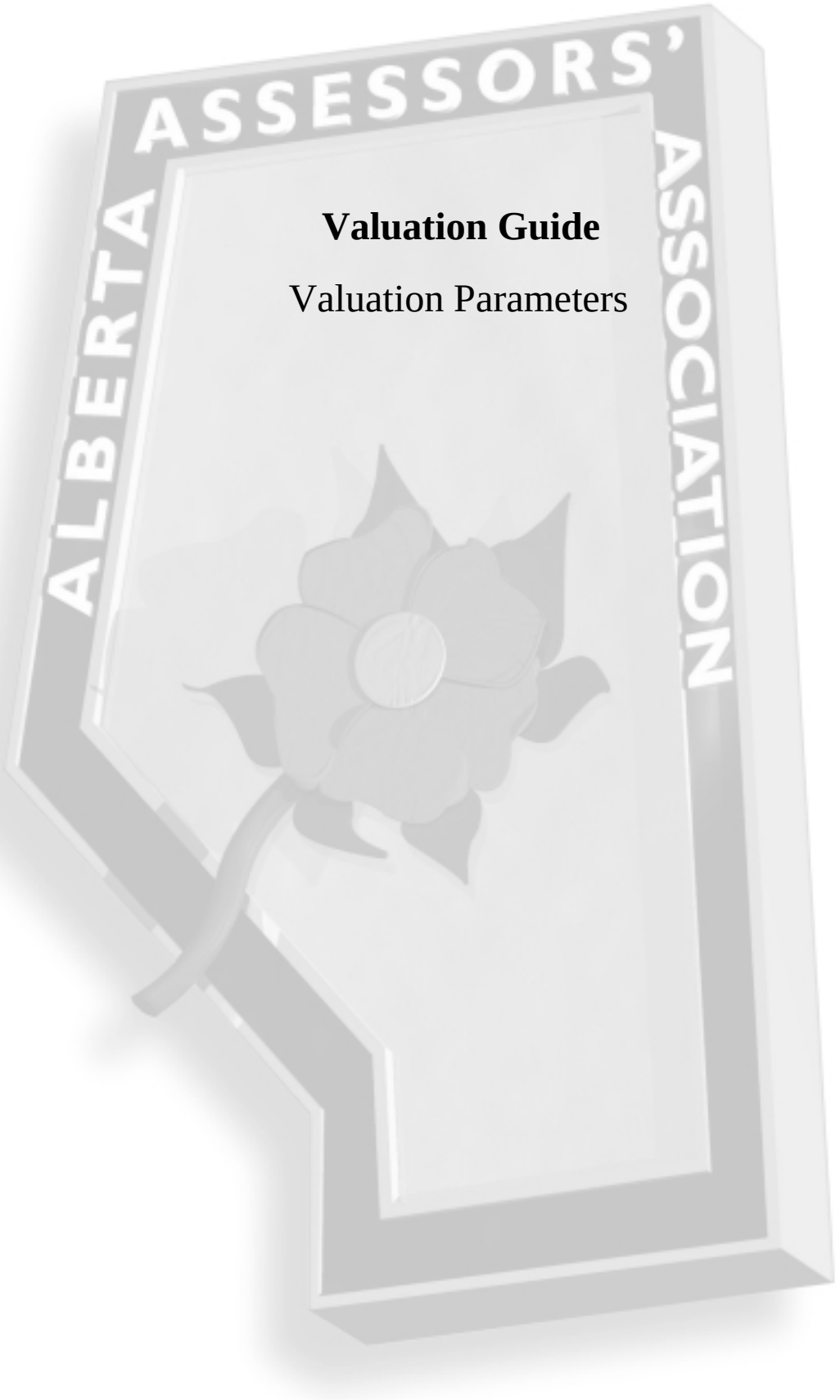

Valuation Guide

Valuation Parameters

The Alberta Assessors' Association is not engaged in rendering legal, accounting, assessing, or other professional advice. If legal advice or other expert assistance is required, the services of a competent professional should be obtained. Any person utilizing any of the analysis in this Guide should satisfy themselves that the analysis is applicable to their particular circumstances, and is consistent with current legislation and case law. Users of this Guide are reminded that legislation, government policy, and the contents of this Guide, may change from time to time, and that they should ensure that any information they are relying on is current.

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Valuation Parameters

Introduction to Valuation Parameters

What are valuation parameters?

Valuation parameters are the factors (or range of factors) found in every valuation procedure that dictate and assist the assessor in the valuation of the property.

Why are valuation parameters important?

1. Valuation parameters are the critical elements in a valuation process; they are the factors that determine the value of a property.

   For example, the following market value formula for a motel has two variables: number of units and value per unit.

   Motel Market Value = # of Units x Value per Unit

   The "number of units" is a *variable* dictated by physical evidence.

   The "value per unit" is a *valuation parameter* set by the assessor through analysis of market sales data.

Once the valuation parameter (or range of valuation parameters) is set for a particular class of motels, it becomes possible to determine values for all motels in that class by determining the number of rooms and applying the formula.

> *The assessment system in Alberta is set up so that every valuation process employs one or more valuation parameters.*

2. Valuation parameters are also the "tools" that assist in establishing equity in the mass appraisal process by limiting the values derived by the assessor to those within the suggested guidelines.

   Under the Municipal Government Act, the assessor is obligated to establish the fee simple value of real estate. To achieve this end, he or she must establish the value expected from the market place, or the typical value. Valuation parameters are studied, analyzed, and set to reflect these typical values.

It follows that if the valuation parameters are set up and applied in a manner that achieves typical market values for all similar properties, then the assessment system will achieve equity in assessments.

By dictating a value or range of values for types of property, valuation parameters are also critical to establishing appropriate market values and a fair assessment system.

What are the *variables* or factors in a valuation process?

The market value of every type of property is guided by and relates to a number of variables:

1. The physical characteristics of the property:

   Building size/ areas,

   Construction style/ materials,

   Condition of improvements,

   Building configuration,

   Site size, and

   Location.

2. The supply and demand conditions in the market place.

Every valuation process relies upon these types of inputs.

What are the *valuation parameters* in a valuation process?

The *valuation parameters* outlined in each valuation process are guides to indicate both the appropriate variables to consider in the analysis of values, i.e., the valuation formula, and the value or range of values that would be appropriate to use in the analysis. Valuation parameters consist of the following types of factors:

1. The costs of construction.
2. The income characteristics of the real estate:

   Rents,

   Other income, and

   Operating expenses, etc.

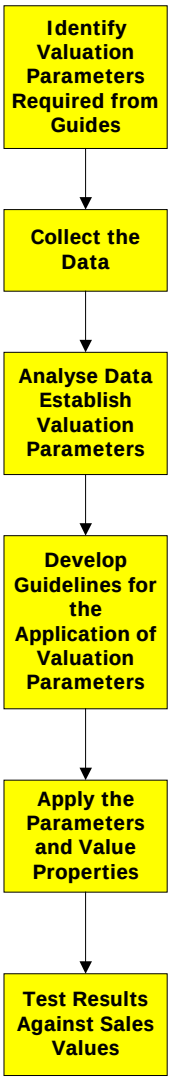
3. The market place:

   Risk profiles, i.e., capitalization rates, and

   Market sales prices.

1.0 Purpose

The purpose of this guide is to outline the process by which all valuation parameters used in the various valuation guides should be developed, or in the case of costs, where such information can be found.



2.0 Outline of Valuation Parameter Process

1. **Review the guides and identify the parameters to be developed.**

2. **Collect the data needed to establish the parameters.**

3. **Analyze the data by class of property and tabulate results.**

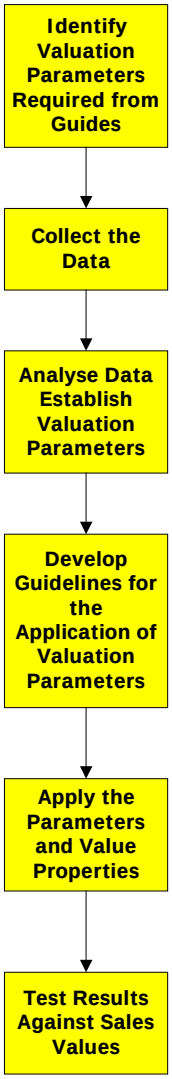
4. **Determine the amount of flexibility or latitude necessary in the valuation process and how this will be accommodated by the valuation parameters. Develop guidelines for the application of the valuation parameters.**

5. **Apply the parameters to the valuation process and value properties.**

6. **Test results against available sales data.**

Note: The valuation *variables*, i.e., the physical description, size, etc., and market conditions should be determined for each property.

How the Process Works



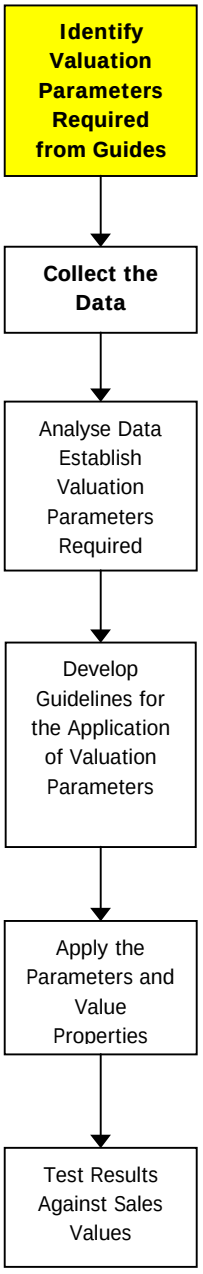
In the process of developing values for particular property types, the steps to follow are:

1. Review the valuation guide to determine the valuation process, the variables required to describe the property, and the valuation parameters required to determine the values.
2. Research and develop the parameters.
3. Apply them in the valuation model as suggested in each guide.

The focus of this guide is to explain how to research and develop the necessary valuation parameters.

2.1 Identify Valuation Parameters

Each valuation guide sets forth a valuation process containing various valuation parameters. A review of these procedures and required parameters is set forth at Table 1 beginning on the next page.



Note: The formulas illustrated below contain the following variables:

GLA	=	Gross leasable area
OI	=	Other income
OE	=	Operating expense
NR	=	Net rent
GR	=	Gross rent
SF	=	Square feet
PAR	=	Average room rate per available room
FFE	=	Value of furniture, fixtures, and equipment
INT	=	Value of intangibles
CR	=	Cost rate
V	=	Vacancy
UE	=	Unrecovered expense
CAP	=	Capitalization rate
OAC	=	Overall capitalization rate
PSF	=	Sales price per square foot
PCF	=	Sales price per cubic foot
DPN	=	Depreciation

Table 1: Summary of Valuation Parameters

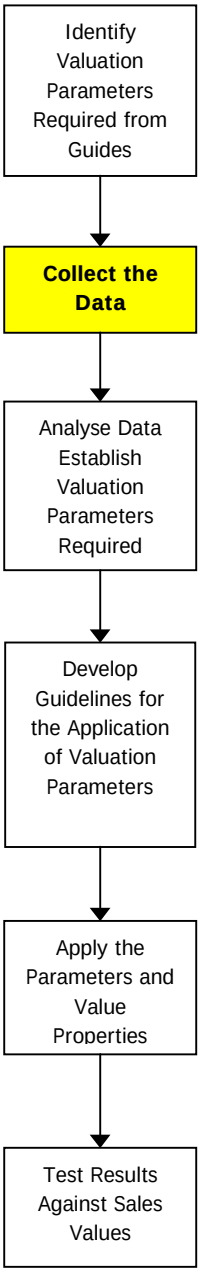
Guide	Formula: Value =	Valuation Parameters
Shopping Centres	((GLA x NR) + OI –V – UE) / CAP	NR range of typical rents according to class of centre and type of store V typical vacancy rate - % of income UE typical vacant space shortfall and other unrecovered management expense CAP range of cap rates determined from market
Hotels / Motels	((Rooms x PAR) + OI – OE – FFE – INT) / OAC	PAR stabilized avg. room rates - normalized to typical market rates by class of hotel OE operating expenses stabilized and normalized to typical for class FFE typical deduction by class INT typical intangible deduction by class OAC overall rate determined from market
Office Buildings	((GLA x NR) + OI –V – UE) / CAP	NR typical full floor net rents according to class of office and type of space V typical vacancy rate - % of income UE typical vacant space shortfall and other unrecovered management expense CAP range of cap rates determined from market
Multi-Residential	Units x GR x GIM Or ((Units x GR) – OE – V) / OAC	GR typical gross rent per unit by class of building GIM gross income multiplier – from market sales analysis OE typical operating expenses by class of bldg. OAC developed from market sales
Commercial Strip Properties	((GLA x NR) + OI –V – UE) / CAP or GLA x GR x GIM	NR range of typical rents according to class and type of store V typical vacancy rate - % of income UE typical unrecovered management expense CAP range of cap rates determined from market GR typical gross rent by class of strip comm. GIM gross income multiplier
Golf Courses	Improvements x CR – DPN + Land Or (INC – OE) / OAC	CR cost rates from manual or actual – include golf course improvements, by course type DPN from manual or market sales INC typical stabilized income by course type OE typical stabilized expenses by course type OAC rate from market sales analysis

Table 1: Summary of Valuation Parameters - continued

Guide	Formula: Value =	Valuation Parameters
Warehouses	SF x CR – DPN + Land Or PCF x CF Or ((GLA x NR) + OI –V – UE) / OAC	CR replacement costs per square foot from manual or actual DPN depreciation from manual and/or market PCF from market sales analysis by class of warehouse NR range of typical rents according to class of warehouse V typical vacancy rate - % of income UE unrecovered management expense OAC cap rates determined from market
Industrial Buildings	SF x CR – DPN + Land	CR reproduction costs per square foot from manual or actual DPN depreciation from manual and/or market
Grain Elevators	SF x CR – DPN + Land	CR replacement costs per square foot from manual or actual DPN depreciation from manual and from obsolescence study
Gas Bars	Improvements x CR – DPN	CR cost rates from manual or actual DPN from manual or market sales
Manufactured Home Communities	Land + Home	Land by market sales analysis and by income analysis ((Sites x GR) – Oe) / OAC Home by market sales analysis by type and square foot

Note: The formulas shown above are simplified and abbreviated versions of the valuation process. Please refer to each guide for the proper valuation procedure to be followed.

