

Market Value Assessment in Saskatchewan Handbook

Office Building

Valuation Guide



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Office Building Valuation Guide

Market Value Based Assessment Legislation in Saskatchewan

Saskatchewan has different assessment legislation¹ than other jurisdictions in Canada that must be taken into account when valuing properties for assessment and taxation purposes. There are specific definitions in Saskatchewan for “base date”, “market value”, “Market Valuation Standard” and “mass appraisal”. It is important to understand how these definitions relate to one another and the requirement for market value based assessments to be determined in accordance with the Market Valuation Standard.

Base Date is defined as “...the date established by the agency for determining the value of land and improvements for the purpose of establishing assessment rolls for the year in which the valuation is to be effective and for each subsequent year in which the next revaluation is to be effective;”

Market Value is defined as the “...amount that a property should be expected to realize if the estate in fee simple in the property is sold in a competitive and open market by a willing seller to a willing buyer, each acting prudently and knowledgeably, and assuming that the amount is not affected by undue stimuli;”.

Market Valuation Standard means the “standard achieved when the assessed value of property:

- (i) is prepared using mass appraisal;
- (ii) is an estimate of the market value of the estate in fee simple in the property;
- (iii) reflects typical market conditions for similar properties; and
- (iv) meets quality assurance standards established by order of the agency;”

Mass appraisal is defined as “...the process of preparing assessments for a group of properties as of the base date using standard appraisal methods, employing common data and allowing for statistical testing;”.

Assessment legislation in Saskatchewan requires that non-regulated property assessments be determined pursuant to the Market Valuation Standard. Throughout this Handbook the term “market value based assessments” is used to refer to non-regulated property assessments. Unlike single property appraisals, market value based assessments must be prepared using mass appraisal and “...shall not be varied on appeal using single property appraisal techniques”. All Handbook references to market value are subject to the requirements of the Market Valuation Standard.

¹ The following Acts provide the statutory basis for property assessment in Saskatchewan:

- *The Assessment Management Agency Act*
- *The Interpretation Act, 1995*
- *The Cities Act*
- *The Municipalities Act*
- *The Northern Municipalities Act, 2010*

For more details on how to access this information refer to Appendix 2: Resources - Section 2a (Queen’s Printer).

1.0 Introduction

Office buildings are typically purchased for investment purposes, and thus a property's ability to earn income is the critical element affecting its value from a market point of view. The potential income from an office building is affected by many factors including its amenities, location, availability of parking, structural condition, economic conditions, and competition. Any condition that affects potential income or how the market views an office building will affect its market value based assessment.

1.1 Office Buildings Covered in this Valuation Guide

The methods described in this valuation guide are designed to suit office buildings ranging from the lowest quality to the highest quality.

The methods presented here may be applicable to other types of offices located in commercial centres or industrial areas, but the material in this valuation guide does not directly address these or any other types of office properties.

1.2 Scope of Valuation Guide

- This valuation guide is designed as an aid for the valuation of office buildings for assessment purposes.
- It sets out a procedure to follow to derive market value based assessments for office buildings using the income approach.
- The valuation guide provides a practical tool to evaluate and determine market value based assessments.
- Valuation parameters provide the guidelines that establish statistically sound market value based assessments for office buildings as of the base date.
- The valuation guide is designed as a tool to aid the assessor in deriving market value based assessments; it is not intended to replace the assessor's judgement in the valuation process.
- The method presented in this valuation guide is aimed at deriving assessment values for a number of different groups of office buildings.

Hypothetical data and analysis are provided throughout this Valuation Guide in the narrative and in various examples, tables and forms. These examples are provided for illustrative purposes only. The exact form of the market value based assessment analysis is up to the discretion of the assessor subject to the Market Valuation Standard and other relevant legislation.

2.0 Analysis of Valuation Approaches

2.1 Approaches to Value

Sales Comparison Approach

Even though office building sales data is often readily available, it may not be possible to obtain a sufficient number of sales for each type of property to make accurate comparisons. Where sales information is present and applicable, the sales comparison approach should be considered. If the sales information is not sufficient then other approaches to value may be considered.

Income Approach

Office buildings frequently rent and it is generally possible to obtain such rental information for all types of offices. Furthermore, there are generally sales available to indicate capitalization rates required in determining market value based assessments using the income approach. Therefore, the income approach can be employed to establish market value based assessments for office buildings, subject to adequate sales and rental information. Also, any office building sale that does occur should be researched and verified as such analysis is useful in establishing capitalization rates and in confirming the values derived using other approaches to value.

Cost Approach

Office building rents vary with general economic conditions as well as the supply and demand for office space. As a result, the values of office buildings tend to fluctuate over time. Without close analysis of inflationary and deflationary pressures, of changes in land values, and the proper application of depreciation, the cost approach will not yield accurate market value based assessments. Therefore, the cost approach is not recommended for the valuation of office buildings.

