THE APPRAISAL
OF REAL ESTATE
3RD CANADIAN EDITION
BUSI 330

REVIEW NOTES
by CHUCK DUNN

CHAPTER 16

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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 depend 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

<table>
<thead>
<tr>
<th>Item</th>
<th>Subject</th>
<th>Comp. #1</th>
<th>Comp. #2</th>
<th>Comp. #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>1234 Main St., Vancouver, B.C.</td>
<td>1200 Major St., Vancouver, B.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Description</td>
<td>Lot 21, Plan 3345, NWD PID 123-456-789</td>
<td>Lot 15, Block 45, Plan 5421 PID 123-456-987</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale Date</td>
<td>Mar-05-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrument No.</td>
<td>#54908321</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration date</td>
<td>Mar-23-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor</td>
<td>W E Moen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchaser</td>
<td>B C Lewqui</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale Price</td>
<td>$160,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rights conveyed</td>
<td>Fee Simple</td>
<td>Fee Simple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financing</td>
<td>Typical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conditions of sale</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Difference (months)</td>
<td>3 mo at 1% per month</td>
<td>3 mo at 1% per month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoning</td>
<td>R-1</td>
<td>R-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Similar</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Frontage/Depth</td>
<td>12 x 35 m</td>
<td>12.3 x 34 m</td>
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</tr>
<tr>
<td>Lot area</td>
<td>420 m²</td>
<td>418.2 m²</td>
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</tr>
<tr>
<td>Topography</td>
<td>Flat</td>
<td>Flat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>All</td>
<td>All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior/corner lot</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Comments</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>
LAND VALUE - SAMPLE ADJUSTMENT CHART

Data Adjustment Page

<table>
<thead>
<tr>
<th>Item</th>
<th>Comp #1</th>
<th>Comp. #2</th>
<th>Comp. #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale price</td>
<td>$160,000</td>
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</tr>
<tr>
<td>Real property rights conveyed adjustment</td>
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</tr>
<tr>
<td>Adjusted price</td>
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</tr>
<tr>
<td>Financing adjustment</td>
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<td></td>
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<tr>
<td>Conditions of sale adjustment</td>
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</tr>
<tr>
<td>Adjusted price</td>
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</tr>
<tr>
<td>Date of sale adjustment</td>
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<tr>
<td>Adjusted price</td>
<td>$164,800</td>
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</tr>
<tr>
<td>Other adjustments as required</td>
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<td></td>
<td></td>
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<tr>
<td>Zoning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frontage/depth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lot area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>+ $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior/corner lot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Other Adjustments</td>
<td>+ $1,000</td>
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<td></td>
</tr>
<tr>
<td><strong>Final Adjusted Sale Price</strong></td>
<td>$165,800</td>
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<td></td>
</tr>
<tr>
<td>Adjusted sale price/front metre</td>
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<tr>
<td>Adjusted sale price/square metre</td>
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<tr>
<td><strong>Total adjustment</strong></td>
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<tr>
<td><strong>Total adjustment as % of Sale Price</strong></td>
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</tbody>
</table>