

OFFICE MODEL EXECUTIVE SUMMARY

Appraisal Cycle Date – January 1, 2025 to December 31, 2028

Effective Date of Valuation (Base Date) – January 1, 2023

Date of Report – March 14, 2025

Rent Model

Description	Rate (\$/sqft)
Base Rent	\$28.20
Additional Adjustments to Base Rent	
Study Area 6100, 6200, and 6300	-\$3.00
Bank Space	\$11.30
Other Space Type (Other than Office, Bank, Retail and Restaurant)	-\$7.56
Basement Area	-\$1.27
Space located on Floors Greater Than or Equal to Seven	\$1.44
Condition: Calculated Age/per year, from 0 to 29 (Calculated Age = 2023-Effective Year Built*Condition Rating)	-\$0.45
Office A (Class)	\$3.78
Office B (Class)	-\$1.49
House Form	\$7.35
Building Quality Greater Than or Equal to Seven	\$3.03

Parking Rents

Description	\$/month/stall	Eff Rate/month/stall
Base Rent - Parking "Stall" in Downtown (Study Area 6510)	\$200	\$200
Additional Adjustments to base rent:		
Parking "Stall" in Centre Square area (Study area 6520)	-\$11	\$189
Parking "Stall" outside the downtown area and Centre Square	-\$45	\$155
Parking "Space" in the downtown (Study Area 6510)	-\$27	\$173
Parking "Space" in the transitional area (Study areas 6520)	-\$26	\$174
Parking "Space" outside the downtown & Centre Square Areas	-\$91	\$109

Parking "Stall" - refers to parking that is covered (typically underneath a building structure)

Parking "Space" - refers to surface parking

Parkade Rents

Description	\$/month/stall	Eff Rate/month/stall
Base Rent - Parking Space in a Parkade	\$127	\$127

Vacancy and Shortfall

Vacancy Group (2023-Calculated Age)	
Buildings Built in or After 1960	Rate
Downtown Office A	1.87%
Downtown Office B	17.94%
Downtown Office C & House Form	19.44%
Suburban Office A	18.44%
Suburban Office B	22.82%
Suburban Office C & House Form	9.64%
Buildings Built Before 1960	
Downtown Office C & House Form	37.47%
Suburban Office C & House Form	25.49%

Shortfall Group (2023-Calculated Age)	
Buildings Built in or After 1960	Rate
Downtown Office A	0.41%
Downtown Office B	3.96%
Downtown Office C & House Form	4.30%
Suburban Office A	4.08%
Suburban Office B	5.04%
Suburban Office C & House Form	2.13%
Buildings Built Before 1960	
Downtown Office C & House Form	8.28%
Suburban Office C & House Form	5.63%

Overall Capitalization Rates

Base Cap Rate	4.186
Adjustments to Cap Rate	
Site Coverage Less Than or Equal to 65%, Per Percentage (Site Coverage % * Adjustment), to 8%	0.025
Total Net Area Greater Than 6,800 SF and Less Than 15,000 SF (adjustment applied to every 1,000 SF)	0.143
Study Area 6700	3.910

Assessment to Sales Summary Results

Number of Sales	65
Median Assessment to Sale Price Ratio (ASR)	0.975
Coefficient of Dispersion	18.1%

IDENTIFICATION of MODEL AREA

The Office model is an income model that values all office type buildings in Regina. The Assessment Branch classifies these properties in the same manner as the local commercial office market and are generally categorized as either Downtown or Suburban. The BOMA Office Building Classification Guide has been widely accepted as the industry standard when it comes to categorizing office buildings as there are no formal standards that exist, and classification systems vary by market. Within the Guide, office buildings are categorized as Class A, Class B or Class C based on several different factors detailed below.

Class A: The most prestigious buildings with the most amenities and in the best locations. They generally are the most attractive buildings built with the highest quality materials and construction methods. Additionally, these buildings usually have a professional manager, good access, and are typically located in highly visible areas on high traffic streets. Due to their exceptional quality, Class A Buildings are usually leased to reputable tenants at the highest rental rates in the market.

Class B: These buildings are a grade below Class A. Generally, they are slightly older buildings with good management and quality tenants. It is not uncommon for value-added investors to target these buildings with the intention of renovating them back into Class A buildings. Class B buildings are well maintained overall and quite functional. Class B office buildings commonly have an acceptable curtain wall finish, adequate (but not state of the art) mechanical, electrical and safety and security systems, and a mid-quality level of interior finish. Class B buildings compete for a wide range of users at average rental rates for their market area.

Class C: These office buildings are generally older and may be located on less desirable streets in older sections of the city. These buildings tend to be older, have less desirable architecture, limited infrastructure, antiquated technology and less than six storeys. The curtain walls and the mechanical, electrical and safety and security systems of Class C buildings are generally dated, and the quality of finish is minimal. These buildings attract tenants who sign short-term leases for functional space.