2.2 Recommendation

The income approach to value reflects the manner in which the market views office buildings because these properties are bought, sold, and developed on the basis of their expected net incomes. Since the income approach applies well in a mass appraisal environment, the following recommendation is made:

The income approach is recommended for the valuation of office building properties for assessment purposes.

The theory behind the income approach to value is that a property's value reflects the present worth of anticipated or forecasted future benefits from the real estate. As such, the income approach analyses the rents and income from an office building and converts this typical net revenue into an estimate of value.

2.3 Application of the Income Approach

Income Approach Methods

In general there are two methods available to convert future income into a present value:

- Direct capitalization; and
- Yield capitalization (discounted cash flow analysis).

The direct capitalization method is most applicable to the valuation of income-producing properties in a mass appraisal environment. It requires the least amount of data to apply, reflects typical rents and market conditions, and is best suited to the use of statistical analysis. The yield capitalization method is not suitable for use in mass appraisal valuations in Saskatchewan due to its consideration of individual investor preferences (reflects personal versus typical market conditions), its need for more market data and numerous estimates of rents, holding periods and projected reversions, and its lack of suitability for statistical analysis. For these reasons the yield capitalization method will not be further detailed in this Guide.

Overview of the Direct Capitalization Method

The analysis in this section presents a direct capitalization method that is suited for mass appraisal applications.

Direct capitalization converts or “capitalizes” the expected level of potential net income into a market value based assessment using an overall capitalization rate. The conversion factor or capitalization rate is a reflection of all of the investor’s relative and comparative feelings and aspirations about the property in light of the investment characteristics offered by the asset and in comparison to other investment opportunities on the market.

In its most basic form, the direct capitalization method is an elementary mathematical ratio involving the estimation of typical net operating income (NOI) as of the base date, which is then capitalized into value to produce a market value based assessment.

The Direct Capitalization Method

$$\text{Market Value} = \frac{\text{Net Annual Operating Income}}{\text{Capitalization Rate}} \quad V = \frac{\text{NOI}}{R}$$

For example:

$$\begin{aligned} \text{NOI} &= \$100,000 \\ \text{Capitalization Rate (R)} &= 10\% \\ \text{Market Value} &= \$100,000 \div 0.10 = \$1,000,000 \end{aligned}$$

Although there are other methods of converting expected future income into an estimate of value (e.g. discounted cash flow), the direct capitalization method lends itself to mass appraisal applications. It is possible to develop market value based assessments under this formula through proper evaluation of the potential net income and through the selection of an appropriate capitalization rate.

In establishing market value based assessments using the income approach, the objective is to evaluate the typical income generated by the real estate. For office buildings, this task is simplified by the fact that leases are typically established on a net basis (tenant pays all operating expenses including taxes). This factor serves to limit the amount of adjustments required in order to determine the net operating income attributable to the real estate.

2.4 Practical Valuation Process

In this valuation guide, the direct capitalization method has been developed into a practical valuation tool with guidelines on:

- Collecting data;
- Analysing information;
- Developing valuation parameters;
- Determining market value based assessments; and
- Testing the quality of assessment values. (Refer to the Valuation Parameters Guide for a general discussion on statistical testing.)

3.0 Office Buildings Valuation Process

3.1 Overview of the Procedure

- 1) Collect appropriate information.
- 2) Analyse data and establish office classes and office valuation parameters.
- 3) Determine the potential typical net income (PGI)².
 - Establish typical market rents for all types of space in the property
 - Multiply rentable areas by the typical market rents and add other income (e.g. parking) to determine PGI.

$$\text{PGI} = (\text{Rentable Area} \times \text{Market Rent}) + \text{Other Income}$$

- 4) Determine effective gross income (EGI):
 - Deduct for typical vacancy and collection loss.

$$\text{EGI} = \text{PGI} - \text{Vacancy and Collection Loss}$$

- 5) Establish net operating income (NOI):
 - Make appropriate deductions for typical non-recoverable operating expenses and typical shortfall.

$$\text{NOI} = \text{EGI} - \text{Non-Recoverable Expenses} - \text{Shortfall}$$

- 6) Capitalize NOI into value.

$$\text{Value} = \text{Net Operating Income} \div \text{Capitalization Rate}$$

- 7) Add / deduct other appropriate value, if required.
- 8) Determine a market value based assessment of the property.
- 9) Test results.

² *Gross income* does not necessarily imply or rely upon the analysis of “gross” rents. In this analysis potential gross income refers to the potential amount of “net” rental income that can be generated by the property.

How the Approach Works

Start with Net Market Rents for Finished Space

The analysis undertaken relies on the premise that net market rents can be identified for the various types of finished space in the different types of office buildings:

- Typical office area;
- Ground floor / premium office area;
- Basement / storage space;
- Retail areas; and
- Parking space.