Once the variables and the valuation parameters in the valuation procedure have been identified the next step is to collect the necessary data.



2.2 Collect the Appropriate Data

This step in the process makes sure that there is enough information to develop appropriate valuation parameters and values for a property.

More than any other factor the type and quality of information available dictates the methods that can be used to value properties. The efforts put in at the information collection stage will determine the quality of the final analysis.

Data Collection Guidelines

There are several obvious rules to follow in the collection of data:

The size, nature, and condition of each property should be established,

The current market conditions should be analyzed,

For a valuation process involving the cost approach, cost rates and cost data will be required,

For a valuation relying on the income approach, income and expense data will be required,

A sales comparison process relies upon sales data, and

Data should be pertinent to the valuation date.

Sources of Information

In a general sense there are four sources of information:

The existing assessment records,

The owner/operator of the property,

Property inspection, and

Other government or industry publications, industry associations, and appraisal/real estate reports.

All sources of information are important and all sources should be considered in any valuation process.

The Existing Assessment Records

The existing assessment records may have the appropriate information on file, may be dated, or may be oriented to a valuation approach that is no longer employed in the analysis of values for that type of property.

It is important that assessment records be kept current and that appropriate information is on hand to determine the values of properties. For example, it is not appropriate to use the gross floor area measurement in the valuation of a shopping centre using the income approach. Rents are set on the basis of gross leaseable areas, not gross floor areas.

> Review the assessment records of each property to ensure that the description and measurements used in the valuation formula are appropriate. When they are not appropriate, further analysis will be required.

The Owner/ Operator of a Property

> The owner, manager, and/ or operator of a property is the best source of current information about the operations, utility, and functionality of a property.

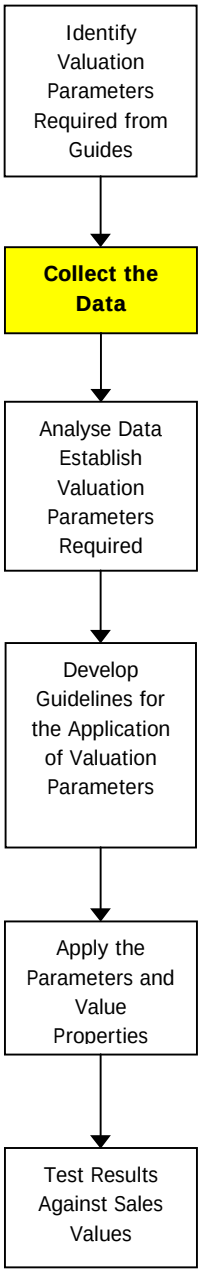
There are several ways to approach the property owner to obtain information about a property:

A questionnaire by mail (see shopping centre example on the following pages),

Telephone, and/or

A meeting.

The first method is the least time consuming and the last is the most time consuming. However, the last method is the most interactive so it is also likely to produce the best results in terms of information supplied.



Information Request Form – Shopping Centre

As part of the ongoing assessment process the Assessment Department requires certain income and expense information from you pertaining to the property identified as:

Name	
Address	
City	
Roll #	

Authorization for such requests arises out of section 295 of the Alberta Municipal Government Act (the Act). Any information received will be treated in a confidential manner as outlined in the *Act* . Failure to provide information has potential consequences as outlined in the *Act* .

Information Required

Rent Roll pertaining to the subject property for the period covering: **July 1997**

1996 Income and Expense Statement pertaining to the subject property

1997 Income and Expense Statement pertaining to the subject property

Information Format

Information can be submitted in either **electronic** (by computer disk), or **paper format,** or by filling in the **enclosed forms**. Our preference is to receive **both electronic and paper formats.**

Information can be submitted in the format used by the property owner but at a **minimum** the following information should be provided:

Minimum Information Requirement on Each Tenant - Rent Roll Information

- Location number
- Tenant (trade) name
- Gross leasable area
- Lease start date
- Lease end date
- Base rent (per month total, year total, or annually per square foot)
- Overage rent (per month total, year total, or annually per square foot)

Include information on all tenants and vacant space. Indicate the date of the Rent Roll.

Minimum Information Requirement from Income and Expense Statement

- Rental income totals (all forms of rent)
- Other income
- Expense recoveries
- Tax recoveries
- Other recoveries
- Operating expense total
- Realty taxes

Rent Roll Request Form – Shopping Centre

TO BE FILLED OUT IN CASES WHERE RENT ROLL INFORMATION IS OTHERWISE NOT AVAILABLE
(AS PER INFORMATION REQUEST).

** MAKE AS MANY COPIES AS REQUIRED **

Centre:
Address:
Rent roll date:

Loc.	Trade Name	Rent Area GLA	**Lease Dates** Start	End	**Rents** Base	Average	**Total Rent**

Income and Expense Request Form - Shopping Centre

TO BE FILLED OUT IN CASES WHERE INCOME AND EXPENSE INFORMATION IS OTHERWISE NOT AVAILABLE

Centre:	
Address:	

RENTAL INCOME	**1996**	**1997**
RENTAL INCOME - BASIC		
PERCENTAGE OR OVERAGE RENT		
STORAGE RENT		
OTHER RENT		
OTHER INCOME		
TOTAL RENT		
EXPENSE RECOVERIES		
RECOVERIES - OTHER		
RECOVERIES - REALTY TAXES		
MISCELLANEOUS		
TOTAL INCOME		

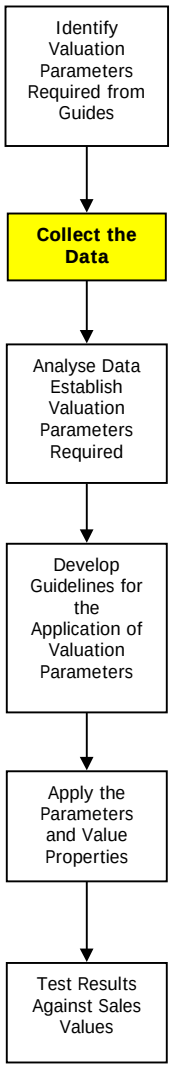
OPERATING EXPENSES		
INSURANCE		
OPERATING		
MAINTENANCE		
CLEANING		
UTILITIES		
ADMINISTRATION		
MANAGEMENT		
LEASING AND PROMOTION		
OTHER EXPENSE		
TOTAL OPERATING EXPENSE		
REALTY TAXES		
TOTAL EXPENSE		

The assessor must weigh the information requirements to value a particular property against the information on hand (state of the current assessment records), as well as the time available in order to decide what approach should be used.

As a general rule, more time should be spent on more complicated properties and less time on less complicated properties. For example, it makes more sense to discuss the operations, functionality, and utility of a special purpose industrial property with the owner than interview the owner of a standard 50,000 sf warehouse.

Furthermore, all sales should be inspected and all owners interviewed.

> Time spent on talking to property owners is paid back many fold in time savings for determining depreciation, gathering overall market condition information, producing better property values, and in fewer assessment appeals.



Property Inspection

> All industrial/commercial properties should be inspected periodically on a re-inspection schedule, and/or when they sell, and/or when they have major renovations (as triggered by building permits).

A property inspection is the best source of physical information about a property and it serves several purposes:

Confirmation of assessment records on hand,

Indication of state and condition of the property, and

Confirmation of information provided by the owner and other sources.

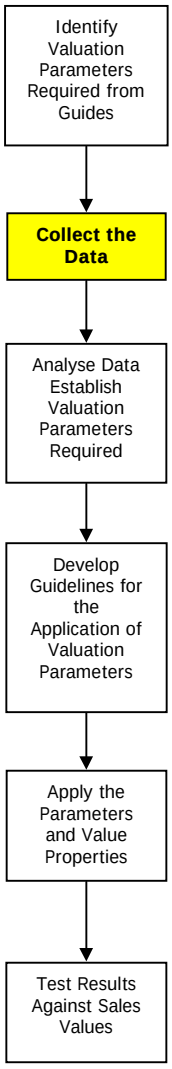
It should not be necessary to perform a detailed inspection each time, that is, taking detailed measurements of each building improvement. Such data can generally be obtained in other manners (such as building plans from the owner).

Other Sources of Information

Researching other sources of information such as government, industry, and/or real estate publications is basically taking advantage of other people's data collection efforts. In this regard, some time spent researching these publications can often save a great deal of time on direct information gathering and can often provide types of information not readily available to the assessor.

Types of Information Collected from Each Source

Assessment Records



Assessment records can be expected to be fairly detailed and accurate in some instances and not as accurate in others. For example, for most property sites, the lot size and legal description does not change frequently. However, caution should be exercised as road widenings and other issues can produce changes in these figures.

Information found in assessment records are the results of past information gathering exercises. Such information can include some or all of the following:

Site size, configuration, topography,

Building quantities, dimensions and areas,

Building construction information:

- Construction dates,
- Construction materials,
- Construction styles,
- Plans, drawings, layouts, etc.,
- Actual cost information,

Income and expense statements,

Other financial information,

Rent rolls,

Sales information:

- Price,
- Date,
- Interests sold,
- Vendor,
- Purchaser,
- Financial arrangements,

Date of last inspection and inspection report, and

Date of last contact with owner and information collected at that time.

Property information is constantly subject to change. Obviously the more outdated the assessment records the greater likelihood errors can occur.

Owner/ Operator

The owner/ operator *is the only source of certain current information*:

Plans, drawings, layouts, etc.,

Actual construction costs,

Financial records such as:

- Rent rolls,
- Vacancy rates,
- Income and expense statements,
- Financial plans and forecasts,

Sales information including:

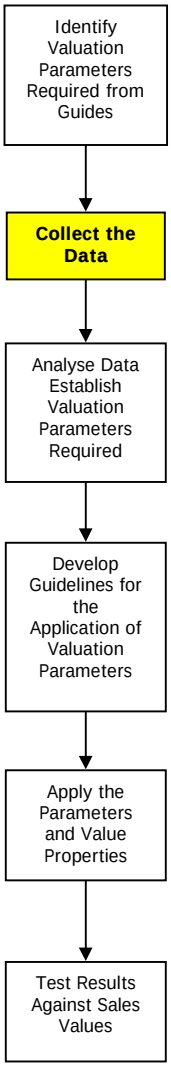
- Prices and interests sold,
- Motivations,
- Financial arrangements,

The current utility and functionality of the property,

The current production and/or performance of the property, and

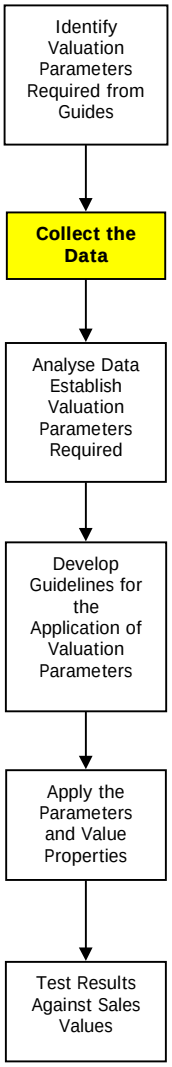
Plans for renovations or additions.