The Office model is a city-wide model application. The majority of the properties valued by this model are located in the downtown central business district of Regina, generally bounded by Albert Street (west), College Avenue (south), Broad Street (east) and Saskatchewan Drive (north). Other properties are located in suburban areas, including Harbour Landing, Grasslands and Albert Street South in southwest Regina, Blackfoot Drive and the Research Park (located at the University of Regina) in south Regina, and Rochdale Boulevard in northwest Regina, and Ross Industrial Park in the north industrial area of the city.

The majority of these properties are located on commercial-zoned land with various zoning classifications depending on location. The majority of the downtown core properties are zoned DCD-D (Downtown) or DCD-CS (Centre Square), with a few zoned DCD-RXG (Regina Exhibition Grounds) and MH (Mixed High Rise). The suburban properties are zoned, depending on location, IH (Industrial Heavy), IL (Industrial Light), IP (Industrial Prestige), MH (Mixed High Rise), ML (Mixed Low Rise), MLM (Mixed Large Market), and PS (Public Service).

Study Area Descriptions

Neighbourhood 6100 – North

Neighbourhood 6100 is located in north and northwest Regina and is best described in three sections. First the area lying north of the rail tracks and west of Lewvan Drive (Pasqua Street) to the municipal boundaries; second, the area lying north of Dewdney Avenue, east of Lewvan Drive (Pasqua street), and west of Winnipeg Street to the municipal boundaries; third, the area lying north of 1st Avenue N between Albert Street and Winnipeg Street to the municipal boundaries.

The majority of the buildings situated in this neighbourhood (57%) were constructed in the 1970s and 1980s with a further 20% being constructed since 2000. The average year built for buildings in this neighbourhood is 1988. Buildings range in size from approximately 400 square feet to 67,000 square feet with an average size of 45,000 square feet.

Improved lot sizes range from approximately 3,000 square feet to 175,000 with an average lot size of 228,000 square feet.

Neighbourhood 6200 – North Industrial

Neighbourhood 6200 includes the Ross Industrial Park and the Eastview neighbourhood adjacent to the southwest corner of the Ross Industrial Park. This area encompasses the City's northeast corner and is roughly bordered by Winnipeg Street to the west, the rail tracks to the southwest, rail tracks to the southeast, the eastern municipal boundary of the city to the east and the northern municipal boundary of the city to the north.

The majority of the buildings situated in this neighbourhood (57%) were constructed in the 1970s and 1980s with a further 29% being constructed since 2000. The average year built for buildings in this neighbourhood is 1989. Buildings range in size from approximately 1,250 square feet to 43,000 square feet with an average size of 15,000 square feet.

Improved lot sizes range from approximately 3,100 square feet to 446,000 square feet with an average lot size of 67,000 square feet.

Neighbourhood 6300 – Warehouse District

Neighbourhood 6300 is commonly known as the warehouse district. The area lying north of the rail tracks from Lewvan Drive (Pasqua Street) to Winnipeg Street; North of Dewdney Avenue to 4th Avenue between Elphinstone Street and Winnipeg Street; North of 4th Avenue to 1st Avenue between Albert Street and Winnipeg Street.

The majority of the buildings situated in this neighbourhood (54%) were constructed in the 1950s, 1960s, 1970s, and 1980s with a further 12% being constructed since 2000. The average year built for buildings in this neighbourhood is 1964. Buildings range in size from approximately 850 square feet to 90,000 square feet with an average size of 12,000 square feet.

Improved lot sizes range from approximately 3,000 square feet to 108,000 square feet with an average lot size of 18,000 square feet.

Neighbourhood 6510 – Downtown

Neighbourhood 6510 is located in downtown Regina. The area lying west of Broad Street; east of Albert Street; south of rail tracks and north of 13th Avenue.

The majority of the buildings situated in this neighbourhood (57%) were constructed in the 1960s, 1970s and 1980s with a further 4% being constructed since 2000. The average year built for buildings in this neighbourhood is 1960. Buildings range in size from approximately 1,900 square feet to 466,000 square feet with an average size of 95,000 square feet.

Improved lot sizes range from approximately 1,400 square feet to 131,000 square feet with an average lot size of 12,000 square feet.

Neighbourhood 6520 – Centre Square

Neighbourhood 6520 is located in the Centre Square neighbourhood (formerly known as the Transitional Area) that borders the south side of the downtown core. This neighbourhood abuts Neighbourhood 6510 along its north border and is roughly bordered by 13th Avenue to the north, College Avenue to the south, Albert Street to the west and Broad Street to the east.

This area is predominantly zoned DCD-CS (Centre Square) and features an older residential area in transition to house-form uses including offices, retail and restaurants.

This area is characterized by small to medium sites mostly with off-site parking and buildings constructed from the early 1900s to the present, with the majority of buildings constructed in the early 1900s and the 1950s through the 1980s. Buildings range in size from approximately 1,900 square feet to 20,000 square feet with an average size of 10,000 square feet.

Improved lot sizes range from approximately 3,000 square feet to 17,000 square feet with an average lot size of 10,000 square feet.