The use of net market rents means that very few adjustments are required to determine the market value of the real estate. Establishing rents for finished space also incorporates the value of leasehold improvements.

Adjustments are then made for:

- Typical vacancy and collection loss;
- Typical non-recoverable expenses (expenses which are not passed on to the tenants); and
- Typical vacant space shortfall (expenses associated with operating vacant space)

to derive the typical net operating income.

Capitalizing NOI produces a value attributable to the real estate

The use of net market rents also means that non-real estate factors such as:

- Business value;
- Building operational costs; and
- Property taxes

do not enter the calculations except in the determination of net market rents.

3.2 Collecting the Appropriate Data

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

Supporting Information

Sources of supporting information include: office building owners/managers, real estate consultants and brokers, real estate publications, industry associations, and government sources.

Property Information

To compare, classify, and develop valuation parameters for office buildings, it is necessary to obtain pertinent physical and descriptive information. Typical information that could be collected for a property and entered into the assessor's valuation system is shown on the Office Building Data Entry Example. (*Refer to Figure 6.*)

To collect the appropriate financial information the assessor could send a Request for Information Form to the office building property owner (or the designated contact person). (*Refer to Section 6.0 for examples.*) If possible, request the following information:

- Detailed rent rolls;
- Rentable areas per tenant;
- Property's income and expense statements;
- Records and details of tenant inducements;
- Basis for rents charged (for finished or unfinished space); and
- Copies of leases.

Property Inspection

To keep records up to date, all assessed properties are generally inspected from time to time. Along with the physical measurements the following types of items may be noted when inspecting an office building:

- Quality of building;
- Condition of improvement;
- Nature and quality of common facilities, amenities, and finishes;
- Quality of finishes in tenant spaces;
- Parking;
- Level of occupancy; and
- Photograph of property.

Where there appears to be surplus or excess land the assessor will typically also review the building and land use by-laws governing each office building.

An analysis of the property information and property inspection information will enable the assessor to arrive at conclusions about:

- The characteristics and nature of the office building market in the jurisdiction and/or market area;
- Typical vacancy and collection loss factors;
- Typical management and operating expenses; and
- Typical market rents for various types of buildings and various types of space (office, retail, storage, etc.).

Information on sales of office buildings in the market must also be collected to assist in the development of appropriate capitalization rates.

3.3 Analyse the Data, Establish Class of Office and Valuation Parameters

Data Analysis

For the assessor to gain full value from the data collected, the data should be organized in such a way that meaningful comparisons can be made and valuation conclusions drawn. By collecting and organizing the data on a number of office buildings it becomes possible to establish the typical performance, characteristics, and valuation parameters to apply in the valuation of other office buildings.

Collecting and tabulating such data also enables the assessor to distinguish between the typical value of real estate components and the actual performance of a specific property. A market value based assessment determined through mass appraisal methods demands the application of a property's typical performance in the marketplace, not its actual performance. As noted in the Valuation Parameters Guide, this requirement is established in the Market Valuation Standard mandated in legislation in Saskatchewan's municipal Acts.

Using Market Rents

In determining potential income, the assessor is not bound by the contractual rent between the landlord and the tenant. Market rents should be used to form the basis of valuation as opposed to actual rents because actual rents may reflect what market rents were at the time a given lease was negotiated (before the base date). Therefore, in order to capture the fee simple value of the real estate as of a particular date, typical market rents that reflect the market conditions as of the base date should be employed.

Fee Simple Interest

For assessment purposes, the market value of a property is its fee simple value. Fee simple estate is defined (*The Appraisal of Real Estate, 3rd Canadian Edition, 2010*) as "absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the four powers of government: taxation, expropriation, police power, and escheat." A fee simple title is the ultimate ownership estate in real property and reflects all rights, title and interests in the property.

Leasehold Interests

Leasehold interests are created in a property where tenants pay less than the market rent. Such tenants could conceivably sublet their space for higher rents and enjoy some of the value of the property. To obtain a proper market value under these circumstances it is necessary to value interests of both the property owner and the tenants.

Following this line of thought, if all office space is valued on the basis of market rents, the expected potential income represents both the income collected by the owner and the fee simple estate in the property.

Analysing Market Rents for Office Space

The assessment valuation procedure for office buildings relies upon the derivation of typical net rent for the typical finished space in a building and the application of these appropriate net rental rates to each space type to derive the potential net income of the property. The essential task in this procedure is to determine the typical rent commanded by the market for the space as of the base date.

This task requires two steps:

- Determine the types and amount of space in the office building; and
- Determine the market rents for that space.

Classification of Office Buildings

Rent may vary by class of office building; therefore the first step in the analysis of rental data is to classify all office buildings by type and function. This process is commonly referred to as stratification.

Office buildings can be stratified based on the types of properties prevalent in the jurisdiction and/or market area. There is no one correct or appropriate classification system.

