



**Assessment and Taxation Department • Service de l'évaluation et des taxes**

## **VALUATION OF INCOME-PRODUCING PROPERTIES**

**2012 General Assessment**

City of Winnipeg  
Assessment and Taxation Department  
May 5, 2011

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## **Introduction**

This document provides an overview of the City of Winnipeg Assessment and Taxation Department's mass appraisal models for income-producing properties for the 2012 General Assessment. These models predict the full market value of the fee simple interest for each property as of the reference date of April 1, 2010.

The income approach models described on the following pages are developed using multiple regression analysis. These models are comprised of sub-models which predict the potential income (rental, parking, and other income), vacancy and collection loss, operating expenses, and capitalization rates.

The ratio statistics for the income-producing models meet the *Standard on Ratio Studies* published by the International Association of Assessing Officers (approved January 2010).

## **Data Collection**

### ***Physical Characteristics***

The physical descriptions of land and improvements are obtained and updated from field inspections, building plans, and property owners. This information is stored in the Assessment and Taxation Department's CAMA database.

### ***Sales***

Basic details regarding transfers of land come from the provincial Land Titles Office. The sales are investigated to determine if they were bona fide arm's-length transfers and if any unusual financing arrangements were in place. Questionnaires mailed to the purchasers assist in this verification process.

### ***Rents, Vacancy, and Expenses***

Rents, vacancy rates, and operating expenses come primarily from questionnaires mailed to property owners. Also considered is rent, vacancy, and operating expense information in published reports (such as CMHC's Rental Market Report, The Johnson Report, and reports published by various real estate firms). Additional information filed in connection with revisions/appeals is also used.

## Model Description

Income-producing properties are valued for assessment purposes using direct capitalization of net operating income (income approach).

The basic equation for direct capitalization is as follows:

$$\text{Market Value} = \frac{\text{Net Operating Income (NOI)}}{\text{Capitalization Rate}}$$

Net operating income is calculated as follows:

$$\text{Net Operating Income} = \text{Potential Annual Income} - \text{Vacancy and collection loss} - \text{Non-recoverable Operating Expenses}$$