The property owner may also be a good source of information about general market conditions for his or her particular type of property, and for future expectations in that area.



Site Inspection

As discussed previously, the site inspection serves to confirm other data; to obtain physical, descriptive, or other information that is missing on the file; and to determine the current state and condition of the property. It can also be used as an opportunity to meet the owner/operator.



Other Sources

It is not possible to generalize what types of data may be found in other sources of information. Research results may produce invaluable information that is right on point, or it may produce results that are only peripheral to the valuation exercise. For example, at the present time Canada Mortgage and Housing Corporation (CMHC) keeps track of apartment vacancy rates in many (but not all) municipalities. Therefore, where it exists, this research can be extremely helpful in the valuation of apartment buildings.

Furthermore, the type and nature of information available from other sources is not constant - in some years the information may be more germane than in others.

> In each guide several sources of other information are listed. However, this list should not preclude the assessor from exploring other sources.

For example, the shopping centre valuation guide suggests the following sources of other information:

Consultants' reports,

Real estate publications, for example, *Dollars and Cents of Shopping Centres,*

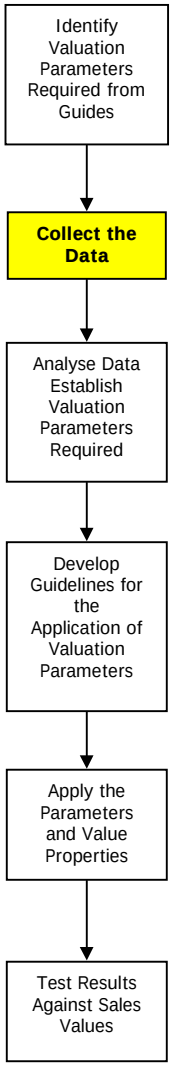
Assessment appeal reports,

Shopping centre guides and directories, for example, *Canadian Directory of Shopping Centres,* and

Industry associations.

Screening Information

All data collected should be scrutinized to ensure that it is accurate and fairly reflects the nature of the property. Becoming accomplished at the scrutinization process, that is, what to review, what to accept at face value, and what to research in greater detail, is mostly the result of experience. Some of the issues to consider in this exercise are presented below.



Assessment Records

Obviously **the age of the information** is the primary critical factor in determining the applicability of the assessment records. However, other issues will also come into play.

Who collected the information?

Is the data applicable to the valuation process?

Is the property subject to constant assessment appeals? (*Indicating that the information on hand may not be reflective of the owner's view of the property.)*

Owner/Operator

The owner is also the taxpayer and therefore a certain bias can be expected in the information presented to the assessor by some owners. However, as discussed, the owner is the only source of some of the critical information required in the valuation process for many properties.

> The assessor's job is to listen to the concerns and facts as presented by the owner, and critically review these findings through comparison of the findings and information gathered from other sources and other owners of similar property.

Site Inspection – Data Entry Form

Good notes should be made when inspecting a property. The inspection sheet should be dated and the time spent at the site should be noted. Each valuation procedure has a property data entry sheet that will assist the assessor in identifying the appropriate information to be collected for that type of property – *(For an example, see the Multi-Residential Data Entry Form on the next page.)*

Form MR1: Multi-Residential Data Entry

1.1	**Address**	1104 12th St SW	**Value Date**	1-Jul-97
1.2	Municipality	Edmonton		
1.3	Roll #	123789	Multi-Res Class	**6**

	Building Data	
1.4	Year built	1983
1.5	Renovations	no
1.6	Sites area (Sf)	136,000
1.7	Building Area (Sf)	388,020
1.8	Density (Land/Bldg)	2.85
1.9	Number of Floors	12.0
1.10	Number of Units	367
1.11	Parking Indoor spaces	250
1.12	Parking Outdoor spaces	100

Unit Types	No.	No. of Rooms	Typical Area (sf)
Bachelor/ Studio	4	3.0	750
One bedroom	114	4.0	880
Two bedroom	201	5.5	1,100
Three bedroom	48	7.0	1,325
Other			
Commercial (Sf)			
Totals	**367**	**1,910**	**388,020**
Average number of rooms /unit			**5.20**
Average unit size (sf)			**1,057**

	Inspection Notes	
1.13	Inspection date	12-May-96
1.14	Condition (Fair, Avg, Good)	Avg
1.15	Location (Fair, Avg, Good)	Avg
1.16	Quality (Fair, Avg, Good)	Avg
1.17	Rental Appeal	Avg
1.18		

	Included in Rent	Yes/No
1.19	Heat	yes
1.20	Electricity	no
1.21	Water / sewage	yes
1.22	Parking	no
1.23	Cable	yes
1.24		

Amenities	Yes/No	Comment
Air Conditioning	no	
Carpeting	yes	
Pool	yes	outdoor
Tennis courts	no	
Exercise failities	no	
Other	no	
Meeting room	yes	1,450 sf
Laundry	yes	coin operated
Furnished Apt.	no	
Refrigerator	yes	
Stove	yes	
Other Furnishings	no	

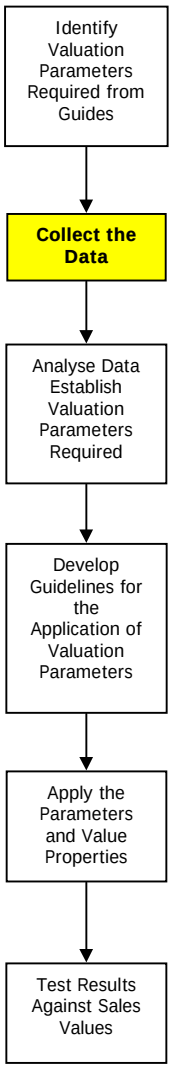
1.25	Location comment	Near centre of town part of high desity res. Neighbourhood
1.26	Site comment	Level & landscaped
1.27	Other comment	

	Sales Data	**1**	Market sale ?	no
1.28	Sales Price	$1	Price @ 100% Interest	$1
1.29	Sales Date	1-Jan-87	Financing	
1.30	Instrument Number		Effect of Financing (+/- %)	0.0%
1.31	Interests Transferred	100.0%	Final Price @ Mkt. Financing	**$1**
1.32	Vendor Name			
1.33	Vendor Address			
1.34	Purchaser Name			
1.35	Purchaser Address			

Physical Data

The form on the previous page includes a great deal of information about the physical aspects of the property including:

- Location
- Year built
- Site area
- Number of floors
- Numbers and types of apartments
- Amenities



Rent Characteristics

There is also space to note the items included in the rent.

Qualifying Data

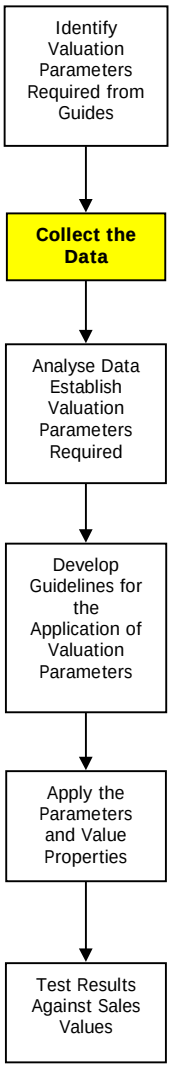
The data sheet also includes places to enter judgments about the location, quality, condition, and comments about various aspects of the property.

Sales Data

Along with the physical characteristics and the judgments to be made about the quality of the property, the form also includes an area to record sales data.

With this data it should be possible to characterize and classify the property into a group of properties that contain similar attributes. Not all characteristics will be used to develop the property classes but they should be noted to assist in the application of the valuation parameters and the valuation of the property.

Although the data entry forms are designed to capture the main descriptive variables used in the valuation process, the assessor should not limit the analysis to the items included on the forms. If the property has an unusual condition or outstanding feature, then this should be noted in the information collected.



Other Sources - Being Critical About Statistics

Some information from other sources can be relied upon as strictly factual and presented without bias, for example *Statistics Canada* reports. However, even here the raw data collected by Statistics Canada may be from a limited number of replies and as such it may not entirely reflect the reality of the market place.

> In the analysis of statistical data it is important to know **what was said**, the **questions that were asked**, and **who replied** – these latter two factors are often overlooked in the analysis of data.

Other sources of information generally report research results. However, there are a number of factors that can influence the findings:

> Were all results reported? It may be that when the study was completed, unfavourable results were omitted.
>
> What questions were asked to obtain the data? The phrasing of a question can often be leading and the results produced will then indicate a bias.
>
> Who answered and did not answer the questions? Analysis of data reflects the replies of the people who answered the questions. For the results to apply to the entire group of properties or the entire population, the replies that are gathered must come from a sample that is representative of the population. If the body sampled is not representative of the population, the results cannot legitimately be applied.

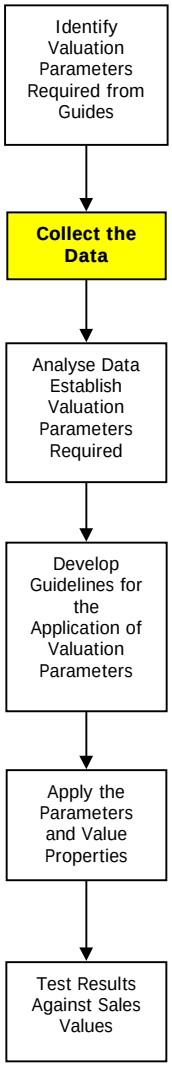
Often the questions asked and the people that answered are not reported in a study. If the results of a study are critical to the valuation process, some effort should be made to determine how the results were produced. Otherwise, a general evaluation of a research report should consider the following:

> Determine who made the report, who the target audience was, and view the results from that basis.

How much information is required?

There are two general rules to follow in the gathering of information:

1. Gather as much information as needed so that you feel confident the results reflect typical, fee simple market values.
2. Like throwing a stone in the centre of a pond, start with the information closest at hand, and proceed outward in time, distance, and similarity of property until sufficient information is gathered to meet the first condition.



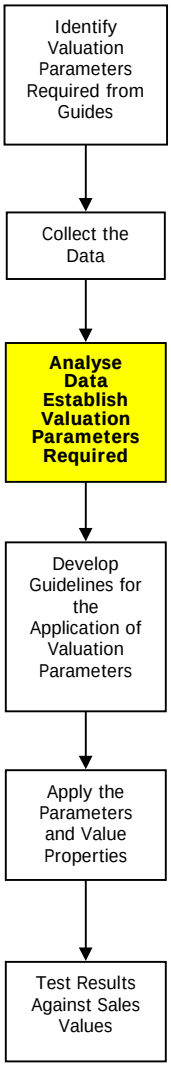
Information Gathering Conclusion

> *Valuing properties requires certain types of information, as discussed in the valuation guides, which needs to be collected. Some of this information will be specific to a property – the property variables. Some will be generic to a group of properties – the valuation parameters.*

The mass appraisal process also requires the development of valuation parameters to:

Ensure that the typical fee simple value of the real estate is determined, and

Assist in valuing properties where appropriate information could not be obtained.



2.3 Analyze the Data

Specific Property Variables

Certain data will be property specific, for example, the rooms in a hotel, the gross leasable area of a shopping centre, and the number of apartments in a building. Other than ensuring that the appropriate information is on hand and that the facts are correct, property variable information does not require further analysis.

Development of Valuation Parameters

For the valuation parameters that guide the valuation of property, the data collected requires the following kinds of analysis to produce the appropriate valuation parameters:

Sorting and classifying,

Tabulating, and

Refining the results.

Sorting and Classifying

> Perhaps the most difficult part of the valuation parameter development process is to divide the properties into groups that have similar traits and value characteristics. However, this step is also the key to a successful market value analysis in a mass appraisal environment.

Property Classification Guidelines

Classes of property may contain as few as three similar properties as in the case of more specialized industrial uses (any fewer and the properties may as well be valued on a "single fee appraisal" basis), and as many as several thousand, for example, single family detached homes.

For properties where values relate to local market conditions and to local market competition – such as multi-residential buildings, the property classification systems should be based upon the types of properties prevalent in the municipality.

For properties where there is a more national market and those with similar national traits, such as shopping centres, the property classification system should be based upon accepted national definitions, for example, regional shopping centres.

