

MULTI-RESIDENTIAL TOWNHOUSE MODEL EXECUTIVE SUMMARY

Appraisal Cycle Date – January 1, 2021 to December 31, 2024

Effective Date of Valuation – January 1, 2019

Date of Report – April 25, 2022

Townhouse Rent Model

	\$/Month
Base Rent: (Three Bedroom Unit)	\$ 1,375
Additional Adjustments to Base Rent:	
One Bedroom Unit	\$ (303)
Two Bedroom Unit	\$ (161)
Four Bedroom Unit	\$ 125
Age:	
Calculated Age * Condition Rating/per year	\$ (1.88)
Misc:	
Unit is Average or Below Average Condition	\$ (388)
Unit in Good Condition and Above	\$ (148)
Location:	
Study Area 2610 (North West)	\$ 75
Study Area 2620 (North)	\$ -
Study Area 2630 (North Central)	\$ (50)
Study Area 2640 (Downtown, Cathedral, Transitional)	\$ -
Study Area 2650 (East of Downtown)	\$ (50)
Study Area 2670 (South)	\$ 75
Study Area 2680 (South East)	\$ 103

Townhouse Vacancy

Vacancy:	
Suburbs (2610;2620;2670;2680)	7.8%
Inner City: (2630;2640;2650)	5.3%

**Commercial Component:
Rent Model**

Description	\$/PSF
Base Rent	31.56
Adjustments to Base Rent	
Study Area 4450	4.58
Effective Age 2019 to 1990, per year (Age x Condition)	-0.53
Basement Adjustment	-8.06
Unheated Warehouse Adjustment	-40%

Vacancy

Commercial Component	9.09%
----------------------	-------

Overall Effective Gross Income Multipliers

Description	EGIM
Base EGIM	11.666
Adjustments to E GIM	
Townhouse Developments (Yr Blt Pre 2000):	-3.774
High-Rise Developments:	-1.293

Assessment to Sale Ratio Summary Results

Ratio Statistics for Assessment/Adjusted Price	
Number of Sales:	61
Median	0.997
Coefficient of Dispersion	8.9%

MULTI-RESIDENTIAL MODEL

IDENTIFICATION of MODEL

The Multi-Residential Model is an income model valuing non-condominium multi-residential properties with four or more units. Generally described, these properties typically are 100% multi-residential or may include a small commercial component.

The income approach, sometimes referred to as the rental income approach, is based on the theory that the value of the properties is based on the present worth of anticipated income. Estimating the value of an income-producing multi-residential property for assessment purposes is done by using the Effective Gross income Multiplier (EGIM) method of capitalization. An EGIM expresses the relationship between a property's income before expenses and its value. The effective gross income (EGI) is calculated using the potential gross income of the property (i.e. the rents), minus an allowance for vacancy. The sale price of a property that has sold, divided by the property's EGI, will determine an EGIM.

$$\text{Sale Price} / \text{EGI} = \text{EGIM}$$

Once the multipliers have been determined, they are applied to multi-residential properties to estimate value.

$$\text{Value} = \text{Income (EGI)} \times \text{Rate (EGIM)}$$

PROPERTY TYPE DESCRIPTIONS

The multi-residential properties in Regina can be grouped into three distinct building types

Low-Rise Apartment – building less than 6 stories and consisting of four or more rentable units. These buildings either have a common entrance or entrances to the building, with access to the units from an interior hallway (Apartment Style), or without common entrance to the building with individual access to the units (Garden Style).

High-Rise Apartment – building with 6 stories or more and consisting of four or more rentable units. There is a common entrance or entrances to the building, units are accessed from an interior hallway. These buildings typically have elevators.

Townhouse Apartment – buildings are typically two-story units with basements, all floors occupied by the resident. Each unit has private entrances and are either in a row or back to back.

Separate rental models are developed for each of these property types.

IDENTIFICATION of MODEL AREA

The Multi-Residential model is a city-wide model in application. There are seven distinct multi-residential neighbourhoods located within the city of Regina municipal boundaries each with varying types and ages of multi-residential buildings, land sizes and locational characteristics. These neighbourhoods are defined on the enclosed map and are individually described below.

