appraised groups. Finally, reasonable and supportable conclusions may be made regarding the unit values for the properties within each group. There may be several useful variants of this method.

Relative comparison analysis may be especially useful for mass appraisal of property groups with a limited number of sales or parcels. It may also be useful for evaluating the reasonableness of value indications from other applications of the sales comparison approach, and for mass appraisal quality assurance as described in sections 16.5, 16.6, and 16.7.

**14.5.2 Multiple Regression Analysis.** Multiple regression analysis is a useful mass appraisal tool that may be applied in the sales comparison approach.<sup>54</sup> This is a highly complex statistical procedure that analyzes the relationships between the property characteristics and sale prices of sold property to develop a mathematical equation that may be used to determine the just valuations of groups of real property. The effective implementation of this method requires relatively large quantities of

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<sup>51</sup> Appraisal Institute, *The Appraisal of Real Estate, Twelfth Edition* (Chicago: Appraisal Institute, 2001), page 441.

<sup>52</sup> Ibid, page 445. Also, this type of methodology is listed and described as “*per unit value analysis*” in the student reference manual of the IAAO Course 300 (Fundamentals of Mass Appraisal).

<sup>53</sup> Ibid, pages 445-446.

<sup>54</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), pages 164-193.

market data, highly sophisticated statistical software, highly skilled staff, and usually the hiring of external consultants. The feasibility of using multiple regression analysis in the State of Florida may be limited to counties with larger resource bases and the required quantities of market data. Separate multiple regression models may be developed for residential market areas and other real property groups. Multiple regression models produce useful diagnostics indicating the predictive ability of individual property characteristics within models, and the overall accuracy and reliability of the models. When applying this technique, specific diligence is required to assure the reasonableness of regression coefficients and the stability of regression coefficients and just valuations from year to year. The effective implementation of multiple regression analysis carries several assumptions, the most important of which are complete, accurate, and representative mass appraisal data.

**14.5.3 Adaptive Estimation Procedure.** Adaptive estimation procedure, also referred to as “feedback,” is another useful mass appraisal tool that may be applied in the sales comparison approach.<sup>55</sup> Like multiple regression analysis, this is a highly complex statistical procedure that analyzes the relationships between the property characteristics and sale prices of sold property to develop a mathematical equation that may be used to determine the just valuations of groups of real property. Separate feedback models may be developed for residential market areas and other real property groups. The adaptive estimation procedure has requirements, possible limitations, and assumptions similar to those of multiple regression analysis.

**14.6 Quality Assurance in the Sales Comparison Approach.** If this approach is used, its effectiveness may depend in part on the following: reliable data collection and management; effective exploratory data analysis; good market knowledge; sound appraisal judgment; and application of mass appraisal quality assurance tools.

## **15.0 THE INCOME CAPITALIZATION APPROACH**

**15.1 Description of the Approach.** The collection and management of income capitalization data is described in section 6.13. In its basic applications, the income capitalization approach is a set of procedures where stabilized income from income-producing real property is capitalized into a just value indication by dividing stabilized net operating income by an overall capitalization rate, or by multiplying stabilized gross income by a gross income multiplier. A buyer of income-producing property exchanges current dollars for the expectation of receiving future dollars.

**15.2 The Importance of Stratification.** The income capitalization approach relies upon proper stratification of real property. Stratification criteria may include property use code, location, quality grade, effective age, or size. The appropriate level of stratification may vary based on the number and type of real property parcels involved and the amount of market data available.

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<sup>55</sup> Ibid, pages 196-201.

**15.3 Units of Comparison for Income and Operating Expenses.** As applied in the income capitalization approach, units of comparison are the economic units into which the income, operating expenses, or value indications of real property may be divided for analyses. Examples of units of comparison would be rent per square foot or expenses per square foot. There are two primary criteria for selecting the appropriate unit of comparison for income and expenses. One is that unit of comparison most frequently used by market participants in their decision-making for the property type under analysis, and the other is that unit of comparison resulting in the lowest measures of dispersion within income and operating expense data sets. Before valuation analysis, all income and operating expense data should be reduced to the appropriate unit of comparison.

**15.4 Factors to Consider in Just Valuations.** Section 193.011, Florida Statutes, lists the factors that Florida Property Appraisers must consider in the just valuation of real property for ad valorem tax purposes. See section 2.1.2.

**15.5 Market Rent and Fee Simple Estate.** Market rent, which is distinct from contract rent, is the most likely rent that an income-producing property would command if offered for lease on the open market, as of the date of appraisal. Fee simple estate is the unencumbered ownership of real property limited only by the four powers of government: taxation, police power, eminent domain, and escheat. Unless specified otherwise, fee simple estate is the interest in real property to be appraised for ad valorem tax purposes in the State of Florida.<sup>56</sup> Market rent corresponds to the fee simple estate. Contract rent is the rent due under the terms of an existing lease agreement for real property, and contract rent corresponds to the leased fee estate. Therefore, contract rent is irrelevant to real property appraisal for ad valorem tax purposes in the State of Florida, unless independent support is available indicating that contract rent is equal to market rent. Market rent may be less than, equal to, or greater than contract rent.