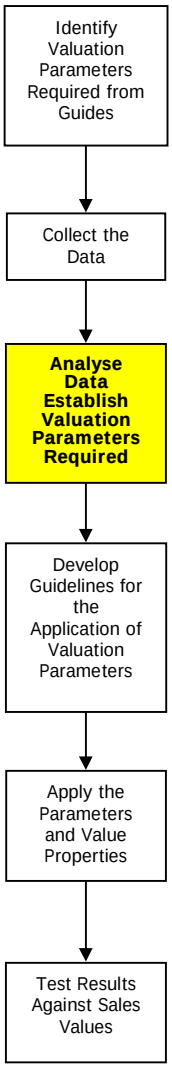
As such there is no one correct or appropriate classification system.

The objectives of classification are:

To enable the valuation of a number of properties easily and efficiently,

To stratify the properties into specific classes so that comparisons are meaningful, and conversely,

To have a broad enough definition of classes so that there are sufficient numbers within the group to establish valuation parameters and values.



Classes of properties and their valuation parameters **should be developed for each municipality**. However, as properties are reasonably similar throughout the province, the classifications may also be reasonably similar from municipality to municipality. In addition, some transference of experience should be possible between similar municipalities.

How to Classify Properties

The elements that can be used to categorize properties into homogeneous classes are generally the physical variables including:

Function/ nature,

Location,

Size:

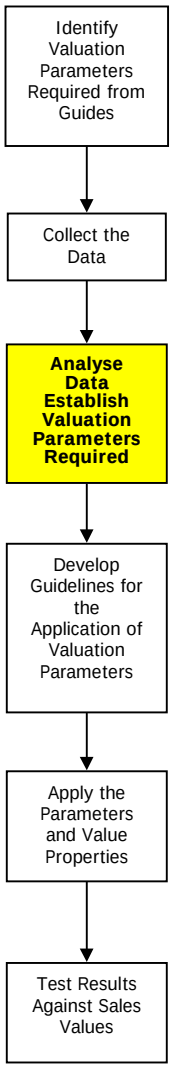
- Size of site,
- Floor space,
- Volume,
- Number of units,
- Number of floors,
- Production capacity,

Density of development (land/building ratio),

Age/ condition, and

Facilities/ amenities.

As the number of identifying variables increases, the number of potential classes also increases, quickly achieving an unmanageable number of classes. This is where the art of classifying comes into play. The objective is to achieve large classes that have similar characteristics. In this way, properties can be valued using the same valuation parameters. For example, it might be expected that all high rise apartment units in the middle of town would have roughly similar values per unit, and therefore, can be classified as one group.



However, it would not be expected that a high-rise unit would have the same value as a low-rise unit in a better residential neighbourhood. Therefore, in most instances, a different class would be needed for the low-rise property.

It may also be possible to narrow the number of physical variables considered in establishing classes of homogeneous property. For example, by considering the quality rating (fair, good, excellent) as a substitute for age and location, it may be possible to narrow the field of classes.

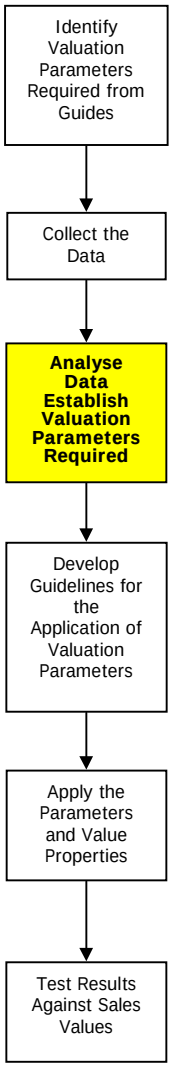
Classification and the Cost Approach

When the cost approach is employed to value property, it may not seem that the same classification exercise need be undertaken. In fact, the cost approach has typically the most well developed system of classification of all approaches to value. If a cost manual is employed, the assessor is valuing an improvement based upon a model facility where the values per square foot have already been established. The "models" contained in a cost manual, for example, industrial building, gas station, or golf course, are "classes" of property. Such manuals also contain their own application guidelines and adjustment procedures.

Classification - Conclusion

The classification of properties into groups with similar physical characteristics and similar value-driven characteristics is the most important step in the mass appraisal valuation process. Each valuation guide contains some reference to the types of property classes that can be expected and how to differentiate between classes.

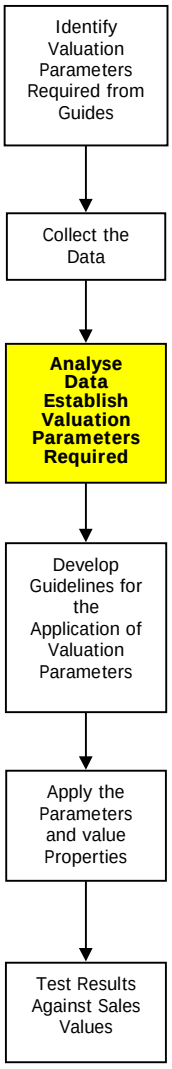
Ultimately, property classification depends upon the types (and values) of property found in each municipality. The only way to determine the appropriate classes to employ is to collect the data and attempt to sort the properties into logical groups through comparison of their attributes.



Tabulating Results

After classifying the properties into groups, consolidate all data that will be used to determine the property valuation parameters into one table. If the numbers are limited, this can generally be accomplished using a spreadsheet program that lists all pertinent property variables. If there are a lot of properties to be tabulated and a lot of valuation parameters to be established, a database setup may be the appropriate tool.

A table permits the consideration of the range and means for the various variables involved in the analysis of properties. Each valuation parameter may require its own table. For example, establishing food court rents in regional malls in Edmonton might consider 10 to 15 current rents taken from the various rent rolls of regional malls in Edmonton. Therefore, rent rolls from most, if not all, regional malls should be collected; the food court stores identified; the terms of the current leases extracted; and the data entered into one table. Once tabulated the following results may emerge:



Example of Valuation Parameter Tabulation Results

Analysis of Food Court Rents – Regional Malls Edmonton – 1997

Variable	Mean	Range
No. of Leases	12	1995 - 1997
Store Size	155 Sf	85 – 300 Sf
Rent	$67.25	$50 - $100

From this information, all food court stores in regional malls could be valued using rents in the range between $50 and $100.

To complete the valuation of this shopping centre, similar rental rate valuation parameters should be established for all classes of tenants in the mall. These classes may be numerous and very detailed, for example, jewelry stores, shoe stores, card shops, etc., or they may be more inclusive – tenants between 1,000 and 1,500 sq. ft. Again the decision on how to classify the tenants should be determined by each jurisdiction.

Refining the Results

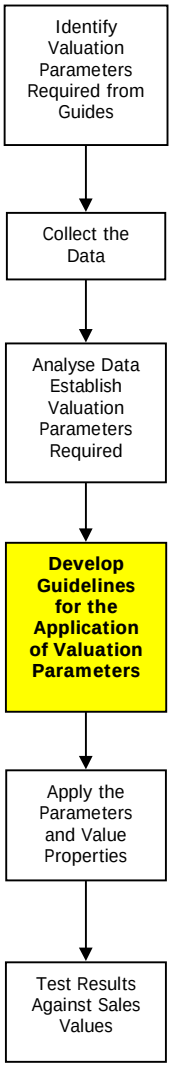
Mean or Median

Mean, median, and mode are all measures of "central tendency". In large, normally distributed populations, for example, the mean, median, and mode for the number of bedrooms in single family detached homes are expected to be the same figure. For other groups or classes of property, the measure of central tendency selected should be the one that best reflects the average or typical property characteristic. In this analysis, the median is often selected as the measure to use.

Unusual Properties

The tabulation process may uncover certain properties that do not seem to fit in with the other properties. These properties may be mis-classified or they may simply be somewhat unusual. In such cases the tabulation and analysis done to determine the valuation parameters should exclude the unusual property, establishing a more homogeneous group. The unusual property should then be valued separately or on a different basis than the remainder of the class.

2.4 Develop Guidelines for Application



Once the valuation parameters have been set and the results tabulated, guidelines have to be set on how to apply the parameters. For example, should all food court tenants in regional malls in Edmonton be valued at the mean rent of $67.25 per square foot? Or should the rental rates be allowed to vary within a certain range of the mean?

Flexibility

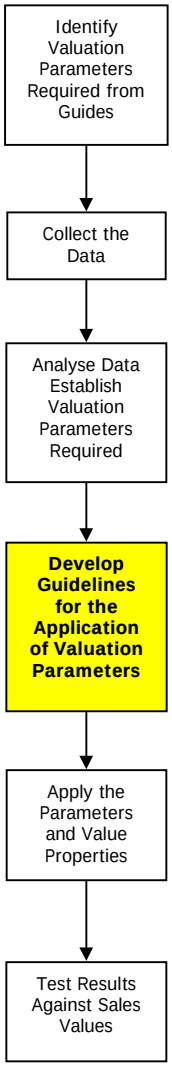
Flexibility presents a dichotomy in the mass appraisal process. The more flexible a process the better able it is to adjust to market realities. However, the more a valuation process attempts to capture the actual performance of a property, the more chance it has of developing values that do not reflect the typical fee simple value of the real estate.

Realistically, even under typical fee simple criteria, there will be some variation in the values of similar properties. For example, all regional shopping centres will not have the same market value per square foot as not all shopping centres have "typical" locations. Therefore, every valuation process demands some flexibility.

There are several ways to achieve flexibility:

1. Allow all valuation parameters to vary within given ranges.
2. Fix some valuation parameters according to the class of property and allow others to vary. For example, fix rents by store type to the median rent and allow expenses, vacancy rates and capitalization rates to vary.
3. Fix all valuation parameters for each class of property except one, for example, the capitalization rate.

The amount of flexibility that is permitted can be limited by providing ranges of values. For example, where the actual rental rates for food court stores in Edmonton in 1997 varied between $50.00 and $100.00 with a mean of $67.25, the range of rents allowed under the valuation parameter might be between $60.00 and $75.00. In this valuation scenario, the assessor is provided with a guideline that allows the latitude of selecting the appropriate rate between these figures.



Working with Ranges

Setting Ranges

Ranges may be set using statistical tools such as measures of variance including standard deviations, or coefficients of dispersion. Or they may be set on a more ad hoc basis – the median value, say $67.25, plus or minus $5.00. The wider the range the more variance permitted in the valuations.

To a certain extent there is a limit on the breadth of ranges that should be allowed. The regulations in Alberta require property market values to be within certain coefficients of dispersion. Narrowing the ranges that can be applied is one way to ensure that this standard is achieved.

Going Outside the Range

Not all properties are typical or within the range of being typical. Certain properties may be encountering difficulties that suggest the application of a valuation parameter outside the range, for example, a community shopping centre with a 30% vacancy rate. In this scenario, the typical vacancy rate in the jurisdiction may be 7%, but because of the poor location of one centre, its vacancy rate is 30%. In valuing the property, the assessor may feel a rate outside the range should be applied. **Again the assessment jurisdiction has a choice in policy to make:**

1. The assessor should be allowed to apply the valuation parameter that he or she feels is appropriate - *with an explanation as to why a rate outside the range was selected*, or
2. The assessor must apply rates within the range.

When a Different Valuation Parameter Should Be Applied

Some range in property values should be expected within each class of property. However, the assessor must balance this fact with the dictum that stipulates typical property values be generated, i.e., a valuation that reflects the fee simple real estate value and that is not subject to errors in management. There is no hard and fast rule that guides this balance. The assessor must in the end apply some judgment to the valuation of certain properties.

Establishment of Ranges

A typical property should be valued using valuation parameters.

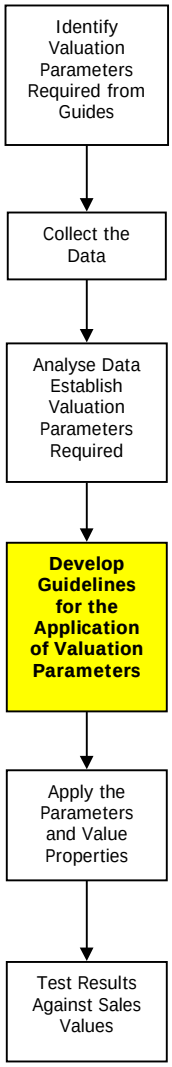
Properties with attributes and performance figures that are below the norm should be valued with rates within the range but below the median, or those that would produce lower market value conclusions.

Conversely, properties with attributes or performances that are above average should be valued with parameters that produce higher market value conclusions.