## Valuation of Multi-Family Properties

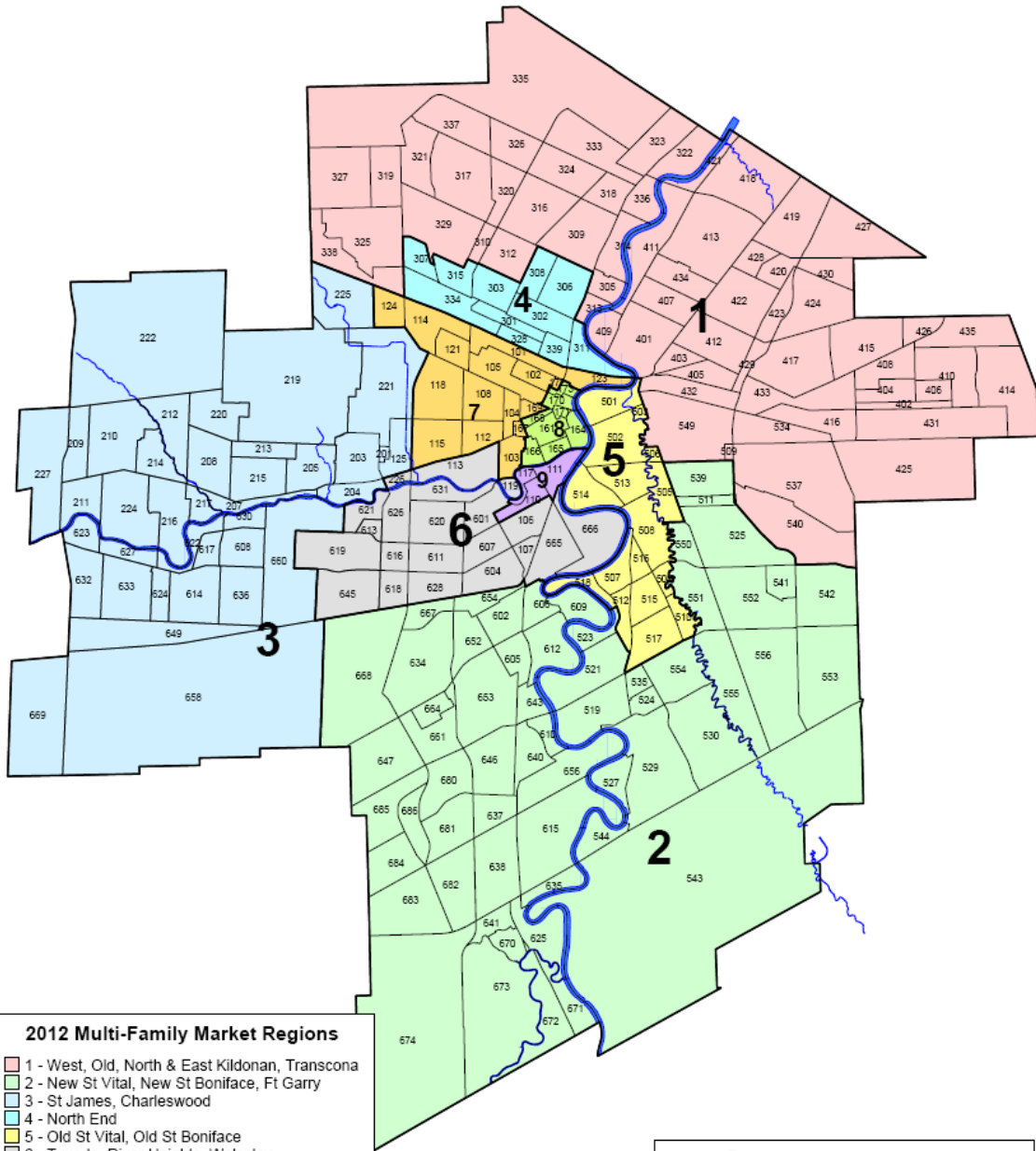
### Market Regions

For valuation purposes, the city is divided into nine multi-family market regions.

<i>Market Region</i>	<i>General Description</i>
1	West, Old, North, and East Kildonan, Transcona
2	New St. Vital, New St. Boniface, Fort Garry
3	St. James, Charleswood
4	North End
5	Old St. Vital, Old St. Boniface
6	Tuxedo, River Heights, Wolseley
7	West End
8	City Centre
9	River Osborne, Roslyn

A map of the above regions is shown on the following page.

# 2012 Multi-Family Market Regions



- 2012 Multi-Family Market Regions**
- 1 - West, Old, North & East Kildonan, Transcona
  - 2 - New St Vital, New St Boniface, Ft Garry
  - 3 - St James, Charleswood
  - 4 - North End
  - 5 - Old St Vital, Old St Boniface
  - 6 - Tuxedo, River Heights, Wolseley
  - 7 - West End
  - 8 - City Centre
  - 9 - River Osborne, Roslyn

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### Description of Multi-Family Inventory

The following tables show the multi-family inventory profile by market region, age, unit count, and storey count. (All counts are approximate.)

<i>Market Region</i>	<i>Count</i>
1	401
2	154
3	138
4	120
5	251
6	203
7	427
8	87
9	158
Total	1,939

<i>Effective Year Built</i>	<i>Count</i>
Before 1946	368
1946 to 1959	436
1960 to 1974	726
1975 to 1997	351
1998 or after	58
Total	1,939

<i>Unit Count</i>	<i>Count</i>
12 or less	623
13 to 30	627
31 to 60	315
61 or more	374
Total	1,939

<i>Storey Count</i>	<i>Count</i>
5 or less	1,709
6 or more	230
Total	1,939

## **Independent Variables**

The variables that affect the estimated potential gross income (PGI)—which includes rental, parking, and other income—are as follows:

- Number of rental units
- Unit type mix
- Effective year built
- Average rental unit size
- Total gross floor area
- Amount of parking
- Market region
- Pools
- Site influences
- Tenant appeal

## **Calibration of the Sub-Models**

### ***Potential Gross Income (PGI)***

The PGIs generated by the model range from \$281 to \$1,284 per unit per month; the median is \$587. Most of the PGIs fall between \$483 and \$732 (20<sup>th</sup> and 80<sup>th</sup> percentiles).