Office buildings range in size, quality, type, location and number of tenants. In order to estimate the potential gross income from such properties, it is important to consider how these factors influence market rents and capitalization rates. Building class and quality are indicative of the rents that can be charged, the inducement packages offered, and the risks associated with an investment.

The following is a hypothetical example of how office buildings may be grouped (stratified) and described:

1) Prestige or flagship office buildings

- Materials and finishes meet the highest standards.
- Located in the downtown core, generally high rise buildings.

2) Standard quality office buildings

- Average materials and finishes.
- Location of the buildings is not strictly limited to the downtown core.
- Generally older than prestige quality buildings.

3) Below average quality and standard of office buildings

- Public areas are minimal and lack definition.
- Building services and mechanical/ electrical systems provide little or no flexibility for future change.
- Public transportation access may be infrequent.
- Shopping and restaurant facilities may be minimal.

Types of Space Found in an Office Building

There is a wide variety of uses and types of space found in office buildings. The following classifications describe the most common types of space found in an office building:

- Typical office area;
- Ground floor and premium office areas (e.g. penthouses);
- Basement / storage space;
- Retail areas; and
- Parking space.

These classes also may define the different rental rates and income sources for offices.

Organizing the Data

The income information collected from the property owner and the inspection notes taken by the assessor are typically organized by class of building and type of space. As more buildings are classified and added, patterns may emerge. The assessor can use these patterns to begin to establish the typical valuation parameters to be applied to the type of space and class of office building, including:

- Typical market rents for various types of buildings and various types of space (office, retail, storage, etc.);
- Typical vacancy and collection loss factors;
- Typical inducements; and
- Typical management and operating expenses.

Analysis of these factors (as presented in *Sections 3.4, 3.5, and 3.6*) produces some of the typical valuation parameters required in the assessment process. (*Refer to Figure 1 for an example.*)

Where there is adequate underlying data, multiple regression analysis (MRA) may also be used to help determine valuation parameters such as typical rent. (Refer to the Introduction Chapter/Sales Comparison Approach section for an additional explanation of the MRA statistical technique.)

Figure 1: Office Building Valuation Parameters Example

Parameter	Above Average Quality			Average Quality			Below Average Quality		
	Low	Median	High	Low	Median	High	Low	Median	High
Vacancy allowance	3.0%	5.0%	7.0%	4.5%	7.0%	9.0%	4.5%	8.0%	11.0%
Non-recoverable operating expense		6.5%			8.0%			8.0%	
Vacancy shortfall (\$ per sf)*	\$4.00	\$6.00	\$8.00	\$3.25	\$4.50	\$7.00	\$2.00	\$3.50	\$5.00
Capitalization rates	6.5%	7.5%	8.0%	7.0%	8.0%	9.5%	8.0%	9.0%	11.0%

* Vacancy shortfall may also be expressed as a percentage.

3.4 Determine Potential Gross Income (PGI)

Establish Market Rents

This income approach procedure requires that typical net market rents be established for finished office building space. The amount of rent and degree of finish will vary according to the type of space and the class of office building.

Typical Market Rents

Establishing typical net market rents for finished space in comparable office buildings can be accomplished in the following manner:

- Analyse market rents for the type of space found in similar office buildings.
- The best evidence of the market rent for a particular property is the net rental rate for finished space that reflect the market conditions as of the base date.

Full Floor Rents

All other factors being equal, the expectation is that a small office in a building will have higher rent per square foot than a larger office in the same building. In order to ensure that the rental rates established for the types of space in the building reflect typical market rents, typical rental areas should be considered. As well, and in order to compare one office building to another, the assessor can attempt to determine the market rents for a full office floor.

Consolidation of Rental Rates

When valuing an individual property for assessment purposes, rents established for similar space in other office buildings of the same class will be applied.

Therefore, all rental and other information collected should be organized in such a way as to produce typical rents for each type of space and each class of office building. (*Refer to Figure 2 for an example.*)

Once the rent rolls and other financial information have been analysed from a sufficient number of office buildings, it should be possible to determine appropriate statistical measures (median, mean, range, etc.) for the market rents by types of space within each class of office.

Issues with Market Rents

Understanding Office Market Conditions

Lease arrangements tend to vary according to the state of the market including the supply and demand for office space and the negotiating power of the parties involved. Estimation of office building market value based assessments therefore requires a thorough understanding of the office market and the types of leases being offered. Copies of leases are important factors in understanding this market. For example, if the practice, because of market conditions, is to give tenants inducements to lease, this impacts the net rent received by the owner.

Tenant Inducements

In order to establish the typical net market rent in situations where the tenants receive inducements, it is necessary to analyse the terms and conditions of these inducements.

Landlords may offer inducements to tenants in order to attract them into a building. Generally speaking, the amounts of inducements are higher in times of higher vacancies. Inducements can consist of one or more of the following:

- Leasehold improvements.
- Cash payments for various reasons.
- Periods of free rent.
- Lease buy-outs.