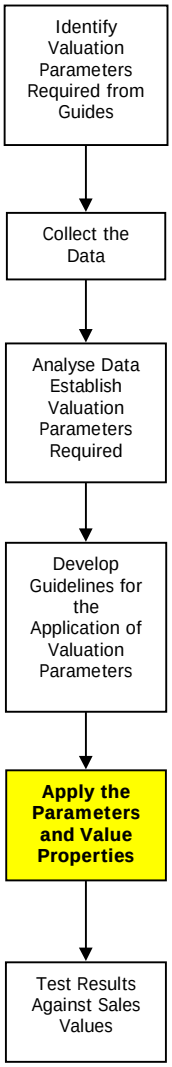
Economies of scale also enter the picture. A food court tenant with 85 square feet of space would expect to pay more per square foot in rent than one that has 300 square feet. This observation would be true regardless of how well the entire mall is performing.

Location affects performance, and therefore, also influences the valuation parameters that are applied. Better locations should have higher rents, better room rates, or higher sales values per square foot.

Building conditions above or below the typical should be a consideration in the application of a valuation parameter. Cost manuals make this distinction when determining the effective age of a property.



2.5 Apply Valuation Parameters



A Class B office building example was selected *(See Figure 1)* to illustrate the valuation parameter process and how it should be applied.

Step 1: Identify the Variables and Valuation Parameters

As the Office Valuation Guide indicates, the assessor has to establish the following information in order to determine the value of a Class B office building:

Physical Data

Office area,

Premium office area,

Retail area,

Storage area, and

Number/type of parking spaces.

Qualitative Data

Quality of the building in relation to other Class B buildings.

Other Data

Other income, and

Actual parking income – since the example provided illustrates a building with significant hourly and/or non standard parking income, actual income instead of typical monthly parking rates were used.

Valuation Parameters

Rent per square foot for office area,

Rent per square foot for premium office area,

Rent per square foot for retail space,

Rent per square foot for basement / storage space,

Typical long term office vacancy rates,

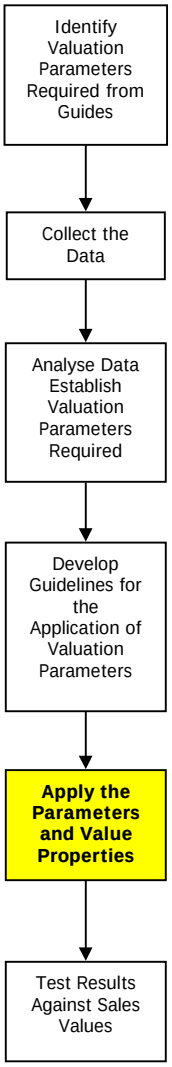
Vacant space shortfall,

Unrecovered management expense, and

Capitalization rate.

Step 2: Collect the Data

The next step is to collect the data. To accomplish this end, complete the following tasks:



1. Pull the existing assessment records for office buildings in the municipality.
2. Forward a *Request for Information Form* to all owners.
3. After receiving a reasonable number of replies, complete a preliminary sort to classify the properties as follows:

   Class A,

   Class B,

   Class C,

   Class M (medical), or

   Unknown – other.

4. Complete a quick inspection of the unknown properties and some of the others to determine if they should be classified under another type of office building classification.
5. More thorough inspections of a few properties should be undertaken when the data is less than complete or in the case of a sale.
6. Enter data for each office building property on *Form OF1 – Office Data Entry,* as shown on the example *(Figure 1).*
7. From the rent rolls returned by the owners, enter the data for the pertinent leases on *Form OF2 – Office Building Rent Analysis* as shown in Figure 2.

   Pertinent leases provide an indication of the current market rents charged for a full office floor.

   Pertinent leases also include current leases for retail, storage, and premium office building space.

Explore, inspect, analyze, and record the results on the OF1 – Office Building Data Entry Form. The *variables* relating to the Class B office building example are shown on Form OF1 – Office Data Entry.

Figure 1: Form OF1 – Office Building Data Entry

Address	**1151 Bronte Road**
Building Name	Fuller Building
Municipality	Town
Roll #	124578
Office Class	Class B

Value Date	**2-Jul-01**
Measurements in	feet

Inspection Notes	
Inspection date	4-May-01
Office quality	Good Class B building
Vacancies	no
Extra features	Large open interior with parts of second floor overlooking foyer
Parking	Above ground - fee
Location	Near middle of town
Tenant type	Multiple tenants
Condition	Good
Other comment	Cafeteria restaurant

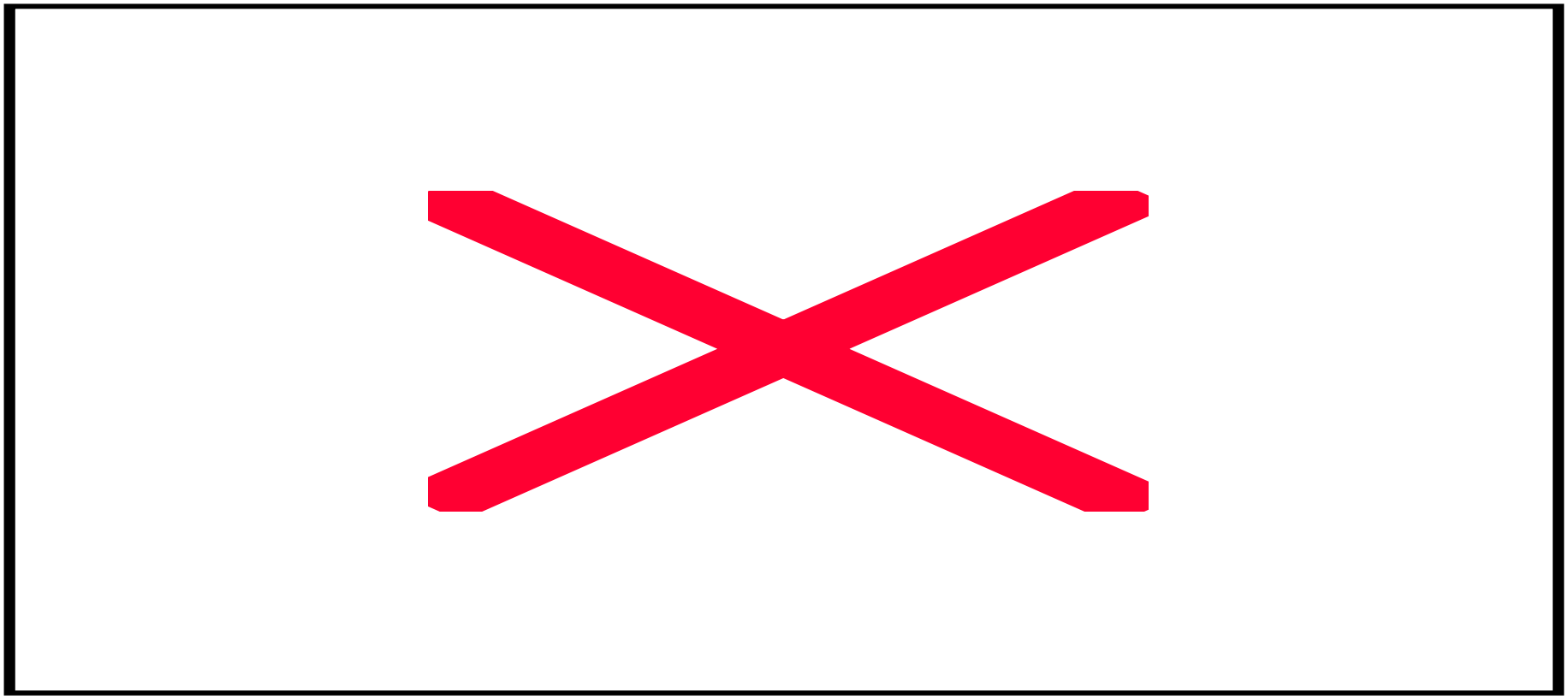
Building Data	In sq. feet
Total building area	64,200
Typical floor rentable area	
Building Efficiency	77.9%
No. of Storeys	2
No. of Parking spaces	185
Year built	1978
Year renovated	

Rentable Area Breakdown	
Office	30,000
Ground flr/ Prem.*	14,500
Retail	3,100
Bsmnt. / Strg.*	2,400
Total Rentable	50,000

* Not including retail rentable area

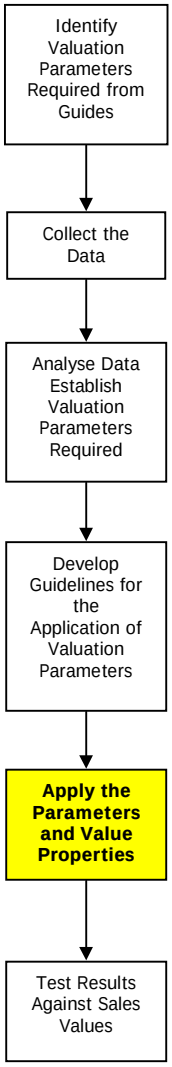
Land / Density	
Site area in sq. feet	146,000
Density Ratio	44.0%

Figure 2: Form OF2 – Office Building Rent Analysis



Step 3: Analyze the Data

Tabulate the Property Data - Physical Characteristics



The next step in the process is to tabulate all the appropriate building variables and physical data about each property from the information collected. In the example municipality, there are 15 Class B office buildings and the appropriate physical data was determined on all of them. The results of this analysis are found at Figure 3: *Tabulation Results – Class B Office Buildings – Physical Data 1997* on the next page.

Analysis of Physical Information

The physical information is listed along with the number of parking spaces and the vacancy rates reported in 1996. All vacancy rates are converted to a square foot measure.

Average, median, minimum, and maximum numbers are developed to assist in the comparison and qualification of each property with respect to the typical Class B office building.

Tabulate the Property Data – Valuation Parameter Information

The listing of physical data on a spreadsheet is followed by analysis of the rent rolls and financial information gathered from each property owner.

Again, in the example, this information was received from all class B property owners. However, it should not be necessary to obtain a return from each owner to establish the valuation parameters – a majority of properties or a reasonable number should suffice.

Once the data is tabulated it is analyzed to determine the nature and character of the Class B office building class.

Figure 3: Example of Tabulation Results – Class B Office Buildings – Physical Data 1997