Neighbourhood 6600 – Central West

Neighbourhood 6600 is located west of downtown Regina. The area lying west of Albert Street; east of Wascana Creek; south and north of rail tracks.

The majority of the buildings situated in this neighbourhood (62%) were constructed in the 1970s and 1980s with one building being constructed since 1990. The average year built for buildings in this neighbourhood is 1971. Buildings range in size from approximately 1,920 square feet to 382,000 square feet with an average size of 38,000 square feet.

Improved lot sizes range from approximately 3,000 square feet to 131,000 square feet with an average lot size of 22,000 square feet.

Neighbourhood 6700 – Central East

Neighbourhood 6700 is located in central east Regina. The area lying east of Broad Street; west of Ring Road; south of rail tracks and north of the Wascana Creek.

The majority of the buildings situated in this neighbourhood (57%) were constructed in the 1970s, 1980s and 1990s with a further 5% being constructed since 2000. The average year built for buildings in this neighbourhood is 1966. Buildings (and units) range in size from approximately 75 square feet to 466,000 square feet with an average size of 48,000 square feet.

Improved lot sizes range from approximately 2,500 square feet to 365,000 square feet with an average lot size of 25,000 square feet.

Neighbourhood 6800 – Southeast

Neighbourhood 6800 is located in southeast Regina and is bordered on the north by CP tracks; the south boundary is Wascana Creek and the city's municipal boundaries. The west boundary is the Ring Road; the east boundary is the city's municipal boundaries.

The majority of the buildings situated in this neighbourhood (57%) were constructed in the 2000s and 2010s with the other 43% being constructed previous to 2000. The average year built for buildings in this neighbourhood is 1997. Buildings range in size from approximately 1,400 square feet to 53,000 square feet with an average size of 12,000 square feet.

Improved lot sizes range from approximately 3,100 square feet to 1.2 million square feet (27.5 acres) with an average lot size of 64,000 square feet.