**15.6 Market Rent and Expense Analysis.** Reliable market rent and expense analysis involves both quantitative and qualitative analyses. After market rent and expense data have been appropriately stratified and reduced to units of comparison, analysis of these groups may reveal relationships affecting these data. Useful quantitative analyses may include calculating and considering measures of central tendency and dispersion for unit rent and expenses, and conducting other exploratory data analyses as described in section 8.0.

Other quantitative techniques such as paired data set analysis and regression analysis may be used to derive quantitative adjustments for significant differences within market rent and expense data groups, but these tools have specific data requirements that often are not met within available data sets. Therefore, these types of quantitative techniques are rarely used in rent and expense analysis. Market participants may not follow such a quantitative adjustment process in their decision-making. Quantitative

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<sup>56</sup> See Schultz v. TM Florida-Ohio Realty Ltd Partnership, 577 So.2d 573 (Fla. 1991). Also, see Valencia Center, Inc. v. Bystrom, 543 So.2d 214 (Fla. 1989).

appraisal analysis requires the use of appraisal judgment.<sup>57</sup> Any quantitative adjustments and conclusions should be reviewed for reasonableness, consistency, and stability and, if necessary, overridden by relative comparison analysis. Qualitative analysis is useful as a method of considering overall significant differences within and between real property groups. Relative comparison analysis, a common application of qualitative analysis, is described as:

*“Relative comparison analysis is the study of the relationships indicated by market data without recourse to quantification. Many appraisers use this technique because it reflects the imperfect nature of real estate markets.”*<sup>58</sup>

Ranking analysis, a variant of relative comparison analysis, is useful in mass appraisal.<sup>59</sup> As applied in mass appraisal, relative comparison analysis may involve stratifying, sorting, ranking, and bracketing market rent and expense data in order to arrive at reasonable and explainable conclusions. It requires good market knowledge and sound appraisal judgment. In applying relative comparison analysis, the data may first be stratified, sorted, and considered based on overall significant differences within data sets and then ranked based on overall relative desirability. From this, reasonable ranges (brackets) and point indicators may be developed for the market rent and expenses of appraised property groups. Then, these ranges and point indicators may be compared with each other to determine relative reasonableness within and between the appraised groups. Finally, reasonable and supportable conclusions may be made regarding the market rent and expenses for the properties within each group. There may be several useful variants of this method.

**15.7 Income and Operating Expenses.** Income and expenses may be determined after consideration of the relevant market factors pertaining to the property type under appraisal. The market factors that may be considered include the following:

- 1) the recent income and expense histories of properly stratified real property groups,
- 2) the current trends for income and expenses of properly stratified real property groups,
- 3) the market expectations for income and expenses of properly stratified real property groups,
- 4) the recent history, current trends, and market expectations for income and expenses of individual properties within properly stratified real property groups, and

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<sup>57</sup> Appraisal Institute, *The Appraisal of Real Estate, Twelfth Edition* (Chicago: Appraisal Institute, 2001), page 441.

<sup>58</sup> Ibid, page 445. Also, as applied within the income capitalization approach, this type of methodology is listed and described as the “*stratification*” method in the student reference manual of the IAAO Course 300 (Fundamentals of Mass Appraisal).

<sup>59</sup> Ibid, 445-446.

- 5) commercially available and published reports on the recent history, current trends, and market expectations for income and expenses of property that may be compared to the properly stratified real property groups.

**15.8 Potential Gross Income.** Potential gross income is generally comprised of potential gross rent and miscellaneous income. Potential gross rent is the total market rent a property could generate assuming no vacancy or collection loss. Miscellaneous income is other income from sources such as parking fees and storage fees.

**15.9 Vacancy and Collection Loss.** Vacancy is a loss in potential gross income due to vacant rentable space and tenant turnover. Collection loss is a loss in potential gross income attributable to nonpayment of rent due. Vacancy and collection loss is subtracted from potential gross income.

**15.10 Effective Gross Income.** Effective gross income is the result of subtracting vacancy and collection loss from potential gross income.

**15.11 Operating Expenses.** These are the annual operating expenditures required to continue the production of effective gross income. In addition to the units of comparison for operating expenses mentioned in section 15.3, it may be appropriate to consider operating expense ratios. Operating expenses include only those expenditures directly related to the operation of real property, and specifically exclude any expenses attributable to individuals or entities that may own the real property. Operating expenses for real property may include items such as ad valorem taxes on real property, any special assessments, insurance payments, typical management fees, and maintenance expenses. Items not allowable in operating expenses include items such as the following: income tax or other expenses attributable to individuals or entities that may own real property; depreciation; capital improvement expenditures; and debt service payments.