Inducements affect both the net income received by the owner and the effective rent paid by the tenant. For example, a five-year net lease for 2,500 square feet at a rental rate of \$20 per square foot per annum is a fairly straightforward rental arrangement (total rent over five years = $\$20 \times 2,500 \times 5 = \$250,000$). If, however, the tenant negotiates one year of free rent or a \$50,000 signing bonus, then the effective rent paid by the tenant is something less than the \$20 per square foot stated on the rent rolls. Instead of paying \$250,000 over the five-year lease the tenant now pays \$200,000, or (without considering the time value of money) an average rate of \$16 per square foot.

Leasehold Improvement Allowances

The most common form and application of inducements is the provision of leasehold improvements by the landlord either through actual construction or through a direct cash payment to the tenant.

Since the valuation procedure presented in this valuation guide is based on the net effective rent for finished space, the income analysis incorporates the value of leasehold improvements. Because of this approach, inducements that are attributable to leasehold improvements should not affect the net market rents used in the assessment of a property. Therefore, no deduction or adjustments to the base rent should be made for inducements attributable to leasehold improvements.

Leases for Unfinished Space

Allowances can be made for unfinished office space depending on the availability of market information. However, the recommended approach is to establish the appropriate market rent for finished space. This can be accomplished by completing a study of finished office space as presented in *Figure 2*.

Figure 2: Typical Office Building Rents Example

Typical rent per square foot	Above Average Quality			Average Quality			Below Average Quality		
	Low	Median	High	Low	Median	High	Low	Median	High
Office space	\$15.00	\$18.00	\$22.00	\$8.00	\$12.00	\$16.00	\$2.00	\$6.00	\$9.00
Ground floor / premium office	\$25.00	\$27.00	\$32.00	\$15.50	\$17.50	\$22.00		\$7.00	
Retail	\$31.00	\$36.00	\$40.00	\$18.00	\$20.00	\$25.00		\$15.00	
Basement / storage	\$4.00	\$5.00	\$7.00	\$2.50	\$3.00	\$5.00		\$2.00	
Parking spaces		\$1,800			\$1,200			\$600	

Gross and Partially Net Leases

Where the rents reported include some or all operating expense items, it becomes necessary to deduct these expense items from the reported rent in order to achieve a net rental rate and therefore, comparable to other rents.

Gross Rent Conversion to Net Rent (1,000 ft² office) Example

	Total	Per ft ²
Gross Rent	\$10,000	\$10.00
Operating Expenses	-\$ 1,250	-\$1.25
Taxes	-\$ 2,800	-\$2.80
Net Rent	\$ 5,950	\$5.95

Calculation of Potential Gross Income (PGI)

Upon completing the analysis of all available rental information, the assessor should be able to determine appropriate statistical measures (median, mean, range, etc.) for the market rents by the typical types of space found in each class of office building.

The estimation of the potential gross income (PGI) is completed by adding the potential income that could be generated from each type of space (office, retail, storage) to any other income generated by the property. (*Refer to Figure 3.*)

The office building may, for example, contain ground floor retail space or a special penthouse floor. It may be necessary to establish other market rental rates to apply to this type of space.

Ground floor or concourse retail space can command higher rents than general office space.

Premium space commands premium prices. If the nature of the building is such that rental rates change on a floor-by-floor basis due to such things as the view or some type of unique architectural amenity (e.g. roof garden, balcony), then the analysis of these market rents should consider and reflect these premiums, if they exist as of the base date.

In order to calculate PGI, the basic rentable area of each type of space is multiplied by the typical market rent for that type of space. The total of such calculations added together with the income from parking forms the PGI. The calculation of PGI can be illustrated as follows:

Figure 3: Potential Gross Income Calculation Example

Type of space	Rentable area	Net market rent	Total rent
Office	79,750	\$12.00	\$957,000
Premium / ground floor office	2,200	\$18.00	\$39,600
Retail	3,750	\$20.00	\$75,000
Basement/ storage	1,400	\$3.00	\$4,200
Parking	100	\$1,200	\$120,000
Total potential gross income			\$1,195,800

Comparison of Types of Space

The categorization of property and office space types makes the task of calculating PGI easier by enabling the comparison of one property to another similar property. As a result, in the case where no data is received on a property, it will still be possible to establish the income for the property through an analysis of the type, quality and size of the areas they occupy and imputing typical market rents from the analysis of similar properties that did supply information.

Issues with Analysis of Space

Common Standard of Measurement

Rents can be reported in any number of standards, including gross measured area, usable area and rentable (or net leasable) area. It is important that a common measurement standard be used to measure space so that useful comparisons can be made. The assessor should be aware of this and attempt to convert all measurements of rental space to one standard for analysis and application.

Other Commercial Components

If the office property contains other commercial components (for example, a hotel or retail), these parts of the property could be valued separately. These other commercial components may be valued using procedures found in other valuation guides (e.g. Hotel/Motel and Shopping Centre Guides). The total of all such values would then be added together to form the total property value.