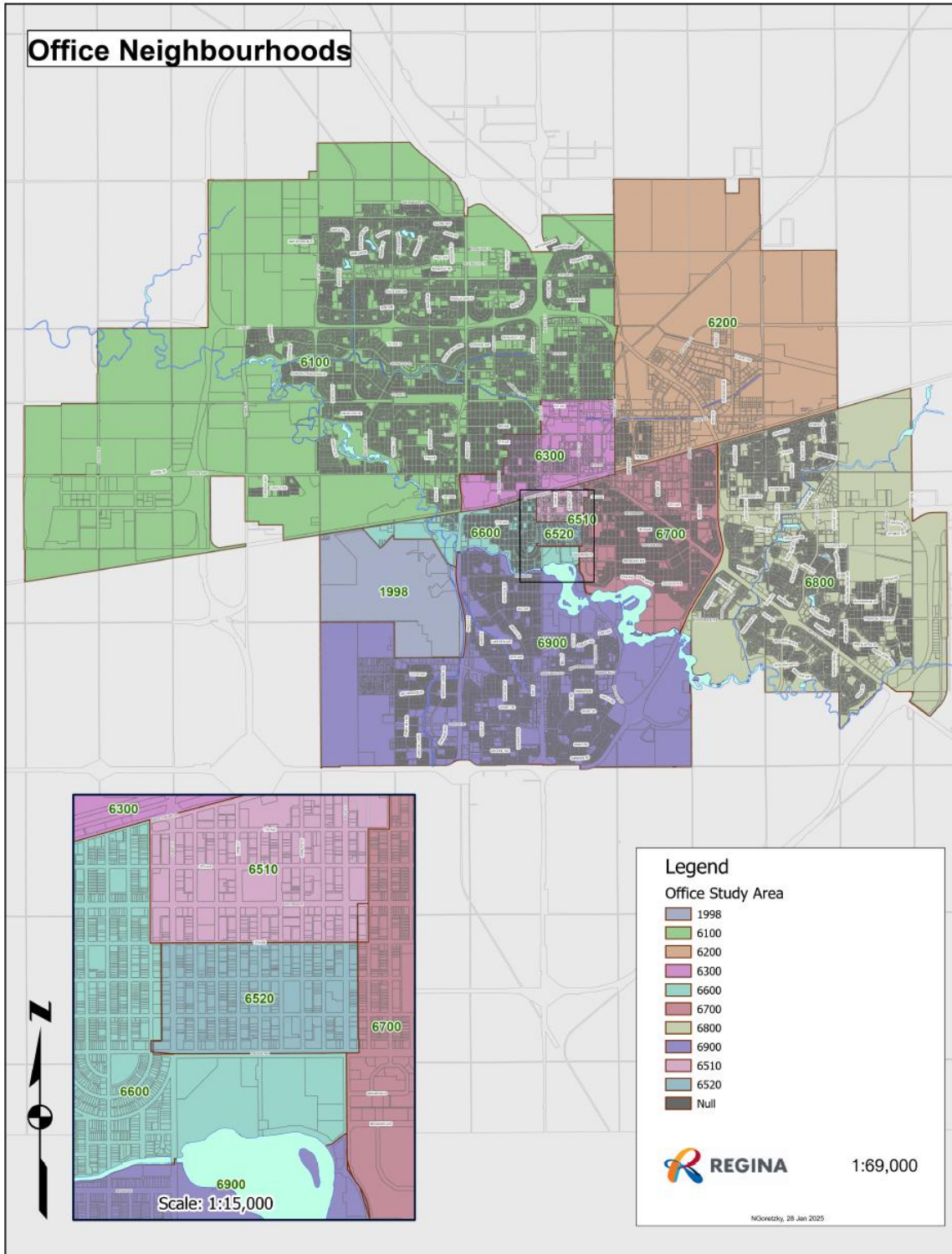
Neighbourhood 6900 – South

Neighbourhood 6900 is located in south Regina. The area lying south of the rail tracks to Wascana Creek; south of Wascana Creek and west of the ring road to the city boundary limits.

The majority of the buildings situated in this neighbourhood (52%) were constructed in the 1970s and 1980s with a further 15% being constructed since 2000. The average year built for buildings in this neighbourhood is 1978. Buildings range in size from approximately 1,100 square feet to 396,000 square feet with an average size of 37,000 square feet.

Improved lot sizes range from approximately 1,400 square feet to 1.4 million square feet (32 acres) with an average lot size of 56,000 square feet.

MAP



SCOPE of DATA and ANALYSIS

Each year, the City Assessor requests copies of rent rolls for all non-residential properties in the City of Regina. The data for the development of the mass appraisal net rent model came from these returned rent rolls.

A total of 674 office net rents were analyzed using multiple regression analysis. The rent model is an additive model that predicts rents based on the Class of office space, lease space location within the building and effective age of building. The following table provides a breakdown of these rents along with some statistical measurements.

Office Rent Statistics

STRATA	N	Mean	Median	Minimum	Maximum
Overall	674	\$17.75	\$16.11	\$6.03	\$40.15
Class A Buildings	164	\$22.90	\$21.50	\$7.00	\$37.50
Class B Buildings	138	\$15.86	\$15.00	\$6.07	\$29.46
Class C Buildings	372	\$16.19	\$15.00	\$6.03	\$40.15
Condition/Age Less Than 29 Years	389	\$17.87	\$15.75	\$6.03	\$40.15
Condition/Age Greater Than or Equal to 29 Years	285	\$17.59	\$17.35	\$7.00	\$36.50
Buildings with Basement Space	20	\$15.46	\$15.89	\$7.00	\$25.86
Buildings with 7 or More Floors	111	\$20.24	\$19.50	\$6.69	\$37.50
Buildings with 6 or Less Floors	543	\$17.33	\$15.94	\$6.03	\$40.15
Quality Greater Than or Equal to 6	44	\$25.48	\$26.77	\$10.00	\$37.50
Quality Less Than or Equal to 5	630	\$17.21	\$16.00	\$6.03	\$40.15

Rent Model

Description	Rate (\$/sqft)
Base Rent	\$28.20
Additional Adjustments to Base Rent	
Study Area 6100, 6200 and 6300	-\$3.00
Bank Space	\$11.30
Other Space Type (Other than Office, Bank, Retail and Restaurant)	-\$7.56
Basement Area	-\$1.27
Space located on Floors Greater Than or Equal to Seven	\$1.44
Condition: Calculated Age/per year, from 0 to 29 (Calculated Age = 2023-Effective Year Built*Condition Rating)	-\$0.45
Office A (Class)	\$3.78
Office B (Class)	-\$1.49
House Form	\$7.35
Building Quality Greater Than or Equal to Seven	\$3.03

*Study Area 6100, 6200, and 6300 includes neighbourhoods: 1030, 1040, 1050, 1060, 1070, 1080, 1221, 1222, 1231, 1251, 1252, 1321, 1322, 1327, 1331, 1335, 1336, 1337, 1411, 1421, 1422, 1423, 1424, 1425, 1426, 1428, 1430, 1431, 1511, 1512, 1514, 1517, 1516, 1521, 1525, 1611, 1612, 1613, 1614, 1615, 1616, 1619, and 1999.

**Excluded variables (considered in the calibration stage; excluded as insignificant in predicting value): Restaurant Space, Retail Space, Study Area 6600, Study Area 6700, Study Area 6800, and Study Area 6900.

Condition Rating

Calculated age is calculated using the following formula:

$$\text{Base date (2023)} - \text{Effective Year Built} * \text{Condition Rating}$$

The condition of buildings and structures is determined taking into consideration the remaining economic life of both short-lived and long-lived items.

Condition Rating Chart

Poor	1.3
Below Average	1.15
Average	1.0
Above Average	0.9
Good	0.8
Very Good	0.7
Superior	0.6
Excellent	0.5

Vacancy and Shortfall

Typical 2023 base date vacancy and shortfall adjustments were estimated from the returned rent rolls from property owners and Regina office inventory reports from various commercial real estate firms (Avison Young, Colliers, ICR, etc.).

