

# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

## CHAPTER 1 - REAL PROPERTY AND ITS APPRAISAL

## **INTRODUCTION**

- Land provides the foundation for social and economic activities for the people who inhabit and share
  it.
- Concepts of real property differ among various disciplines:

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legal - consideration of ownership and use,
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economic - as an agent of production,

finance - as value in exchange,

sociology - as a resource and a commodity,

geography - those physical elements and related activities.

- Common understanding among disciplines of lands uniqueness, physical immobility, durability, finite supply and utility.
- Value is an economic concept based on these aspects of land.
- Value is determined by attitudes and actions of people in response to social and economic factors, the constraints of law, and legal encumbrances.

## **CONCEPTS OF LAND**

# **Geographic and Environmental**

- Each parcel is unique in physical attributes and location which impacts its utility and highest and best use. Adjacent properties are still considered unique.
- Various processes such as physical, chemical, biological, and socioeconomic affect human habitation and activity on land. This in turn affects the value of the land.
- Land has many uses including agricultural, commerce, residential, and recreational.
- Land use is affected by climate, topography and distribution of natural resources, population, industry, and current trends in these areas.
- Land's geography provides the background that appraisal requires regarding natural resources, location of industry, actual and potential markets.

# **Governmental and Legal**

- Laws reflect the rights and obligations associated with various interests in land.
- Land includes the ground, what is under and over it, as well as what is attached. Mineral rights are not included in Canada.
- Canadian law has defined the government's land use controls at federal, provincial, municipal, and First Nations levels.
- Ownership rights are subject to law and value of these rights a focus of appraisal.
- Appraisers must consider easements, access and use restrictions, and the recording and conveying titles. The information is recorded by a government agency and available at the title office.

## Economic

- Land ownership has rights that can be legally limited by government statutes.
- Land ownership is a form of wealth and therefore, an object of value.

## Social

- Modern society is concerned with land use and how rights are distributed because land is fixed in quantity. But land can be modified, destroyed and sometimes created.
- Increased demand puts pressure to use land more intensively.
- Laws are intended to serve the public good.
- Currently the principle restrictions on land use in Canada arise from planning and zoning provisions.
- Changing land use controls affect the nature and extent of private ownership, hence values.
- Land use controls determine what and where development can occur and those activities allowed subsequent to development. Recent efforts include increased air and water regulation.

## REAL ESTATE, REAL PROPERTY, AND PERSONAL PROPERTY

- "Real estate" is immobile and tangible; it includes land and all things attached, whether natural or human created
- "Real property" includes all interests, benefits, and rights inherent in ownership.
- A right or interest is also referred to as an estate in land, is determined by duration and may be either freehold or leasehold.
- The total range of ownership interests is called the "bundle of rights".
- Ownership bundle consists of the right to: use, sell, lease, enter, give it away or do nothing. Each may be separated and traded in the market.
- Restrictions on the bundle are placed by common law and all levels of government. Discussed in Chapter 6.
- Appraisers distinguish between (1) real estate, (2) real property, and (3) personal property and (4) trade fixtures.

# APPRAISAL PRACTICE

- In Canada, the Appraisal Institute of Canada (AIC) is the major appraisal organization that sets standards for education appraisal practices.
- The Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP) is a set of appraisal standards that must be followed by all members of the AIC.
- These standards can be viewed on the AIC website.
- Members will complete appraisal reports, or carry out consulting or appraisal review for clients, all of which are governed by the CUSPAP guidelines.
- The AIC also requires members to re-certify by taking various courses which are appraisal specific or related to real estate in some manner.
- Appraisal practice includes Appraisal, Appraisal Review and Appraisal Consulting. See Chapter 27 for more information.

# **Appraisal Reporting Options**

- CUSPAP details three types of appraisal reports:

  - "narrative report" comprehensive and detailed;
    "short narrative" consists of concise and brief descriptions;
  - "form" a standardized format, combining check-off boxes and narrative comments.

# Purpose and Intended Use of an Appraisal

- The purpose is the stated reason and the establishes the scope of the assignment.
- Established by the client, explaining what they want answered about the property.

- Values sought can be: market value, fair value, assessed value, use value, investment value, business value or other types of value as defined by the client and the appraiser.
- Purpose establishes the foundation of the final value conclusion.
- Intended Use is how the client will use the appraisal information for their needs, such as: market value for sale or purchase purposes, investment value, assessed value, to assist in setting lease rates, for government expropriation, etc.
- The date of the appraisal must always be shown as forces on any given day can affect a property's value.
- See Table 1.4 in the workbook for "Typical Uses of Appraisals", Transfer of Ownership, Litigation and Investment counselling, decision-making and accounting.

# **Appraiser Liability**

- Members are required to carry liability insurance through the AIC.
- Areas of possible liability are negligence, misrepresentation, fraud, breach of contract, or lack of compliance with the CUSPAP.
- Appraisers are providing opinions of value and to avoid liability, a thorough and professional job is necessary.
- This requires good market data support for all opinions and adjustments to validate a reliable estimate of value for the subject.



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## **CHAPTER 2 - THE NATURE OF VALUE**

## **INTRODUCTION**

• Value is a main consideration for an appraiser.

## **FACTORS OF VALUE**

- The factors that create value are utility, scarcity, desire, and effective purchasing power. Supply factors are utility and scarcity, while demand factors are desire and effective purchasing power interacting to determine the demand / supply relationship.
- **Utility**: the ability to satisfy a human want, need, or desire. Residential properties give shelter, commercial properties generate income.
- Scarcity: the present or forecasted supply of an item relative to its demand. Scarcity coupled with utility yields value.
- **Desirability**: desire is a purchaser's wish to satisfy human needs or wants.
- **Effective Purchasing Power**: the ability of people to participate in a market in the purchase of goods and services with cash or its equivalent.
- **Supply and Demand**: the interaction of these four factors that create value is reflected in the principle of supply and demand.

# THE HISTORY OF VALUE THEORY

• This section is an overview of Theories of Value since it was first discussed in the 1700's by Adam Smith. It discusses the theory under the headings of The Classical School, The Challenges to the Classical School, The Neoclassical Synthesis, and Modern Appraisal Theory.

# DISTINCTIONS AMONG PRICE, COST, AND VALUE

- Price is the amount agreed upon by both buyer and seller for a good or service and subsequently paid.
- Cost is cost of construction or overall development cost, including profit.
- Value is the **anticipation** of benefits to be obtained in the future and can change over time.
- The type of value must also be defined: market, assessed, investment, etc.
- Cost is not value.

# **MARKET VALUE**

• Market value, a major focus in most real estate transactions and defined as:

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

• Similar definitions include those of the International Valuation Standards Committee (IVSC), Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP), and that in the Expropriation Act of British Columbia (RSBC).

### OTHER TYPES OF VALUE

## Fair Value

Used by the accounting profession and defined by the Generally Accepted Accounting Principles (GAAP) and the International Financial Reporting Standards (IFRS). Definition is similar to Market Value used by appraisers.

## Use Value

- The value a specific property has for a specific use without regard to highest and best use or the money received on a sale. For example, limited-market properties such as a manufacturing plant built for a specific purpose or a house built for a handicapped person.
- Objective value refers its cost of construction, while subjective value refers to what something is worth to someone or what people will pay for an item. (See the workbook page 1.18.)
- Limited-Market and Special Purpose Properties: Limited-use properties usually have few potential buyers because of their unique design with minimal market date available. If market value cannot be determined, but its use is viable and likely to continue, these properties could be appraised on their current use or a likely alternative use. Examples include churches, public buildings or schools.

## **Investment Value**

• A value of a specific property to a *particular* investor based on *their* investment criteria.

## **Business Value**

- A going concern is an established and operating business with an indefinite future. In some cases the physical assets are an integral part of the business, e.g. hotels, restaurants, manufacturing operations, etc.
- Layman reference to intangible and tangible assets as business value or business enterprise value but in essence is the market value of a going concern.
- Separation of market value of the land and buildings from the total value of the business is sometimes difficult.

# **Public Interest Value**

Generally a term covering a family of value concepts that relate the highest and best use of property to non-economic uses. It is not based on economic principles.

# Assessed Value

- It refers to valuing a property for assessment and taxation purposes.
- The local or provincial legislation may or may not refer to market value.
- The definition of assessed value and how it will be determined is defined by statute.

# **Insurable Value**

It is the value of an asset that is covered by insurance. It might be replacement or reproduction cost. The value may be controlled by provincial legislation.

# **Actual Cash Value**

Sometimes referred to as the ACV it is the replacement cost new of a building less any depreciation to date.



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## **CHAPTER 3 - FOUNDATIONS OF APPRAISAL**

## **INTRODUCTION**

- Real property is the focus of real estate appraisal theory as perceived by society to be a good investment.
- The level of participation depends on one's needs and wants.
- The production of goods, services, and income depends on the combined effects of four essential economic ingredients called **the agents of production**.

## **AGENTS OF PRODUCTION**

Combining the four agents of production (land, labour, capital, and entrepreneurial coordination) creates a finished real estate product.

- Land is the basis for any development and its cost must be considered in relation to the overall development.
- **Labour** comprises all of the direct and indirect costs to construct and market the product, including wages, materials, and financing.
- Capital is the cost of financing and the return on both borrowed capital and equity capital invested in the project.
- **Entrepreneurial Coordination** is the anticipation of receiving a profit in addition to the return of the equity investment. That is, the consideration of the time and expertise required by the developer to create and market the project.

## ANTICIPATION AND CHANGE

- **Anticipation** of future benefits creates value. Residential housing provides a place to live and to raise a family. Commercial properties generate future income. Education for future work advancement.
- Change is the brought about by the nature of the social, economic, governmental, and environmental forces interacting on a daily basis which in turn affect the public's attitudes towards real estate.
- **Depreciation and obsolescence** impact real estate by lessening those future benefits, hence value.

# SUPPLY AND DEMAND, SUBSTITUTION, BALANCE, AND EXTERNALITIES

• Economic theory states the price of a commodity varies directly but not necessarily in proportion with demand and inversely but not necessarily in proportion, with supply. With an increase in demand relative to supply, the price will rise. An increase in supply relative to demand will have the opposite effect and the price will fall. The supply and demand for commodities tend toward equilibrium or a balanced market. At this theoretical point, market value, price and cost are equal.

- The **supply** of real estate depends on the **four** agents of production. Supply refers to the amount of service or space available. Quality of space is also important. **Quantity** of space changes slowly, while **quality** can change quicker by remodelling or making additions.
- The **demand** is the desire and ability of market participants to buy or lease goods and is affected by the quantity and quality of supply. Demand supported by purchasing power results in an effective demand. Appraisers must be aware of the supply and demand for the real estate they are appraising.
- Competition is fundamental to the equation because it affects both the supply and demand which in turn affects the value of the commodity. Existing subdivisions compete with new subdivisions for buyers. Shopping malls are either newly constructed or remodelled to compete for and attract new shoppers.
- Substitution assumes rational, prudent purchasers, with no undue delay in obtaining that commodity and that they will be attracted to that equally desirable commodity with the lowest price. This principle is fundamental to the three approaches to value: direct comparison, cost, and income. In other words you can satisfy your needs by BUYING, BUILDING or INVESTING in a similar property.
- Balance states that property values are created and sustained when contracting, opposing, or interacting elements are in a state of equilibrium. It is achieved when the combination of land and improvements is optimal with no added benefit or utility achieved by adding another unit of capital. Following this principle are those of diminishing returns, contribution, surplus productivity and conformity. The principle of diminishing returns states that adding more units of production will produce greater net income up to a certain point and at this point further expenditures result in diminishing returns. For example, building a four bedroom house where three is standard may not return any extra value in relation to the cost incurred.
- Contribution is the value of a particular component measured in terms of its contribution to or its absence from, thus adding to or detracting from the value of the whole property. For example, a residential swimming pool may or may not return its cost when the property is sold on the market. In some cases, homes are purchased and the pool is filled in as a giant planter. The pool does not add value and, in fact, detracts from it.
- **Surplus Productivity** is the net income to the land remaining after the costs of the other agents of production have been paid. It tends to set the value of the land when the income is capitalized at an appropriate rate of return.
- Conformity holds that value is maintained when properties conform to those market expectations/ standards. The principle of **regression** states a higher-priced property in a lower-priced neighbourhood will be worth less than that in a comparable neighbourhood. Likewise, the principle of **progression** states that a lower- priced property in higher- priced area will command a higher price.
- Externalities state that factors outside the property can affect its value, either in a positive or negative manner. Externalities occur on a macro/international to a micro/ neighbourhood level. Since real estate is immobile, this principle is very important and appraisers should be aware of external events at all levels as they impact property values. International / national externalities include proximity of provinces to their trading partners, the regions geography and available resources encouraging growth in certain industries. Community / neighbourhood externalities include local laws and policies, an example would be the policy of the local authority allowing the expansion of an airport in

the neighbourhood adversely affecting property values of those proximally located properties. Other examples include property taxes and social attitudes.

• An appraiser needs to be aware to those externalities impacting the subject property.

## FORCES THAT INFLUENCE REAL PROPERTY VALUES

- The four basic forces that affect real property values are social trends, economic circumstances, governmental controls and regulations, and environmental conditions. Their interaction affect all parcels of land.
  - 1. **Social Forces** are related to population characteristics. A study of demographic trends will reveal the potential demand for real estate. Social forces reflect attitudes towards education, law and order, and lifestyle options.
  - 2. **Economic Forces** refer to factors such as employment, wage levels, price levels, cost of money, new developments, supply of existing properties, rental rates, and construction costs, to name some. The appraiser needs to keep abreast of any economic trends that may affect the market they are appraising.
  - 3. **Governmental Forces** refers to the effect government policies can have on real estate values. Policies regarding public services (police and fire protection), transportation networks (roads, rapid mass transit, bridges, etc.), local zoning and building bylaws, environmental protection of lands, fisheries legislation, control over mortgage loans and policies regarding banks, or credit unions, etc.
  - 4. **Environmental Forces** refer to such factors as climate, topography, toxic contaminants, natural barriers to development (rivers, mountains, wetlands, etc.), primary transportation systems, and nature of surrounding property. Other areas to investigate are public transportation, schools, stores, parks, recreation facilities, places of worship, processors of raw materials, etc.
- The appraiser needs to be aware of these forces and this is best done by reading the local and national newspapers and trade publications, and by attending appraisal organizations' meetings, seminars, and annual conferences. This is an ongoing learning experience and does not occur in one or two days, but over a lifetime. Appraisers interpret the market for clients and therefore need to be familiar with market trends and local activity.



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## INTRODUCTION

Since buyers and sellers require different types of properties for different reasons, the real estate market is divided into sub-markets within those respective categories. Markets are influenced by the attitudes, motivations and interactions of buyers and sellers. Appraisers need to identify and interpret these actions by analysing the supply - the utility and scarcity of property, and the demand - the desire and effective purchasing power of those seeking real estate.

## CHARACTERISTICS OF REAL ESTATE MARKETS

Real estate is not an efficient market by its nature given confidentiality in information and time lags; supply often lags demand because of the time required to develop new projects. (Table 4.1 Compares Efficient Markets and Real Estate Markets).

# **Market Segmentation and Delineation**

Page 4.3 lists the possible market participants that may interact with one another in a real estate transaction. The number involved varies depending on the complexity and the needs of the participants. **Market segmentation** identifies the most probable users of a property by the consumer characteristics whereas **product disaggregation** differentiates the subject property and properties of similar attributes or characteristics. **Market Delineation** is that market segment identified to be most likely interested in the subject real estate and the services it provides. Thus, **market analysis** combines market segmentation and product disaggregation. (Figure 4.1 outlines the Market Delineation process).

# **Defining Geographical Boundaries**

- Boundaries can be geographic or demographic. Physical boundary limits include structure types, street patterns, shopping areas, terrain, vegetation, lot sizes, and transportation routes.
- Start with the subject property and work outwards noting all similarities or dissimilarities. Walk/drive/bike the area noting defining characteristics on a map.
- Use published data such as those maps available from the Real Estate Board or the local municipality as a guide to boundaries.
- A **neighbourhood** is defined as a group of complementary-residential, commercial, and community land uses.
- A **district** has **one predominant** land use, commonly composed of apartments, commercial/industrial, or agricultural lands.
- A market area can encompass one or more neighbourhood or district, referring to an area where people live or work.