Parking Income – Hourly Rates

Where annual parking rates per space can be established parking income may be included as part of the PGI. For parking facilities with attendants and hourly rates, it may not be possible or appropriate to determine the annual rental rate per parking space. For example, some buildings may charge parking on

an hourly basis. In these instances it may be more appropriate to add the net income from parking (after deduction for operating expenses) to the EGI.

When investigating and analysing the potential inclusion of parking income for an office property, ensure that the parking income is attributable only to the property and not to any business interest.

3.5 Determine Effective Gross Income (EGI)

The potential gross income (PGI) is now reduced to reflect vacancies and produce the effective gross income (EGI).

Vacancy Rates

The vacancy rate in office buildings tends to fluctuate with supply and demand for offices. As the demand for office space increases, vacancies decrease and the market conditions shift in favour of the seller or landlord. An office market experiencing low vacancy is also an indicator for developers to construct new projects. Once these projects come on stream, or if there has been a decline in the demand for office space, vacancies rise and the bargaining power in the market shifts toward the purchaser or tenant. In the latter instance, landlords attempt to fill their buildings by offering larger inducements. This fluctuation of vacancy rates and inducement payments generally follows in cycles.

Establish Typical Vacancy Rates for Each Class of Office

Since vacancy rates are cyclical and the objective of the assessment process is to establish the typical real estate value, typical vacancy rates should be applied in the assessment of office buildings.

Information on vacancy rates can be derived from many sources. The primary source is the information supplied on the questionnaires returned by property owners. It is also possible to obtain such information from the managers of office buildings. There are also a number of real estate firms that keep statistics on such matters. The collection of this information is part of the process of developing the valuation parameters in *Section 3.3*.

To determine Effective Gross Income (EGI):

Start with the potential gross income (PGI).

- 1) Add the typical parking income (and other income, if appropriate) to the PGI to derive total PGI.
- 2) Multiply the total PGI by the typical vacancy rate for that class of office.
 - Other commercial components, if present, may require special consideration for application of vacancy.
- 3) Deduct these vacancy allowances from the total PGI.

The result is the effective gross income (EGI).

Figure 4: Effective Gross Income Calculation Example

Potential gross income		\$1,195,800
Other income (parking, etc.)		\$4,700
Total potential gross income		\$1,200,500
Typical office vacancy rate	5.0%	-\$60,025
Retail vacancy rate	n/a	0
Total effective gross income		\$1,140,475

3.6 Establish Net Operating Income (NOI)

The operating expenses that are not recovered must be deducted from the effective gross income (EGI) to obtain the net operating income (NOI) from the property.

Where leases are signed on a net rent basis, the tenant also agrees to pay his or her share of the operating expenses associated with the property (as defined in the lease). In a typical office building, the operating costs such as real property taxes, heating, air conditioning and cleaning are usually apportioned amongst the tenants on a square foot basis. Net rent analysis attempts to reflect the value of the income net to the owner; that is, the income after all expenses have been paid. Even on a net rental basis, however, there are two areas where the property owner must cover expenses:

- Non-recoverable operating expenses – expenses which are not passed on to the tenants; and
- Vacant space shortfall - expenses associated with operating vacant space.

The EGI must be reduced by the amounts of non-recoverable operating expenses and vacant space shortfall that is typically reflected in the marketplace for the various classes of office buildings, such adjustments supported by market evidence and analysis.

Unrecovered Operating Expenses

Unrecovered operating expenses is the term used in this Handbook to refer to the total of the operating expenses that are not recovered from the tenants. This includes non-recoverable operating expenses and vacant space shortfall.

Non-Recoverable Operating Expenses (typically not included in a lease)

The operating expenses that are typically not recovered from tenants under the terms of a lease are as follows:

- Legal and audit fees

- Structural repairs and repairs which are capital in nature (and outside standard maintenance and repair work).

This may include such things as roof and wall repairs and parking lot resurfacing. In the general operation of an office building, these types of expenses do not generally occur every year.

- Advertising and promotion – This only includes advertisements by the management in the operation of the building; for example, advertising to fill vacant space.
- Leasing commissions - In times of high vacancies and when the building is first being leased up, leasing commissions, even though amortized over the term of the lease for which they are incurred, can have a large effect on the net income generated for the landlord. Leasing commissions should be taken into account when establishing the net effective rent paid by a tenant. However, if they have not been properly accounted for in the determination of rent, they form part of the deduction for unrecovered operating expenses.

Vacant Space Shortfall

Expenses related to the cost of carrying vacant space may not be chargeable to other tenants under typical lease arrangements. When space becomes vacant, the owner of the office building carries the operating costs of that space. These costs include such things as heating and security associated with the unoccupied space, as well as some operating expenses and realty tax payments that would otherwise have been made by a tenant. The expense represents a shortfall to the owner and, therefore, a deduction from the amount of income received from the office building. In assessing the office building, the vacant space expense shortfall should be based on typical vacancy levels; that is, the same vacancy factor that is used to determine EGI.