Vacancy and Shortfall are based on office properties located downtown or in the suburbs (anywhere outside of downtown), with vacancy set at greater than or equal to 1960 (year built) or less than 1960. Due to the low number of House Form properties, they have been combined with Office Class C properties. The estimates are as follow:

Vacancy = Total vacant area/total rentable area

Vacancy			
Buildings Built in or After 1960	Rate	Vacant Area (sqft)	Rentable Area (sqft)
Downtown Office A	1.87%	34,553	1,851,498
Downtown Office B	17.94%	300,237	1,673,675
Downtown Office C & House Form	19.44%	199,298	1,025,414
Suburban Office A	18.44%	32,464	176,062
Suburban Office B	22.82%	73,653	322,741
Suburban Office C & House Form	9.64%	106,716	1,106,773
Buildings Built Before 1960			
Downtown Office C & House Form	37.47%	91,607	244,491
Suburban Office C & House Form	25.49%	11,644	45,676

Shortfall = Expense Ratio x Dark Space Ratio x Vacancy

Expense ratio = Gross Rent/Net Rent

Dark Space Ratio = Occupancy Costs of a vacant space/Occupancy Costs of a rented space

Shortfall	
Buildings Built in or After 1960	
Downtown Office A	0.41%
Downtown Office B	3.96%
Downtown Office C & House Form	4.30%
Suburban Office A	4.08%
Suburban Office B	5.04%
Suburban Office C & House Form	2.13%
Buildings Built Before 1960	
Downtown Office C & House Form	8.28%
Suburban Office C & House Form	5.63%

Overall Commercial Capitalization Rates and Adjustments

Economic capitalization rates were estimated by dividing the predicted base date net operating income (generated from the net rent model) by adjusted sale prices. Sales used in this analysis occurred between January 1, 2017 and December 31, 2022. These sales were verified by mailing questionnaires to both vendors and purchasers.

Sales were adjusted for non-realty items and other factors when warranted. Sales used between January 1, 2017 and December 31, 2022 did not warrant a time adjustment to the base date of January 1, 2023.

Commercial Capitalization Model

The economic capitalization rate analysis involved 65 sales, detailed in the table below:

ADDRESS	Account	Sale Year	Sale Month	Adjusted Sale Price	Proposed Income	Adjusted Cap Rate
240 HENDERSON DRIVE	10014012	2019	1	2,200,000	169,100	7.69
216 MCINTYRE STREET	10017619	2020	12	571,500	30,900	5.41
4936 4TH AVENUE	10020269	2019	6	2,100,000	87,800	4.18
1066 ALBERT STREET	10025852	2021	4	610,000	31,800	5.21
1459 RETALLACK STREET	10026638	2017	9	315,000	28,800	9.14
1405 ALBERT STREET	10026915	2017	11	625,000	42,600	6.82
1457 ALBERT STREET	10026919	2022	5	635,000	38,000	5.98
1463 ALBERT STREET	10026920	2017	6	1,550,000	90,500	5.84
1430 MCINTYRE STREET	10026927	2018	10	2,500,000	96,700	3.87
1422 SCARTH STREET	10027031	2021	2	376,594	28,800	7.65