Neighbourhood 2610

Neighbourhood 2610 is located in Northwest Regina and is bordered on its south side by 9th Avenue North between Pasqua Street and Courtney Street, and by CP tracks between Courtney Street and the western municipal boundary of the city. Between Pasqua Street and Albert Street, the south boundary lies behind the subdivision known as Argyle Park; between Albert Street and Winnipeg Street, the south boundary wraps around north boundary of the Uplands subdivision. The east boundaries are Pasqua Street, 12th Avenue North and the city's municipal boundaries north of 9th Avenue North; south of 9th Avenue North, the east boundary is Courtney Street. The north and west boundaries are the city's municipal boundaries.

There are 23 multi-residential developments in this neighbourhood. The majority of these developments are low rise apartment buildings (91%), with the remaining being townhouse developments. These buildings were constructed between 1977 and 2018, reflecting an average year built of 2000. Developments range in size from 12 units to 200 units, with an average unit count of 76.

Neighbourhood 2620

Neighbourhood 2620 encompasses properties located in north and west Regina. This neighbourhood is located east and south of Neighbourhood 2610 and is bordered on its south side by Dewdney Avenue west of Lewvan Drive to Courtney Street, and the CN tracks east of Lewvan Drive to Winnipeg Street. The west boundaries are Catherwood Crescent south to 12th Avenue North, then Pasqua Street south to 9th Avenue North, then Courtney Street from 9th Avenue North south to the CP tracks. The east boundary is Winnipeg Street from Kowalchuk Crescent south to the CN tracks and then Lewvan Drive from there to the CP tracks.

There are 160 multi-residential developments in this neighbourhood. The vast majority of these developments are low rise apartment buildings (85%), with a scattering of townhouse developments (15%). These buildings were constructed between 1950 and 2017, reflecting an average year built of 1969. Developments range in size from 4 units to 362 units, with an average unit count of 26.

Neighbourhood 2630

Neighbourhood 2630 encompasses properties located in north central Regina. This neighbourhood is located east and south of Neighbourhood 2620 and is best described in three parts. One part lies west of Broad Street to Courtney Street, bordered on the south by Saskatchewan Drive to Lewvan, and the Creek west of Lewvan; the north boundary is CN tracks to Lewvan, Dewdney Avenue to Courtney. The second part lies between Broad and Winnipeg Street, bordered by Victoria Avenue to the south and the CN tracks to the north. The third part lies east of Winnipeg Street, with McDonald Street being the east boundary, again between Saskatchewan Drive and 4th Avenue.

There are 56 multi-residential developments in this neighbourhood. Approximately 77% of these developments are low rise apartment buildings, with the remaining being townhouse developments. These buildings were constructed between 1909 and 2017, reflecting an average year built of 1977. Developments range in size from 4 units to 51 units, with an average unit count of 14.

Neighbourhood 2640

Neighbourhood 2640 encompasses properties located in central Regina, encompassing the downtown area, the Cathedral area and the Transitional area. This neighbourhood is bordered on the south side by Wascana Lake and Wascana Creek, the west boundary is Lewvan Drive. The north boundary is Saskatchewan Drive between Wascana Creek and Broad Street, then Victoria Avenue from Albert Street to Winnipeg Street, which is the east boundary for the neighbourhood.

There are 158 multi-residential developments in this neighbourhood. The vast majority of these developments are low rise apartment buildings (71%); the remaining 29% is split between townhouse developments and high-rise developments (13% and 16% respectively). These buildings were constructed between 1910 and 2015, reflecting an average year built of 1963. Developments range in size from 4 units to 316 units, with an average unit count of 38.

Neighbourhood 2650

Neighbourhood 2650 lies immediately east of central Regina. This neighbourhood is bordered on the south side by Wascana Lake between Winnipeg Street and the Ring Road, and Victoria Avenue East from the Ring Road to Brown Street. The north boundary is the CP tracks, the west boundary is Winnipeg Street, and the east boundary is the Ring Road from Wascana Creek to Victoria Avenue East and Brown Street from Victoria Avenue East to the CP tracks.