# **REAL ESTATE CYCLES**

Trends in real estate can be measured by the interaction of several market statistics such as the GDP, vacancy rates, rental growth rates, capitalization rates, home price changes and changes in supply. (Refer to Figure 4.2: Real Estate Cycles and Economic Cycles).

# MARKET AREAS, NEIGHBOURHOODS AND DISTRICTS

# **Change and Transition in Market Areas**

Appraisers must be aware of changes and probable changes in the market and consider the following to get a better understanding of the area:

- What is the trend occurring in the area, is it getting better, worse, or staying the same?
- What is the rate of change and the absorption of properties in the area?
- Is there any re-zoning occurring in the area and what is overall community plan (OCP)?
- Transition is a result of change. Transition and change occur at different times affecting different areas of the market. Change can be either good or bad and of a shorter or longer duration. It is transition, from one land use to another that causes positive or negative effects of value and is usually over a longer term. In determining highest and best use it is the area in transition that requires more analysis, because of its interim use before development.

# Life Cycle of a Market Area

A market's life cycle, like an individual's, is 1-growth, 2-stability, 3-decline, and 4-revitalization. All markets change at different rates and the appraiser needs to recognize this rate. Transition often occurs in the revitalization stage when land use is no longer financially feasible and discontinued in favour of a more productive use.

# **Evidence of Transition**

Transition is evidenced by variations of within the market area, those differences in home condition, different land use, and indication of potential transition to a more intensive use as in the introduction of offices into a single-unit residential neighbourhood. Changes in one market area usually affect neighbouring, competing areas.

# ANALYSING VALUE INFLUENCES

**Gentrification** is the process of renovation or rehabilitation and a reversal of the decay in a blighted neighbourhood. A consequence is the **displacement** of those previous residents given increased rents, property values, hence property taxes. **Displacement** also occurs with the consolidation of land required for the large scale public improvement projects or as a result of government action through expropriation.

# **Social Influences**

The **demographics** of an area include population density, skill levels, age levels, household sizes, employment status, quality of education, medical, recreational, cultural, and commercial factors.

## **Economic Influences**

The income levels, income distribution amongst households, property ownership, rental trends and vacancy rates, new development and redevelopment, vacant land, and past and future trends in these areas.

## **Governmental Influences**

These refer to the tax laws, zoning, building codes, fire and health regulations, quality of public services, and environmental regulations for all levels of government.

# **Environmental Influences**

These include any natural or man-made changes that affect the market, such as building size, density and maintenance, topographical, open spaces, nuisances and hazards from nearby developments

(odours, noise, litter, smog, etc.), adequacy of public services and maintenance, street widths and traffic patterns, changes in land use, microclimate (winds, temperatures, and humidity), environmental liabilities, and access to public transportation.

All of the above have to be analysed to see how they may impact property values.

## CHARACTERISTICS OF REAL ESTATE DISTRICTS

Different real estate districts require different services; the availability of public utility provided is reflected in real estate value.

## **Single-Family Residential Districts**

Homeowners' associations often attempt to 1-maintain or 2-improve property values and can have a great impact on and thwarting developments. Some examples of their efforts include the limiting of traffic patterns to main roads, lobbying for and maintaining good public services, improving community facilities such as schools, recreation centres, hospitals, and shopping areas.

# **Multi-Family Residential Districts**

These districts have their own requirements and include access to the workplace, transportation shopping facilities, reputation of the area, proximity to open spaces and recreation facilities, parking for the owners and guests (on and off the site), and vacancy and turnover rates. (Refer to Table 4.3)

# **Other Types of Districts**

- Other districts include office, retail, commercial/industrial, and agricultural.
- Speciality districts include forestry, medical, research and development parks, high tech parks, education districts, and historic districts. See Tables 4.4 to 4.10 their characteristics.
- Historic districts are usually set up under federal, provincial, or municipal government legislation.
- The type of information discussed above cannot be learned overnight, but is a culmination of the appraiser's 1-experiences and 2-participation in the market. That is why it is important to read local newspapers and magazines and become involved in various real estate organizations. Networking is important because information learned today may be important later. Those contacts are important and a valuable resource that you can turn to provide timely answers.
- With the advent of the Internet, searching and book-marking real estate websites is an efficient resource and useful tool for all types of data. All levels of governments have extensive websites and community profiles that provide a good overview of any district in the city or province.
- Half of the appraiser's job is to know where to look for data and the other half is to analyse it to produce a reliable report for the client.



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### CHAPTER 6 - REAL PROPERTY OWNERSHIP AND INTERESTS

## INTRODUCTION

Ownership involves the **identification** and **valuation** of **different rights**, the limitations of these rights and how they affect the property's value.

# THE BUNDLE OF RIGHTS

- Fee simple is the purest form of ownership, unencumbered by other interests or estates, subject only to the governmental restrictions such as taxation, expropriation, police power and escheat.
- The bundle of rights is the rights a person has when they own property and what they can do with it.
- The bundle of rights include the right to sell, lease, mortgage, donate, another means of transfer or to do nothing at all.
- Each right has some value and if one or more is removed, then a partial interest is created and valued accordingly.

## PARTIAL INTEREST IN REAL PROPERTY

Appraisers will appraise the fee simple interest or an interest less than fee (a partial interest). They can be created economically, legally, physically, or financially.

## **Economic Interests**

• The most common economic interest is created when a property is divided by a lease. Both the lessor and lessee each obtain a partial interest, the leased fee and the leasehold interest.

# **Leased Fee Interests**

- The lessor's or landlord's interest in the property the right in a lease contract to grant the lessee use of the property for a certain period of time.
- The lessor has the right to be paid rent, repossession on the termination of the lease, default provisions, and the right of disposition including sale, mortgage or bequest of the property, subject to the lessee's interest during the lease period.
- Lessor is the landlord. "OR" of lessor is the "OR" of landlord.

## **Leasehold Interests**

This is the lessee's or tenant's interest in the property, created by a lease contract giving them an interest in the property for the period of the lease. They may be able to sublease and improve the property if allowed by the lease. The tenant's main obligation is to pay the contracted rent. If market rent has increased since signing the lease, then the tenant has an economic advantage. The tenant "holds" the lease, hence the term "leasehold".

## **Sub-leasehold or Sandwich Interests**

The lease may allow the tenant to sublease the premises to a third party for all of part of the remaining term of the existing lease. In a **sublease**, the original lessee is "sandwiched" between a lessor and a sublessee. Important to read the lease to fully understand its terms and seek legal advice if necessary.

# **Legal Interests**

Easements or other legal restrictions may restrict the use of a property creating a partial interest and may either be for a short period of time or ad infinitum.

# Life Estate

- Defined as, the total rights of use and occupancy of a property limited to the lifetime of a designated party.
- The designated party is the life tenant.
- The remainderman is the person who acquires the interest of the property upon the death of the life tenant.

## **Easements**

- An easement is an interest in a property that **conveys use**, but **not** ownership, over a portion of an owner's property.
- They have very **specific uses**, as defined in the agreement, and can be surface, sub-surface, or overhead easements, or a combination of them.
- The property that enjoys the benefit of an easement has gained while the property subject to the easement is burdened. **Easement appurtenant** attaches to the property benefitted. The property that enjoys the benefit of the easement is referred to as the **dominant tenement** while the property subject to the easement is the **servient tenement**.
- They can be **public** or **private** easements created by contract, or by government entities through expropriation.
- Easements have taken away some of the bundle of rights and therefore the property is worth less than market. They could possibly be worth more depending on the easement agreement.
- Appraisers should search title to see if an easement is present and how it may affect value.

# **Transferable Development Rights / Several use Rights**

- The development rights are separated from the property and sold and transferred to another land owner in another location who can use it for a higher density development not normally permitted under the zoning laws for that area.
- Used in the preservation of agricultural production, open space or historic buildings.

# **Physical Interests**

- Physical interests can be achieved both horizontally or vertically.
- Horizontal is through subdivision and assemblage.
- Vertical either sub-surface or air rights which can be sold or leased separately. This is becoming more significant with the engineering advances affecting land use and those highest and best use considerations. An example in Vancouver is the sale by the Christ Church Cathedral of its air rights to the adjacent development of Park Place. The Church received monies for maintenance and the developer was able to build a higher and more dense structure, subject to zoning guidelines. This is a common arrangement in the preservation of historic buildings and different municipalities determine the rules for these transfers.

# **Financial Interests**

Properties can be mortgaged, and so can be subdivided into mortgage and equity components.

# **Equity Interests**

The equity in a property is the owner's interest after all claims and liens have been paid out and or satisfied.

# **Mortgage Interests**

The purchase and ownership of real property may involve a debt secured with the real estate as collateral.

## REAL PROPERTY OWNERSHIP

## **Public and Private Ownership**

- **Public ownership** is that of roads, sidewalks, utility systems, and other public facilities.
- **Private ownership** is that of property by private individuals, subject to regulations placed on it by the various levels of government (e.g., zoning, expropriation).

# **Public Restrictions on Ownership**

Private ownership of real property rights subject to those restrictions known as the four powers of government:

- 1. **Taxation:** the right to property taxes by provincial and local government.
- 2. **Expropriation:** the right to take property for a public good, subject to reasonable compensation for the taking.
- 3. **Police Powers:** the right to regulate property for the public safety and protection (building standards, zoning, etc.).
- 4. **Escheat:** the right of government to take property when there are no rightful heirs.

## **Private Restrictions on Ownership**

- Private restrictions can limit the use, development, or ownership of a property.
- This can be done by easements, right of way, restrictive covenants, party wall agreements, etc.
- These are registered against the property's title in the Land Title or Registry office.

## FORMS OF OWNERSHIP

# **Concurrent Ownership of Real Property**

- Real estate can be owned by more than one entity such as individuals, partnerships, corporations, or trusts.
- When the bundle of rights is owned as separate interests, tenancy is created.
- Tenancy is holding property by any form of title.
- Concurrent ownership includes joint tenancy, tenancy in common, and tenancy by the entirety.

**Joint Tenancy** - the joint ownership by two or more persons with the right of survivorship. Each has the same interest and upon the death of one, ownership automatically goes to the other person(s).

**Tenancy in Common** – an estate held by two or more persons each having an undivided interest. The interests need not be equal and there is no right of survivorship. One can sell their interest without the other's approval.

**Tenancy by the Entirety** - an estate held by husband and wife in which neither has a disposable interest during the lifetime of the other, except by joint action. It is the same as joint tenancy, but only applies to spouses.

# **Legal Entity Ownership of Real Property**

## **Land Trusts**

A special deed transfers the property to a trustee / trustees who become owners of the beneficial interest in the trust. The duties and functions of the trustees are outlined in a trust agreement which must be carefully followed. Note that a judgement against a beneficiary is not a lien against the real estate.

# **Partnerships**

This is a business arrangement where two or more persons/companies jointly own a business and share in the profits/losses. Partnerships can be general or limited.

- In general partnerships, the partners are active and all share the assets and are responsible for all liabilities equally. Liability is unlimited. The agreement automatically terminates on the death of any partner.
- Limited partnerships have both general and limited partners. All the partners participate by pooling funds, but the limited partners are passive in that they do not participate in the management of the business with their liability limited to the amount of their investment.

# **Stock Corporations**

Shareholders own shares in a company and their liability is limited to their share investment. They do not hold an interest in the real property. The owner of the real property is the legal entity, the corporation.

## **Limited Liability Companies**

Limited liability companies combine the features of corporations and partnerships. Owners are members and not shareholders or partners. Management is usually given to the members in proportion to their capital contribution. The rights to profit-sharing, management participation and voting may be separated and are transferable. Not allowed in Canada at this time.

# **Syndications**

A creation of private or public partnerships to pool funds for some specific real estate purpose. Originally set up for tax shelter benefits. Although they involve a partnership, the rights of investors in syndication differ from those of general or limited partners.

# **Special Forms of Ownership**

# **Condominium or Strata Title Ownership**

Each owner holds title to their own unit and an undivided partial interest in common area of the property. Usually defined by local legislation (British Columbia it is the Strata Property Act) as to how the boundaries of the units are drawn up, how the unit entitlement is calculated, how the strata/condominium association/corporation will operate, and the responsibilities of the officers. Owners pay a monthly strata fee allocated for general maintenance and a reserve for major replacements: roof, painting, equipment, etc. Stratas are common in residential, commercial, industrial and mixed-use buildings (i.e., residential and retail/office uses combined). Almost all real estate can be stratified if allowed under the local legislation.

In British Columbia a "condo" is referred to as an apartment type strata unit, meaning a suite in a multi-storey building. A "townhouse" is an attached unit usually with its own entrance and a small backyard area. A "strata warehouse unit" refers to a warehouse unit in a multi-tenanted complex with its own entrance and loading bay doors, either at the front or rear of the unit. A "strata retail unit" refers to a retail space within a shopping mall complex. "Bare land strata" refers to unimproved land, usually subdivided and ready for development.

# **Cooperative Ownership**

A stock corporation acquires an apartment building, prices the various apartment units and issue shares to individuals who occupy the units through a lease agreement.

- The value of the unit is based on the number of shares they must purchase.
- The title is held by the company so individual units cannot be mortgaged; instead, the shares are used to secure a loan.
- Each owner is required to make a monthly payment that represents a proportionate share of operating expense and debt service on the mortgage. These maintenance fees are adjusted by the corporation's board of directors.
- On a sale of share, shareholders can veto the sale if the new shareholder is unacceptable to the present shareholders.

# **Timesharing**

This involves the sale of either limited ownership interests in or right to use and occupy residential apartments or hotel rooms. There are two forms: fee and non-fee timeshares.

• Fee-timeshare - the owner receives a deed for a specified part of the year, thereby limiting ownership. The timeshare can be sold, leased or bequeathed. The interest can be mortgaged and title recorded. Value is based on the number of weeks and the time of the year.

Two types of fee-timesharing are ownership and interval:

- In **ownership**, each purchaser receives a deed to particular unit as a tenant in common with the agreed use stipulated in the deed.
- In **interval**, the period may only last for the duration of the project. On expiry, the interval ownership reverts to tenancy in common. The option then is to either, sell the property, divide the interests or continue as tenants in common and renew the interval estate.
- **Non-fee timeshare** does not convey legal title with only a right of use attached to the unit and related premises.

Three types of non-fee timesharing are leasehold interest, vacation license, and club membership.

- Leasehold is a prepaid lease arrangement for a certain period of time.
- Vacation license allows the right to use a given unit for specific times over the life of the vacation license contract.
- **Club membership,** timeshare patrons purchase a membership for a specified number of years in a club that own, lease or operate the timeshare property.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

## **CHAPTER 7 - THE VALUATION PROCESS**

## INTRODUCTION

- Valuation is a systematic process appraisers use to solve client's questions regarding a property's value
- Each property is unique and many value opinions can be developed.
- Most common value is "market value".
- Once the problem is defined and the scope established, then the research begins: international and local trends, forces affecting value, data to be examined, etc.
- Apply one or all of the three approaches to value: cost, direct comparison, income.
- Finally the data is analysed and the value estimates reconciled into a final estimate of value.

## IDENTIFICATION OF THE APPRAISAL PROBLEM

- Identify the client's **needs**, those of the **intended users**, the intended **use** of the appraisal, **type of value and its definition**, **effective date**, **relevant characteristics and assignment conditions**.
- Follow the Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP).

## **Client and Intended users**

• The client is the person or entity who engages the appraiser and may or may not be the intended user. The intended user is the one who will use the results and for whom ultimately the report is written.

# **Intended Use of the Appraisal**

• How is the appraisal going to be **used**: e.g., to facilitate purchase or sale, determine loan amount, basis of taxation, terms of a lease, valuing financial assets, expropriation purposes, or other real estate decisions.

## Type of Value and its Definition

- This will determine the **type of value** such as market, use, going concern, investment, or assessed value
- A clear definition of value must be stated so that the appraiser's conclusion is clearly understood.
- Where an opinion of value is not the purpose as in appraisal review and consulting, the type of opinion still needs to be identified.