Studies completed as part of the office building valuation parameters indicate the typical amount of costs to be deducted due to vacant space shortfall. (*Refer to Figure 1.*)

$$\text{Vacant Space Shortfall} = \text{Typical Vacant Space} \times \text{Vacant Space Operating Cost Per ft}^2$$

Operating Expense Surcharge

A common clause contained in office leases is an administration charge or surcharge on operating expenses. This surcharge is usually a percentage of the operating expenses. In normal circumstances, part of the surcharge is attributed to the management and administration of the building and, therefore, covers the value of the management interest in the property. The other part of the surcharge contributes to the costs of the operating expenses attributable to the vacant space shortfall. The surcharge may reduce the non-recoverable operating expenses.

Determination of Net Operating Income

The objective of this valuation process is to determine the annual net operating income (NOI). When making the deductions for typical non-recoverable operating expenses from the EGI, the assessor may annualize such expenses as structural repairs and other extraordinary repairs over a reasonable period of years. The same applies to leasing commissions that should be charged over the course of the lease term. By deducting the annualized portion of these expenses from the EGI a more accurate reflection of NOI is given and provides the foundation for a more stabilized market value for the office building.

Figure 5: Net Operating Income Calculation Example

Typical vacancy sf	4,355	
Shortfall per sf*	\$4.50	
Vacant space shortfall	\$19,598	
Effective gross income		\$1,140,475
Non-recoverable expense	8.0%	-\$91,238
Vacant space shortfall		-\$19,598
Net operating income		\$1,029,639

*Vacancy shortfall may also be expressed as a percentage

3.7 Capitalize the Net Operating Income into Value

After estimating the net operating income (NOI), the market value based assessment is produced through the direct capitalization of the NOI.

$$\text{Value} = \text{Net Operating Income} \div \text{Capitalization Rate}$$

Establishing Capitalization Rates

Sales of Office Buildings – Recommended Approach

Turning the equation in the capitalization method around produces the appropriate formula for establishing capitalization rates:

$$\text{Capitalization Rate} = \text{Net Operating Income} \div \text{Value (Sale Price)}$$

In the same manner that income and rents are analysed for property valuation purposes, the income and other data should be analysed for office properties that have sold as of the base date in order to establish the capitalization rates to be applied to office buildings.

Other Approaches

If there is insufficient market sales evidence to establish capitalization rates, there are other possible ways such as mortgage-equity or band of investments to derive rates. These other approaches are not suitable for use in mass appraisal valuations in Saskatchewan.

Other Sources

Published capitalization rate studies and similar reports may be used in some markets as a general check of the rates determined by the assessor.

Selection of a Capitalization Rate

Selection of an appropriate capitalization rate is essential to the estimation of an equitable and realistic value for a property. The selection task starts with an analysis of the capitalization rates demonstrated in the sales of similar office building properties.

After a review of the available information, appropriate statistical measures (median, mean, and range, etc.) can be determined for capitalization rates for each class of office building. From this the typical capitalization rate can be determined for each group of properties being valued.

Effective Tax Rates

In some income valuation procedures, the capitalization rate employed is adjusted for taxation considerations. However, in the examples used in this valuation guide this adjustment is not required because net incomes are being used and taxes have been deducted as an expense.

3.8 Add / Deduct Other Values

There may be certain properties where the entire value of the property is not completely captured by the foregoing application of a given valuation approach. In these situations a lump sum adjustment may be required. For example, a property may have surplus or excess land which is not developed due to current market conditions. This land may be valued separately and added to the market value based assessment for the entire property. A similar lump sum adjustment may also be applied for improvements if warranted.

3.9 Market Value Based Assessment of Property

In summary, a market value based assessment is determined by establishing the typical net operating income generated through the foregoing analysis and applying to this the appropriate typical capitalization rate. Then, if required, any additional value is added to this total to determine an overall market value based assessment for the property.

An example of an office building valuation is presented in *Section 5.0*.

4.0 Validation of Results

The strength of an assessment system rests on two tenets: (1) its ability to produce appropriate market value based assessments; and (2) its treatment of similar properties in a fair and consistent manner.

To accomplish these ends, the valuation process reflects the views and methods used in the marketplace. The process is applicable to all properties.

There are two areas where the quality of the results can be ensured quickly and efficiently:

- 1) Valuation parameters; and
- 2) Check against sales values.

Valuation Parameters

The assessor's valuation system has valuation parameters that have been researched, collected and analysed by local assessors. Appropriate statistical measures (median, mean, range, etc.) can be determined for each valuation parameter. When the assessor applies these valuation parameters to all similar properties, then the market value based assessments will be fair and consistent.