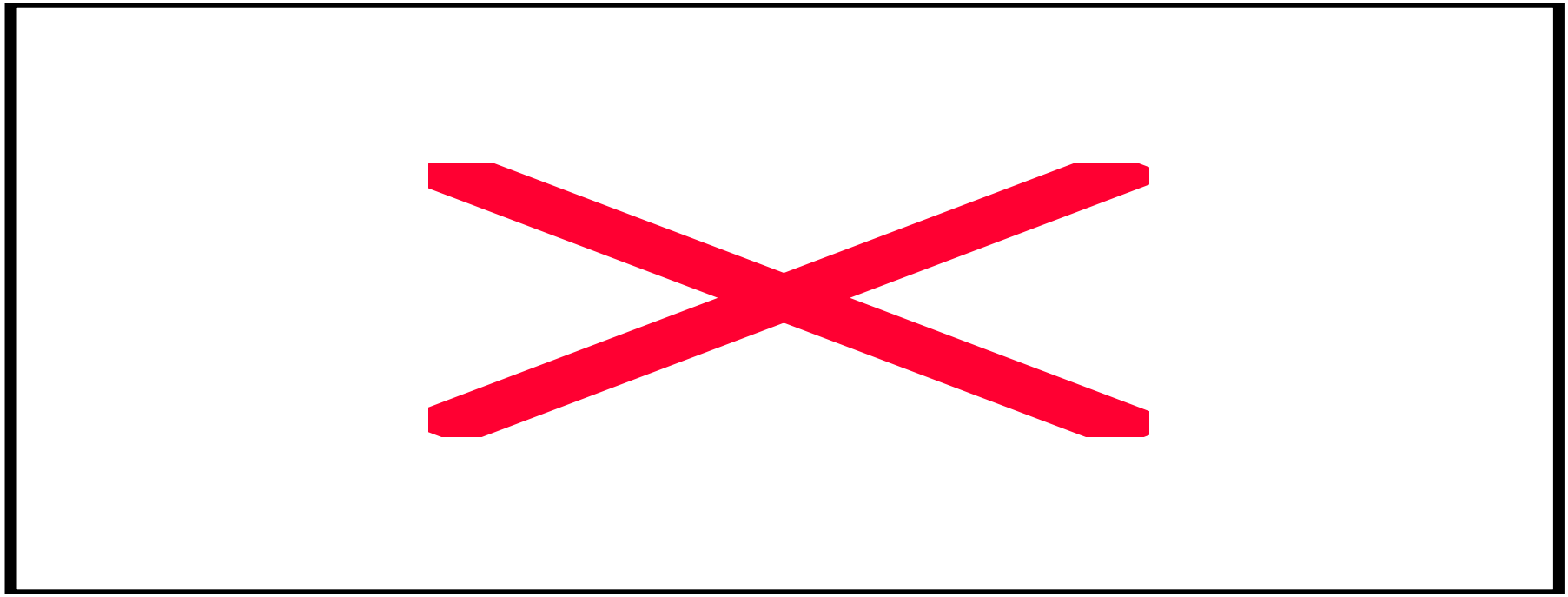
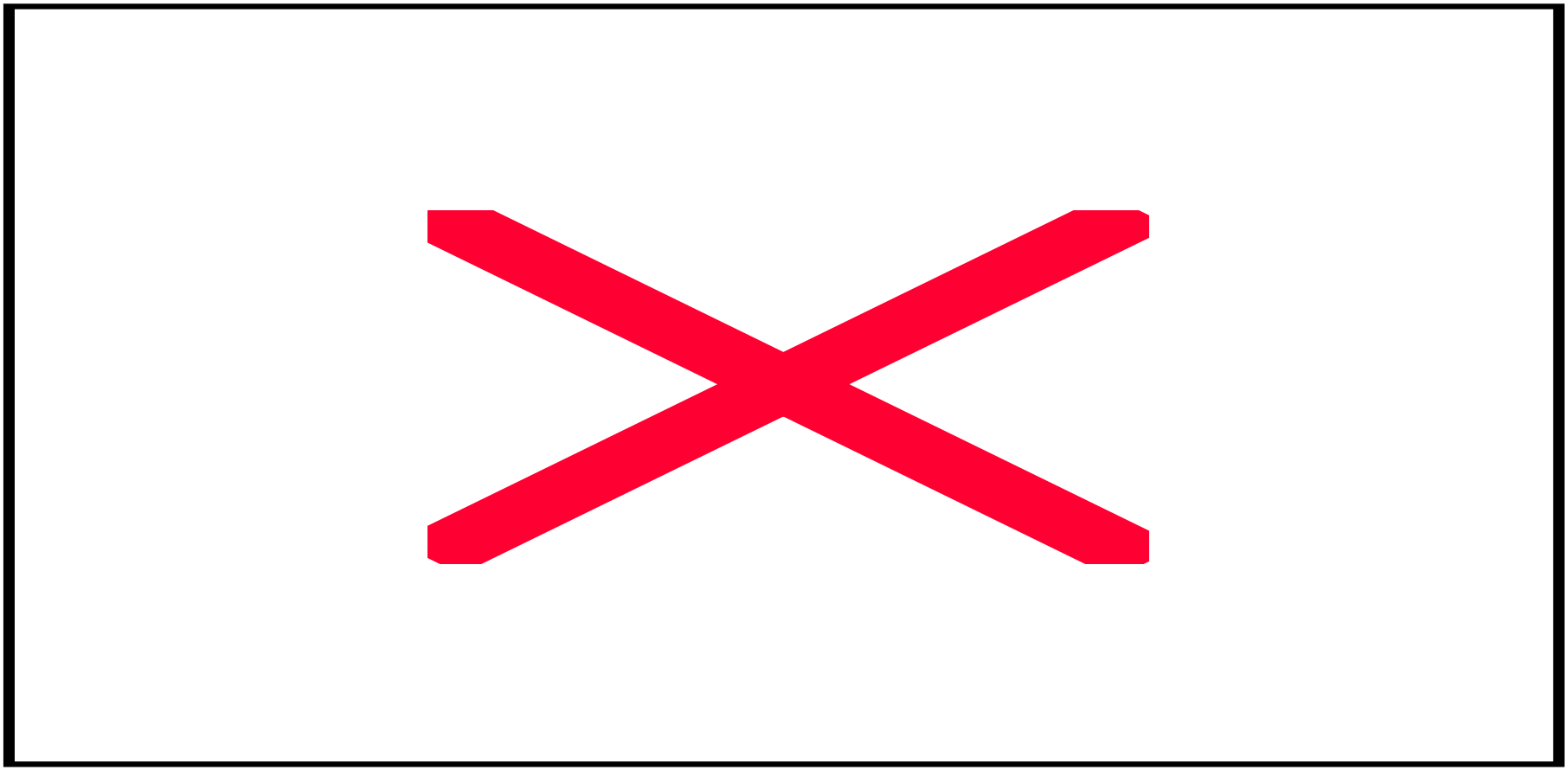
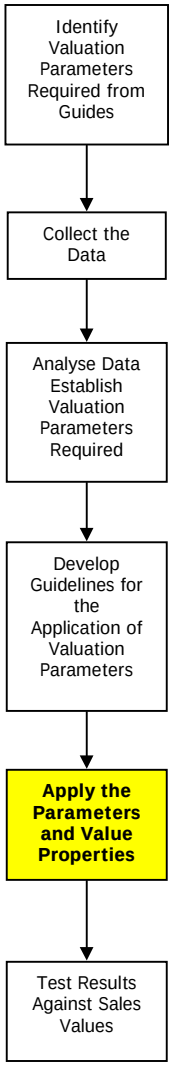


Figure 4: Example of Tabulation Results – Class B Office Buildings – Financial Performance 1997



Analysis of Rental Valuation Parameters

Analysis of the rent rolls produces a list of pertinent leases in each Class B office building (one example is illustrated on *Form OF2 – Office Building Rent Analysis*). These leases indicate the current market rent for the various types of space found in each office building, that is, office space, premium office, various classes of retail space, and storage space. From these individual forms the rent conclusions are brought forward to be tabulated onto one spreadsheet: Figure 4: *Tabulation Results – Class B Office Buildings – Financial Performance 1997*.



In analyzing rents, the objective is to determine the net amount paid that is attributable to the real estate. For office space, this would be the net rent for finished space. *(See Section 3.0 Determining Market Rents.)*

Mean, median, minimum, and maximum rent values are determined as shown. Consideration is given to what the typical rents should be for each type of space and the range of rents that could be applied. The results of this analysis can be found at Figure 5: *Example of Typical Class B Office Building Rents – 1997*.

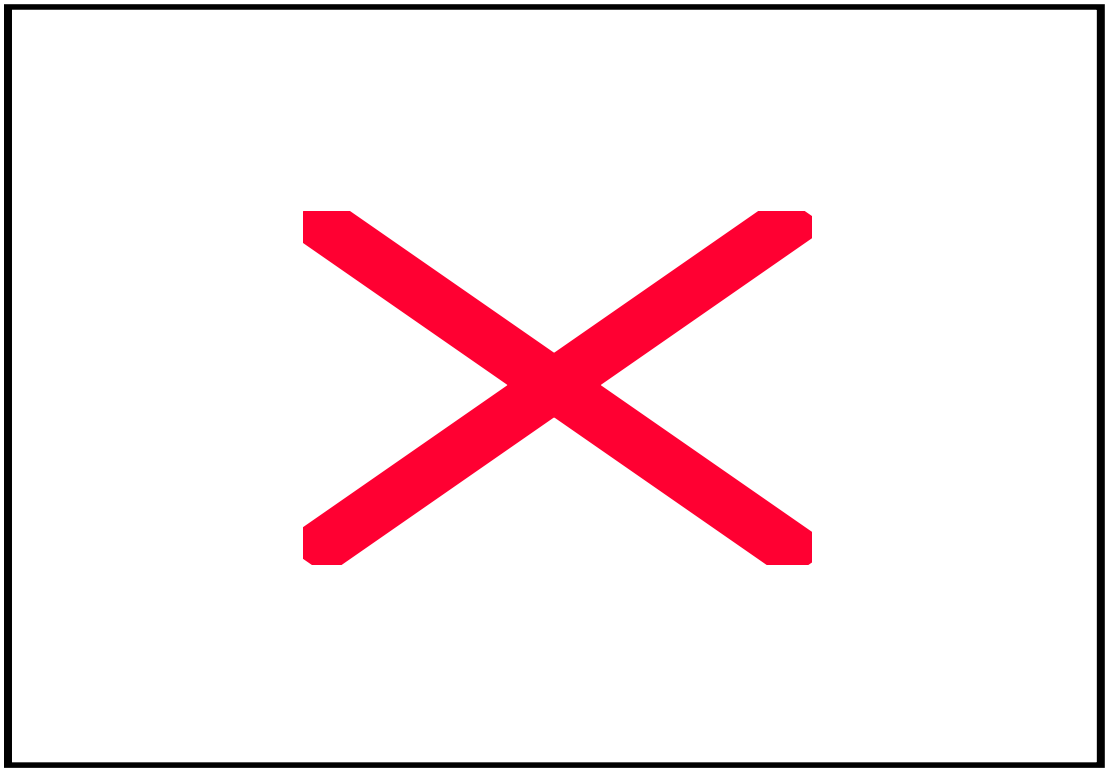
Analysis of Other Financial Data Valuation Parameters

Along with rents, a number of other valuation parameters are considered. Parking revenue, other income, operating recoveries, operating expenses, vacant space shortfall, and unrecovered expenses are analyzed. Through this analysis, and following the methodology presented in the office building valuation guide it was determined that there is not enough consistency in the parking revenue or the other income to develop parameters for this example. The differences between operating recoveries and operating expenses are accounted for in the vacant space shortfall and the unrecovered operating expenses.

Therefore, along with the rental rates, two valuation parameters are developed for the analysis of this financial data:

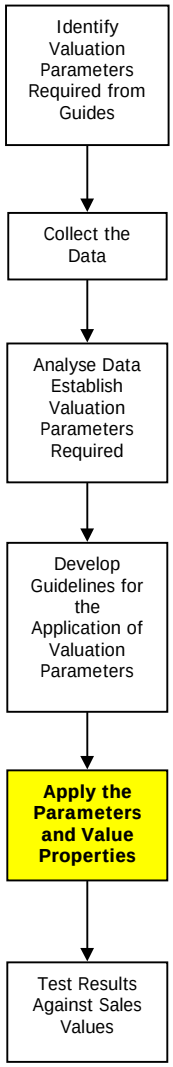
- Vacant space shortfall, and
- Unrecovered operating expense.

Figure 5: Example of Typical Class B Office Building Rents - 1997



Vacant Space Shortfall

The vacant space shortfall reflects the operating expense recoveries that must be met by the owner as a result of vacancies. In the example, this amount was arbitrarily set at 75% of the actual operating recovery rate per square foot**.** This reflects that it does not cost as much to operate vacant space as it does to operate full space. In any case, the amount set aside for vacant space shortfall is directly offset by the amount included in the unrecovered operating expense, that is, if the vacant space shortfall rate were to be set at the same level as the actual recovery rate, the unrecovered operating expense allowance would be proportionately lower.



Unrecovered Operating Expense Allowance

The unrecovered operating expense allowance is the amount of operating expenses remaining (excluding mortgage, interest, and debt repayment) after operating recoveries and after deducting the vacant space shortfall allowance, divided by the total income (rental plus other income).

> If actual instead of typical unrecovered operating expenses are used as a means of establishing the appropriate deduction from the rental income, the expenses should be analyzed to make sure they are in line with the typical, expected expenses.

For example, if the administrative and management expenses of 14 class B office buildings roughly equal 10% of the rental revenue then the same ratio of expenses should be applied to the 15th building.

Vacancy Rate Valuation Parameter

To develop the **long-term** valuation parameter for the vacancy allowance, a number of sources of data should be considered:

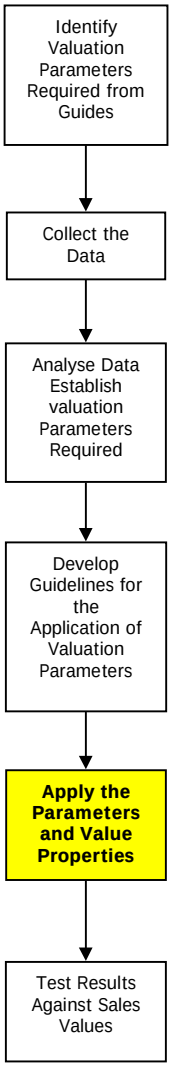
Any current vacancy information collected from the owners, as shown at Figure 3.

Any previous vacancy information collected from the owners.

Information gained through interviews with property owners.

Information collected by local realtors.

The vacancy rates as indicated at Figure 4 are the result of this analysis.



Capitalization Rate Valuation Parameter

The only remaining *valuation parameter* to be determined before the value of Class B office buildings can be completed are the capitalization rates to be employed. Capitalization rate analysis is outlined in section 4.0 of this guide. The results of this analysis for Class B office buildings are reported at Figure 5 along with the rental rate information.