Since the intended use of the mass appraisal is for ad valorem taxation, it is typical to exclude ad valorem real property taxes from operating expenses and to add, or load, the effective tax rate to the overall capitalization rate to derive a loaded overall capitalization rate for appraisal purposes. An alternative method of handling the interdependency between just value indications and ad valorem taxes on real property is a circular reference feature in spreadsheet software or that may be available within advanced CAMA systems. The circular reference is a programmed feature that simultaneously calculates two interdependent variables.

**15.12 Reserves for Replacement of Short-Lived Items.** Short-lived items are those building components with remaining economic lives shorter than that of the main structure. Examples may be roof coverings, floor coverings, and air-conditioning units. Reserves for replacement are annual amounts that may be set aside to provide for the replacement of short-lived items at the end of their economic lives. Market participants vary in whether and how they apply this practice.

**15.13 Net Operating Income, Before and After Reserves.** Net operating income may be calculated in one of two ways: one is by subtracting only operating expenses from effective gross income, and the other is by subtracting both operating expenses and reserves for replacement from effective gross income. The appropriate method may depend upon factors such as market practices for the property type under appraisal, the availability of market data, and whether reserves were considered in the derivation of the overall capitalization rate.

**15.14 Direct Capitalization.** Direct capitalization is defined as a method used to convert a single year's income expectancy into an indication of value in one direct step, either by dividing the net operating income by an appropriate overall capitalization rate or by multiplying the gross income by an appropriate factor or multiplier.<sup>60</sup>

**15.15 Overall Capitalization Rates.** An overall capitalization rate, or overall rate, is a number in decimal form that may be divided into net operating income to produce an indication of just value by the income capitalization approach. Methods for deriving overall rates may include the following: comparable sales; gross income multiplier methods; band-of-investment using mortgage and equity; and the debt coverage ratio method.<sup>61</sup> Also, investor surveys may be useful in the determination of overall capitalization rates. Indicated overall rates from such analyses may be reconciled using relative comparison analysis. Overall rates may be derived before or after reserves for replacement. It is important to assure consistency between derivations of net operating income and overall rates within income capitalization models. If an income capitalization model initially excludes reserves, and then later reserves are subtracted from net operating income, it is essential to appropriately lower the overall capitalization rate for consistency. See the second paragraph in section 15.11.

**15.16 Gross Income Multiplier Method.** In this variant of direct capitalization, a value indication may be formed in two ways. One way is to multiply potential gross income by a market-extracted potential gross income multiplier, and the other is to multiply effective gross income by a market-extracted effective gross income multiplier. Gross income multipliers may be extracted from sales by dividing the sale price by potential gross income or effective gross income. Gross income multipliers should be applied the same way they were extracted. Various indicators of gross income multipliers may be reconciled using relative comparison analysis. Because the gross income multiplier method does not explicitly consider operating expenses, there should be reasonable consistency between the operating expense ratios of sold properties from which multipliers may be extracted and those of the property groups to which multipliers may be applied.

**15.17 Yield Capitalization.** Yield capitalization has variants. Discounted cash flow analysis is a common variant of yield capitalization, when appropriate. Discounted cash flow analysis is a set of procedures where a value indication is produced by

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<sup>60</sup> Appraisal Institute, *The Appraisal of Real Estate, Twelfth Edition* (Chicago: Appraisal Institute, 2001), page 529.

<sup>61</sup> *Ibid.*, pages 530-538.

projecting the future annual net operating income over a typical investment holding period, along with the net proceeds of resale at the end of the holding period, and then discounting these future economic benefits back to the present using an appropriate discount rate. In some cases, Florida courts have rejected property valuations for ad valorem taxation that involved projecting and discounting future economic benefits.<sup>62</sup> After consideration of applicable case law, Property Appraisers have the discretion to determine whether this valuation method is appropriate in particular situations.

**15.18 Quality Assurance in the Income Capitalization Approach.** If this approach is used, its effectiveness may depend in part on the following: reliable data collection and management; effective exploratory data analysis; good market knowledge; sound appraisal judgment; and application of mass appraisal quality assurance tools.

## **16.0 QUALITY ASSURANCE FOR FLORIDA MASS APPRAISAL**

**16.1 The Quality Assurance Process.** The mass appraisal quality assurance process may include the following: planning; organization; legal framework; good staff selection procedures; effective education and training for management and staff; reliable data collection and management; internal communication; appraisal edits and reviews; sale ratio studies; corrective actions; value reconciliation; evaluating assessment performance for unsold property; and taxpayer feedback. Appraisal judgment is required throughout the quality assurance process. See section 3.2.6.

**16.2 Florida Law, Administrative Rules, and Regulatory Requirements.** These items provide the legal framework for the mass appraisal process for ad valorem taxation of real property in the State of Florida. The quality assurance component of mass appraisal should ensure substantial compliance with applicable provisions of Florida law, administrative rules, and regulatory requirements.

**16.3 Effective Education and Training.** Effective education and training for county management and staff are essential to an accurate and equitable mass appraisal process. Effective means that the education and training are appropriate and that the resulting knowledge and skills are used throughout the mass appraisal process. Education is accomplished primarily through courses offered by professional organizations. Training may be accomplished through seminars, in-house training, and on-the-job training. These guidelines may be used as part of an education and training program for county management and staff.