### ***Vacancy and Collection Loss***

The two vacancy and collection loss rates in the model are 2.5% for market regions 4 and 7 and 1.3% for all other regions.

### ***Operating Expenses***

The operating expenses generated by the model range from 42.2% to 66.0% of effective gross income (EGI); the median is 55.0%. (EGI is the potential gross income less vacancy and collection loss.)

### ***Capitalization Rates***

Capitalization rates for the sold properties are calculated by dividing the model-generated NOI estimates by sale prices that are time-adjusted to April 1, 2010. Analysis of these rates result in model capitalization rates ranging from 5.0% to 7.5%.



## Valuation of Office and Retail Properties

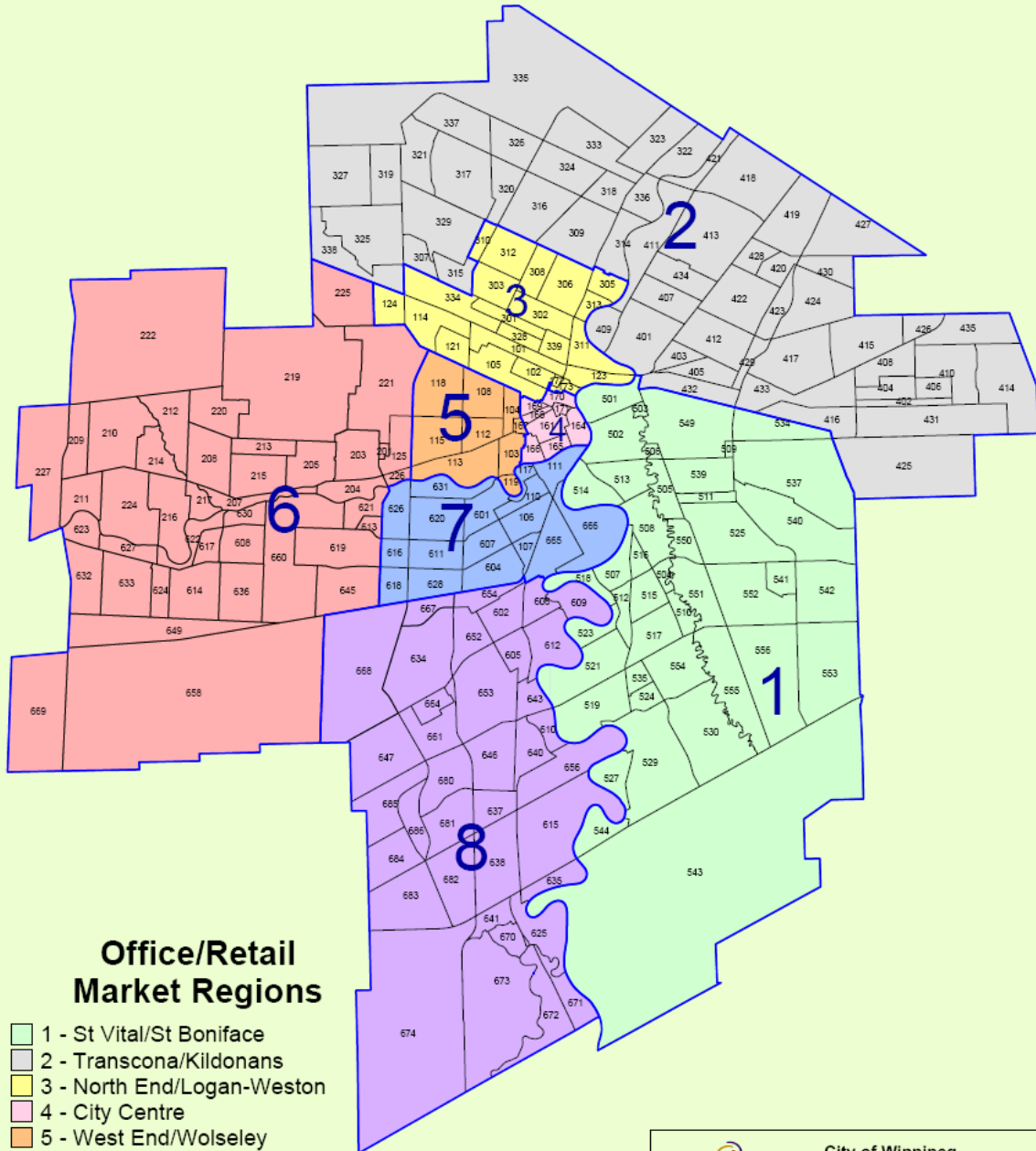
### Market Regions

For valuation purposes, the city is divided into eight office-retail market regions.