# Effective Date of the Opinion of Value

- Date must be specified as conditions and forces affecting value are always changing.
- Value conclusions apply to the effective date, a specific point in time.
- Most valuations intend to find current value.
- Retrospective values for estates, insurance, income tax, lawsuits, or other situations.
- Future valuations may be necessary for new construction of residential or income properties.

# **Relevant Property and Legal Characteristics**

• Location of the property, interests to be valued, size, layout and quality of construction, economic such as rent, finance terms.

• A legal description to identify the subject property, and the relevant land use and zoning regulations is required.

# **Assignment Conditions**

- Statement of any extraordinary assumption, hypothetical condition, supplemental standard and or jurisdictional exception is required in the scope of the report.
- Disclosure of assumptions and limiting conditions imperative to avoid misleading the client.
- Extraordinary assumption refers to an appraisal based on the proposed building to be completed by the effective date of appraisal.
- Hypothetical conditions are contrary to what exists, but are asserted for the purposes of analysis.
- Supplemental standard is an additional requirement beyond the professional standards. Jurisdictional exception is a relevant law or public policy that contradicts professional standards. Both must be identified at the beginning of the report.

# SCOPE OF WORK DETERMINATION

- The amount and type of information researched and the analysis applied.
- Appraiser's decision of scope required based on use and value required.
- Indicate what was **not done** in the appraisal.
- Explanation required if any of the typical (3) approaches omitted.

# **Planning the Appraisal**

- Most appraisals are fairly standard, and can be done by one appraiser while other more complicated assignments require extensive planning and assistance, either by staff members or other professionals who assist the appraiser.
- The appraiser or appraisers signing the certification bear the ultimate responsibility and therefore for all of those who help in producing the report.
- An effective plan follows a detailed outline delineating the major parts of the report with notes and procedures involved in each section allowing the appropriate amount of time to be allocated in the valuation process.

# DATA COLLECTION AND PROPERTY DESCRIPTION

- General data is information about trends that affect the property in a defined market area.
- Specific data relates to the property itself and the comparables.
- Supply and demand data relevant with the amount and type collected determined by the approaches applied and on the defined scope of work.

## DATA ANALYSIS

- Collected data is analysed for market relevance and for highest and best use implications.
- Market analysis is the study of the market conditions for a specific property, the motivations involved, and other influences affecting that type of property's value.
- It assists the appraiser to see the overall picture and what **affects** the present supply and demand.
- **Highest and Best Use** of property as if vacant and as improved is essential.
- It identifies the comparables to be used and the derivation of an opinion of value.
- Helps establish those decisions on whether the improvements should be maintained, deficiencies to be cured and the improvements to be modified or demolished.

 The highest and best use conclusion should specify the optimal use, its timing, and its most likely user.

# **Land Value Opinion**

- A separate land value may be necessary for the cost approach, taxation purposes, or expropriation.
- Land value can be found by direct comparison, extraction, allocation, subdivision, land residual or ground rent capitalization.

#### APPLICATION OF THE APPROACHES TO VALUE

- Cost, direct comparison, and income are the three traditional approaches to estimate value. All three are applicable but one or more of these approaches may be more reliable in a given assignment. The factors considered are its intended use, the scope of work and the quality and quantity of data available for analysis.
- Cost Approach is based on the principle that value is related to cost. It is derived by adding the land value to the depreciated value of the improvements. Entrepreneurial profit or incentive may be included.
- Direct Comparison Approach is based on an analysis of recent or listed sales of comparable properties, noting the similarities and differences and adjusting their values to reflect the subject property. Elements of comparison for adjustment include property rights conveyed, financing terms, conditions of sale, money spent after purchase, market conditions, location, physical characteristics, economic characteristics, use/zoning, and non-realty components in the sale price. Through the adjustment process, a range of values in which the subject property is likely to fall is established.
- **Income Approach** is based on the present value of future benefits. Future benefits relate to the property's income and resale value. There are two methods of income capitalization, direct and yield capitalization. The former involves one year's stabilized net income whereas the latter utilizes several years' stabilized net income and a reversionary value at the end of a designated period being capitalized or translated into a capital value by a yield rate derived from the sales of similar income producing properties.

The three approaches will be discussed in more detail later in the course.

#### FINAL RECONCILIATION OF VALUE INDICATIONS

- The last step is to **reconcile** the values from the approaches into a final estimate of value, either as a single figure or a range of value.
- The appraiser analyses the approaches used and considers the reliability and applicability of each before arriving at the final estimated value.

#### REPORT OF DEFINED VALUE

- The final value is based on the appraiser's **opinion** and reflects their **judgment**.
- It is usually a written report and conforms to the CUSPAP standards.



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REVIEW NOTES by CHUCK DUNN

**CHAPTER 8** 

# ARE 3<sup>rd</sup> EDITION REVIEW NOTES CHAPTER 8 - DATA COLLECTION

#### **INTRODUCTION**

- Collection of data, reliability of source, and the management and analysis thereof is essential.
- Modern technology has simplified the process of data collection.
- Reliable conclusions require accurate, supportable data.
- Follow CUSPAP guidelines as to collection and reporting of data.
- Market conditions and property type determine type of data required general, specific or competitive supply and demand.
- Organisation of data into grids aids in the isolation and study of specific data.
- The analysis of data should answer the reader's question "So what?" This means that any data in the report should be analysed and not left for the reader to interpret.
- Only data that will help in determining the value should be included. **DO NOT** put in useless or redundant data just to make the report look larger and more expensive.

# TYPES OF DATA

#### General, Specific, Competitive supply and demand data

Data is obtainable from either primary or secondary sources. General data refers to those not directly related to the subject property such as the social, economic, governmental, and environmental factors affecting property value. These are available through secondary sources such as Statistics Canada, provincial and local agencies and private data services. Primary data refers to that information obtained by the appraiser pertinent to the subject property and comparables in the subject area.

#### **Economic Trends**

- Must recognize and understand how economic trends affect value, but also the probable direction, extent, impact, and cause of these changes.
- The study of **international trends** is essential since we are in a global economy. The Canadian market is affected by policies of the United States and those countries in Europe and Asia.
- National and regional trends affect values, e.g., Federal Government policies on taxation, legislation, budgets, etc.
- Local market conditions more likely to directly influence property values e.g. city taxation, major industries.

#### **Demographics**

- Population is important in the local market both from a household and an employment perspective.
- Different **household** formations require different types of space and support facilities: shopping, medical, and education.
- **Employment** generates a demand for commercial/industrial space as well as employment opportunities and the ability to form households.
- As population and demand for services provided changes, so do real estate values.

### **Government Regulations**

- Zoning determines what can be constructed on and done to a property, affecting value.
- Private property rights are not entrenched and may be taken away by governments through enactment of zoning and other laws without consultation or compensation.
- Agricultural Land Acts protect farming and wilderness areas.
- Environmental standards may affect property values in a positive or negative way.
- Building regulations determine the size and quality of the structure, hence value.

# **Trends in Building Activity**

- Housing starts and commercial constructions are a large part of the Gross National Product.
- Developments take time for construction and marketing. If the market slows down, the developer cannot stop building but only reduce the size of the development.
- Mortgage rates have a significant effect on building activity.

#### **Building Costs**

- Building costs are affected by labour and materials, building technology, financing costs, building codes, and regulations such as zoning, environmental, and subdivision regulations.
- Costs tend to follow the economy in general, including inflation and deflation trends.

#### **Taxes**

- Taxes are set by the different local governments and determined by their respective budget requirements.
   Revenues are derived from a variety of taxable sources with the shortfall coming from property taxes.
   Real estate taxes are based on assessed values of all the properties in the area and may or may not be based on market value.
- Once the total assessed value is determined, then the value of the properties is divided into the annual budget to derive a tax rate. The tax rate is usually expressed as dollars per \$100, mills per dollar, or dollars per \$1,000 of assessed value, hence mill rate. For example, if the budget is \$5 million and the value of all the properties is \$50 million, then the tax (mill) rate is \$100 per \$1,000 of property value. The tax for each parcel is calculated by multiplying the parcel's assessed value by tax (mill) rate so that the tax for each parcel is at the same percentage of assessed value. The tax is therefore a tax according to value, tax ad valorem.
- In order to compare the effect of property tax across different jurisdictions, the tax (mill) rate, a nominal rate has to be converted to an effective rate. This is done by multiplying the tax rate by the ratio of assessed value to market value or, common level ratio or assessment ratio.
- This may be calculated for all properties, a single parcel or any group of properties for example, residential property. It follows that the tax rate either deters or attracts development to the different jurisdictions.

### An example :

A jurisdiction needs to raise \$15,000,000 and the total assessment for the jurisdiction is \$987,500,000, the nominal tax rate is 1.5%.

```
$15,000,000 \div $987,500,000 = 0.015 = 1.5\% or expressed as $15 per $1,000 (mill rate).
```

The parcel property tax is calculated by multiplying the assessed value of the single property with the nominal tax rate (%).

```
\$80,000 \times 1.5\% = \$1,200
```

The effective tax rate required for comparability purposes among jurisdictions when the assessed value is not based on 100% of market value is calculated by converting the nominal rate using the assessment ratio or alternatively dividing the property tax by the market value.

$$1.5\% \times 0.8 = 1.2\%$$
 or  $\$1,200 \div 100,000 = 1.2\%$ 

Review Notes: Data Collection

# **Financing**

- Cost and availability of money affect the type and quality of development to be undertaken.
- If mortgage costs are lower, it will encourage tenants to buy rather than rent because mortgage payments may be equal to their rent.

# SPECIFIC DATA

This includes details about the property under appraisal, comparable sales, and the relevant market conditions for that type of property. The data requirements are required for the three approaches to value and to determine the highest and best use of the property.

#### **Competitive Supply and Demand Data**

Awareness of the supply of competing properties, future construction of similar properties, the future demand for the type of property, and the highest and best use possibilities.

# **Competitive Supply Inventory**

Knowledge of the number of rental units, recent sales, offered for sale, and those that will come up for sale. Much of this information can be found from the local real estate boards, of which appraisers are usually members.

#### **Demand Study**

Appraisers need to know the future demand for properties similar to the subject and cannot always assume that demand will be steady and exist in the future. For a large project, expert assistance may be required in determining demand. Chapter 9 discusses market research analysis techniques in more detail.

#### DATA COLLECTION

#### **Sources of General Data**

- Information comes from all levels of government, CMHC, trade associations, and real estate boards.
- Table 8.2 lists many sources the appraiser can use.
- Data such as housing inventory, starts, completions, absorptions, household incomes, population demographics, and housing forecasts are important. Immigration and population shifts within the country are also relevant.

#### **Public Records**

Includes title transfers which list vendor and purchaser, legal descriptions, transfer price (in most cases), any financing, and other charges that may affect the bundle of rights.

#### **Listings and Offerings**

From local real estate brochures and newspapers, Internet databases, for sale signs, personal networking, assessment office records, and private databases that appraisers can subscribe to for a modest fee.

A Listing is a written contract between an owner and the broker stating that the owner has employed the broker to sell his or her real estate.

An **offering** is the set of terms presented by the prospective purchaser or tenant, subject to a negotiation, and if accepted by the seller or landlord, results in a contract.

#### **Published News**

Secondary source to confirm details available in local real estate newspapers, trade magazines, articles from real estate associations, appraisal organizations and local newspapers.

#### **Market Participants**

These include salespeople, appraisers, mortgage brokers, developers, and major lenders.

# Sources of Competitive Supply and Demand

- Sources of demand and supply information include field inspections, interviews with market participants, building permits, subdivision maps and surveys of competitive sites.
- Estimates of demographic, economic and statistics from local to national and personal observation are useful in gathering demand data.
- Use of data sampling requires caution and a good understanding of the principles and implications. Research involves both specific and sample data and a framework for the selection and drawing of random sampling is required. **Judgement data**, often used by appraisers is that sample data selected, based on personal judgement and thought to be fairly representative of that group. Refer to Data Sampling on page 8.21 for its strengths and weaknesses.

## **Geographic Information Systems**

This is a system that captures, stores, analyzes, manages and presents data that are linked to a location and available from various government sources at a local, provincial and national level. It is suggested that the student go to their local government website to find what is available in these systems - lot sizes, municipal services, topography, easements or rights of ways. Other excellent tools for viewing properties and streetscapes are Google map and Google earth. Chapter 10 discussed topography and land or site analysis in more detail.

# Selecting Comparable Data and Establishing Comparability

- Data for comparison used in the three approaches should come from properties that are similar to the subject in size, location, features, condition, topography and similar neighbourhoods. Other considerations are buyer and seller motivation, terms of sale, use of property before and after its sale.
- In the process of establishing comparability and select sales, the appraiser begins to formulate an opinion on the general market, subject property and its connection to the data.
- Data for the income and cost approaches require consideration of sources other than sales such as those market trends in construction costs, lease terms, typical expense and vacancy rates. The data may also be used to qualify adjustments in the direct comparison approach.
- The geographic area of comparable sales depends on the property type and by in large fall into two categories, those that are comparable and competitive and those that are just comparable.
- Authenticity of data is important.
- The appraiser must understand the concept of comparability to avoid comparing properties with different highest and best use, limiting the search for comparables or the selection of inappropriate factors of comparison.

#### DATA ORGANIZATION

Data analysis is the process and the market data grid (spreadsheet) is the tool used to organise the data and facilitate the process. The significant characteristics of the subject and those sales of the most comparable properties are identified. The subject site is compared to the comparables and adjustments are made to their sale prices. Chapter 14 goes into more detail on the use of the adjustment grid for data analysis.

# **Summary**

It is up to the appraiser to become market-knowledgeable and this can be done by reading local trade papers and magazines and networking with the industry players. Attending local dinner/lunch meetings, seminars and workshops, and working on various association committees all add to the appraiser's networking capabilities and useful when searching for information.

If accessible, review the Multiple Listing Service on a daily basis and data base those properties on your computer for future reference. Remember internet data will often be removed once the property has sold or the listing has expired so save it.

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**CHAPTER 9** 

# ARE 3rd EDITION REVIEW NOTES CHAPTER 9 - MARKET AND MARKETABILITY ANALYSIS

#### INTRODUCTION

Market analysis is the identification and study of the market for a particular economic good or service and is considered on two levels by appraisers:

- broad market viewpoint;
- and the market within which the subject competes.

Marketability study/ analysis refers to the sale, absorption or lease of a specific property under current or anticipated market analysis and must be included in all appraisals. Marketability analysis requires a capture rate.

Capture rate is the estimated percentage of the total potential market for a specific type of property that is currently absorbed or forecast to be absorbed. The capture rate is dependent on the size of its trade area, the anchor tenants and competition. Short –term capture is absorption and long –term capture is referred to the share of the market.

Market/marketability analysis in real estate requires the analysis of the buyer/seller and user markets – the two main parts in market delineation for valuation.

Market/marketability analysis helpful in:

- Interaction of demand and supply and its effects on value in both current and future markets;
- Determining the highest and best use;
- Comparative advantage and disadvantages identified and in the broadest sense information provided for use in the three approaches to value. Refer to table 9.

### **FUNDAMENTAL CONCEPTS**

### **Market Definition and Delineation**

- Identify the real estate product and the market in which it competes. It is a complementary task in which the former provides some information required in the latter.
- Familiarity with the characteristics and attributes of the subject property, (its property productivity analysis) and analysis of its physical, legal and locational characteristics highlight the property's ability to compete and helps identify those competing properties in the defined market area.
- Defining the real estate market for the subject site improves the understanding of and the effect of externalities.
- Market/ marketability analysis identifies market participants and separates those properties by characteristics.

#### **Demand**

- Analysis of potential users, (buyers, renters or investors) based on their needs, desires, preferences and ability to purchase.
- Demand based on growth rates in population, income and employment levels.
- Refer to tables outlining the important factors in a demand analysis for residential, retail, office markets and industrial markets.
- Household formation varies with income and age groups, migration and general employment.

- Household size is not constant, always changing, presently falling.
- Population projections, availability of land and adequacy of infrastructure required to forecast growth.