1329 SCARTH STREET	10027047	2018	2	421,000	26,300	6.25
1736 DEWDNEY AVENUE	10027217	2020	6	950,000	37,400	3.94
215 7TH AVENUE	10027272	2021	6	565,000	35,800	6.34
1650 ANGUS STREET	10032480	2022	2	542,500	40,700	7.50
1540 ALBERT STREET	10032494	2021	4	665,000	66,800	10.05
1945 HAMILTON STREET	10032584	2021	12	21,000,000	1,474,900	7.02
1821 ROSE STREET	10032602	2021	3	974,998	67,100	6.88
1846 SCARTH STREET	10032625	2021	12	3,400,000	185,200	5.45
2125 11TH AVENUE	10032629	2018	6	9,600,000	559,900	5.83
1840 CORNWALL STREET	10032640	2021	9	800,000	37,000	4.63
2500 12TH AVENUE	10032662	2017	3	1,100,000	78,300	7.12
1866 MCARA STREET	10033872	2019	8	700,000	36,700	5.24
1964 PARK STREET	10033929	2018	7	7,250,000	886,400	12.23
2066 RETALLACK STREET	10036974	2022	4	1,519,988	104,700	6.89
2146 ROBINSON STREET	10037013	2020	5	680,000	57,700	8.49
2510 13TH AVENUE	10037569	2017	12	550,000	30,100	5.47
2500 13TH AVENUE	10037570	2022	8	500,000	37,900	7.58
2445 13TH AVENUE	10037578	2017	4	2,375,000	227,800	9.59
2445 13TH AVENUE	10037578	2019	12	3,050,000	263,100	8.63
2101 SMITH STREET	10037595	2021	8	1,100,000	70,400	6.40
2222 13TH AVENUE	10037635	2021	10	2,000,000	201,100	10.06
2222 13TH AVENUE	10037635	2022	3	2,630,000	201,100	7.65
2150 SCARTH STREET	10037654	2017	12	2,156,250	118,300	5.49
2151 SCARTH STREET	10037663	2022	3	5,590,000	449,400	8.04
2128 HAMILTON STREET	10037670	2022	7	2,200,000	208,300	9.47
2075 HAMILTON STREET	10037676	2019	4	900,800	84,400	9.37
1855 VICTORIA AVENUE	10037719	2019	9	19,656,957	1,872,900	9.53
2267 ALBERT STREET	10037734	2019	1	840,000	53,100	6.32
2275 ALBERT STREET	10037735	2017	2	3,200,000	183,700	5.74
2400 COLLEGE AVENUE	10037756	2017	4	8,024,999	512,400	6.39
2208 SCARTH STREET	10037844	2017	4	5,125,000	331,900	6.48
325 VICTORIA AVENUE	10039067	2020	7	407,000	26,700	6.56
100 E COLLEGE AVENUE	10039801	2021	5	375,000	23,300	6.21
310 GARDINER PARK COURT	10044479	2017	10	965,000	56,800	5.89
3411 PASQUA STREET	10049430	2021	2	975,000	44,700	4.58
4002 PASQUA STREET	10052425	2020	9	1,850,000	98,600	5.33
2625 31ST AVENUE	10054866	2022	3	1,200,000	88,300	7.36
4426 ALBERT STREET	10054869	2017	2	4,960,000	292,400	5.90
2629 29TH AVENUE	10055051	2020	5	2,300,000	160,600	6.98
500-4010 PASQUA STREET	10062856	2017	12	675,100	45,600	6.75
1550 SASKATCHEWAN DRIVE	10070128	2018	1	1,477,770	72,300	4.89

438 E VICTORIA AVENUE	10087849	2018	10	2,199,996	242,000	11.00
1914 HAMILTON STREET	10087977	2018	2	16,200,000	1,135,400	7.01
3435 PASQUA STREET	10091620	2019	3	1,175,000	74,300	6.32
3419 PASQUA STREET	10091621	2021	10	1,387,500	80,800	5.82
1920 COLLEGE AVENUE	10108179	2019	6	28,249,992	1,765,400	6.25
2220 COLLEGE AVENUE	10113778	2017	4	9,825,000	819,100	8.34
2445 BROAD STREET	10120138	2020	12	2,265,750	162,700	7.18
1809 MACKAY STREET	10120537	2021	8	410,000	52,800	12.88
3889 E ARCOLA AVENUE	10124891	2021	8	4,025,000	275,100	6.83
2332 SCARTH STREET	10210653	2022	2	1,630,000	87,100	5.34
3515 PASQUA STREET	10223793	2022	3	1,800,000	90,300	5.02
4561 PARLIAMENT AVENUE	10233275	2017	4	14,350,000	746,200	5.20
1140 ALBERT STREET	10250553	2018	1	600,000	24,700	4.12
1455 ELLIOTT STREET	10286159	2019	6	1,300,000	94,200	7.25

The reconciliation process for developing the economic capitalization rate and adjustments to the rate primarily involved Multiple Regression Analysis, which was supported by a consultation process with individuals active in the Regina real estate market. Recognized published capitalization rate data were also reviewed. The economic capitalization rate and adjustments are as follow:

Description	Rate (%)
Base Cap Rate	4.186
Adjustments to Cap Rate	
Site Coverage Less Than or Equal to 65%, Per Percentage (Site Coverage % * Adjustment), to 8%	0.025
Total Net Area Greater Than 6,800sqft and Less Than 15,000sqft	0.143
Study Area 6700	3.910

*Study Area 6700 includes neighbourhoods: 1523, 1617(east of Osler Street), 1618, 1621, and 1623.

*Excluded variables (considered in the calibration stage; excluded as insignificant in predicting value): Study Area 6100, Study Area 6200, Study Area 6300, Study Area 6600, Study Area 6800, Study Area 6900, and Building Age (Capped at 40 Years).

Other Adjustments

Extra Land

Extra Land is the difference between a property's actual parcel size, and the maximum parcel size that would be required to accommodate the existing improvement.

Site coverage in the Office model ranges from ten (10 percent) to one hundred (100 percent). The median site coverage is thirty-nine and a half (39.5 percent). When site coverage is less than sixty-five (65 percent), the Capitalization Rate for the building is adjusted according to the results of the regression Capitalization Rate model, to a minimum of eight (8 percent) site coverage.

When the site coverage ratio is less than eight (8 percent), then:

Extra Land Value = (Lot Size-(building foot-print / .08))/Lot Size*Land Assessment

MODEL VALIDATION

In mass appraisal, the most effective means of evaluating the accuracy of appraisals is a ratio study. A ratio study compares the appraised values produced by the valuation models to sale transactions in the marketplace.