**16.4 Mass Appraisal Data and the Mass Appraisal Process.** Section 6.0 describes systems and processes for collecting and managing complete, accurate,

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<sup>62</sup> See Palm Beach Development and Sales Corp. v. Walker, 478 So.2d 1122 (Fla. 4th DCA 1985); St. Joe Paper Co. v. Adkinson, 400 So.2d 983 (Fla. 1st DCA 1981); Muckenfuss v. Miller, 421 So.2d 170 (Fla. 5th DCA 1982); Spanish River Resort Corporation v. Walker, 497 So.2d 1299 (Fla. 4th DCA 1986) affirmed 526 So.2d 677 (Fla. 1988); and Mastroianni v. Barnett Banks, Inc., 664 So.2d 284 (Fla. 1st DCA 1995) review denied 673 So.2d 29 (Fla. 1996).

and consistent data essential to the Florida mass appraisal process. Such data is the most important component of an effective mass appraisal system. Evaluating mass appraisal data collection and management is the first of two steps in evaluating whether a mass appraisal process is effective. The other step is evaluating whether the just valuations of real property substantially comply with Florida law, administrative rules, and regulatory requirements.

**16.5 Just Valuation Edits Within CAMA Systems.** Valuation edits are programmed reports that may be produced within CAMA systems. There are two primary considerations for designing just valuation edits. The first is to determine the criteria for selecting the properties to appear on the report, and the other is to select the data fields and calculations to appear on the report. Such reports may be designed to reflect just value changes from the prior year to the current year for specified groups of real property or for individual properties. Also, valuation edits may show just values and unit just values for real property. These reports allow the user to identify any unusual just value indications such as extremely high or low values, extremely high or low unit values, or unusually high or low changes in value, both in dollar terms and percentage terms. Any parcels with such unusual indications may be reviewed further for valuation accuracy and reasonableness, and either validated or corrected.

**16.6 Desk Reviews and Field Reviews.** Desk reviews may include the activities described in the previous paragraph. As tests of reasonableness, other desk review activities may include calculating measures of central tendency and dispersion for just values and unit just values within properly stratified real property groups, and then comparing these to the same measures for the prices and unit prices of the sold properties within the corresponding real property groups. These measures may be compared for reasonableness and consistency using relative comparison analysis. Field review may involve physically inspecting individual properties or samples within real property groups with any unusual just value indications, and then validating or changing the just values accordingly. Value changes should be made to all property affected by the factor causing need for the change, not just to individual properties that may appear on a sale ratio study.

**16.7 Sale Ratio Studies.** Sale ratio studies are commonly used quality assurance tools for the mass appraisal process. In sale ratio studies, just value-to-sale price ratios are adjusted upward by dividing by one minus any aggregate percentage adjustment for the first and eighth criteria, resulting in adjusted sale ratios. Any adjustments for the first and eighth criteria apply in the aggregate to specified strata of real property and to real property assessment rolls as a whole.<sup>63</sup> Sale ratios may be expressed as percentages. Sale ratio studies may be programmed and performed within CAMA systems, or the mass appraisal data may be downloaded from CAMA systems and the sale ratio studies performed using spreadsheet or statistical software. There are two primary considerations for designing sale ratio studies for mass

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<sup>63</sup> *Technical Opinion OPN 95-0018*, July 10, 1995, Property Tax Administration, Florida Department of Revenue. Also, see *Technical Opinion OPN 90-0039*, August 20, 1990, Property Tax Administration, Florida Department of Revenue.

appraisal quality assurance purposes. The first is to determine the criteria for selecting the sales to appear on the report, and the other is to select the data fields to appear on the report.

**16.7.1 Uses of Sale Ratio Studies.** Sale ratio studies may be useful for the following quality assurance aspects of the mass appraisal process: monitoring the appraisal work of teams or individuals; evaluating appraisal level and uniformity; and proactively evaluating regulatory compliance.

**16.7.2 Inappropriateness of Selective Reappraisal.** The following excerpt explains selective reappraisal: *“The reliability of sales ratio statistics depends on unsold parcels being appraised in the same manner as sold parcels. Selective reappraisal of sold parcels distorts sales ratio results, possibly rendering them useless. Equally important, selective reappraisal of sold parcels (“sales chasing”) is a serious violation of basic appraisal uniformity and is highly unprofessional.”*<sup>64</sup> Additionally, the U.S. Supreme Court has disapproved selective reappraisal.<sup>65</sup>

**16.7.3 Matching Property Data on Sale Date and Appraisal Date.** The relevant legal and physical characteristics of the sold property, as of the date of sale, should be accurately matched with the same characteristics as of the date of appraisal. This may be accomplished by excluding from the ratio study all sales where any of the following changes were made to the sold parcels between the date of sale and the date of appraisal: new construction; significant renovation or demolition; changes in zoning or future land use classification significantly affecting value; combinations; and splits.