<b>Market Region</b>	<b>General Description</b>
1	St Vital, St Boniface
2	Transcona, The Kildonans
3	North End, Logan-Weston
4	City Centre
5	West End, Wolseley
6	St James, Charleswood, Tuxedo
7	River Heights
8	Fort Garry

A map of the above regions is shown on the following page.

# 2012 Office/Retail Market Regions



- Office/Retail Market Regions**
- 1 - St Vital/St Boniface
  - 2 - Transcona/Kildonans
  - 3 - North End/Logan-Weston
  - 4 - City Centre
  - 5 - West End/Wolseley
  - 6 - St James/Charleswood/Tuxe
  - 7 - River heights
  - 8 - Ft Garry

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Off\_Ret\_Mkt\_Regn\_WOR

### Description of Office and Retail Inventory

The following tables show the office and retail inventory profile by market region, age, and building size. (All counts are approximate.)

<i>Market Region</i>	<i>Count</i>	
	<i>Office</i>	<i>Retail</i>
1	158	295
2	114	384
3	124	402
4	231	128
5	108	311
6	100	238
7	139	261
8	78	123
Total	1,052	2,142

<i>Effective Year Built</i>	<i>Count</i>	
	<i>Office</i>	<i>Retail</i>
Before 1926	66	220
1926 to 1945	86	293
1946 to 1974	438	837
1975 to 1997	357	620
1998 to 2002	34	76
After 2002	71	96
Total	1,052	2,142

<i>Size (sq. ft.)</i>	<i>Count</i>	
	<i>Office</i>	<i>Retail</i>
5,000 or less	463	1,416
5,001 to 12,000	274	396
12,001 to 25,000	130	175
25,001 or more	185	155
Total	1,052	2,142

## Independent Variables

The variables that affect the estimated potential rental income are as follows:

- Leasable area
- Effective year built
- Premise location
- Property type
- Tenant class
- Market region
- Site influences
- Heat type
- Tenant appeal
- Amount of parking

<i>Office Property Types</i>	
OFA	Office–Class A
OFB	Office–Class B
OFC	Office–Class C (3 storeys or more)
OFD	Office–Old–Downtown (3 storeys or more)
OFS	Office (1-2 storeys; 3 storey suburban)
OFM	Office–Medical/Dental
OFR	Office–Converted from residential
BNK	Banks & Credit Unions

<i>Retail Property Types</i>	
CSC	Community Shopping Centre
NSC	Neighbourhood Shopping Centre
RET	Retail
RRC	Retail–Converted from residential
RSC	Regional Shopping Centre
RST	Restaurant
RWC	Retail Warehouse
SKP	Store/Kiosk with fuel pumps
SUM	Supermarket
VCD	Vehicle Dealership
VCW	Car Washes
VSG	Vehicle Service Garage (repair)

<i>Parking Property Types</i>	
PKL	Parking Lot
PST	Parking Structure

<i>Tenant Class</i>	
A1	High Quality Office/Retail Finish
A2	High Quality Restaurant (including free-standing chains)
C1	Retail Warehouse
C2	Standard Office/Retail/Industrial Finish
C3	Food Court
C4	Standard Quality Restaurant (including non-free-standing chains)
C5	Kiosks & Small Service
C6	Storage or Mezzanine (Office or Retail)
C7	Government Tenant (Office or Retail)
C8	Cinema
C9	Basement Leasable Space (Office or Retail)
O8	Substandard Basement/Storage Finish