# **Competitive Supply**

Data of properties that compete directly with subject gathered from:

- field inspections;
- building permits;
- interviews with developers, marketers and city planners;
- published data, i.e. Canada Mortgage and Housing Corporation, CMHC.

# **Market Equilibrium**

In the short term supply and demand are relatively fixed, but if demand is high or low then prices will change dramatically. Given lag in supply, short term is characterised by disequilibrium. In the long term, the market moves towards equilibrium but is seldom achieved.

# **Trends in Market Activity**

- Markets can be active (sellers) or depressed (buyers).
- Also described as weak or strong, broad or narrow, loose or tight, balanced or unbalanced.
- Markets are cyclical and fluctuate for different reasons:
  - o long term cycle responds to changes in employment, population, income; and in the
  - o short term, changes to cost and availability of credit.

#### LEVELS OF MARKET ANALYSIS

- Requires sophisticated tools and techniques.
- May simply be inferred or from fundamental analysis requiring more extensive data and sound judgement.
- Based on hard data but also on participants perceptions of what is happening.

# **Inferred Analysis and Fundamental Analysis**

- Inferred or trend analysis uses historical data rather than future projections. Descriptive and may be general or specific.
- Fundamental analysis is a more detailed study of market conditions with focus on specific market of subject site with strong quantifiable, reasonable evidence forecasting future development.
- See Table 9.2 for the differences.

#### TYPES OF ANALYSIS

- 1. Economic
- 2. Market studies and marketability studies
- 3. Investment
- 4. Feasibility

### 1. Economic Bases Analysis

• It is based on the survey of industry and business that generate the employment in the community including population growth and income level data.

# 2. Market Studies and Marketability Studies

- A macroeconomic **market study** provides demand /supply information for a property type or area.
- A marketability study is a property- specific study and includes a market study. Based on the four factors that create value, viz. utility, scarcity, desire and effective purchasing power, it is helpful in determining the highest and best use.
- Refer to table on Page 9.13 questions to determine effectiveness of marketability study.

# 3. Feasibility Analysis

- The analysis to determine whether the project will fulfill the investor's objectives.
- Profitability criteria determined by specific market or investor or investments ability cover all operating expenses and provide a reasonable return.
- Highest and best use and feasibility analysis are interrelated but may involve different data and focus.
- Refer to table 9.3 on comparison of Real Estate Analyses.

#### SIX-STEP MARKET ANALYSIS PROCESS

Most market / marketability analysis use a simple six-step process (Refer to Table 9.4)

- 1. property productivity analysis;
- 2. market delineation;
- 3. demand analysis and forecast;
- 4. competitive supply analysis and forecast;
- 5. interaction of supply and demand;
- 6. subject capture estimation.
- Page 9.15 shows and lists the steps for Housing Demand.
- Page 9.19 shows and lists the steps for an Existing Apartment Complex.
- Page 9.21 shows and lists the steps for an Existing Retail Space
- Page 9.23 shows and lists the steps for an Existing Office Space.
- Page 9.25 shows and lists the steps for an Existing Hotel Properties.
- Page 9.27 shows and lists the steps for an Existing Industrial Properties
- Page 9.30 shows and lists the steps for an Existing Agricultural Properties.



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CHAPTER 10

# ARE 3<sup>rd</sup> EDITION REVIEW NOTES CHAPTER 10 - LAND AND SITE ANALYSIS

#### INTRODUCTION

- This chapter focuses on the 1-description and 2-analysis of the land or site.
- Land can have both on-site and off-site improvements to make it useable.
  - o **Off-site** includes water, drainage, sewers, utilities, and access to roads.
  - o **On-site** includes landscaping, site grading, driveways, drainage improvements, accessory buildings and support facilities.
- Site description includes factual data, land use restrictions, legal descriptions, title and record data and a description of its physical characteristics.
- Site analysis involves the study of those **neighbourhood factors** that create, enhance or detract from utility and marketability.
- Gather data to determine highest and best use as if vacant.

#### LEGAL DESCRIPTIONS OF LAND

- A parcel of land is identified by a common description and held in one ownership. Each parcel is unique.
- Identified by a **unique legal description** that sets out its boundaries and is registered in a central office.
- Boundaries determined by 1-metes and bounds system, 2-rectangular survey system or 3-lot and block system.

#### **Metes and Bounds**

Land is identified by a series of measurements outlining the boundaries of the property. The method involves a point of beginning, from where reference points based on compass bearings describe the direction of the boundaries and "close" the property's boundary by returning to the point of beginning. See workbook page 3.8 and 3.9.

# **Rectangular Survey System**

Known as the government's survey or section and township system. Reference points commence at the 49<sup>th</sup> parallel of latitude and the east-west lines are called base lines while the north-south lines are called principal meridians. Each set of lines has a unique number so properties can be accurately located.

# Lot and Block System

This is an outgrowth of the rectangular survey system and can be used to simplify the location description of small parcels. Survey location of streets and blocks with the establishment of lot lines by agreement of property owners. Also known as recorded plat survey system or recorded map survey system. It is a unique, registered plan number of the defined area or subdivision.

#### TITLE AND RECORD DATA

# **Ownership Information**

• The details of ownership of a property are important to an appraisal as it determines the interest that has to be valued. A copy of the title will indicate any easements and restrictions which may limit the

use of the property, however appraisers often include a limiting condition for those that have not been recorded.

- Title information is found in a land registry or land title office operated by a government agency.
- Title information can be searched on the Internet for a small fee.

# **Zoning and Land Use Information**

- Land use and development can be regulated by all levels of government. The appraiser must be
  aware of zoning and building codes and any likelihood of changes. Zoning can affect such things as
  building height and size, site coverage, number of units allowed, parking requirements, sign
  requirements, future street widening and other factors that can be found by reading the bylaws and
  codes.
- Highest and Best Use is affected by zoning and land uses.

#### **Assessment and Tax Information**

- Assessments are carried out under provincial legislation and tax rates are set by cities and municipalities.
- Assessed values may not be good indicators of market value because of statistical methodology techniques used in mass appraisals.
- Tax levels can affect property values if they are excessive.

#### PHYSICAL CHARACTERISTICS OF LAND

# Size and Shape

- Frontage, depth and overall shape can affect the value of a property. Dependent on its use considerations, regular-shaped lots may be more valuable than odd-shaped ones, i.e. triangular shaped ones.
- Measurements are frontage first and then the depth, i.e. 33' x 120' or 10 x 40 metres.
- Large tracts of land are measured in acres or hectares.
- Appraisers need to know how to convert from imperial to metric.
- Generally as the size increases the unit price decreases, i.e. price per front foot is less, the wider the lot.
- Different types of properties have different characteristics affecting value of which the appraiser needs to be aware.

#### **Corner Influence**

• More advantageous for commercial and industrial use and so for residential but this will be indicated by the market evidence.

# **Plottage**

- Plottage refers to an increase in value given the greater utility created when two or more properties are assembled into one parcel. Assemblage is the process of that creates plottage value.
- Assemblage allowing higher and better use, increases value. The reverse may also occur when a
  larger parcel must be subdivided to achieve higher and better use and is sold for less than the sum of
  the retail prices of its components. The lower unit price reflects market allowances for risks and
  costs associated with subdivision and marketing of the land.

# **Excess Land and Surplus Land**

- **EXCESS** land is land that is not needed to serve or support the existing improvements. Such land may have its own highest and best use or may allow for future expansion of the existing improvements. It has a potential to be sold separately and must be valued separately.
- **SURPLUS** land is not needed for the existing improvements and typically cannot be separated from the property and sold off. It does not have an independent highest and best use. See workbook page 3.14.

# **Topography**

This relates to land's contours, grading, natural drainage, soil conditions, view and general physical characteristics.

# **Geodetic Survey Program**

Topographic maps prepared under the direction of the Geodetic Survey Division of natural Resources Canada are referred to a quadrangles or quads. They provide information for base lines, meridians and township lines when drawing maps. They also provide information on topographic features - mountains, rivers and lakes.

# **Soil Analysis**

Surface and subsoil conditions are important for improved and agricultural properties. Its condition may indicate the need for pre-loading or piling which in turn, affects the cost of development and the value of the site.

#### Floodplain and Wetlands Analysis

Defined as lands that are seasonally or permanently covered by shallow water or where the water table is at or close to the surface. Properties in these areas have a limited use due to building restrictions. Location maps are available from government sources and that provided by the client with appraiser awareness required of its unique features and legislation surrounding its use.

#### Utilities

- Off-site utilities may be public or private and include sanitary sewers, domestic water (potable water), raw water for commercial purposes, natural gas, electricity, storm drains, telephone and cable service. If not available, how is the value affected?
- Most important are domestic water and sanitary sewers as most sites require them before any development can commence.
- The installation of utilities is a consideration in the highest and best use conclusion.

#### **Site Improvements**

- The off-site and on-site improvements available to the site thereby affecting its value.
- Off-site includes access roads, utility hook ups, remote water retention ponds and sewer drainage lines.
- Consider if they are adequate and if not what the costs are to bring them up to standard.

# Accessibility

• Consider the access to the site from other neighbourhoods and commercial areas? Any restrictions on turning lanes, median strips, one way streets, lanes, no "on street" parking in front of the site, restricted parking for residents only, dead end streets, etc. These factors affect the value of the site, impacting positively or negatively depending on the property type.

#### **Environment**

- Factors such as local climate, water supply, drainage, air quality, wildlife presence, earthquake, proximity to streams, wetlands, rivers, lakes and oceans must all be considered.
- Government legislation, environmental and climatic factors must be analyzed to determine land use. Future land use must be compatible with the local environment.
- Refer to an expert who has the knowledge needed to detect hazardous substances. Environmental reports must be done to investigate their presence and if present, the party responsible and cost to cleanup. Refer to Figure 10. 5 and 10.6 regarding the valuation of a contaminated property.

# SPECIAL CHARACTERISTICS OF RURAL, AGRICULTURAL AND RESOURCES LAND

Upon inspection of these types of sites, factors to consider are soil, water, drainage, irrigation, climate, potential crops, environmental controls, unapparent environmental hazards, and other considerations that can affect the use and the value of the site.

On the following page is a data form that may be helpful when collecting data:

# **Site Data Form**

Location and Address	
Lot Dimensions	
Width	Depth
Area	
Shape	
Comments	
Utilities	
Electricity	Gas
Water	Sewers
Telephone	Cablevision
Sidewalks	Curbs
Street surface	
Topography Lot in relation to street grade Even	Above Below
Drainage Good Fair Po	oor
Landscaping Grass Trees Retaining walls	
Sidewalks and condition Driv	veways and condition
Other	
Zoning	
Easements or encroachments	



Real Estate Division

# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

CHAPTER 11

# ARE 3<sup>RD</sup> EDITION REVIEW NOTES CHAPTER 11 - IMPROVEMENT ANALYSIS

#### INTRODUCTION

- This process involves three things:
  - 1) property inspection;
  - 2) building description; and
  - 3) analysis of architectural style and functional utility.
- An accurate inspection is VERY important to assess the need for any deferred maintenance, whether
  it serves its intended function, the ability to find similar comparables, cost analysis and estimate of
  depreciation.
- Style and functional utility are examined in terms of the following:
  - o the use for which the property was designed;
  - o its actual or contemplated use; and
  - o its most productive use.

The three uses may or may not be the same with the aim of improvement analysis being the following:

- Accurate identification of building materials for analysis;
- Reliable judgement of the quality and condition of improvements and components;
- Support for conclusion in the highest and best use analysis and use of the approaches to value.

#### PROPERTY INSPECTION

- Appraisers need to be familiar with the **inspection process** and some **basic construction knowledge** for a reliable assessment of the site.
- Property inspection should not be underestimated, much of the primary data is collected at this stage.
- Determines reliability of approaches, possible first time interaction with client and establishing creditability, failure of disclosure can lead to litigation.
- Use of a qualified building inspector may be advisable in some situations.

# **BUILDING DESCRIPTION**

- It provides the basis for comparing the subject site's improvements with those considered standard in the subject property's market hence its highest and best use analysis.
- Types of materials and techniques can change over time due to:
  - new building technologies;
  - competitive prices of materials;
  - rising and falling energy prices may make some buildings more desirable; and
  - dictates of fashion affect the demand for certain types of buildings.

# **Elements of a Building Description**

Primary concerns are:

- type of use represented by the existing building;
- the codes and regulations affecting this use;
- building size, plan and construction; and
- details of building's exterior and interior and equipment and mechanical systems.
- An objective view is necessary to determine the market standard for the type of property and its reaction to the presence or absence of those components. Sometimes two values are relevant – market or fair value or the use value to the owner.

#### Use Classification

Typical land uses include:

- residential;
- commercial;
- industrial;
- agricultural; and
- special purpose.

Each has various subgroups and zoning regulations will dictate what can be built and whether the existing and potential land use is either conforming or non-conforming to the zoning by-laws and in the case of the latter, its effect on value.

# **Building Codes and Ordinances**

- They protect the health, safety and welfare of the public and are enacted by the various levels of government.
- Appraisers should ensure the building meet these codes and if not, why not, and the cost to upgrade.

# Size

- Accurate measure of the size of the building is essential.
- Gross building area is measured using the exterior walls of the building.
- Check plans against the actual measurements to ensure they are accurate.
- Porches, garages and out buildings sizes are calculated and shown separately.
- Appraisal Institute of Canada has published guidelines and appraisers are encouraged to follow them.
- BOMA has established a method for measuring office space and should include gross building area
- (GBA), finished building area or gross living area (GLA) and leasable building area (GBA). (Refer to table 11.2: Building Measurement Standards

# **Format**

For residential properties the main elements of a building description are:

- substructure;
- exterior description;
- interior description; and
- equipment and mechanical systems.

• Each of these will have various subsections to be described in more detail. Refer to figure 11.1, page 11.8.

#### DESCRIPTION OF EXTERIOR MATERIAL AND DESIGN

This description will give information on:

- substructure;
- superstructure;
- framing;
- insulation;
- ventilation;
- exterior walls and doors;
- roofs and drains; and
- chimneys.

A more complete description is found in the text and in the Residential Property Analysis Course BUSI 400.

# DESCRIPTION OF INTERIOR MATERIALS AND DESIGN

This description will give information on:

- interior walls and doors;
- internal supports;
- stairways;
- painting, decorating, and finishing; and
- protection against decay, pests and moisture penetration.
- Green building and sustainability discussion on page 11.18

A more complete description is found in the text and in the Residential Property Analysis Course BUSI 400.

# **EQUIPMENT AND MECHANICAL SYSTEMS**

This description will give information on:

- plumbing system;
- bathroom fixtures, kitchen fixtures, other fixtures must be examined;
- heating and cooling systems;
- electrical systems-adequate, require upgrading; and
- miscellaneous systems-fire, elevators, alarm systems and intercom systems.

# ANALYSIS OF ARCHITECTURAL STYLE AND FUNCTIONAL UTILITY

Utility and Style are not always related. If form and function work together then value is enhanced.

Good design meets the following criteria:

- functions well *suitability of intended use*;
- looks good appeals to the aesthetic sense;
- feels good carries meaning, recreates feeling from another time or place;
- balance sense of correct proportions, compatibility; and
- affordable consistent with market expectations for price range.

# **Architectural Style**

- The art and science of building design. Construction affects market value.
- Market standards and tastes influence style.
- External forces can change style, e.g. the energy crisis of the 70's meant new and better insulation and heating systems.

# **Functional Utility**

- The house plan must be useful and work for the occupants. This can change over time as evidenced between homes of today and those built 25, 50, 75 years ago.
- Some general standards of functional utility are:
- compatibility to general market;
- suitability or appropriateness for its intended purpose;
- comfort, efficiency, safety, security;
- accessibility;
- ease and cost of maintenance; and
- market standards, attractiveness and economic productivity.

# **Residential Design and Functional Utility**

- Standards vary widely for different income levels and different regions.
- Functional utility is determined by layout, accommodation, adequacy and ease and cost of maintenance.
- Interior traffic patterns are very important to functionality.
- Over the years standards have changed so we have now at least two/three bathrooms, well-equipped kitchens, large closets, family rooms/offices, double garages. Equipment includes dishwashers, 3/4 piece bathrooms, spa tubs, air conditioning, etc., for modern clean living environments.
- It is up to the appraiser to keep up-to-date on these changes and this can be done by visiting new homes, and strata units to see what builders are offering and what the public requires.
- Pages 11.38 to11.46 discuss the commercial type buildings and their Functional Utility. These include Shopping Centers, Office Buildings and Hotels. Industrial buildings are classified as Manufacturing Plants, Warehouses and Distribution Facilities. Others are Agricultural Properties, Special-Purpose Buildings and Mixed use Buildings.