Select the Appropriate Valuation Parameters For the Subject

Overall Impressions

In the example, the subject Class B office building on Bronte Road is older but appears to be above average in comparison to other Class B office buildings in the municipality. The large foyer adds to the rental appeal. However, it also adds to the expense of operating the property and the inefficiencies of the space. Therefore:

Rental rates at or above average were used.

Actual parking rates were used.

At $3.50, a higher than average vacant space shortfall allowance was employed in the example to account for the high operating expenses of the subject property.

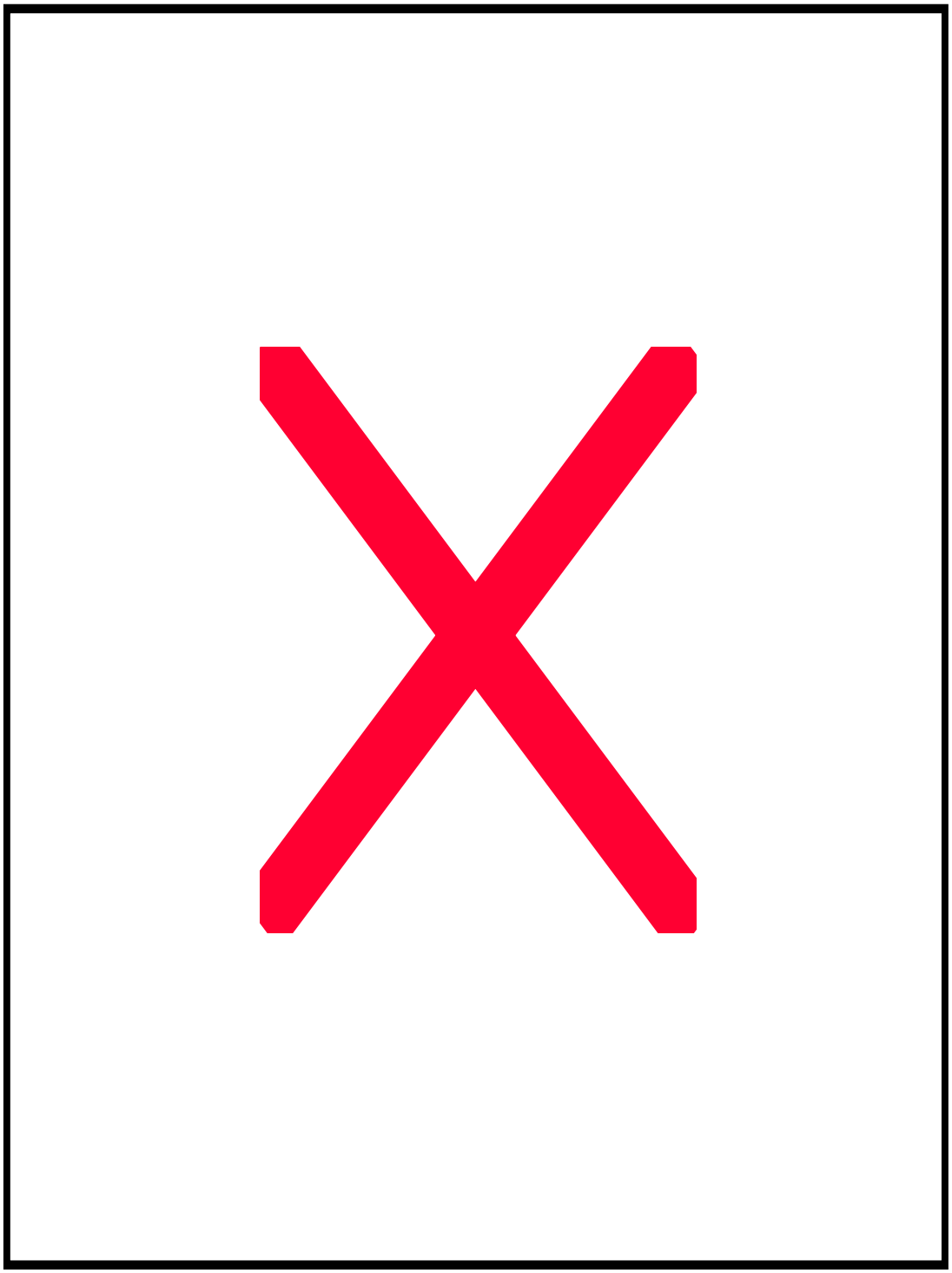
Similarly, a 12% unrecovered expense allowance was employed.

Finally, a 9.0% lower than typical cap rate was employed to reflect the low vacancy and better than average quality of this building.

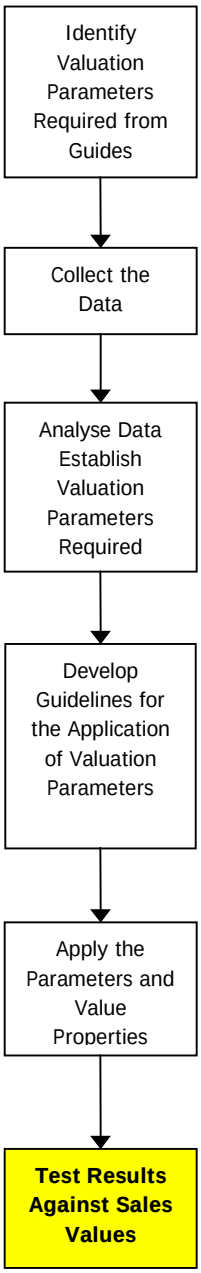
Apply the Parameters to Develop a Value

Figure 6: *Form OF3 – Office Building Valuation Summary* on the following page produces the results of this analysis.

Figure 6: Form OF3 - Office Building Valuation Summary Example



2.6 Test Values



There are two methods to test the results:

1. After applying the parameters and determining the values of all the Class B office buildings, compare the values generated per square foot.

   Better buildings should have higher values per square foot.

   Similar buildings should have similar values.

2. Test the results against any sales values that have occurred in the past few years. Note: Since the assessment is based upon the fee simple value of the real estate the sales value may require some adjustment in order to compare to the value generated under this analysis.

3.0 Determining Market Rents

Many properties earn income. This income may be in the form of rent assignable to the real estate, such as a store in a shopping centre, or it may be in the form of income earned by the business operating the real estate, for example, a hotel. In either case, the objective is the same:

> In analyzing income and rents the objective is to determine the net amount paid to the owner that is attributable to the real estate.

Once the income generated by the property is determined, its value can be estimated.

Types of Rent

Rents can be truly net, sometimes referred to as "net, net, net", in which the tenant pays all taxes and operating expenses separately from rent, or rental arrangements can be "gross" where the tenant makes one payment to the landlord and the landlord is responsible for all taxes and operating expenses, or some arrangement in-between.

When tenants pay net rents, only a few adjustments have to be made to the income stream to reflect the net operating income to the owner, that is, the amount the owner puts in his or her pocket at the end of the day.

If tenants pay gross rent, all appropriate operating expenses must be deducted from the income collected to establish the net operating income.

When tenants only pay a part of the expenses in addition to their rent, the appropriate adjustments and deductions will have to be made in order to establish the net rent.

Business Income

When the business operating a property earns income, such as a hotel, part of that income is attributable to the real estate and part is attributable to other non-real estate interests such as furniture, equipment, and management. The amounts of income attributable to these other interests should be deducted from the gross income received in order to establish the net income to the real estate.

Adjustment of Rents

Although many rents appear to be, and are often referred to as triple net, not all leases are based upon this arrangement. **The only way to be certain about the nature of the rental arrangements between the landlord and tenant is to read and interpret each lease.** Fortunately, most leases in each shopping centre, office building, or apartment building are very similar. However, two factors arise that produce exceptions to this rule:

1. Some tenants, such as department stores, insist upon, and have the ability to complete their own lease arrangements. These leases are generally different from the common leases signed by other tenants.
2. Leases change over time, especially when assessment procedures change. Therefore, some older leases may possess more dated language and conditions.

Lease Analysis

There are several key elements in a lease between the landlord and tenant:

1. The quality, location, and incentives given to the tenant in respect of the moneys paid. For example, there may be cash incentives or free rent, or the rent may include services, appliances, or furniture.
2. The type of rental payment may range from fixed payments; step-up leases where rents are raised (or lowered) on a set schedule over a period of months or years; and/or leases that include sales performance clauses (overage rent).
3. The term of the lease or the number of years (or months) it is expected to run and the various renewal options.
4. The operating expenses that are expected to be met by the tenant, for example, power, heat, interior maintenance, snow removal, etc. In addition, the lease may describe the rights of the tenant to review, question, or appeal these expenses.

There are many individual factors contained within each lease. The importance of recognizing the differences between leases arises both in the analysis of value and in the comparison of value from one property to another.

Determining Market Rents as of the Valuation Date

Base Rent

To determine the current market rent for each tenant, the following guidelines are provided (in order of descending importance):

1. For most tenants the best source of market rent information is the rent roll. Using these rent rolls, the best evidence of "market" rents are (in order of descending importance):

    Actual leases signed on or around the valuation date.

    Actual leases within the first three years of their term as of the valuation date.

    Current rents for similar types of stores in the same shopping centre.

    Older leases with active overage rent or step-up clauses.

2. As a secondary source of rent information, and as a check on the rents derived from the actual rent rolls, the rental rates can be compared to the rents established for similar tenants in other similar properties.

3. If comparable information is not available, it may be necessary to analyze the existing lease and interview the owner and tenant(s) to determine what the current rent on the space should be.

Overage Rent

Overage rent should be added to the base rent in order to determine the net rent paid to the owner.

Overage rent may form a minor or significant portion of the rent collected in a shopping centre or other commercial retail establishments. Sometimes information on overage rent is provided on a rent roll but more often it is found as a summary figure on the income and expense statement. If the rent roll specifies the overage rent for each tenant, the net rent to the owner is the sum of the base rent plus the overage rent. However, if the overage rent is totaled on the income and expense statement, some adjustment to tenant rents may be necessary to establish the market rental rates.

Rent Adjustments - Inducements

Tenant inducements should be deducted from the base rent.

Tenant inducements are common at certain points of time for some types of properties, for example, office buildings. These rental arrangements may require adjustment in order to produce the net rent.

> Inducements must be considered when establishing the appropriate market rent for the space. The value of the inducement spread out over a reasonable term should be deducted from the base rent.

The only exception to this rule is when the inducement adds value to the real estate. If the rent charged for finished space is higher than for unfinished space, for example, in an office building, then the value of the inducement does not need to be deducted from the base rent.

The rationale for deducting inducements is found in the determination of the current market rent for a store. For example, if a department store signs a new 25-year lease for $700,000 per annum in rent and receives back $2,000,000 in inducements, then the real net rent paid is somewhat less than $700,000 per annum.

The effect of an inducement can be determined as follows:

> INDUCEMENT PER SF = TOTAL INDUCEMENT ÷ STORE GLA ÷ TERM OF LEASE

In the above department store example, the effect of the inducement (*without considering the time value of money)* would be as follows:

Department Store:	135,000 sf
Lease	25 years
Inducement:	$2,000,000

Inducement per SF = $2,000,000 ÷ 135,000 ÷ 25 = $0.593 /sf

Therefore, in this example, the contract rent paid by the department store is $5.00 per square foot. After allowing for the inducement the net effective rent is $0.59 lower than the contract rent or $4.41 per square foot.

Information on inducements can be found in the *Letter of Intent, the Offer to Lease,* and/or within the lease. The best way to obtain the particular information on inducements is to contact the owner and/or the tenant.

Rent Adjustments – Common Area Maintenance Charges

Other than properties leased on the basis of gross rents, tenants in net leases are at least partially responsible for the expense of operating the property and maintaining the common areas. Most tenant leases provide for the recovery of Common Area Maintenance (CAM) as part of the rental payments made to the landlord. In a simplified world, all tenants would cover all the expenses attributable to their existence in the property and no adjustments would be required for CAM charges. The reality of the market place is different:

> CAM expenses are not generally analyzed and reported in a way that allows them to be appropriately assigned to each tenant.
>
> Some tenants, such as department stores, often limit the amount of CAM they will pay, for example, $1.00 per square foot to be increased in 5-year intervals by the change in the consumer price index.

When the rental arrangements of a tenant do not reflect the actual CAM expense attributable to that tenant, the actual rent received by the owner may be higher or lower than the base rent. In such cases adjustments may have to be made for the excessive or deficient CAM payment.

In a shopping centre, the typical arrangement is for the landlord to establish the total CAM expenses, deduct the amount contributed by the anchor stores, and split the remainder among the other tenants according to their square footage, that is, a proportionate square foot basis.