**16.7.4 The Importance of Stratification.** Sale ratio studies rely upon proper stratification of sold properties into groups with one or more significant characteristics in common. Appropriate stratification criteria may include the following: the seven statutory real property strata, property use code, geographic unit, site code, effective age, size, quality grade, or value range.

**16.7.5 Graphic Displays of Sale Ratio Study Results.** The effectiveness and understandability of the results of sale ratio studies may be enhanced by the use of graphic displays. Useful tools for displaying sale ratio study results may include arrays, frequency distributions, histograms, scatter plots, and box plots.<sup>66</sup> Scatter plots, or scatter diagrams, are especially useful for displaying the relationship between sale ratios and a single continuous variable such as size, age, price, or value. Box plots are especially useful for displaying the relationship between sale ratios and a single discrete variable such as market area, neighborhood, quality grade, age range, size range, price range, or value range. Diligence is required when interpreting and

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<sup>64</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), page 315.

<sup>65</sup> See *Allegheny Pittsburgh Coal Co. v. County Commissioner*, 488 U.S. 336, 109 S.Ct. 633, 102 L.Ed.2d. 688 (1989).

<sup>66</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), pages 224-226, 243-245.

acting upon the apparent relationship between sale ratios and a single variable such as value range, because there could be a correlation between value range and another variable such as market area. This could cause a mistaken conclusion that a valuation inaccuracy is attributable to factors within a value range, when in fact the valuation inaccuracy is attributable to factors within a market area. Another useful tool for displaying and analyzing sale ratio data is the contingency table, which simultaneously reflects the relationships between sale ratios and two discrete variables such as market area and value range, or neighborhood and age range.<sup>67</sup>

**16.7.6 Statutory Real Property Strata.** Section 195.096(3)(a), Florida Statutes, requires the Department of Revenue to compute statistical and analytical measures on the following seven real property classes, or strata, when the classes constituted 5 percent or more of the total assessed value of real property in a county on the previous tax roll.

1. *Residential property that consists of one primary living unit, including, but not limited to, single-family residences, condominiums, cooperatives, and mobile homes.*
2. *Residential property that consists of two or more primary living units.*
3. *Agricultural, high-water recharge, historic property used for commercial or certain non-profit purposes, and other use-valued property.*
4. *Vacant lots.*
5. *Nonagricultural acreage and other undeveloped parcels.*
6. *Improved commercial and industrial property.*
7. *Taxable institutional or governmental, utility, locally assessed railroad, oil, gas, and mineral land, subsurface rights, and other real property.*

Florida Property Appraisers may also perform statistical analyses on these seven strata for quality assurance and to proactively evaluate regulatory compliance.

**16.7.7 Measures of Appraisal Level in Sale Ratio Studies.** In sale ratio studies, measures of appraisal level are generally reflected by measures of central tendency. The three common measures of appraisal level for sale ratio studies are the median, mean, and weighted mean.<sup>68</sup> These three items are required inputs for calculating measures of appraisal uniformity (see section 6.7.10). Also, measures of appraisal level are useful for evaluating horizontal equity and vertical equity (see sections 16.7.13 and 16.7.14).

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<sup>67</sup> International Association of Assessing Officers, *Property Appraisal and Assessment Administration* (Chicago: International Association of Assessing Officers, 1990), pages 524-525.

<sup>68</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), pages 229-233.

**16.7.8 Adjustment for the First and Eighth Criteria.** Section 2.1.2 contains the statutorily mandated eight factors, or criteria, that Florida Property Appraisers must consider in the annual just valuations of real property. Aggregate adjustments to the just value-to-sale price ratios within real property strata may be applied to account for the first and eighth criteria. Each year with the submittal of the preliminary assessment rolls, Property Appraisers are required to report on Department of Revenue Form DR-493 any percentage adjustments applied within real property use code groups to reflect consideration of the first and eighth criteria. The Department of Revenue uses these reported percentage adjustments in the statutory level of assessment calculations for evaluation of assessment rolls. Since Property Appraisers have the discretion to determine any appropriate percentage adjustments, the Department of Revenue does not determine any adjustments for the first and eighth criteria. However, Rule 12D-8.002(4), Florida Administrative Code, specifies that if any reported percentage adjustments exceed 15 percent, documentation supporting these percentage adjustments must be provided to the Department of Revenue. Any adjustments for the first and eighth criteria apply in the aggregate to specified strata of real property and to real property assessment rolls as a whole.<sup>69</sup>

**16.7.9 Level of Assessment.** The measure of appraisal level used by the Florida Department of Revenue to evaluate assessment rolls and to certify assessment rolls to the Department of Education is called the level of assessment. In Florida, the level of assessment is based on the adjusted weighted mean ratio for specified strata of real property and for real property assessment rolls as a whole. For proactively evaluating regulatory compliance, Property Appraisers may calculate the level of assessment by dividing the unadjusted weighted mean sale ratio by one minus any aggregate percentage adjustment for the first and eighth criteria.