#### **QUALITY AND CONDITION SURVEY**

- Appraisers need to be able to assess the quality of the materials and the construction to accurately establish the value.
- Maintenance costs are related to the quality and construction.
- Rate of depreciation is affected by quality of materials and workmanship, e.g. leaky condominiums in British Columbia.
- Depreciation falls into three categories (discussed in detail in Chapter 19):
  - 1) Items needing immediate repair;
  - 2) Items that may be repaired or replaced at a later date (short-lived); and
  - 3) Items expected to last the full economic life of the building (long-lived).



Real Estate Division

# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

CHAPTER 12

# ARE 3<sup>RD</sup> EDITION REVIEW NOTES CHAPTER 12 - HIGHEST AND BEST USE ANALYSIS

#### INTRODUCTION

- Highest and best use (HABU) identifies the most profitable, competitive use of the property.
- All valuation assignments are based on use.
- HABU is the foundation on which market value rests.

#### FUNDAMENTALS OF HIGHEST AND BEST USE

#### Defined as:

"the reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported and financially feasible and that results in the highest value."

- It applies to land alone because the value of improvements is considered an additional value, **contributory** to the land.
- Land has value, improvements contribute to value.
- Important the HABU of the property as developed is also recognized.
- Distinguish between value as though vacant and as improved.
- Questions to ask:
  - should land be developed or left vacant?
  - what kind of improvement?
  - should existing improvement be maintained or altered to increase value?
- Sometimes a judgement call as to whether or not to keep the old improvements.
- Consider interim use until the future HABU is reached, a holding situation.
- Intensity of use must also be considered in relation to existing improvements.

# The Four (4) Tests

Must meet four implicit criteria in the order as stated:

- 1. legally permissible;
- 2. physically possible;
- 3. financially feasible; and
- 4. maximally productive.
- Market and marketability analysis and land use regulations can limit the number of uses available.
- Is the use reasonably probable? If so, then consider it.
- Test the HABU conclusions to ensure that existing and potential competition from other sites is identified.
- Consider competition for the various uses of the site. Which use is best?

# APPLICATION OF HIGHEST AND BEST USE ANALYSIS

- HABU builds on the market / marketability analysis conclusions.
- HABU as though vacant focuses on alternative uses applying the four criteria of legal permissibility, physical possibility, financial feasibility and maximum productivity.
- The four criteria test is also applied to HABU as though improved with the focus on the three possibilities continuation of, or modification of the existing use or demolition of the existing use and redevelopment of the land.

# Highest and Best Use of Land as Though Vacant

- If land is vacant, then value as it exists.
- The HABU of land as though vacant must be considered in relation to its existing use and all potential uses.
- If improved, then how much does the improvement contribute?
- Consider demolishing the improvements if little or no value as it may cost too much to maintain them.
- Future potential use is a big factor in considering whether to demolish the improvements.
- "Historic district" zoning has made demolition impossible and the building must be kept.

# Testing the Legal Permissibility of Land as Though Vacant

- Determine which uses are legally permissible.
- Search title to see if any restrictions precluding any use(s):
  - 1. private restrictions;
  - 2. deed restrictions;
  - 3. long term leases;
  - 4. building codes;
  - 5. historic uses;
  - 6. environmental restrictions.
- Consider the use permitted under current zoning, possibility of new use allowed with a zoning change; existence of private restrictions on site;
- Check community plan for future uses.

# Testing the Physical Possibility as Though Vacant

Physical characteristics of the site -

- size, shape, terrain, access, frontage, depth;
- capacity and availability of public utilities.
   Subsoil conditions -
- stable or require fill or pilings, consider cost of grading.

# Testing the Financial Feasibility of Land as Though Vacant

- If value is commensurate with its cost and conforms to the previous two criteria, then the use is financially feasible.
- For income-producing properties, the income analysis requires the support of the six-step market /marketability study to determine economic demand.
- Project the expected gross income, less vacancy and operating expenses to arrive at an expected net income for each use.
- Calculate the rate of return on the invested capital of each use and if it satisfies the required market rate of return, it is financially feasible.
- For uses that are not income-producing, determine which use creates a value greater than the costs of development and marketing.
- Value benefits must exceed the cost.
- Critical to analysis is the need for relevant and credible market data, consideration of project timing, risk and external obsolescence factors.

# Testing the of Maximum Productivity of Land as Though Vacant

- If the three previous tests are positive then this one is the final test.
- The use that produces the highest residual land value consistent with the market's risk tolerance associated with that use and expected rate of return is the HABU.
- HABU is determined by capitalizing the income with a rate of return commensurate of the risk or alternatively, by the analysis of land sales to users.
- Residual land value is determined by taking the value of the proposed use (land and improvements) and deducting the cost of labour, capital and entrepreneurial coordination to create those improvements or alternatively by capitalizing the residual income to the land. Discussed in detail in Chapter 22.

# The Conclusion of Highest and Best Use as though Vacant

State in terms of use, timing of Use, Market participant-users and buyers.

# Possibility of Assemblage

- Some parcels can only achieve HABU if part of a land assembly.
- Must determine feasibility and probability of assemblage and its related costs.

# Highest and Best Use of Property as Improved

- Use of the property **as presently developed** must be examined in order to consider demolition of existing improvements and redevelopment, continuation or modification of existing use.
- Each of the scenarios must be considered to determine which is the most feasible?
- If money has to be spent, does it conform to market preferences and maximise profit if sold?
- Hypothetical conditions and or extraordinary assumptions must be stated.

# Testing Continuation of the existing use of the property as Improved

• Criterion of legal permissibility, physical possibility and financial feasibility met and the existing use remains more profitable without modification or redevelopment, then the HABU is met.

# Testing Modification of the existing use of the property as Improved

- Modification decision will rest on a cost benefit analysis;
- For non-conforming properties consider if modification would satisfy conformity requirements which involves an analysis of change in zoning and the costs incurred in obtaining those changes.
- Legally non-conforming, then it is only for the life of the improvement(s).

# Testing Demolition of the of the property as Improved and Redevelopment

• Considered when an alternative use given consideration of all four criteria is more profitable than the existing use.

#### SPECIAL SITUATIONS IN HIGHEST AND BEST USE ANALYSIS

# **Single Uses**

- Sometimes a property's HABU may not be consistent with the surrounding land uses.
- The HABU may be unique or unusual, e.g. one office building in a residential community, but only one because the demand is not there for more.
- Should the single use be continued or discontinued from, say, retail commercial to multiple family?

# **Legally Nonconforming Uses**

- Legal use was previously established but later changed by amendment to zoning by-laws, partial taking in expropriation, changes in density and in development standards.
- Cannot usually upgrade or expand unless new standards are met.
- If unused for a certain period of time, then non-conforming use is cancelled.
- It can be an under- or over- improvement of the site.
- Limited use and can be eliminated for various reasons.
- In an income property, the income stream is discounted substantially because of uncertainty.
- See city by-laws regarding nonconforming uses.

#### **Interim Uses**

- Current HABU that is likely to change in the next 5-7 years.
- Some speculative value because of the expectancy of future profit.
- Interim use may appear to be contrary to principle of consistent use but it may just what the market accepts as adding more value versus vacant land.
- Consider the community plan.
- A **holding value** until the time is ripe for development as in mobile parks, parking lots, vacant land used for storage and older buildings with minimum rent.

#### Use That Is Not the Highest and Best Use

- Concept of consistent use is that improvement must be valued based on a use that is consistent with property's highest and best use.
- Many buildings are inconsistent with the ideal improvement and would be developed differently if site was vacant.
- The current improvement adds value and will remain until it is economically viable to demolish it.
- Not all sites in an area can be developed with the ideal building, as the demand is not there and neither is the purchasing power.
- Adjust for external obsolescence.

# **Multiple Uses**

- Sites often have a variety of potential future uses.
- Appraiser must try to value each of them.

### **Special-Purpose Uses**

- Some properties or improvements have very specific or a limited number of uses.
- HABU is the continuation of the present use, if feasible.
- If not feasible, the HABU is to demolish the structure or radically change it for another use.
- Sometimes two valuations required and must be clearly presented one based on HABU and another based on use presuming the existing use. An alternative use must be considered if there are no buyers for the property in its current use.

#### REPORTING HIGHEST AND BEST USE CONCLUSIONS

- All appraisals should include a statement about HABU as though vacant or as improved.
- Much of HABU analysis is built from the use of the six-step market analysis process.
- In residential reports it mostly is "as presently developed" if the house has some value left in it.
- See Table 12.1 for HABU statements that can be used in reports.
- See discussion on common errors and issues in highest and best use.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

# ARE 3<sup>rd</sup> EDITION REVIEW NOTES CHAPTER 13 - DIRECT COMPARISON APPROACH

#### INTRODUCTION

- The analysis of sales, listings or offers of properties similar to the subject.
- Based on principle that an opinion of market value may be supported by the investigation of the market's reaction to comparable and competitive properties.
- Comparative techniques of adjustment used include the paired sales, trend analysis and statistics.

#### RELATION TO APPRAISAL PRINCIPLES

Review these main principles for the Direct Comparison Approach

- Supply and Demand,
- Substitution, Balance,
- Externalities and
- Market Analysis and Highest and Best Use.

#### APPLICABILITY AND LIMITATIONS

- Good if many recent sales of similar properties are available so a value pattern or trend in the market may be identified.
- Less reliable if there is a lack of sales. One sale does not make a market.
- Less reliable for specialized buildings.
- Limited use for income producing properties.
- Useful in supporting conclusions in other approaches in developing a value bracket for cost and income approach.

#### **PROCEDURE**

- Research the market for recent sales, listing and offers. Market analysis and HABU aid in the selection of quality data.
- Comparables selected should reflect the actions of the buyers attracted to those properties considered similar to the subject.
- Verify the information of those arm's-length transactions.
- Select relevant units of comparison.
- Look for differences between comparables and subject and then make adjustments.
- Reconcile the various comparables into one final value estimate.

# **Researching Transactional Data**

- Look for competitive sales similar to the subject.
- Consider the date of sale, location and physical characteristics.
- Consider motivation of the buyers and sellers.
- Consider market changes.

#### **Data Sources**

- Land titles offices:
- Assessment offices;
- Electronic web sites that specialize in sales transactions;

- MLS of real estate boards;
- Interviews with buyers and sellers;
- Appraiser's own files and associate's information.

# **Verifying Transactional Data**

- If necessary, talk to one of the principals in the transaction.
- Search title records for documented evidence.
- Check against other market transactions.

# **Selecting Units of Comparison**

- Select unit of comparison for the type of property being appraised.
- Use facilitates comparison of subject with comparable properties.
- See Table 13.1, for different units of comparison.

#### **Analysing and Adjusting Comparable Sales**

- Adjust for differences between the subject and the comparables.
- Use a data grid (See Table13.2) to show adjustments and the final adjusted figure.
- Logical and efficient method to communicate data

# **Analysing and Adjusting Comparable Sales**

- Qualitative and quantitative adjustments are made.
- Quantitative rely on mathematical applications.
- Qualitative rely on the appraiser's judgement based on market analysis.
- Adjustments made to the total price or appropriate units of comparison.

# **Elements of Comparison**

Ten possible areas of comparison:

- 1. Real property rights conveyed;
- 2. Financing;
- 3. Conditions (motivation) of sale;
- 4. Monies spent after purchase;
- 5. Market conditions (time adjustment);
- 6. Location;
- 7. Physical adjustments;
- 8. Economic conditions;
- 9. Use (zoning); and
- 10. Non-realty components of value.

# **Sequence of Adjustments**

• The sequence of adjustments applied to the comparables is shown in Table 13.4. The first 5 adjustments are considered transactional adjustments – up to and including Market Conditions. The next series of adjustments are property adjustments. Note that the first 5 adjustments are

cumulative affecting the previously adjusted figure. Property adjustments can be grouped together and made as one adjustment.

- Sequence varies according to availability and reliability of sales.
- Adjustments can be either in dollars or percentages.

# **Reconciling Value Indications in the Direct Comparison Approach**

- The appraiser summarizes and re-examines the data and analysis.
- The comparables values are resolved into a range of value or a single value indication a point estimate.
- The appraisal report clearly communicates how the final value was derived using the direct comparison approach.
- Are the comparable similar in terms of characteristics and location?
- Was it sold in the same market as the subject?
- Is the transaction similar to the sale of the subject?
- Would a purchaser consider the comparable an alternative to the subject?

# Units of Comparison and Real Property Interests in the Reconciliation Process

Make sure the value conclusion is consistent with the intended use of the appraisal and those values from the other approaches used in the report.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

# ARE 3<sup>rd</sup> EDITION REVIEW NOTES CHAPTER 14 - COMPARAIVE ANALYSIS

#### INTRODUCTION

- The process of applying quantitative and qualitative techniques.
- Identify the elements of comparison affecting the value of the type of property being appraised.
- Compare the attributes of each comparable with the subject.
- Derive a net adjustment for each comparable.
- Reconcile the range of adjusted prices into a single final value.

#### **QUANTITATIVE ADJUSTMENTS**

Paired sales analysis, given sufficient data is the foundation for quantitative adjustments when using "pure pairings". That is, two similar sales that exhibit a difference in only one attribute with the price difference reflecting the value of the attribute. The key element in the reliable use of the method is the availability of data. Sometimes multiple adjustments are required to isolate a single variable. When few "pure" pairings are available, the appraiser may use paired sales of adjusted values but must be aware that the difference measured may not equate the difference in the actual value of the attribute being measured. Support of and testing the reliability of data using other analytical methods or secondary data is essential in appraisal. Don't let mathematical adjustments cloud your thoughts and try to understand how the market behaves when making adjustments.

**Grouped data analysis** is similar to the above except that a number of sales grouped by an independent variable are compared in pairs. This method is reliable when there are many sales available all with similar characteristics.

**Secondary data analysis** is used to support analysis derived from other methods. This makes use of data that does not directly impact the subject or comparables and may be collected by research or from government agencies who analyze the real estate market in general.

**Statistical Analysis** involves the use and understanding of statistical concepts and methodology to arrive at a conclusion. Some expertise and knowledge is required by the appraiser to ensure relevant and meaningful data. Sources of data are available from real estate boards, CMHC and other associations.

**Graphic Analysis** is the visual display of data and the application of statistical curve fit analysis to derive a conclusion. A graphic display serves to show the market's reaction to changes in the variables of comparison and may reveal a trend, and by using different formulae or curve fit analysis, the best fit for the data being analysed is determined.

**Cost Analysis/Cost Related Adjustments** can use the depreciated building cost or one of its components. Reliable if there is limited sales activity. Support adjustments as cost does not equal value.

**Capitalization of Income Differences** is a method where the loss of income due to some deficiency is capitalized into a capital value. If a house only has one bathroom and two are the market standard, and the estimated income loss is \$50.00 per month or \$600 per year, then capitalizing this loss at a market rate of 5% indicates a total loss in value of \$12,000 for that deficiency. Widely used as its simple to support and commonly used in expropriation.

# **QUALITATIVE ANALYSIS**

Includes trend analysis, relative comparison analysis and ranking analysis.

**Trend analysis** is effective when there is a large amount of data that can be analyzed to establish a trend. Data from real estate boards and associations are a good example.

**Relative Comparison Analysis** is the study of those relationships of market data without application to quantification. It reflects the imperfect nature of the real estate market and establishes comparative relationships as inferior, superior or similar to the subject. An important consideration in the comparables' selected for analysis is the highest and best use criterion. Reliable results may be obtained by bracketing the subject between those inferior and superior properties with more research and other analytical tools used to establish a bracket if there is none. It is by and large a subjective decision and often based on the appraiser's knowledge and experience.