There are 82 multi-residential developments in this neighbourhood. These developments are predominately low rise apartment buildings (90%); the remaining are townhouse developments. These buildings were constructed between 1945 and 2015, reflecting an average year built of 1970. Developments range in size from 4 units to 150 units, with an average unit count of 19.

Neighbourhood 2670

Neighbourhood 2670 is located in south Regina and is bordered entirely on the north side by Wascana Lake and Wascana Creek. The city's municipal boundary forms both the south and east boundaries of this neighbourhood. The west boundary is Lewvan drive from the creek to 25th Avenue, and thereafter the city's municipal boundaries.

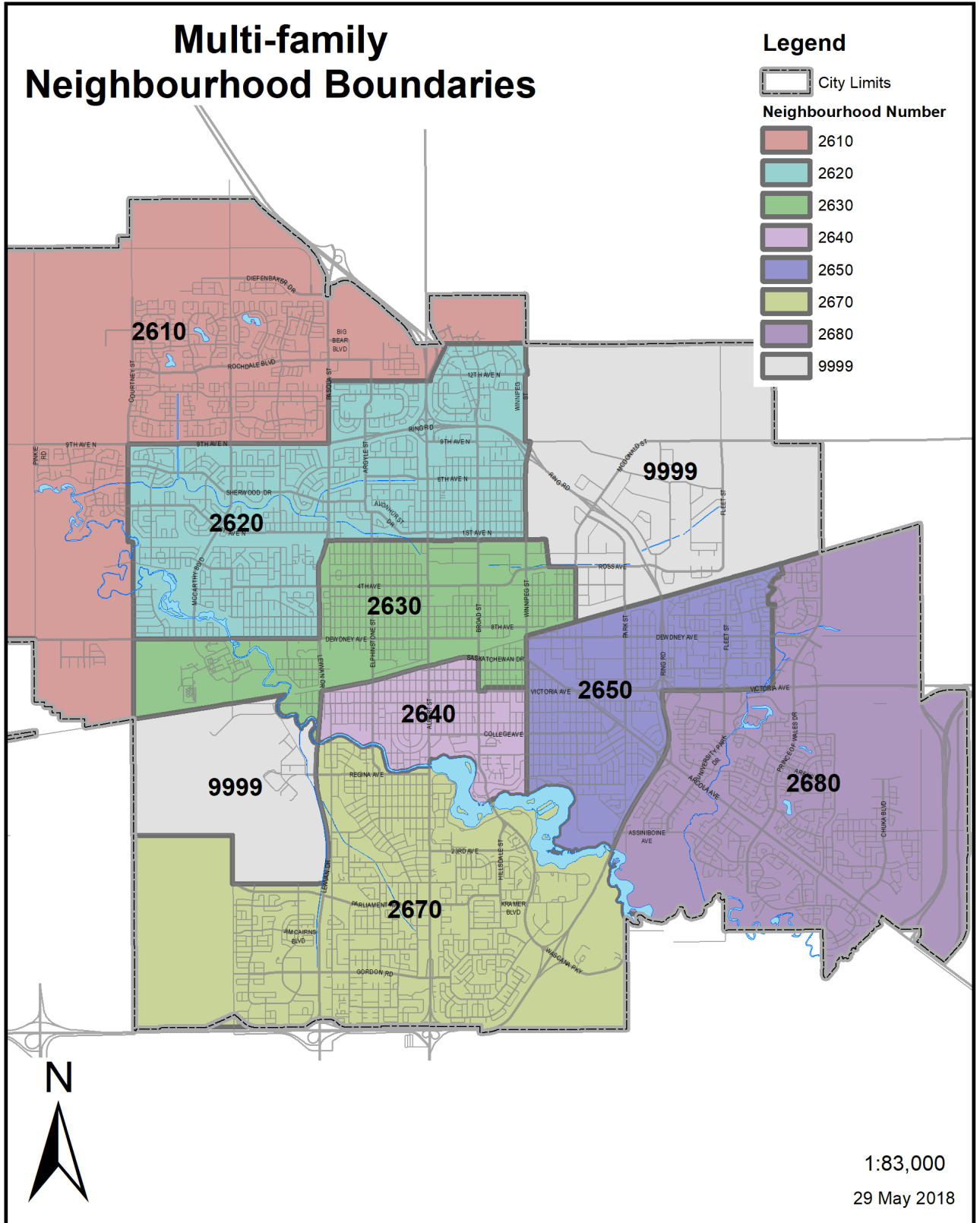
There are 171 multi-residential developments in this neighbourhood. Low rise apartment buildings (98%) are the dominate development type; the remaining 2% are townhouse developments. These buildings were constructed between 1954 and 2018, reflecting an average year built of 1966. Developments range in size from 4 units to 314 units, with an average unit count of 28.