**16.7.10 Measures of Appraisal Uniformity In Sale Ratio Studies.** Appraisal uniformity may be evaluated both between and within real property groups. Appraisal uniformity between groups may be evaluated by comparing measures of appraisal level for real property groups. Common indicators of appraisal uniformity within groups are the array, range, coefficient of dispersion, and price-related differential.<sup>70</sup> Arranging the sales in ascending ratio order creates an array, and the lowest and highest ratios reflect the range. These two indicators are simple, directly observable, and useful for small groups of sales. However, the coefficient of dispersion and the price-related differential are generally applied as indicators of appraisal uniformity within real property groups.

**16.7.11 Coefficient of Dispersion.** The coefficient of dispersion is the most commonly used indicator of appraisal uniformity in sale ratio studies. It measures the variation of sale ratios within a group of sold properties. Since the coefficient of

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<sup>69</sup> *Technical Opinion OPN 95-0018*, July 10, 1995, Property Tax Administration, Florida Department of Revenue. Also, see *Technical Opinion OPN 90-0039*, August 20, 1990, Property Tax Administration, Florida Department of Revenue.

<sup>70</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), pages 233-237, 239-242.

dispersion is based on the median, it is not influenced by extreme sale ratios, as are measures of appraisal uniformity based on the mean.

**16.7.12 Price-Related Differential.** The price-related differential (PRD) measures appraisal uniformity between low- and high-value properties within real property groups. A PRD below the acceptable range may indicate that high-value properties are overappraised relative to low-value properties, and the mass appraisal may be considered “progressive.” A PRD above the acceptable range may indicate that high-value properties are underappraised relative to low-value properties, and the mass appraisal may be considered “regressive.”

**16.7.13 Horizontal Equity.** Horizontal equity relates to equity in appraisal level between real property groups stratified by criteria other than value range. Horizontal equity may be evaluated by comparing measures of appraisal level for real property groups stratified by items such as geographic units, site codes, age groups, and size groups. Graphic analysis may also be useful for evaluating horizontal equity. See section 16.7.5. If any significant horizontal inequity is apparent, additional analysis, and possibly appraisal level changes, may be required.

**16.7.14 Vertical Equity.** Vertical equity pertains to equity in appraisal level related to the value of real property. Vertical equity may be evaluated by calculating the price-related differential for real property groups stratified by items such as geographic units, site codes, age groups, and size groups, and by comparing measures of appraisal level for value range groups. Graphic analysis may also be useful for evaluating vertical equity. See section 16.7.5. If any significant vertical inequity is apparent, additional analysis, and possibly appraisal level changes, may be required.

**16.7.15 Statistical Indicators for Regulatory Purposes.** During the assessment roll evaluation process, the Department of Revenue performs certain statistical analyses on applicable statutory real property strata as described in section 16.7.6. Relevant to these guidelines are three statistical indicators calculated by the Department of Revenue: the level of assessment, the coefficient of dispersion, and the price-related differential. The level of assessment is equivalent to the adjusted weighted mean as described above. For quality assurance and to proactively evaluate regulatory compliance, Florida Property Appraisers may also perform such statistical analyses. The Department of Revenue may also utilize other statistical indicators in the assessment roll evaluation process.

**16.8 Reconciliation of the Mass Appraisal.** The process of reaching just value conclusions for real property is an application of administrative discretion by Florida Property Appraisers.<sup>71</sup> If a single valuation approach is used for a real property type, the value indications by this approach may be reviewed for quality assurance before reaching final conclusions of just value. If more than one valuation approach is used for a real property type, the just value indications by each approach may be reviewed for quality assurance and reconciled to final conclusions of just value. It is not

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<sup>71</sup> See Powell v. Kelly, 223 So.2d 305 (Fla. 1969). Also, see Spanish River Resort Corporation v. Walker, 497 So.2d 1299 (Fla. 4th DCA 1986) affirmed 526 So.2d 677 (Fla. 1988).

necessary to base final conclusions of just value on a single approach.<sup>72</sup> Final conclusions of just value may be based on the value indications from one of the approaches, or may be based on a weighted average of the value indications from the approaches used. In reaching a final conclusion of just value, the factors for consideration may include the following: the quality and quantity of the data used in each approach; the applicability of each approach used; and the approach or reconciliation that produces the best indicators of appraisal performance.

**16.9 Evaluating Appraisal Performance for Unsold Property.** Sale ratio studies evaluate appraisal performance for sold property. For quality assurance purposes, it is helpful to evaluate appraisal performance for unsold property. Two practical types of analysis for this evaluation are percent change in just value methods and the unit just value method.