**Ranking Analysis** is a sorting process done by ranking the comparables' element(s) of comparison, ie size, corner lot, frontage, etc., in relation to the subject, thereby establishing a clear relationship by an element of comparison or by overall comparability. It follows that trends may be established for those variables that are market –sensitive and discarding those that are not.

Just remember the real estate market is very imperfect and no two sales are identical. Comparisons are based on quantitative and qualitative data and supported opinion.

#### **ELEMENTS OF COMPARISON**

#### TRANSACTIONAL ADJUSTMENTS

#### **Real Property Rights Conveyed**

- This is normally the first adjustment; with an adjustment required if the property rights between the subject and comparable are not the same.
- Comparable sales with easements or restrictive covenants registered against the title or income-producing properties subject to leases are encumbered and an adjustment has to be made for the reduced bundle of rights.

## **Financing Terms**

- If the rate on the assumed or new financing is higher or lower than current market rates then the price may have been affected.
- Check vendor financing for details of mortgage and whether any conditions affect the final selling price.
- If so, then the appraiser must find the discounted value of the mortgage and adjust the selling price accordingly as this has often been considered in negotiations between the buyer and seller.
- Only adjust for the figure if the market has adjusted the same way.
- Refer to text, Page 14.12 for calculation on cash equivalency adjustments.
- Appraisal requires the need to reflect market perceptions with emphasis placed on a market-derived adjustment rather than one derived by calculation.
- Beware of double- counting interdependence of financing and condition of sale.

# **Conditions of Sale**

- In most cases buyers and sellers are typically motivated and transactions are considered arm's-length.
- If motivation is atypical, and the sale not considered arm's-length, care is necessitated with the intended use of the appraisal becoming an important consideration.
- Sellers may be forced to sell quickly and therefore the price is lower.

- Buyers may be forced to buy quickly and therefore the price is higher.
- Interviews with the parties involved buyers, sellers, agents or even neighbours may reveal information.

# **Expenditures Made Immediately After Purchase**

- A knowing buyer considers these costs and discounts them in his offer price.
- Expenditures include deferred maintenance, demolition and removal of any portion of the improvements, petition for a zoning change and remediation of environmental contamination.
- The relevant figure is not the actual cost incurred but the figure agreed to by the buyer and seller.

# **Market Conditions or Time Adjustment**

- Occurs when comparable properties are sold at different dates from the effective date of appraisal and market conditions change in the interval.
- In the time interval under consideration, given market condition changes, increase or decrease the price of the comparables accordingly.
- Usually adjustment is a monthly percentage figure based on actual sales.
- Use paired sale analysis for primary data supported by secondary or published data.
- Published data tends to be general with more research required for more specific data for the type and location of the subject.
- Don't rely on hearsay data, do your own analysis with support.

# **Property Adjustments**

#### Location

- Can refer to a location within one neighbourhood as in the price differentials between interior and corner lots, or to those found between different neighbourhoods.
- Use paired sales analysis backed up by data from other reliable sources.
- Refer to text, Page 14.21 for comparison using statistical and graphical analysis.

### **Physical Characteristics**

- Encompasses those differences noted such as building size, quality of construction, style, age, condition, site size, attractiveness, and amenities between the subject and the comparables.
- Cost  $\neq$  value.

#### **Economic Characteristics**

They are attributes of a property that directly affects its income and usually applied to income type properties.

## Use/Zoning

All comparables should have similar highest and best use or zoning but if comparables are unavailable then adjustments required for those comparable with a different current use or highest and best use.

# **Non-Realty Components**

- Include personal property, business concerns and other items not considered real property but included in sale price of the comparable or in the ownership interest in the subject property.
- More common in income-producing properties.
- In residential, the items are usually of nominal value older appliances and some furniture. If price seems high then ask if anything else was included in the price. Examine the motivation of the buyers and sellers.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

# ARE 3<sup>rd</sup> EDITION REVIEW NOTES CHAPTER 15 – APPLICATIONS OF THE DIRECT COMPARISON APPROACH

#### INTRODUCTION

This chapter illustrates the most commonly used techniques of direct comparison.

Quantitative are applied first and then qualitative for clarification.

Other techniques considered depending on complexity of appraisal assignment.

### OFFICE BUILDING EXAMPLE

Students should read this section as it is a case study used to illustrate the process. The reconciliation is often the most important part of the appraisal as it summarizes the report and opinions of the appraiser.

### INDUSTRIAL BUILDING EXAMPLE

Case study that describes in detail the methodology for appraising a warehouse with some finished office area. Discussion of the Quantitative Adjustments are under the headings; property rights conveyed, financing terms, conditions of sale, expenditures make immediately after purchase, market conditions and condition of improvements. With the application of quantitative adjustments, a value range per unit price is indicated. Qualitative Adjustments are based on the adjusted unit price. A written reconciliation summarizing the results and a final estimated market value is determined.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

#### INTRODUCTION

• Land provides utility and therefore has value.

#### **RELATION TO APPRAISAL PRINCIPLES**

- Anticipation, Change, Supply and Demand, Substitution and Balance all influence value.
- Land supply relatively stable, but can sometimes be physically created
- Erosion, pollution, exhaustion through farming, change of arable land into desert impacts the inventory of land.
- Scarcity plus utility creates value.

### **Property Rights and Public Controls**

- Appraisal estimate the value of the physical real estate and the property rights.
- Property rights include the following to:
  - develop;
  - lease;
  - farm;
  - mine;
  - alter topography;
  - subdivide;
  - assemble:
  - hold for future; and
  - construct or alter improvements.
- Public records show:
  - easements;
  - rights-of-way; and
  - private and public restrictions.
- Zoning and community plans indicate how development is to proceed.
- Include housing, commercial, industrial, open spaces and community buildings.
- Off-site improvements such as water, sewers, hydro, electricity, gas must be in place before the development commences.
- Governments can expropriate land for development for public and non –public projects.
- Land, water, air and mineral rights may be protected by government legislation.

# **Physical Characteristics and Site Improvements**

- Consider the physical characteristics, available utilities and site improvements:
  - size, shape, frontage, topography, location, view, contours, grade, and drainage.
  - availability of water, sewers, electricity, natural gas, telephone and TV cable.

### **Highest and Best Use (HABU)**

- Always consider site value based on HABU as if vacant and available for development to its most economic use.
- Must then consider the present improvements do they contribute to value?
- Contribution of improvements estimated by subtracting market value of the site from the market value of the site as improved.
- Consider demolition costs.
- If site is being determined for a use other than HABU, this must be stated.

### Possibility of Assemblage

Some parcels of land realize their highest and best use only as part of an assemblage. In this case the appraiser must determine its feasibility and possibility. If it is an option, then consideration of the costs and timing of assembly and future demand of the site when completed, become very important.

# APPLICABILITY AND LIMITATIONS OF VALUE TECHNIQUES

- Site value analysis is typically a separate section in the report and done before the application of the three approaches to value.
- Use the Direct Comparison Approach in most cases, however if not applicable, then allocation, extraction or income capitalization methods should be considered.
- Table 16.1 summarizes the four methods.

#### DIRECT COMPARISON APPROACH

- Preferred method of valuation.
- Used for vacant or considered vacant sites, namely sites with old improvements that can be demolished.
- The appraiser will follow these steps:
  - gather sales, offers or listing data;
  - identify similarities or differences;
  - identify HABU of each comparable and select those for analysis;
  - identify units of comparison-price per square or front foot or per hectare;
  - make adjustments for differences between subject and comparables; and
  - form a conclusion as to market value.
- Comparison items are:
  - property rights, financing, conditions of sale, money spent after purchase.
  - market conditions, location, physical characteristics, available utilities, zoning.
- Order of comparison:
  - zoning is usually first;
  - sale date close to effective appraisal date;
  - similar location or neighbourhood;
  - consider offers on listings and listings themselves; and
  - personal interviews are good for additional information.
- Use a grid to arrange the sales data (see attached forms).
- Subject listed first on the grid.
- The 3-4 comparables are listed next.
- Adjustments made for differences.

- Adjustments based on market evidence.
- Final values reconciled into a value indication for the subject.

# **ALTERNATIVE TECHNIQUES**

#### **Market Extraction**

• Land value is extracted from a sale price of an improved property by deducting the depreciated value of the improvements. The remaining value is the land value.

#### Allocation

- Based on principles of balance and contribution, that is there is a typical ratio of land value to property value for each type of real estate.
- Support available from mass appraisal data, observed patterns over time, in consultation with developers.
- Common application in subdivision lot sales where one can directly measure the ratio of lot value to total property value.
- Sales in an area are \$100,000 and land values are around 25% of sale prices. Therefore, land is worth about \$25,000.
- Used to approximate values when vacant land sales are scarce.
- Not commonly used in commercial properties because of variances in parcel size and intensity of use.
- Difficulty in use when HABU and land value ratios of comparables not similar to subject.

### **Income Capitalization Procedures**

The various procedures depends on the use of reliable capitalization rates, information which is often difficult to get and hence, generally not used as primary valuation techniques except in the case of subdivision development analysis. This section is for information only.

#### Land Residual Technique

- Used when sales data of similar parcels is not available.
- Land value is estimated by isolating the net income attributable to the land and the capitalization thereof at a market-derived land capitalization rate to provide an estimate of value.

#### **Ground Rent Capitalization**

- Ground rent is the amount paid for the right to use or occupy the land according to a lease.
- Income to the land is determined by ground lease rate that is, the landowners interest or leased fee estate
- Market interest rates are used to convert ground rent income or leased fee estate into an indication of land value.

#### **Subdivision Method**

- Use of discounted cash flow analysis (DCF) to value potential for subdivision in the short term.
- The appraiser estimates the amount of lots that may be developed on the site, their absorption and their projected retail prices.
- Account for entrepreneurial profit either by selection of an appropriate discount rate or as a line expense.
- Deduct all the costs of permitting, construction and absorption of all lots over time with the analysis ending when the last lot is sold.
- The raw land value is sum of the net cash flows for each period discounted to time zero or the present value of the net proceeds.

See sample charts on next page for presentation and analysis of data.

# LAND VALUE - SAMPLE CHART

# **Data Collection Page**

Item	Subject	Comp. #1	Comp. #2	Comp. #3
Address	1234 Main St., Vancouver, B.C.	1200 Major St., Vancouver, B.C.		
Legal Description	Lot 21, Plan 3345, NWD PID 123-456-789	Lot 15, Block 45,, Plan 5421 PID 123-456-987		
Sale Date		Mar-05-11		
Instrument No.		#54908321		
Registration date		Mar-23-11		
Vendor		W E Moen		
Purchaser		B C Lewqui		
Sale Price		\$160,000		
Rights conveyed	Fee Simple	Fee Simple		
Financing		Typical		
Conditions of sale		None		
Time Difference (months)	0	3 mo at 1% per month		
Zoning	R-1	R-1		
Location		Similar		
Frontage/Depth	12 x 35 m	12.3 x 34 m		
Lot area	420 m <sup>2</sup>	418.2 m <sup>2</sup>		
Topography	Flat	Flat		
Utilities	All	All		
Interior/corner lot	No	No		
Other Comments	None	None		

# LAND VALUE - SAMPLE ADJUSTMENT CHART

# Data Adjustment Page

Item	Comp #1	Comp. #2	Comp. #3
Sale price	\$160,000		
Real property rights conveyed adjustment	0		
Adjusted price	0		
Financing adjustment	0		
Conditions of sale adjustment	0		
Adjusted price	0		
Date of sale adjustment	\$4,800		
Adjusted price	\$164,800		
Other adjustments as required Zoning			
Location			
Frontage/depth			
Lot area			
Topography			
Utilities	+\$1,000		
Interior/corner lot			
Total Other Adjustments	+ \$1,000		
Final Adjusted Sale Price	\$165,800		
Ajusted sale price/front metre	\$13,479		
Ajusted sale price/square metre	\$396.46		
Total adjustment	\$5,800		
Total adjustment as % of Sale Price	.036%		



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

#### **INTRODUCTION**

- Theoretical breakdown of land and buildings based on market comparisons.
- Compares the cost to develop a new or substitute property with the same utility as the subject.
- Application of approach requires consideration of two cost bases *reproduction cost* (exact replica) or *replacement cost* (substitute of similar size and utility).
- Cost to construct the existing structure and site improvements including direct + indirect + entrepreneurial profit by one of three techniques:
  - 1. Comparative unit method
  - 2. Unit- in place method
  - 3. Quantity survey method
- The cost estimate is adjusted for the depreciation evident in the subject structure.
- Depreciation as at the effective date of appraisal is deducted from the cost of the new structure using one or more of the following methods:
  - 1. Market extraction
  - 2. Economic age-life
  - 3. Breakdown
- Land value is added based on comparable land sales.
- Sum of land and improvements is fee simple value and adjusted for rights to reflect the value of the property interest being appraised.
- Reflects market thinking in purchase decision namely, the correlation of cost to value and the costs incurred to bring an existing structure up to the condition and utility desired.

#### RELATION TO APPRAISAL PRINCIPLES

- Substitution.
- Supply and demand.
- Contribution.
- Externalities.
- Highest and best use.
- Stabilization.

#### APPLICABILITY AND LIMITATIONS

- Good if limited market data.
- Good if improvements are new or newer.
- Good when there is adequate support for land value.
- It can sometimes be used to make adjustments in the Direct Comparison approach.
- Good for additions or renovations.
- Good for unique or special use buildings
- Good for insurance purposes.
- Good for calculating income taxes on the depreciated value of the improvements.
- Useful in feasibility studies and in assessment of anticipated profit of the project.
- Not good for older buildings as depreciation is difficult to measure.
- Not a relevant approach if investor is looking for an immediate purchase.
- Value is fee simple with additional adjustments necessary if other real property rights are being appraised.

#### **PROCEDURE**

- 1. Estimate value of the site as though vacant.
- 2. Choose a method for estimating costs either reproduction or replacement cost method.
- 3. Estimate the direct (hard) and indirect (soft) costs of the improvements as of the effective date of the appraisal.
- 4. Estimate the entrepreneurial profit of project based on market data.
- 5. Add #3 and #4 for the total cost of project.
- 6. Estimate all forms of depreciation namely, physical deterioration, functional or external obsolescence.
- 7. Deduct depreciation from the costs new to arrive at the depreciated cost.
- 8. Estimate depreciated value of any other contributing improvements, including site improvements.
- 9. Add the land value from #1.
- 10. Adjust for any personal property and if value is not fee simple, then adjust for relevant property rights.

#### Site Value

- Value based on the highest and best use
- Assumes fee simple interest

### **Reproduction Cost versus Replacement Cost**

#### Reproduction Cost

• The cost to construct an **EXACT** duplicate or replica of the building under appraisal using the same or identical materials, design, layout and quality of workmanship as the original. It employs all the deficiencies, superadequacies and obsolescence of the subject improvements.

### Replacement Cost

- The cost to construct a building with a similar **UTILITY** to the subject using current materials, building standards, design and layout. In some cases existing obsolescence is assumed to be cured.
- Decision to use either is dictated by the age, its uniqueness and use at the time of the appraisal.
- Replacement cost can eliminate the need to estimate functional obsolescence.
- Replacement cost buildings usually cost less than reproduction because current materials and construction methods are being used.
- Replacement cost buildings do not suffer from super adequacies as they are built to current standards.
- Generally simplifies the procedure for estimating depreciation.

#### **Cost Estimates**

### Direct Costs (Hard Costs)

- Cost of materials and labour, and the contractor's profit is included.
- Assumes standard building practices and standards of construction.
- Assumes that the contractor is operating in a normal market.

### Indirect Costs (Soft Costs)

- Architect fees.
- Property taxes.
- Sales and leasing commissions.
- Appraisal fees.
- See Page 17.11, Table 17.1 for a list of the standard direct and indirect costs.

Review Notes: The Cost Approach

# **Entrepreneurial Incentive and Profit (Loss)**

- An economic reward for the risk associated with the project.
- E-profit measured by the difference between all costs of development and its market value.
- E-incentive is the amount an entrepreneur expects to receive as compensation for providing expertise, the coordination and assumption of risk in undertaking the development.

# Estimating Entrepreneurial Profit (Loss) and Incentive

- Most markets have a typical range of expected profit for various projects.
- The greater the risk, the greater the profit.
- Some profit due to increase in land value during construction.