Neighbourhood 2680

Neighbourhood 2680 is located in southeast Regina and is bordered on the north by Victoria Avenue East from the Ring Road to Brown Street, and the CP tracks from Brown Street to the city's municipal boundaries. The south boundary is Wascana Creek and the city's municipal boundaries. The west boundary is the Ring Road from Wascana Creek to Victoria Avenue East and then Brown Street from Victoria Avenue East to the CP tracks. The east boundary is the city's municipal boundaries.

There are 38 multi-residential developments in this neighbourhood. The majority of these developments are low rise apartment buildings (84%); the remaining, townhouse developments. These buildings were constructed between 1977 and 2019, reflecting an average year built of 1966. Developments range in size from 4 units to 222 units, with an average unit count of 48.

MAP



SCOPE of DATA and ANALYSIS

Prior to 2019, the City Assessor requested copies of 2016, 2017, 2018 and 2019 rent rolls for all non-residential properties. The data for the development of the mass appraisal net rent model came from these returned rent rolls.

A total of 11,376 multi-residential rents were analyzed using multiple regression analysis. The rent model is an additive model that predicts rents based on the type of unit and other factors such as the effective age of the building, location of the building, location of the unit within the building.

Multi-Residential Rental Summary Results

Property Type	Count	Minimum	Maximum	Mean	Median
High-Rise	1,157	\$ 600	\$ 1,459	\$1,021	\$ 980
Low-Rise	9,452	\$ 427	\$ 1,750	\$ 998	\$ 974
Townhouse	767	\$ 850	\$ 1,664	\$1,192	\$1,194
Total:	11,376	\$ 427	\$ 1,750	\$1,013	\$ 985

The following table provides specific breakdown of the Townhouse rents along with statistical measurements.

2019 Base Year Townhouse Rental Model Summary Statistics - General					
Strata	Count	Min	Max	Mean	Median
Overall:	767	850	1664	1192	1194
Unit Type:					
Two Bedroom	212	854	1294	1085	1079
Three Bedroom	541	850	1664	1227	1224
Four Plus Bedroom	14	1274	1574	1466	1507
Building Characteristics:					
Building in above average condition	8	1000	1200	1041	1013
Building in good condition	163	900	1325	1134	1100
Building in very good condition	596	850	1664	1211	1214
Building Location:					
Study Area 2620 (North)	168	984	1454	1206	1214
Study Area 2630 (North Central)	2	850	950	900	900
Study Area 2640 (Downtown, Cathedral, Transitional)	309	854	1524	1162	1154
Study Area 2650 (East of Downtown)	199	1044	1664	1201	1194
Study Area 2670 (South)	32	1174	1593	1399	1407
Study Area 2680 (South East)	57	1000	1275	1183	1210