The legislated statistical requirement affecting the assessment of commercial properties in Saskatchewan is for the median ratio of a city-wide assessment-to-sale ratio study to be within the range of 0.95 to 1.05.

The primary measure of appraisal uniformity in ratio studies is the Coefficient of Dispersion (COD). Low CODs tend to be associated with good appraisal uniformity, however CODs can be impacted by the nature of the jurisdiction, appraised properties, and observed data.

The median assessment-to-sale ratio and Coefficient of Dispersion for this Office model is provided below:

Number of Sales	65
Median Assessment to Sale Price Ratio (ASR)	0.975
Coefficient of Dispersion	18.1%

Additional statistical analysis can be performed, subject to sufficiency of available data, to ensure uniformity among characteristics found throughout the analyzed properties. The most common tools used are ratio statistics, scatterplots and non-parametric tests.

In mass appraisal, the two most widely used non-parametric tests are the Kruskal-Wallis test and the Mann-Whitney Test. The Kruskal-Wallis test is used when there are two or more groups being tested and the Mann-Whitney test is used when there is only one group being tested. In mass appraisal, both tests are used to determine if the Assessment to Sales Ratios (ASR's) of the groups are statistically different. The assumption in both tests (null hypothesis) is that the distribution of the ASR's for the group(s) being tested are not different.

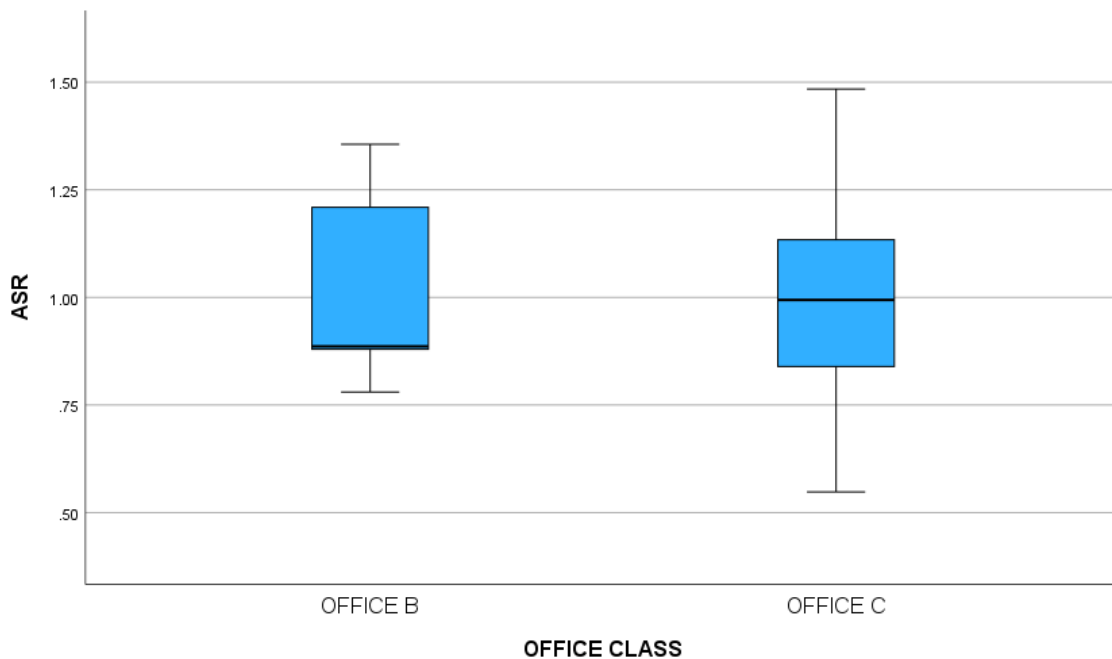
If the distribution of the ratio is the same among the different classifications, the model is assumed to be unbiased.

Office Class

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig. ^{a,b}	Decision
1	The distribution of ASR is the same across categories of Office Class.	Independent-Samples Mann-Whitney U Test	1.000	Retain the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