### **Depreciation**

- Is the difference between the cost new and the present contribution to value of the improvements.
- It is a **loss in value** due to any or all of the following:
  - Physical deterioration or wear and tear;
  - Functional obsolescence or a flaw in the design, structure or the materials; and/or
  - External obsolescence or a negative outside force affecting the value.
- Remaining value is the depreciated cost of the improvements.
- Depreciated cost + the site value gives the market value by the cost approach.
- Depreciation will be discussed in more detail in Chapter 19.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

#### INTRODUCTION

- The Appraiser must estimate the cost of all improvements.
- It is based on personal inspection or plans/specifications.

#### COST DATA SOURCES

- Data from appraiser's own files.
- Cost data services.
- Usually based on a rate per square foot/metre.

# **Cost-Estimating Services**

- Marshall and Swift Publication Company www.marshallswift.com
- Dodge Corporation www.fwdodge.com
- R.S. Means Company www.remeans.com
- Publications include all types of costs, different types of improvements, different regions of North America, local and time adjustment factors. Usually exclude demolition costs and entrepreneurial profit.
- Based on standard measuring techniques. See AIC guidelines for measuring a house.

# **Cost Index Trending**

- Updated cost manuals using cost index tables to convert historical costs to current cost estimates.
- Different geographic regions have different costs.
- Refer to page 18.3 for an example of trending.
- Reliability of method questioned by data used and difference in standards used at the time of the historical cost versus the effective date of appraisal.

## **COST ESTIMATING METHODS**

- Comparative-unit method.
- Unit-in-place method.
- Quantity survey method.

#### **Comparative-Unit Method**

- Derive a cost per unit of area.
- It is based on the cost of similar structures as the subject adjusted for market conditions and physical differences.
- Indirect and direct costs may be separate.
- Adjust for time and location.
- Costs vary with size.
- It is uncomplicated, practical and widely used.
- Use recent sales and deduct the land value to arrive at the costs to build the property.
- Use care and judgement at all times.
- See pages 18.7 9, figures 18.1 and 18.2, and table 18.1 for example.

#### Unit-in Place / Segregated cost method.

- Individual building components are costed out on a square or lineal or cubic basis.
- Unit cost based on actual quantity of materials used plus the labour required for each square foot of area.
- See page 18.10, table 18.3 for an example of Unit-in-Place Method for Brick Veneer Wall.
- See page 18.10, table 18.4 for an example of Unit Cost per Square Foot of Brick Veneer Wall.
- Refer to page 18.12, table 18.5 shows adjustments required to calculate total project value.

# **Quantity Survey Method**

- Most detailed of all the methods and often applied by a skilled professional, a quantity surveyor.
- Reflects the quantity and quality of materials used in the construction of an improvement and all categories of labour required.
- Page 18.12, table 18.5 shows the total cost to construct a project using the Unit-in-Place Method.
- Page 18.13, table 18.6 shows a Contractors Breakdown for a Warehouse Property.

# **Estimating Entrepreneurial Incentive**

- Rates derived through market analysis and interviews with developers.
- See page 18.4 for an example of calculations.
- Based on:
  - % of direct costs
  - % of direct and indirect costs
  - % of direct and indirect costs and land value
  - % of the completed value of project



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

## AGE AND LIFE RELATIONSHIPS

- Actual age or chronological age is the number of years that have elapsed since completion of construction whereas effective Age is based on the property's present condition and general overall maintenance. Effective age can be lesser than or greater than its actual age at the date of the appraisal. It is the responsibility of the appraiser, based on the inspection of the building, to estimate the effective age of the subject property.
- Total Economic Life and Useful Life is the length of time that the improvements contribute to the value of the property and ends when the use for which it was originally intended, is no longer its highest and best use. At this point, the options to the owner are to renovate or convert to a new use, rehabilitation, remodelling or demolition and redevelopment. Economic life is normally shorter than the physical life.
- Remaining Economic Life (REL) AND Remaining Useful Life is the difference between Economic Life and Effective Age. The REL is the remaining expected economically productive life span of the structure. It changes due to market conditions and the building's overall maintenance.
- The *physical life* of a property can be well over 60 years depending upon the type of construction and its overall maintenance. In some parts of Canada, many buildings are hundreds of years old.
- Short-lived items are usually building components or equipment such as furnaces, hot water tanks, carpets, roofing, kitchen cupboards, electrical fixtures, and windows and doors; i.e., those items whose life expectancy is less than the original structure. For instance, a hot water tank will usually last for 5-10 years. During the life time of a home it will probably be replaced 5 or 6 times. Therefore, the tank is depreciated over a 10 year period. The same is true for other building components as each will have their own unique lifespan.
- Gross Income Multiplier is calculated by dividing the selling price of a property by its estimated or actual monthly rent. So if a property sells for \$200,000 and it rents for \$2,000 per month, the multiplier is 100 based on a monthly rent. If the annual rent is used instead, the multiplier is \$200,000 divided by \$24,000 or 8.3.

# **DEPRECIATION METHODS**

# MARKET EXTRACTION METHOD

- Depreciation can be estimated using the direct comparison approach if adequate comparables can be located and analysed. The depreciation rate found from these comparables can then be compared to the rate found for the subject using the breakdown method to see if the final figure is "in the ballpark". If it isn't, then the appraiser must re-check his or her calculations for possible errors or incorrect assumptions.
- Refer to the textbook, pages 9.10-11, tables 19.1 and 19.2 for examples of this method which can be applied to any type of property from single family homes to industrial/commercial properties. Students should also know the limitations of this approach.

# **ECONOMIC AGE-LIFE METHOD**

• The economic age-life method is a quick and easy method to apply and may be used in form reports to give an estimate of the building's depreciated value. It is based on the application of the ratio, the building's effective age divided by its economic life multiplied by the property's total cost. However,

this method does not consider individual short-term items like the furnace, hot water tank, etc. The appraiser can account for newer short lived items by adjusting the effective age, thereby reducing the amount of the depreciation charged against the property. See examples on pages 19.12 and 19.13.

# • Variations of the Economic Age-Life Method

In this method certain items of depreciation can be easily and accurately estimated. This depreciation is then deducted from the total cost before applying the age-life ratio. See page 19.14 for an example.

# **BREAKDOWN METHOD**

This is the most comprehensive and detailed method to measure depreciation because it segregates the total depreciation into individual components parts such as Physical Deterioration, Functional Obsolescence and External Obsolescence. The method attempts to depreciate each individual item based on the assumption that each item has their individual effective age and economic life.

See page 19.16, figure 19.3, Components of Depreciation, for a visual interpretation of this concept. In understanding this concept, the appraiser is better able to estimate the Effective Age of a building. Remember the Effective Age is a judgement call by the appraiser based on observation and inspection of the property.

# **Physical Deterioration**

All physical building deterioration falls under one of three categories:

- Deferred maintenance curable and applies to items in need of immediate repair on the effective date of appraisal. Test to cure is based on return of value equal or greater than cost to "cure" or if the increment return is not equal or greater than cost, the expense will allow another item to maintain value.
- Short-lived physical depreciation not curable physically or economically feasible and requires replacement in the short term.
- Long-lived physical depreciation not curable and include those items that were not considered under the previous two categories. Assumption is they all have the same life and age expectancy and are all treated similarly.
- Refer to page 19.22, figure 19.4: Age-life Procedure for estimating all items of Physical Deterioration and explanation and worked example of method on pages 19.23-25.

# **Functional Obsolescence (F.O.)**

- Caused by flaw in the structure, materials or design of improvement when compared with the highest and best use and most functional design requirements as at the effective date of appraisal.
- Caused by functional defects in the structure, curable or incurable, deficient or superadequate.
- Five types of functional obsolescence (F.O.):
  - Curable F.O. caused by a deficiency requiring an addition
  - Curable F.O. caused by a deficiency requiring a substitution
  - Curable F.O. caused by a superadequacy that economically feasible to cure
  - Incurable F.O. caused by a deficiency
  - Incurable F.O. caused by a superadequacy
- Refer to page 19.26, table 19.4: Types of F.O. with examples of each on pages 19.27-33.

# **External Obsolescence**

- Loss in value caused by factors outside a property and may be temporary or permanent.
- May be localised or market wide affecting a single property or class of properties.
- Frequently affects both land and buildings and important to isolate and allocate the effects to either the land or the building or both.
- Three primary methods of measuring external obsolescence are:

Allocation of market - extracted depreciation

Analysis of market data

Capitalization of an income loss

• Refer to pages 19.34-36 on examples of each.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

- Much of this chapter is for the advanced appraisal course and the workbook specifies sections not to be read. See workbook for excluded sections.
- Value is based on the earning potential of the property using its net operating income and a market capitalization rate.

## RELATION TO APPRAISAL PRINCIPLES

- **Anticipation** is the forecasting of income and expense levels to estimate present value.
- Change may reflect future changes to the quality and quantity of income.
- Change will affect return required by an investor and the way the investor values a property.
- Change will also affect supply and demand as society's attitudes change for the type of space required.
- **Supply and Demand** is related to competition or lack of it and determines present rental and vacancy rates and future values.

# APPLICABILITY AND LIMITATIONS

• This approach is usually given the most consideration for income producing properties.

## **DEFINITIONS**

• Refer to Pages 20.4 -5, tables 20.1 and 20.2 when reading this chapter.

### Leases

- A lease is a written document listing the rights of the various parties to use and occupy space.
- It states how the rent is to be determined and the expenses allocation between landlord (lessor) and tenant (lessee).
- .• Flat Rental Lease rent is level throughout its term, used in net rental situations where the tenant is responsible for all their expenses.
  - gross lease lessor pays all the expenses, tenant only the rent.
  - modified gross lease expenses shared on some basis between the parties.
  - **single net lease tenant** pays utilities, taxes or insurance; **lessor** pays structural repairs and property maintenance and taxes or insurance.
  - **double net lease tenant** pays utilities, taxes, insurance and maintenance; **lessor** responsible for structural repairs and maintenance.
  - **triple net tenant** pays for everything except for major structural repairs which is the responsibility of the lessor.
  - Variable Rental Lease rent level changes throughout term, usually in situations where owner anticipates periodic changes in market rent. Rent changes may be done as a periodic percentage change or may be linked to the Consumer Price Index (also known as an *index lease*).
  - **Step-up or Step-Down Rental Lease** rent level changes at specified times at one or more points during the lease term. Also known as a *graduated rental lease*.
  - **Revaluation Lease** periodic rent adjustments based on revaluation of market rent under prevailing market conditions.
  - **Percentage Lease** some or all of the rent is based on a specified percentage of the volume of business, productivity or use achieved by the tenant.
  - Terms can be monthly, short term (1-5 years), or long term (over 5 years) and often have renewal clauses indicating renewal terms and conditions.

**NOTE**: Always read the leases because terms are specific to each situation and may not conform to the above definitions.

## Rent

- Market Rent sometimes called economic rent, rent that could be commanded in the present market if property was available based on current rents of similar type properties.•Contract Rent the actual rent specified in the lease document, may be higher or lower than market rent, compare properties with similar xpense apportionments between the parties, lease terms and level of finished space.
- Effective Rent where concessions such as free rent, above market tenant improvements (TI's) or atypical allowances given, the effective rent must be quantified. Defined as the total of base rent, or minimum rent stipulated in a lease, over the specified lease term minus rent concessions. Can also use market rent in calculation.
- Excess Rent the amount by which contract rent exceeds market rent at the time of the appraisal. May reflect market changes or unique property attributes.
- **Deficit Rent** the amount by which market rent exceeds contract rent at the time of the appraisal.
- **Percentage Rent** the rental income received in accordance with the terms of a percentage clause in a lease.
- Overage Rent percentage rent paid over and above the guaranteed minimum rent or base rent.

# **FUTURE BENEFITS**

- **Potential Gross Income (PGI)** is the total potential income at full occupancy before operating expenses are deducted.
- Effective Gross Income (EGI) is the anticipated income after allowing for vacancy and collection losses due to unoccupied space, turnovers and non-payment of rent.
- **Net Operating Income (NOI)** is the anticipated net income after all operating expenses have been accounted for and deducted from the effective gross income; expenses are adjusted to reflect normal or typical expenditure for the year.
- Equity Dividend is the net income remaining after debt service is paid.
- **Reversion** is the lump-sum benefit an investor receives upon termination of an investment or at an intermediate analysis period during the term of an investment. This amount is calculated before or after the mortgage balance is deducted.

# **Operating Expenses**

- Defined as periodic operating expenses necessary to maintain the real property and maintain the income flow.
- Three categories fixed, variable and replacement allowances.
  - **fixed expenses** are expenses that do not vary with occupancy and have to be paid even when property is vacant. Examples are taxes and insurance. Amount is fairly constant from year to year.
  - **variable expenses** generally vary with the level of occupancy, similar property types reflect a reasonably consistent pattern in relation to its gross income.
  - **replacement allowances** are funds set aside to replace building components that wear out more rapidly than the building itself.

# **Rates of Return**

- The rate of return an investor seeks is a 1) return **OF** and 2) return **ON** their investments.
- Discount rates are defined as rates that convert any future cash flow into a present value figure.
- Rates found by examining the market sales of similar properties.

• Overall capitalization rate is a rate that reflects the relationship between a single year's net operating income and the total property value.

# **Estimating Rates**

- Rate is influenced by the degree of perceived risk, market expectations about future inflation, market expectations about the future, other rates for alternative investments, and rates earned by comparable properties in the past, availability of debt financing and prevailing tax laws.
- Rates are prospective and not historical rates.
- Higher cap rates for less desirable properties, lower cap rates for better ones.
- Rates are estimated based on the above criteria.

## Risk

- Higher risks require higher rewards and can lead to losses and not gains.
- Each type of property has its own risk factor.

# **Inflation**

- Inflation is an increase in the volume of money and credit and a rise in the general level of prices and erosion of purchasing power.
- Inflation can be expected or unexpected.
- Appreciation in the real value results from an excess of demand over supply and an increase in property values.

# **PROCEDURE**

- Supports two basic methods direct capitalization and yield capitalization.
- Direct uses one year's income to establish a value. (Required in BUSI 330).
- Yield capitalization uses a series of cash flows over time together with a reversion value or resale proceeds to establish value. (Not required in BUSI 330).

# **Steps in the Income Approach**

- Research income and expenses for the subject and the comparables.
- Estimate the potential gross income (PGI).
- Estimate vacancy and collection allowances.
- Subtract vacancy and collection from the PGI to arrive at Effective Gross Income (EGI).
- Estimate total operating expenses fixed and variable.
- Subtract expenses from the EGI to arrive at the Net Operating Income (NOI).
- Apply the direct capitalization rate to the NOI to arrive at a value.

# **Direct Capitalization**

- Makes use of a single year's income and a market derived overall capitalization rate.
- A very simple approach understood by many people.



# THE APPRAISAL OF REAL ESTATE 3<sup>RD</sup> CANADIAN EDITION BUSI 330

REVIEW NOTES by CHUCK DUNN

- Important to analyze income and expenses correctly and accurately
- Consider the future income and expenses, i.e. in keeping with the principal of anticipation that value is the present worth of future benefits.
- May consider a single year or series of years as in the actual level of income at time of appraisal, the first year of the investment, the forecasted income over a specified projected period or the stabilized average income over a specified projected period. Depends on availability of data and capitalization method employed.

# **Estimating and Adjusting Market Rent**

- Must verify the current rents by talking to tenants, reviewing leases, and examining the market.
- Compare to previous 1-3 years as a guide.
- Describe the rental income in unit basis for comparison purposes. See page 21.28 for sample statement of an Apartment.
- Examine similar properties to see if rents are market.
- Rents will vary with rights being leased, market conditions, location, physical characteristics, division of expenses, use of the property, and non-realty components.