**16.9.1 Percent Change in Just Value Methods.** There may be variants of the percent change in value method for evaluating appraisal performance for unsold properties. One variant involves listing all real property parcels within a properly stratified group, including just values for the current and prior years for all parcels and sale prices for any sold parcels, and calculating the percent change in just value for each parcel. These just value percent change indicators may be reviewed for consistency, reasonableness, and validity. These data sets may be analyzed for significant differences in value changes between sold and unsold property. Any such differences or any extreme changes in value may require further research to validate or correct. Another variant of this method involves comparing the average percent change in just value between the sold and unsold subgroups of properly stratified real property groups. Any significant differences in the percent changes in value between the sold and unsold subgroups may require further research to validate or correct.

**16.9.2 Unit Just Value Method.** This method requires use of the appropriate just value unit of comparison for the property type under analysis. It involves comparing the average unit just values for unsold parcels within properly stratified property groups with those of sold parcels within the same groups. If sold and unsold properties are appraised equitably, their average unit values should be similar, other factors held constant. Any significant differences between the average unit just values of sold property and those of unsold property may require further research to validate or correct.

**16.10 Taxpayer Feedback.** Taxpayer feedback is part of the mass appraisal quality assurance process. Such feedback may be reflected in informal inquiries, petitions filed with the county value adjustment board, and litigation. Depending on the time of year, informal inquiries may be the preferred form of receiving and responding to taxpayer feedback.

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<sup>72</sup> International Association of Assessing Officers, *Mass Appraisal of Real Property* (Chicago: International Association of Assessing Officers, 1999), pages 20-21.

## ADDENDUM

Listed below in bold italics are the eight factors that Florida Property Appraisers are required to consider in the just valuation of real property as stated in Section 193.011, Florida Statutes. Following each factor is a discussion of the applicable Florida case law as provided by the Office of the General Counsel, Florida Department of Revenue. These case law discussions are summaries of court rulings. Care should be taken to consult the actual cases, along with legal advice where necessary, in their application.

***Factors to consider in deriving just valuation.--In arriving at just valuation as required under s. 4, Art. VII of the State Constitution, the property appraiser shall take into consideration the following factors:***

***(1) The present cash value of the property, which is the amount a willing purchaser would pay a willing seller, exclusive of reasonable fees and costs of purchase, in cash or the immediate equivalent thereof in a transaction at arm's length;***

See Bystrom v. Bal Harbour 101 Condominium Association, Inc., 502 So.2d 1312 (Fla. 3d DCA 1987) which states that where an appraisal is based on sales of comparable properties the appraiser "necessarily considers all, and uses some, of the factors set forth in section 193.011." Also see Vero Beach Shores, Inc. v. Nolte, 467 So.2d 1041, 1044 (Fla. 4th DCA 1985). The sale price may be outweighed by the condition or size; the former is not necessarily the sole determinant of value where no established market exists. Walker v. Trump, 549 So.2d 1098 (Fla. 4th DCA 1989). In this regard, no individual sale can be or should be assumed to represent just or fair market value. See Oyster Pointe Condo. Assoc., Inc. v. Nolte, 524 So.2d 415 (Fla. 1988), which stated the Legislature intended "to include only those fees and costs typically associated with the closing of the sale of real property such as reasonable attorney's fees, broker's commissions, appraisal fees, documentary stamp costs, survey costs and title insurance costs."

***(2) The highest and best use to which the property can be expected to be put in the immediate future and the present use of the property, taking into consideration any applicable judicial limitation, local or state land use regulation, or historic preservation ordinance, and considering any moratorium imposed by executive order, law, ordinance, regulation, resolution, or proclamation adopted by any governmental body or agency or the Governor when the moratorium or judicial limitation prohibits or restricts the development or improvement of property as otherwise authorized by applicable law. The applicable governmental body or agency or the Governor shall notify the property appraiser in writing of any executive order, ordinance, regulation, resolution, or proclamation it adopts imposing any such limitation, regulation, or moratorium;***

The appraiser can consider the potential, future use of property for a 13-story building, although a current lease may prohibit development of 13-story building. Valencia Center Inc. v. Bystrom, 543 So.2d 214 (Fla. 1989). Uses of property barred under zoning, but permitted by comprehensive plan that had priority over zoning restrictions, and for which there was present

market demand, could be considered by the appraiser in assessing the highest and best use to which property could be expected to be put in the immediate future. Holland v. Walker, 492 So.2d 1093 (Fla. 4th DCA 1986), review denied 504 So.2d 767 (Fla. 1987). The temporary existence of a moratorium or delayed development should not be the sole consideration in determining the value of land. Atlantic Intern. Inv. Corp. v. Turner, 383 So.2d 919 (Fla. 5th DCA 1980). Speculative investment should be considered as the highest and best use, and if there is no present demand, that would affect the value the appraiser attaches to the property. Vero Beach Shores, Inc. v. Nolte, 467 So.2d 1041 (Fla. 4<sup>th</sup> DCA 1985). Building density restrictions are applicable for consideration. Walker v. Hoffman, 464 So.2d 710 (Fla. 4th DCA 1985). The appraiser is not bound by the fact that the property cannot presently be used for purposes permitted by the zoning. Florida Rock Industries v. Bystrom, 485 So.2d 442 (Fla. 3d DCA 1986). But see Security Management Corp. v. Markham, 516 So.2d 959 (Fla. 4th DCA 1987), which holds that property zoned for 234 apartments but for which a Court had ordered the City of Hallandale to process plans for 1,500 units should still be assessed on the basis of the underlying zoning. Further, the appraiser should not consider future or potential uses unless they are to be expected immediately and not at a vague or uncertain time in the future. Lanier v. Overstreet, 175 So.2d 521 (Fla. 1965). Future uses based in the possibility of rezoning should not be based on speculation and conjecture. Bal Harbour Club, Inc., v. Dade County, 222 So.2d 428 (Fla. 3d DCA 1969).