Townhouse Rent Model

	\$/Month
Base Rent: (Three Bedroom Unit)	\$ 1,375
Additional Adjustments to Base Rent:	
One Bedroom Unit	\$ (303)
Two Bedroom Unit	\$ (161)
Four Bedroom Unit	\$ 125
Age:	
Calculated Age * Condition Rating/per year	\$ (1.88)
Misc:	
Unit is Average or Below Average Condition	\$ (388)
Unit in Good Condition and Above	\$ (148)
Location:	
Study Area 2610 (North West)	\$ 75
Study Area 2620 (North)	\$ -
Study Area 2630 (North Central)	\$ (50)
Study Area 2640 (Downtown, Cathedral, Transitional)	\$ -
Study Area 2650 (East of Downtown)	\$ (50)
Study Area 2670 (South)	\$ 75
Study Area 2680 (South East)	\$ 103

*Age variable is calculated using the following formula:

$$\text{Base date (2019)} - \text{Year Built}$$

Townhouse Vacancy

The typical 2019 vacancy was estimated from the returned rent rolls and indicated an adjustment of 5.3% for the inner city; 7.8% for the suburbs (Study Area 2610;2620;2670;2680

**Commercial Component:
Rent Model**

Description	\$/PSF
Base Rent	31.56
Adjustments to Base Rent	
Study Area 4450	4.58
Effective Age 2019 to 1990, per year (Age x Condition)	-0.53
Basement Adjustment	-8.06

Unheated Warehouse Adjustment	-40%
-------------------------------	------

Vacancy

Commercial Component	9.09%
----------------------	-------

The typical 2019 vacancy was estimated from the returned rent rolls and indicated an adjustment of 9.09 per cent for the commercial component.

Gross Income Multiplier and Adjustments

Gross income multipliers were estimated by dividing the predicted 2019 net operating income generated from the rent model by adjusted sale prices. The 61 sales used in the analysis occurred between January 1, 2014 and December 31, 2018. The sales were verified by mailing questionnaires to both vendors and purchasers. Sales were adjusted for chattels as reported; an analysis of 51 sales reporting chattels indicated an average of .88%, a 1% adjustment was applied to those sales where no adjustment was reported. The sales were also adjusted to reflect the market as of the base date January 1, 2019.

The reconciliation process for the resulting income multipliers involved reviewing multiple regression analysis results and reviewing results based on actual reported incomes.

The effective gross income multiplier analysis involved 61 sales, detailed in the following table.