### **Calibration of the Sub-models**

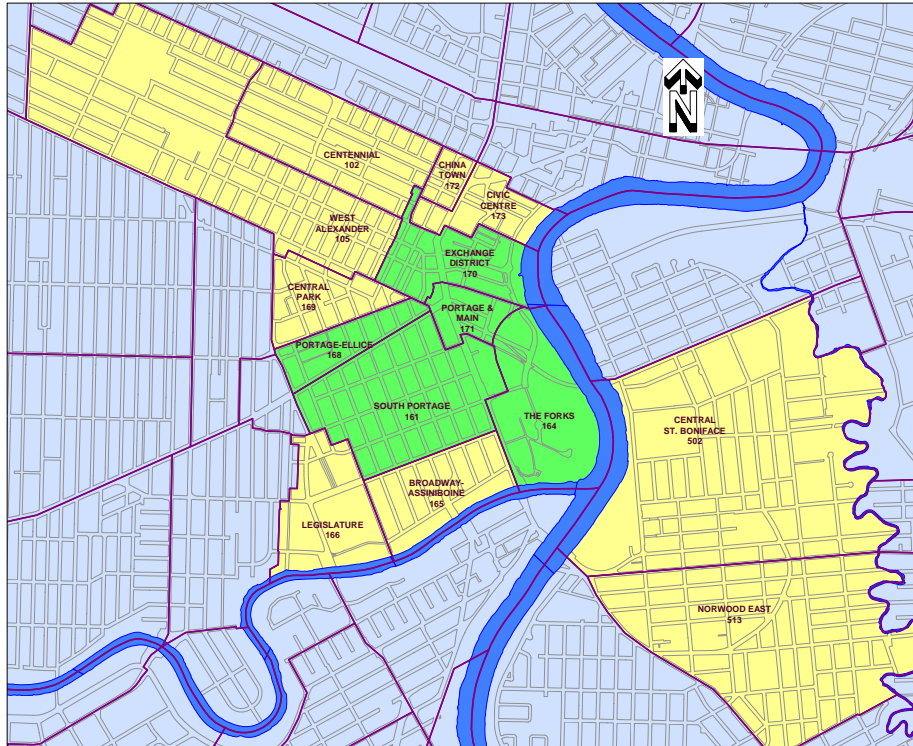
#### ***Potential Rental Income***

Most of the net rents generated by the model fall between \$9.38 and \$14.67 per square foot (20<sup>th</sup> and 80<sup>th</sup> percentiles); the median is \$11.75.

#### ***Parking Income***

The net monthly incomes per stall for surface parking lots and parking structures are shown in the table below. These income rates are net of vacancy loss and operating expenses.

<i>Parking Type</i>	<i>Location</i>	<i>Net income per stall (\$)</i>
Surface	NCA's 161, 164, 168, 170, 171 (green area)	75.00
Surface	NCA's 102, 105, 165, 166, 169, 172, 173, 502, 513 (yellow area)	50.00
Surface	All other NCA's (blue area)	25.00
Structure (heated)	All areas	105.00
Structure (unheated)	All areas	85.00



***Vacancy and Collection Loss***

<i>Property Type</i>	<i>Rate</i>
Office—Class A, B, S, M, and converted residence	7.0%
Office—Class C	6.0%
Office—Class D	15.0%
Bank/Credit Union	2.0%
Retail, including converted residence	5.0%
Store/Kiosk with fuel pumps	5.0%
Retail Warehouse/Supermarket	2.0%
Restaurant	5.5%
Neighbourhood/Community Shopping Centre	5.0%
Polo Park Shopping Centre	2.0%
St. Vital Shopping Centre	2.0%
Kildonan Place Shopping Centre	2.0%
Garden City Shopping Centre	5.0%
Portage Place Shopping Centre	5.5%
The Forks	5.0%
Vehicle Dealership in NCA 227, 653, 661	3.5%
Vehicle Dealership—all other areas	5.0%
Car Wash	2.0%
Vehicle Service Garage	5.0%

***Non-Recoverable Operating Expenses***

<i>Shortfall</i>	
<i>Property Type</i>	<i>Rate(\$)</i>
Office–Class A	12.00
Office–Class B	10.00
Office–Class C	8.00
Office–Class D	6.50
Office–Class M	10.00
Office–Class S and converted residence	6.00
Bank/Credit Union	7.50
Retail, including converted residence	5.50
Store/Kiosk with fuel pumps	5.50
Retail Warehouse	5.00
Supermarket	6.50
Restaurant	8.00
Neighbourhood Shopping Centre	6.00
Community Shopping Centre	9.00
Polo Park Shopping Centre	31.00
St. Vital Shopping Centre	31.00
Kildonan Place Shopping Centre	18.00
Garden City Shopping Centre	18.00
Portage Place Shopping Centre	20.00
The Forks	15.00
Vehicle Service Garage/Car Wash	4.00
Vehicle Dealership	6.00