***(3) The location of said property;***

Location is a factor that the appraiser must at least consider in valuing property, though the appraiser need not to give equal weight to each factor. Roden v. Estech, Inc., 508 So.2d 728 (Fla. 2d DCA 1987), review denied 518 So.2d 1277 (Fla. 1987).

***(4) The quantity or size of said property;***

The size of a parcel may have little effect on its value per acre, when other factors so indicate. Palm Beach Development and Sales Corp. v. Walker, 478 So.2d 1122 (Fla. 4th DCA 1985) review denied 488 So.2d 831 (Fla. 1986) involving vacant unplatted lots in a subdivision being developed. However the size of a parcel may become a extremely relevant factor in the absence of other relevant factors and information. Walker v. Trump, 549 So.2d 1098 (Fla. 4th DCA 1989). The courts have recognized that this may be a dilemma for the appraiser. Muckenfuss v. Miller, 421 So.2d 170 (Fla. 5th DCA 1982).

***(5) The cost of said property and the present replacement value of any improvements thereon;***

The appraiser should consider and recognize differences between old and new properties under the cost approach. Ozier v. Seminole Co. Property Appraiser, 585 So.2d 357 (Fla. 5th DCA 1991). The cost approach may be warranted where property is a "special purpose" property, if there are complications caused by attempting to accurately predict any stability in the "income approach". Daniel v. Canterbury Towers, Inc., 462 So.2d 497 (Fla. 2d DCA 1984); Havill v. Lake Port Properties, Inc., 729 So.2d 467 (Fla. 5th DCA 1999).

***(6) The condition of said property;***

The appraiser should consider and recognize differences in condition between old and new properties under the cost approach. Ozier v. Seminole Co. Property Appraiser, 585 So.2d 357 (Fla. 5th DCA 1991). Contaminated condition may affect the market value. Gulf Coast

Recycling v. Turner, 753 So.2d 712 (Fla. 2d DCA 2000). The appraiser's weight afforded to condition may outweigh the sale price; the latter is not necessarily the sole determinant of value where no established market exists. Walker v. Trump, 549 So.2d 1098 (Fla. 4th DCA 1989); Muckenfuss v. Miller, 421 So.2d 170 (Fla. 5th DCA 1982).

***(7) The income from said property; and***

Though different income approaches can be used, they need not be the only criteria used in setting an assessment but can be used in conjunction with other criteria. Whitman v. Overstreet, 230 So.2d 46 (Fla. 3d DCA 1969) cert. denied 237 So.2d 764 (Fla. 1978). The appraiser when using income can use average occupancy rates for downtown office buildings, and need not use the property's actual occupancy figures, as long as these figures are considered. Mastroianni v. Barnett Banks, Inc., 664 So.2d 284 (Fla. 1st DCA 1995) review denied 673 So.2d 29 (Fla. 1996).

***(8) The net proceeds of the sale of the property, as received by the seller, after deduction of all of the usual and reasonable fees and costs of the sale, including the costs and expenses of financing, and allowance for unconventional or atypical terms of financing arrangements. When the net proceeds of the sale of any property are utilized, directly or indirectly, in the determination of just valuation of realty of the sold parcel or any other parcel under the provisions of this section, the property appraiser, for the purposes of such determination, shall exclude any portion of such net proceeds attributable to payments for household furnishings or other items of personal property.***

See Bystrom v. Bal Harbour 101 Condominium Association, Inc., 502 So.2d 1312 (Fla. 3d DCA 1987) which states that where an appraisal is based on sales of comparable properties the appraiser "necessarily considers all, and uses some, of the factors set forth in section 193.011." Also see Vero Beach Shores, Inc. v. Nolte, 467 So.2d 1041, 1044 (Fla. 4th DCA 1985). The sale price may be outweighed by the condition or size; the former is not necessarily the sole determinant of value where no established market exists. Walker v. Trump, 549 So.2d 1098 (Fla. 4th DCA 1989). In this regard, no individual sale can be or should be assumed to represent just or fair market value. See Oyster Pointe Condo. Assoc., Inc. v. Nolte, 524 So.2d 415 (Fla. 1988), which stated the Legislature intended "to include only those fees and costs typically associated with the closing of the sale of real property such as reasonable attorney's fees, broker's commissions, appraisal fees, documentary stamp costs, survey costs and title insurance costs."