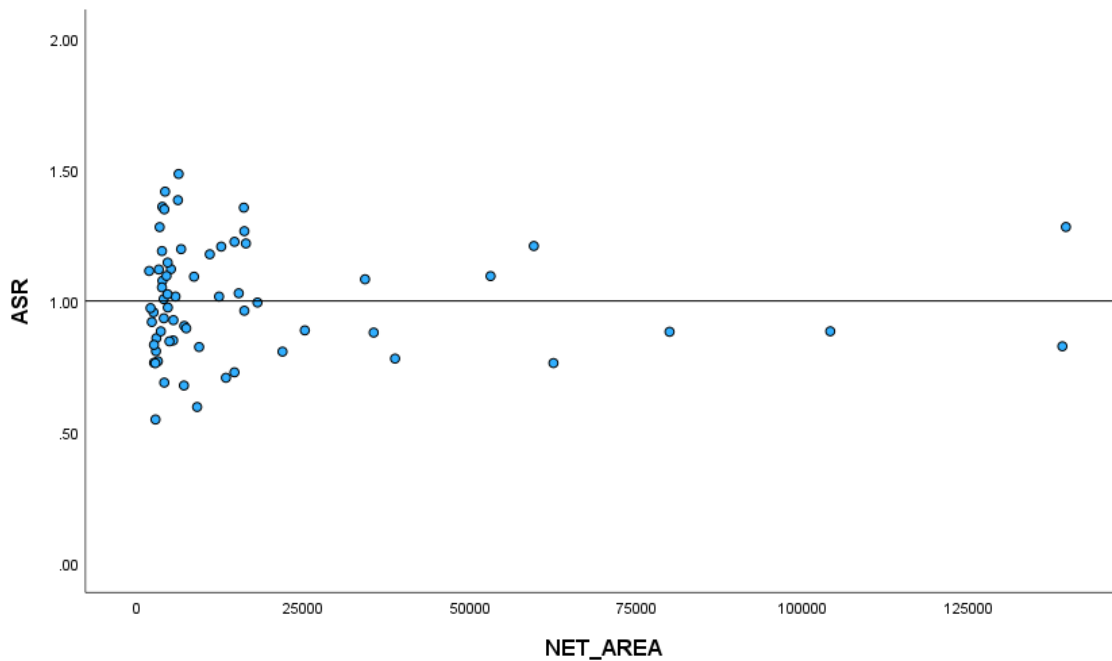


Ratio Statistics by Study Area Groups (Location):

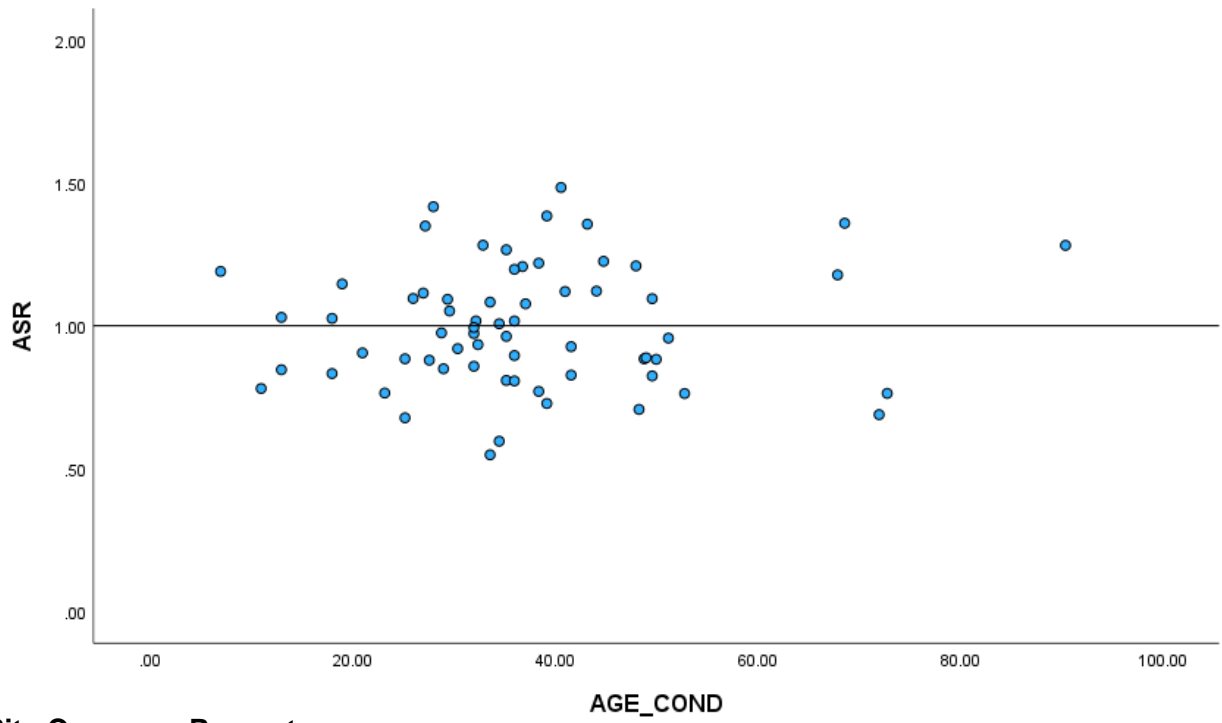
Ratio Statistics for ASR by Location			
Stratification	# of obs.	Median	COD
6100 and 6200	5	1.077	0.160
6300	12	0.931	0.232
6510 and 6520	28	0.948	0.172
6600	3	1.092	0.173
6700	5	1.095	0.180
6800	2	1.002	0.027
6900	10	0.956	0.134
Overall	65	0.975	0.179

A scatterplot is a graphical analysis used to display the dispersion of an entire array of ASR ratio results for non-categorical, or linear, characteristics such as net leasable area, age and site coverage percent.

Net Area



Effective Age with Condition



Site Coverage Percent