# **Characteristic Income and Expenses of Principal Property Types**

Industrial - Medium - to long-term net or modified gross lease, contract rent Retail (major anchor tenants) - long-term net lease, base and percentage (overage) rent Retail (smaller tenants) - short- to medium-term net lease, base and percentage rent Multi-family - lease 1 year or less, modified gross leases, contract rent Office - medium- to long-term lease, base rent may be adjusted upwards

# INCOME AND EXPENSE DATA

- Study the vacancy and collection loss of similar buildings.
- Build a data base of rental data, find sources for this information.
- Land titles records often have registered leases on file.
- For comparative purposes, rates should be based on rent per apartment unit, per room, or per square foot for retail.

## **Lease Data**

- Read and understand the lease and all its terms.
- Pages 21.6 7 lists information a typical lease might contain.
- Rent is the amount paid to use space.
- Appraiser considers rent from all sources.
- Refer to page 21.8, figure 21.1 for a sample worksheet when analyzing a lease.

## Lease considerations:

- Rental concessions such as free rent or extra tenant improvements (TI's).
  - An outline of expense obligations for the lessor and lessee.
  - A renewal option that allows the lease term to be extended for one or more periods.
  - An expense cap that limits the expense share of the tenant or expense stop clause with regards the landlord where the tenant assumes expenses above a certain level.
  - An escalation clause that provides the adjustment of a price or rent based on an event or index. It passes those increases in operating expenses to the tenant on a pro rata basis.

- An expense recovery clause pertains to some or all of the operating expenses paid by the landlord and are recoverable from the tenant.
- A purchase option that allows the lessee to purchase the leased property or match any offer to purchase.
- An escape clause that allows the tenant to cancel a lease.
- A kick-out clause that allows the landlord to cancel a lease.
- A buyout clause that allows a payment by either the landlord or the tenant to induce the cancellation of a lease.
- A condition that continued occupancy depends on the occupancy of another tenant.
- Tenant improvements (TI'S) is the dollar amount provided to the tenant from the landlord.
- A non-compete clause that limits tenants from operating a similar business in a competing location.
- A dark store clause that states the tenant must do business at the site during the full term of the lease and cannot open a competitive store within a specified time period prior to the expiration of the lease. This type of clause may not be considered legal in all jurisdictions.
- An exclusive use clause that limits the landlord from leasing to other tenants conducting a similar business within the complex, thereby controlling the retail mix.

# DEVELOPING RECONSTRUCTED OPERATING STATEMENTS

- Start with research and analysis of the income and expense history of the subject and competitive properties.
- Source of published real estate data on rentals and expenses is useful.
- Any forecast changes for the expenses, e.g. insurance costs increasing because of 9/11.
- Page 21.14, table 21.2 presents historical fixed and variable expense data.

# **Potential Gross Income (PGI)**

- Based on 100% occupancy using contract rents or market rents for vacant space.
- Includes all sources of rent including owner- occupied space, percentage and overage rent for retail spaces, escalation and reimbursements. With reference to apartment buildings include the parking, laundry and rental from party rooms.

# **Vacancy and Collection Loss**

- Based on physical vacancy or collection loss due to concessions or default by tenants..
- Collection loss estimation based on percentage of PGI and depends on history and quality of subject
  within the market conditions researched from published data such as that from CMHC, real estate
  associations, appraiser's own files.

# **Effective Gross Income**

The potential gross income from all sources less the vacancy and collection loss for each of those income sources as each has its own vacancy and collection loss ratio.

# **Operating Expenses**

- Those periodic expenditures necessary to maintain the property and its effective gross income (EGI) assuming prudent and competent management.
- Based on the typical expenses forecast for the property on an annual basis and does not include those extraordinary expenses which are accounted for in the year that they occur.
  - **NOTE:** Mortgage payments, personal expenses and personal income taxes are **NOT OPERATING** expenses and are omitted from the expense statement.

• Expenses categorized as fixed, variable and replacement allowance.

Some typical expenses are listed below and is noted that in multi-family apartment buildings, a major portion of expenses are paid by the landlord whereas in other commercial type properties such as industrial and retail buildings, (more focus given in the BUSI 331 course), the allocation of the expenses are usually negotiated between the landlord and the tenants.

# **Fixed Expenses:**

**property taxes** – available from tax data in public records. Projection of expense based on past tax trends, present taxes, municipality's future expenditures and sales activity in area. **insurance premiums** - fire, owners liability, extended coverage.

## Variable expenses:

- management fees usually expressed as a % of EGI
- leasing commissions fees paid to an agent for leasing tenant space.
- **utilities** based on past charges and current trends and measured per square foot, or per apartment unit to estimate probable future expenses
- gas major expense when used for heat or air-conditioning and may be paid by landlord or tenant
- water depending on type of property is paid by the tenant or if paid by landlord as in the case of multi-family property type, it is expensed by the landlord.
- sewer major expense in hotels, recreational facilities, apartments and office buildings.
- payroll or wages of employees payments to those employees essential to operation and management whose salaries are not included in another category such as the apartment manager or superintendent who resides in one of the suites.
- cleaning includes cleaning costs and cleaning supplies.
- maintenance and repair of the structure incurred during the year to maintain the structure and ensure good working order of major components.
- **decorating and painting** include those costs to attract new tenants and varies with local practice and supply and demand for space. .
- **grounds or landscaping maintenance** varies widely depending on type of property and size of site area. Expense may be entirely or partly reimbursed through an increment added to the rents of tenants served by the facility.
- **security** may be required in certain areas with costs related to specific needs.
- **supplies** include those costs such as cleaning, office and miscellaneous items not included elsewhere.
- garbage and rubbish removal usually contracted and expensed.
- miscellaneous expenses any other costs not categorized, but wise to categorize them.

In all situations the appraiser must review the expenses to ensure they relate to the **operations** of the building and are reasonable, and verify the amounts paid with published statistics and the past data of the subject property.

# **Replacement Allowances**

- In practice, this is sometimes difficult to assess in apartment buildings as some owners may expense while others may capitalize these items. Requires the appraiser to determine that allowance is reasonable, and in line with published statistics and the past history of the subject.
- Replacement allowances are usually for major expenditures for short-lived components, those items that wear out more quickly than the building itself and must be replaced during the building's economic life such as the carpeting, exterior painting, or the roof covering.
- Text on page 21.22 states that "the scope of items covered in a replacement allowance is a matter of appraisal judgement based on market evidence."

• Be consistent in the treatment of expenditures to ensure comparability amongst the comparables and the subject.

# **Net Operating Income**

- The income remaining after the total operating expenses are deducted from the EGI.
- This figure is capitalized with the discount rate to arrive at a capital value.
   Mortgage debt service the annual sum of all mortgage payments.
   Equity dividend the income that remains after all mortgage debt is deducted from NOI.

# **Expense and Income Ratios**

- The ratio of total operating expense to effective gross income is the operating expense ratio and is used as a guide to see if the ratio falls within and is typical of industry guidelines.
- If it doesn't, then all items need to be reviewed as to why there is a variance.
- Ratios published by various real estate associations such as BOMA and IREM are useful in analysis
  but the appraiser still need to develop own ratios from the comparables and subject property to
  determine accuracy and reliability of data.

## SAMPLE ONE-YEAR INCOME AND EXPENSE FORECAST

- Refer to pages 21.28 -29 for a reconstructed income and expense statement for an apartment building.
   Refer to page 21.30 for the Income and Expense Analysis (Multi-Year Forecast 6 years) for the above apartment building
- Besides the net operating income ratio, appraisers may establish a ratio for each expense in relation to the EGI to see that they fall in line with industry standards.



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- See workbook for the excluded sections.
- Method is to convert one year's income into a value indication.
- Good if property is operating on a stabilized basis and adequate sales of similar properties.
- Simple and easy to explain.
- Expresses market thinking.

# DERIVATION OF OVERALL CAPITALIZATION RATES

- Value is found by dividing the Net Operating Income (NOI) by the overall capitalization rate, called R<sub>0</sub> or by multiplying the income estimate by an appropriate factor.
- Capitalization Rate is found from comparable sales of similar properties or effective gross income multipliers and net income ratios.

# Derivation of R<sub>0</sub> from Comparable Sales

- Good when sufficient sales of competitive type properties are available.
- Comparable's sale price, rent structure and expenses must be available for analysis.
- Market conditions must be similar to the appraisal date conditions.
- Similar treatment of income and expenses for both comparables and subject required.
- Must ensure no abnormal financing exists as it may affect the sale price.
- Risk level of comparables should be similar to the subject.
- Refer to page 22.4, table 22.2 for derivation of rate from comparable sales.
- Final rate used for the subject is determined by the analysis of and the appraiser's judgement of the data.

# Derivation of Ro from Effective Gross Income Multipliers

- It may occur that an overall capitalization rate cannot be derived directly because not all data requirements can be met but gross income data can be obtained and verified. In such a case an *effective gross income multiplier* is derived and used in conjunction with a net income ratio (NIR) to produce an overall capitalization rate. It is the complement of the operating expense ratio (OER). Thus NIR = 1 OER.
- The formula for deriving the overall capitalization rate from a net income ratio and effective gross income multiplier is:
  - $R_0 = NIR / EGIM$ .
- Review the example given on page 22.6 and the data on page 22.4, table 22.2.

# **Derivation of Gross Income Multipliers (GIM's)**

- GIM's are used to compare income-producing characteristics of properties.
- Conversion of the PGI or the EGI into an opinion of value by using the relevant GIM.
- Method related to direct capitalization because rates are reciprocals of multipliers.
- Derivation of GIM requires the annual gross income figures of the comparables at the time of sale or their projected income over the first year.
- The sale price of the comparable is divided by the PGI or EGI to arrive at the multiplier.
- The multiplier must be applied on the same basis and timing of income that it is derived namely, the PGI multiplier is applied to the PGI of the subject property using next year's expected income if that is the criteria.
- It is a good rule of thumb as long as the incomes have similar characteristics in terms of location, physical and investment attributes.
- Refer to page 22.18 for an example.



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- Purpose is to reconcile the different approaches into one final estimate of value.
- Some approaches may give two indications of value.
- Refer to page 25.2, table 25.1 on questions to ask about the final reconciliation for each of the three approaches.

# FINAL RECONCILIATION

- The appraiser reconsiders the whole appraisal making sure the data, analytical techniques and logic have led to consistent opinion.
- Questions to ask at this point.
  - Is the effective age consistent with the physical condition reported?
  - Is the same physical condition applied when making adjustments to rents, expenses of the sales comparables?
  - Are of all the approaches consistent with the appraiser's conclusions of highest and best use?
  - Does the value indications of the approaches used reflect the same defined value?
  - Are the property rights consistent throughout the appraisal?
  - Is the market area analysis consistent with the approaches to value? For example, if the area and neighbourhood descriptions indicate a good, strong market do the approaches reflect the same? If the market is slow or declining, is this evident in the approaches applied?
  - Check all mathematical calculations.
  - Check your logic and assess whether the approaches and methods applied consider all the available data and lead to meaningful conclusions.
  - Have all the client's needs been met as presented in the letter of undertaking signed by the client and the appraiser?

# RECONCILIATION CRITERIA

# **Appropriateness**

- Final value need not be the same as the most appropriate approach.
- It can be modified by the other supporting approaches.
- If two approaches are applicable, one may be a more reliable.

## Accuracy

- Refers to the accuracy of the data and to the adjustments made to each comparable.
- Is the appraiser confident about the adjustments ie., good support data and adequate explanations as to why and how the adjustments were applied?
- Adjustments are good if adequate comparables available, adjustments are reasonable, and net and gross dollar adjustments are reasonable.
- Are sales recent so that large time adjustments are not required? If not, explain the time difference.

# **Quality of Evidence**

- Is there adequate data to base your opinions?
- Has the data been verified ensuring reliability?
- If data is scarce then final value may be questionable.
- Remember one sale does not make a market.
- All data is historical so the appraiser must anticipate the future.

## FINAL OPINION OF VALUE

- The final opinion of value may be stated as a single figure or as a range of values.
- Final value depends on the client's needs and requests.
- Single figure required for:
  - real estate taxation;
  - depreciation calculation for income taxes;
  - compensation in liability or expropriation cases;
  - determining rent of premises;
  - making property transfers; or
  - mortgage based loans.
- Usually the final value is rounded up or down to the nearest hundred or thousand dollar figure depending upon the final amount.
- Since appraisers are giving an opinion of value, a range is best.
- Appraisers give an estimate of a final value.
- Final sale price is determined by the parties involved in the transaction.
- If reporting a range then the final value will fall somewhere in the range.
- If market is strong then maybe the upper end is realistic.
- If market is weak then maybe the lower end of the range is more realistic.
- If range is too wide then it may be of no use to the client.
- If range too small then it may imply precision that is not warranted.
- Finally, use common sense when reporting the final estimated opinion of value.



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- The report should lead the client to the final estimate of value.
- Therefore, good communication and writing skills are important.

# **Professional Standards for Appraisal Reports**

- You must communicate in a meaningful way to all the users.
- Avoid any misleading statements.
- Fully explain all statements, ie, if you say the kitchen was renovated 5 years ago what does this really mean? You should state the cabinets were re-placed, new granite counter tops, new stainless steel sink and taps. The flooring was replaced with stone tile and new recessed pot lights were installed in the kitchen work area and a ceiling light in the eating area. Electrical wiring was brought up to standard in the kitchen area.
- Appraisal members must conform to requirements for appraisal reports, consulting and reviewing referred to as the Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP).
- CUSPAP sets out the standards for the appraisal report.
- CUSPAP does not dictate the form, format or style of reporting.
- The substantive content of a report determines its compliance.

## APPRAISAL REPORT

- Narrative-comprehensive and detailed and the Extraordinary Limiting Conditions are not invoked.
- Short Narrative concise and briefly descriptive.
- Form -standardized format with check off boxes and short narrative comments.

# TYPES OF REPORTS

- Reports can be written or oral.
- If a client does not require a detailed report then the appraiser must still do his or her analysis and scope as required by CUSPAP.
- All data must be kept on file for future reference.
- In the final analysis it must conform to the CUSPAP.

## **Oral Reports**

- Oral reports can be testimony in a court of law, either evidence, examination of discovery, or a deposition under oath.
- All file notes and files must be kept.

## WRITTEN REPORTS

# **Form Reports**

- Used by financial institutions, insurance companies and government agencies.
- For purchase and sale and mortgage financing.
- Forms are efficient and convenient to read.
- See pages 26.19 22 for a copy of the AIC Residential Appraisal Report Form
- Form ensures completion of required data and easy reference for the client.
- Mainly used for single family dwellings and residential strata units.

- Not appropriate for more complicated appraisals.
- If additional data is required then the forms can be expanded with additional narrative comments on attached pages.

## NARRATIVE APPRAISAL REPORTS

- This type of report means the appraiser can fully report and explain their opinion of value.
- Data presentation depends on the nature and length of the report.
- Report should be logical and sound in reasoning.
- Report should be descriptive but not overly lengthy and wordy.
- First impressions created by:
  - good quality paper, cover and binding.
  - readable and attractive font style and point selection.
  - photos and charts easy to read and understand and either placed in the body of the report or the addenda.
  - table of contents and sections clearly identified.
  - computers and printers have aided in producing high quality, attractive reports.

# **General Outline**

Most reports have five major parts:

Part One -Introduction

Part Two-Identification of the Appraisal Problem and Scope of Work

Part Three-Presentation of Data

Part Four-Analysis of Data and Conclusions

Part Five-Addenda

See page 26.6, figure 26.1 for the detailed Outline of Narrative Appraisal Report.

Pages 26.7 -18 discuss in detail the above 5 Parts and what data/statement should be included in the various sub-headings.

Refer to page 26.8, figure 26.2 for the Certification Statement and the responsibilities entailed when signed by the appraiser as required by CUSPAP.

Page 26.11, figure 26.3 lists some ordinary Assumptions and Limiting Conditions that an appraiser can use as a guide. Additions and deletions can be made to suit the appraisal at hand.

Make sure that items in the addenda are cross-referenced in the body of the report. The addenda support discussion in the body of the report and helps clarify the readers understanding. Often students have items in the addenda without any explanation of, or reference to, in the report.

Similarly maps and charts in the addenda should be clear, easy to read and understand. Show the subject property on the map for context and once again, to clarify the readers understanding.

Finally, take the time to proof your work and ask yourself whether your final estimate of value makes sense in relation to the data presented in the report.

Date and sign it and then send it off with your invoice to the client.