Check against Sales Values

To ensure that the market value based assessments developed are in line with the local market, the assessment values will typically be checked against any sales of similar properties that took place. Such sales also have inferences for values of similar properties.

5.0 Office Building Valuation Example

The following two pages present a hypothetical example of a market value based assessment analysis of an office building.

Figure 6: Office Building Data Entry Example

Example of typical pertinent physical and descriptive data about the property.

Figure 7: Office Building Valuation Summary Example

Example of summary data on typical net market rents, typical vacancy rates, and the other valuation parameters that can enable the assessor to calculate the appropriate market value based assessment for the property.

Figure 6: Office Building Data Entry - Example

Address		Base Date	
Building name			
Municipality		Measurements in	Square feet
Assessment Roll #			
Office class	Standard quality		
Inspection notes			
Inspection date			
Office quality	Good Standard quality building - appears to date from early 1970s		
Vacancies	Limited - partial vacancies on 3 floors		
Extra features	Large foyer - used to be Prestige quality building		
Parking	Underground - 100 spaces		
Location	West end of office core		
Tenant type	Multiple tenancies		
Condition	Good		
Other comment			
Building data		Rentable area breakdown	
	In sq. feet		
Total building area	98,550	Office	79,750
Typical floor rentable area	7,250	Ground floor/ premium.*	2,200
Building efficiency	88.4%	Retail	3,750
No. of storeys	12	Basement / storage*	1,400
No. of parking spaces	100	Total rentable	87,100
Year built	1973		
Year renovated			
Land / density			
Site area in sq. feet	26,454		
Density ratio	372.5%		

* Not including Retail rentable area

Figure 7: Office Building Valuation Summary – Example

Office address		Base Date	
Class of building	Standard quality	Assessment Roll #	
Type of Space	Rentable area in sf	Net market rent per sf	Market rent - Total
Office	79,750	\$12.00	\$ 957,000
Ground floor/ premium*	2,200	\$18.00	\$ 39,600
Retail	3,750	\$20.00	\$ 75,000
Basement / storage*	1,400	\$3.00	\$ 4,200
No. of parking spaces	100	\$1,200.00	\$ 120,000
Potential gross income	87,100 sf		\$1,195,800

* Excluding retail areas

Vacancy rates		Comments
Typical office %	5.0%	
Retail %		not applicable
Valuation parameters		
Other income	\$ 4,700	temporary lobby rentals
Vacant space shortfall \$/	\$4.50	
Non-recoverable expenses	8.00%	
Capitalization rate %	9.00%	
Land value \$ per		
Other \$ value	\$ 0	

Effective gross income	
PGI	\$ 1,195,800
Other income	\$ 4,700
Total PGI	\$ 1,200,500
Office vacancy	5.0% \$ 60,025
Retail vacancy	na \$ 0
EGI	\$ 1,140,475

Net operating income	
Vacant space shortfall	- \$ 19,598
Non-recoverable expenses	8.0% - \$ 91,238
NOI	\$ 1,029,639

Vacant space shortfall	
Typical vacancy	4,355
Costs per sf	\$ 4.50
Shortfall	\$ 19,598

Market value	
Capitalization rate	9.00%
Value sub-total	\$11,440,433
Other value	\$ 0
Market Value Based Assessment	\$11,440,000

Value breakdown	
Site area	26,454
Land value per sf	\$ 0
Land value	na
Building value	na

6.0 Appendices

A. Request for Property Information Example

As part of the ongoing assessment process, certain income and expense information are required from you pertaining to the property identified as:

Building name	
Address	
City	
Assessment Roll #	

Any information received will be treated in a confidential manner. Failure to provide information has potential consequences.

Information Required

Rent Roll pertaining to the property for the period covering: **July 20__**
20__ Income and Expense Statement pertaining to the property
20__ Income and Expense Statement pertaining to the property

Information Format

Information can be submitted in either **electronic format**, 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/ floor/ suite number
- * Tenant (trade) name
- * Rentable area
- * Lease start date
- * Lease end date
- * Rent
- * Type of inducement, if any
- * Amount of inducement

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
- * Property Taxes

C. Income and Expense Information - Request Form Example

THE INFORMATION REQUESTED ON THIS FORM CAN BE SENT IN YOUR OWN FORMAT (HARD COPY)
ALTERNATIVELY, THIS FORM IS TO BE FILLED OUT.

Building name:
Address:

RENTAL INCOME	Year 20 __	Year 20 __
RENTAL INCOME		
STORAGE RENT		
OTHER RENT (PARKING ETC.)		
OTHER INCOME (LAUNDRY, LOCKERS, ETC.)		
TOTAL RENT		
EXPENSE RECOVERIES		
RECOVERIES - OTHER		
RECOVERIES - REALTY TAXES		
MISCELLANEOUS		
TOTAL INCOME		

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

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7.0 Office Building Valuation Guide

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