It follows that in any shopping centre where the current contract rent of a major tenant includes some limit on the amount of CAM paid, then establishing market rents can require a CAM adjustment for the tenants.

CAM Adjustment Process

For example, consider the following department store lease (where taxes are considered separately):

Face rent	$5.00
CAM limited to	$0.50
Total contract rent	$5.50

In this example, the actual CAM expenses attributable to the department store amounts to $2.50 per square foot. This $2.50 department store CAM expense may be somewhat lower than the actual CAM expenses attributable to the commercial retail unit tenants. Therefore, in this scenario, the effective net rent paid by the department store would be:

Contract rent	$5.50
Less tenant inducements	$0.00
Less actual CAM cost	$2.50
Effective net rent	$3.00

Market Rent Conclusion

Using current rental figures, market rent may be determined as follows:

MARKET RENT = BASE RENT + OVERAGE RENT – (INDUCEMENT + CAM ADJUSTMENT)

4.0 Establishing Capitalization Rates

4.1 Critical Concepts

Capitalization Rates

The *Dictionary of Real Estate Appraisal, 3rd edition* defines the capitalization rate as "any rate used to convert income into value"[1]. Lincoln North has a more explicit definition: "A capitalization rate is broadly defined as a percentage rate which relates the net operating income of a property to its most probable selling price, or market value. If the net operating income being capitalized is the *current* year's net earnings, then no adjectives are needed to further define this type of a current earnings ratio. On the other hand, if the net operating income being capitalized represents the *average* annual net earnings over a given period of time, the capitalization rate is usually referred to as an *overall* capitalization rate."[2]

Capitalization Rate Theory

Traditionally, capitalization rates have represented the relationship between the *current* net operating income of a property and its market value. This relationship does not imply that current net earnings are expected to remain the same throughout the tenure of ownership. They are very likely to rise or fall in the same way that gross earnings fluctuate with changing market conditions. What is significant about *all* current-earnings ratios is that *current* earnings are used as the unit of comparison simply because they are either known amounts or can be estimated with relative certainty.

If the future performance of the property is expected to rise or fall below the norm, then the capitalization rate will be modified accordingly and must indicate the relationship between the *average* annual net operating income which a property is expected to produce during the investment horizon, and the market value or sale price of the property. It then becomes known as an *overall* capitalization rate.

When buying an income property one is buying future income. If current income **equates** to future income, the capitalization rate derived from the first year income is a good indicator of value.

If current income **exceeds** expected future income, the first year income may not produce a proper capitalization rate. A stabilized income is the best indicator for capitalization rate

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[1] *The Dictionary of Real Estate Appraisal, 3rd Edition,* Appraisal Institute, Chicago
[2] North, Lincoln (1976) , *Real Estate Investment Analysis and Valuation,* pp. 142-143.

purposes. The estimated lower market rent for rollover (or renewing) tenants and vacant space will produce the stabilized income that a buyer can expect.

If current income is **less** expected future income, the first year income will not produce a proper capitalization rate. The expected higher market rent for rollover tenants and vacant space will produce a more appropriate estimate of the stabilized income. This stabilized income is the best indicator for capitalization rate purposes.

Perhaps the most important issue is the relationship of current income to the sustainable (affordable) or stabilized cash flow, or 'market'. For example, the recession saw a marked fall in office rents in most areas. In such circumstances it was clearly inappropriate to capitalize the first year's rent at a rate which implies growth going forward. The converse is also true, and it is therefore imprudent to assess value solely by this "current" income approach in an unstable market.

Conclusions

Adjustments to the net income to account for rising or declining markets should be performed with great caution. The price that was paid for a property reflects the assumptions of both the buyer and the seller. If the buyer assumed a rising market, but the analyst makes adjustments to sales based on other assumptions such as a stable or declining market, the resultant conclusion will be a capitalization rate that inaccurately reflects the buyer's motivation. The analyst should always attempt to identify the buyer's assumptions so that his or her conclusions will reflect the buyer's. One way of doing this is to find out the buyer's assumptions related to market rents, expected growth, vacancy, expenses, leasing costs, etc. In addition, issues like potential expansion and other motivating factors cannot be ignored. This does not mean that the analyst must agree with the buyer's assumptions, but the sales price is a given and its driving force. Future income expectation and all its complex components, must be fully understood in order to properly analyze capitalization rates.

4.2 Methods of Analysis for Deriving Capitalization Rates

Theoretical Ideal

Ideally, the analyst would have available all the information which the buyers and sellers had at the time the transactions were negotiated. This would include:

Property Specific Facility and Financial Information

Hotels

Income and expense statements for at least three years,

Proforma income and expenses analysis for next five years,

Budgeted capital expenditures,

Budgeted expenditures for FF&E,

Property specific market survey,

Hotel industry market survey, and

Recent building and environmental survey.

Office Buildings

Leases for all major tenants,

A detailed rent roll,

Administrative costs, CAM and tax recoveries,

Floor plans for the office building showing location of individual tenants,

Income and expense statements for at least two to three years,

Proforma income and expenses analysis for next five years,

Details of recent leases as close to the transaction date as possible,

Information concerning expected tenant renewals and vacating tenants,

Vacant space and assumptions concerning market rents and leasing assumptions,

Tenant leasing costs including inducements and commissions,

Office market survey, and

Recent building and environmental survey.

Shopping Centres

Leases for all major tenants,

Sample leases for ancillary tenants or CRUs,

A detailed rent roll,

Sales performance for individual tenants (in order to establish percentage rents),

Administrative costs, CAM and tax recoveries,

A leasing diagram of the shopping centre showing the location of individual tenants,

Income and expense statements for at least two to three years,

Proforma income and expenses analysis for next five years,

Details of recent leases as close to the transaction date as possible,

Information concerning expected tenant renewals and vacating tenants,

Vacant space and assumptions concerning market rents and leasing assumptions,

Tenant leasing costs including inducements and commissions,

Expansion possibilities,

Budgeted capital expenditures,

Property specific retail market survey, and

Recent building and environmental survey.

Sales Transaction Information

Agreement of purchase and sale,

Due diligence documents,

Title search,

Deed of transfer,

Financing documents, and

Interview buyer and seller regarding motivation.

Analysis of Information

The information above should be analyzed to satisfy the following issues:

Financial Information

One should examine leases to establish expense recovery shortfalls.

The actual vacancy in the property may need to be stabilized on the basis of an analysis of the current and historical vacancy in the subject and comparable properties. Adjustments need to be made for absorption in the case of additions or restructuring of existing space.

Analyze current, historical, and expected future expenses and anticipated recoveries based on income expense statements and pro-formas. This will show the type and extent of management, CAM and tax costs and recoveries. The resultant shortfalls may be projected.

In shopping centres, the leasing diagram assists in establishing the rental pattern within the shopping centre. Certain locations are more desirable and others less so. Various classes of tenants pay different rents. The market rents should differentiate by type of tenant where applicable (fast food tenants versus CRUs). Shopping centre rents vary by size and location.

Market surveys for different classes of property will show the vacancy and occupancy trends that were prevalent at the time of the purchase.

For hotel properties, the market survey will establish future parameters for room rates and occupancy trends.

Transaction Information

Title searches establish type and mix of ownership.

Was the transfer fee or leasehold?

Did the transfer involve a partial interest?

How was the transfer financed?

Interview sellers, brokers, and buyers to establish motivation.

Was the sale a forced sale?

Was the sale a portfolio part interest or share sale?

Does the buyer intend to redevelop?

Is the buyer a Real Estate Investment Trust (REIT) or a pension fund?

Practical Reality

The initial yield comparison is a commonly applied methodology in the valuation of shopping centres, office buildings, and hotels. The going–in or first year capitalization affords a basic point of comparison with the sales comparables. However, caution is necessary as cash flows are not uniformly derived. For some, the net operating income may be calculated without an allowance for structural reserves or bad debt/vacancy. However, an allowance may be included in others.

Recent investment sales and offerings within the broader national markets provide a general indication of an appropriate initial yield range. The difficulty is that each property has its own dynamic relative to its hypothetical norm, and very few properties can be said to be truly stabilized. Many properties exhibit either below-stabilized occupancy, require repositioning or, conversely, are over-rented. In each case, the application of a stabilized yield to the first year's income will distort value.

Since buyers set the price through a process not always available to the typical analyst, standardized assumptions cannot be made concerning the net income information usually provided. It is rare that all the information outlined in the previous section is available on every transacted property. As a result, most analysts rely on information provided by interviews with buyers, sellers, brokers, appraisers, and more recently investment brokers responsible for floating the many security issues available in the last few years. For example, the latter have been ideally placed to obtain the detailed information required by the Ontario Securities Commission prior to the recent REIT floatations. Most valuation analysts rely to some extent on second-hand sources as they can rarely obtain the depth of information required for an in-depth review of property financial data and transaction data. This has especially been the case with the recent explosion in real estate activity since 1995.

As will be seen from a review of the transaction information contained in the following sections capitalization rates have changed considerably between 1995 and mid-1998. Factors that lead to these changes include the improvement in the real estate markets across Canada, improving economic conditions, lower interest rates, greater availability of capital due to the real estate "securitization" phenomena, the emergence of REITs, the re-capitalization of property companies that survived the recession, the continuing influence of the pension funds, and the emerging concept that property portfolios may have an enhanced value rather than a wholesale discount.

Office

In the period 1995 to mid-1998 office building markets throughout Canada recovered tremendously, with vacancies dropping and rents rising commensurately. This improvement in the market meant that capitalization rates began to reflect the bipolar market that existed.

Transactions of well-leased buildings with low vacancy produced relatively low going-in cap rates in the 7.5% to 8.5% range. Buildings with a good upside potential produced very low first year cap rates because buyers were looking ahead to the future and buying on a stabilized basis. Finally, older buildings with high vacancy and in need of refurbishment sold at either negative yield rates or at very high rates reflecting the difficulties in achieving any kind of reasonable return. The analysis of capitalization rates in a recovering market requires an acute awareness of the local leasing and rental market, the properties themselves, as well as an examination of investor motivation. By 1997, a number of portfolio transactions which included a number of office buildings began to occur, namely the Prudential and Confederation portfolios. In addition, Morguard and Canada Life rolled large portfolios in REITs. Accompanied by a surge of capital raised on the stock market, intense bidding began to affect prices and capitalization rates.

Retail

The retail sector was especially affected by the surge of new capital available to REITs, the re-capitalized property firms, and the ever present pension funds. REITs such as Riocan, CREIT, and Realfund were especially dominant buying neighbourhood, community and power centres across Canada. They spent $590 million in 1996 and $580 million as of November 1997. At the same time a consortium of Cadillac Fairview (re-capitalized by the Ontario Teachers Pension Fund (Ontrea)), Goldman Sachs, and Whitestone bought many of the Eatons property interests. Cambridge bought many of the Markborough properties through a combination of direct purchase and share transactions. Similarly Oxford and General Electric bought the Marathon portfolio (which included both shopping centres and office buildings) through a share transaction. Finally, Ontrea bought four shopping centres from Cambridge (its 50% co-owner) via a shotgun clause wherein either could buy each other out. A fifth centre (Bayshore in Ottawa) owned equally by Cambridge, Ivanhoe, and Ontrea ended up 100% owned by Cambridge as a result of the same transaction.

Hotels

The hotel sector has also been the source of intense activity as room and occupancy rates have improved and REITs specializing in this sector have arisen. As of February 1998 CHIP REIT, Canada's first hotel REIT, owned 23 properties across Canada. From its initial portfolio of 3,218 rooms, CHIP has increased its portfolio to almost 6,200 rooms. Two other Canadian hotel REITs have been launched - Legacy Hotels REIT (made up of the former Canadian Pacific hotel chain) and Royal Host REIT. The total value of hotel transactions over 50 rooms in Canada increased from $119 million in 1994 to $826 million in 1996 (77 properties) and $1.981 billion (122 properties) in 1997. This intense level of activity has raised prices per room and generally affected yield rates.

Conclusion

The large volume of office retail and hotel property sales, combined with the large number of portfolio transactions, means that less time can be spent on the analysis of individual deals. As a result, the research generally focuses on major transactions wherever possible. Analysis of real estate transactions necessitates the maintenance of relationships with buyers, sellers, brokers and appraisers and a degree of trust. As such, documentary support for individual transactions is not always available. Also, buyers and sellers often have a different perspective on properties so that income projections beyond the first year will rely heavily upon purchase assumptions and logic that is not always available to the analyst.