<i>Management</i>	
<i>Property Type</i>	<i>Rate</i>
All office and retail properties	5.0%

<i>Other Expenses</i>	
<i>Property Type</i>	<i>Rate</i>
All office and retail properties	2.0%

***Capitalization Rates***

Capitalization rates for the sold properties are calculated by dividing the model-generated NOI estimates by sale prices that are time-adjusted to April 1, 2010. Analysis of these rates result in model capitalization rates ranging from 6.00% to 13.75%. Capitalization rates for most properties range from 7.25% to 11.50%.

## Valuation of Industrial Properties

### Market Regions

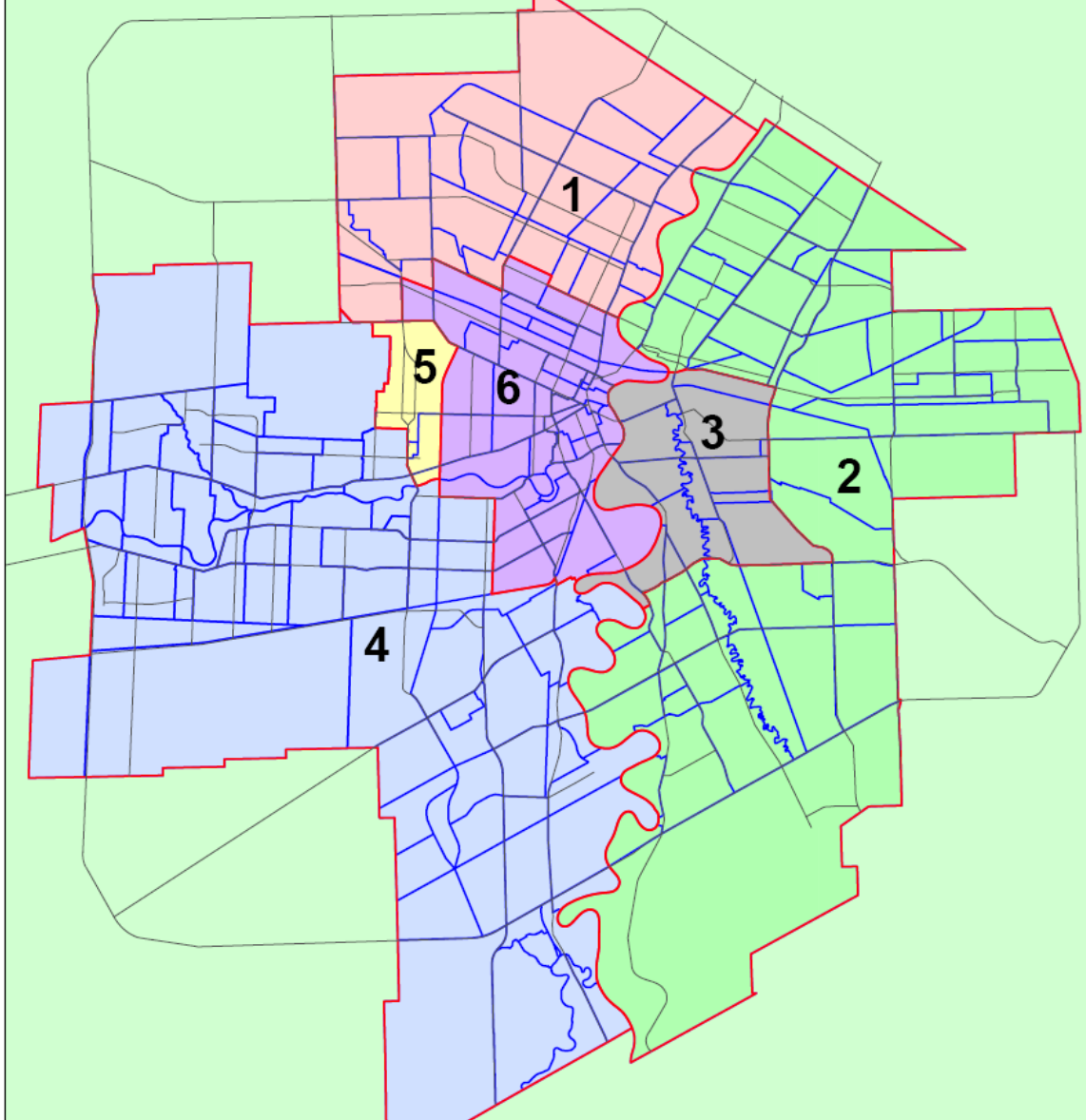
For valuation purposes, the city is divided into six industrial market regions.