2019 Base Year Sales - January 1, 2014 to December 31, 2018						
ACC ID	ADDRESS	Sale Month	Sale Year	Adjusted Price	Potential Effective Gross Income	Effective Gross Income Multiplier
10037805	2121 15TH AVENUE	5	2015	\$ 8,190,379	\$ 806,900	10.15
10054878	4525 RAE STREET	9	2018	\$ 5,922,107	\$ 625,700	9.46
10057212	111 LOCKWOOD ROAD	4	2016	\$ 14,705,088	\$ 1,278,300	11.50
10007969	27 KLEISINGER CRESCENT* (3 Kleisinger)	12	2018	\$ 5,716,763	\$ 474,900	12.04
10012325	87 ANGUS ROAD	8	2016	\$ 2,174,606	\$ 184,900	11.76
10012833	443 N LORNE STREET	11	2015	\$ 4,759,463	\$ 429,900	11.07
10012834	477 N LORNE STREET	7	2015	\$ 1,876,878	\$ 174,800	10.74
10012929	419 N LORNE STREET	5	2015	\$ 1,846,588	\$ 176,200	10.48
10013234	2420 6TH AVENUE N	12	2015	\$ 2,735,161	\$ 230,400	11.87
10013287	331 N BROAD STREET	7	2014	\$ 1,687,604	\$ 162,400	10.39
10013288	307 N BROAD STREET	7	2016	\$ 1,768,010	\$ 168,200	10.51
10019984	831 EMPRESS STREET	6	2015	\$ 490,657	\$ 49,500	9.91
10019984	831 EMPRESS STREET	8	2018	\$ 647,512	\$ 49,500	13.08
10023482	1235 GRACE STREET* (4303 Rae St)	8	2014	\$ 3,290,800	\$ 352,500	9.34
10023604	1108 EMPRESS STREET	1	2018	\$ 458,008	\$ 38,900	11.77
10024082	4741 4TH AVENUE	9	2014	\$ 514,413	\$ 37,200	13.83
10031597	1538 ALEXANDRA STREET	12	2017	\$ 5,690,183	\$ 380,700	14.95
10031598	1530 ALEXANDRA STREET	10	2014	\$ 1,237,150	\$ 99,100	12.48
10032478	2731 9TH AVENUE	5	2018	\$ 714,013	\$ 78,700	9.07
10032756	1424 VICTORIA AVENUE	12	2018	\$ 2,395,249	\$ 290,100	8.26
10032802	1956 MONTREAL STREET	11	2018	\$ 534,010	\$ 46,100	11.58
10037066	2078 GARNET STREET	5	2014	\$ 776,546	\$ 74,200	10.47
10037617	2022 LORNE STREET	8	2015	\$ 4,897,432	\$ 387,300	12.65
10037696	2025 ROSE STREET	3	2018	\$ 3,539,563	\$ 317,600	11.14
10037701	2155 ROSE STREET*(2121 Smith Street)	12	2017	\$ 3,972,698	\$ 343,100	11.58
10037834	1901 14TH AVENUE	11	2017	\$ 1,542,318	\$ 121,100	12.74
10037843	2242 SCARTH STREET	10	2017	\$ 2,015,630	\$ 133,000	15.16
10037877	2205 SMITH STREET	11	2015	\$ 1,831,054	\$ 140,100	13.07
10037908	2305 BROAD STREET	4	2017	\$ 1,793,571	\$ 143,800	12.47
10038337	2158 HALIFAX STREET	9	2016	\$ 684,544	\$ 61,300	11.17
10040114	5 VAUGHN STREET	8	2017	\$ 1,547,329	\$ 138,400	11.18
10040117	27 VAUGHN STREET	2	2016	\$ 2,917,213	\$ 247,000	11.81
10040170	40 FROOM CRESCENT* (909 Grey St; 2300 Abbott Rd)	12	2018	\$ 5,607,421	\$ 436,200	12.86
10041254	2709 CORONATION STREET	5	2014	\$ 640,230	\$ 50,900	12.58
10041381	3812 REGINA AVENUE	5	2018	\$ 668,012	\$ 50,600	13.20
10043874	421 E 17TH AVENUE	4	2017	\$ 632,801	\$ 53,300	11.87
10043899	2479 FRANCIS STREET	2	2014	\$ 506,647	\$ 35,300	14.35
10043990	401 E COLLEGE AVENUE* (405E College Ave)	4	2018	\$ 837,015	\$ 71,900	11.64
10046655	3218 WESTGATE AVENUE	12	2014	\$ 569,873	\$ 49,200	11.58
10046656	3210 WESTGATE AVENUE	9	2017	\$ 857,396	\$ 84,700	10.12
10046661	3319 ARGYLE RD*(2701 Coronation St; 3801 Princess)	12	2018	\$ 4,494,701	\$ 354,300	12.69
10047441	10 MICHENER DRIVE* (4 complexes in Regina)	9	2014	\$ 37,602,232	\$ 3,582,000	10.50
10052986	4110 RAE STREET* (40 properties 536 units)	12	2017	\$ 58,503,162	\$ 4,986,200	11.73
10053168	3959 CAMERON STREET	12	2016	\$ 473,546	\$ 40,100	11.81
10053171	3008 PARLIAMENT AVENUE	11	2018	\$ 1,660,030	\$ 165,700	10.02
10053192	3940 RAE STREET	2	2018	\$ 1,302,024	\$ 106,700	12.20
10053201	3861 RETALLACK STREET	4	2017	\$ 1,360,903	\$ 120,600	11.28
10053208	3820 RETALLACK STREET	7	2014	\$ 452,282	\$ 41,300	10.95
10053238	3000 26TH AVENUE	8	2017	\$ 547,667	\$ 42,300	12.95
10053239	3005 26TH AVENUE	1	2014	\$ 435,378	\$ 39,400	11.05
10053239	3005 26TH AVENUE	2	2015	\$ 511,078	\$ 42,300	12.08
10053328	117 PROCTER PLACE	6	2016	\$ 2,767,597	\$ 236,500	11.70
10053673	20 SPENCE STREET* (26 Spence St)	1	2017	\$ 4,670,449	\$ 451,600	10.34
10054864	4415 RAE STREET	8	2017	\$ 4,842,115	\$ 460,700	10.51
10054865	2755 31ST AVENUE	4	2018	\$ 2,976,054	\$ 267,900	11.11
10056419	4730 PASQUA STREET	8	2014	\$ 15,350,251	\$ 1,276,100	12.03
10059846	4008 DEWDNEY AVENUE	5	2015	\$ 613,093	\$ 62,200	9.86
10017131	319 ANGUS STREET	4	2016	\$ 502,937	\$ 60,800	8.27
10025490	1400 ARGYLE STREET	11	2018	\$ 452,008	\$ 60,180	7.51
10239754	5960 LITTLE PINE LOOP	10	2018	\$ 11,816,571	\$ 951,600	12.42
10271172	1291 N MCEACHERN DR. *(1251N McEachern)	10	2018	\$ 20,606,516	\$ 1,550,800	13.29

The reconciliation process for determining economic gross income multiplier strata primarily involved multiple regression analysis, supported by a consultation process with individuals active in the Regina real estate market. Recognized published gross income multiplier data were also reviewed. The economic gross income multipliers are as follow:

Description	EGIM
Base EGIM	11.666
Adjustments to E GIM	
Townhouse Developments (Yr Bkt Pre 2000):	-3.774
High-Rise Developments:	-1.293

MODEL TESTING

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 arm's length sale transactions in the marketplace.

The legislated statistical requirement affecting the assessment of multi-residential 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. The COD also indirectly measures the quality of the appraisal process by which mass appraisal modelled values are developed.

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

Ratio Statistics for Assessment/Adjusted Price	
Number of Sales:	61
Median:	0.997
Coefficient of Dispersion	8.9%

The median assessment-to-sales ratio and Coefficient of Dispersion for the base EGIM and the adjustments made to the EGIM are provided below:

Ratio Statistics for Assessment/Adjusted Price - Low Rise (Base EGIM)	
Number of Sales:	56
Median:	0.996
Coefficient of Dispersion	9.2%

The median assessment-to-sales ratio and Coefficient of Dispersion for the base EGIM and the adjustments made to the EGIM are provided below:

Ratio Statistics for Assessment/Adjusted Price - Townhouse	
Number of Sales:	2
Median:	1.002
Coefficient of Dispersion	4.8%

Ratio Statistics for Assessment/Adjusted Price - High Rise	
Number of Sales:	3
Median:	1.022
Coefficient of Dispersion	6.3%

To test for bias in the model as a result of variables being excluded, a hypothesis test Kruskal-Wallis, was used. The Kruskal-Wallis test examines whether different variables or categories are appraised at equal percentages of market value. If the distribution of the ratio is the same across the categories (or variable), the model is assumed to be unbiased. The results of these test are as follows:

Location (Study Area):

Hypothesis Test Summary - Location (Study Area)			
Null Hypothesis	Test	Sig.	Decision
The distribution of RATIO4 is the same across categories of STUDY_AREA.	Independent-Samples Kruskal-Wallis Test	0.392	Retain the null hypothesis.
Asymptotic significances are displayed. The significance level is .050.			

Age (Era):

Hypothesis Test Summary - Age (Era)			
Null Hypothesis	Test	Sig.	Decision
The distribution of RATIO4 is the same across categories of AGE_ERA.	Independent-Samples Kruskal-Wallis Test	0.166	Retain the null hypothesis.
Asymptotic significances are displayed. The significance level is .050.			

Quality:

Hypothesis Test Summary - Quality			
Null Hypothesis	Test	Sig.	Decision
The distribution of RATIO4 is the same across categories of QUALITY.	Independent-Samples Kruskal-Wallis Test	0.435	Retain the null hypothesis.
Asymptotic significances are displayed. The significance level is .050.			