<b>Market Region</b>	<b>General Description</b>
1	Old and West Kildonan
2	North and East Kildonan, Transcona, New St. Vital and New St. Boniface
3	Old St. Vital and Old St. Boniface
4	Fort Garry, Charleswood, Tuxedo, River Heights, and St. James West
5	St. James East
6	City Centre, West End, North End, and Fort Rouge

A map of the above regions is shown on the following page.



# Industrial Market Regions



## Industrial Market Regions

- 1 - Old & West Kildonan
- 2 - North & East Kildonan, Transcona, New St Vital, New St Boniface
- 3 - Old St Vital, Old St Boniface
- 4 - Ft Garry, Charleswood, St James West
- 5 - St James East
- 6 - City Centre, West End, North End, Fort Rouge



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### **Description of Industrial Inventory**

The following tables show the industrial inventory profile by market region, age, and building size. (All counts are approximate.)

<i>Market Region</i>	<i>Count</i>
1	332
2	276
3	226
4	253
5	282
6	680
Total	2,049

<i>Effective Year Built</i>	<i>Count</i>
Before 1955	369
1955 to 1979	1,056
1980 to 1994	428
1995 or after	196
Total	2,049

<i>Size (sq. ft.)</i>	<i>Count</i>
6,000 or less	475
6,001 to 15,000	567
15,001 to 40,000	546
40,001 to 100,000	346
Over 100,000	115
Total	2,049

## Independent Variables

The variables that affect the estimated potential rental income are as follows:

- Leasable area
- Effective year built
- Property type
- Market region
- Land area
- Tenant appeal
- Tenant class

<i>Industrial Property Types</i>	
DWH	Distribution Warehouse
FWF	Flex Warehouse – minimum 20% finish
FWS	Flex Warehouse – standard
LWH	Loft Warehouse
MWH	Manufacturing – Heavy
MWL	Manufacturing – Light
SWH	Storage Warehouse
TRW	Transit Warehouse – Truck Terminal

<i>Tenant Class</i>	
C2	Standard Office/Retail/Industrial Finish
O8	Substandard Basement/Storage Finish

## Calibration of the Sub-models

### *Potential Rental Income*

Most of the net rents generated by the model fall between \$4.00 and \$6.13 per square foot (20<sup>th</sup> and 80<sup>th</sup> percentiles); the median is \$5.14.

### *Vacancy and Collection Loss*

<i>Type/Location</i>	<i>Rate</i>
Loft Warehouse	12.0%
Market region 1	5.5%
Market region 6	6.0%
All other regions	4.0%

### *Non-recoverable Operating Expenses*

<i>Shortfall</i>	
<i>Property Type</i>	<i>Rate(\$)</i>
All industrial properties	3.30

<i>Management</i>	
<i>Property Type</i>	<i>Rate</i>
All industrial properties	5.0%

<i>Other Expenses</i>	
<i>Property Type</i>	<i>Rate</i>
All industrial properties	2.0%

### *Capitalization Rates*

Capitalization rates for the sold properties are calculated by dividing the model-generated NOI estimates by sale prices that are time-adjusted to April 1, 2010. Analysis of these rates result in model capitalization rates ranging from 7.00% to 11.50%.

### **Testing and Evaluation of the Models**

The ratio statistics for the income-producing models meet the *Standard on Ratio Studies* published by the International Association of Assessing Officers (approved January 2010).

### **Mixed-Use Properties**

Properties with a combination of residential, office, retail, or industrial space are valued by applying the appropriate model to the income stream from each type of space. The total property value is the sum of the capitalized values of each income stream.