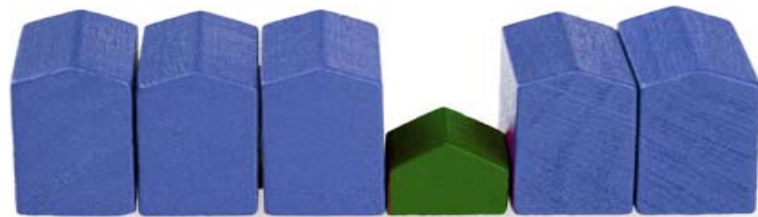









Qualico Communities  
Cost/Benefit Analysis:  
Ridgewood Community



September 18, 2012

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**We will:**

-  **make** and meet our commitments to you
-  **understand** your business and what is important to you
-  **provide** value and build trust through technical competence and consistent results
-  **demonstrate** professionalism through effective interaction and communications
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**Private and confidential**

September 18<sup>th</sup>, 2012

**Mr. Ravi Joshi**

**Qualico Communities**

One Dr. David Friesen Drive

Winnipeg, Manitoba

R3X 0G8

Dear Ravi:

**Re: Cost/Benefit Analysis - Ridgewood Community**

We are pleased to provide you with our findings regarding the financial and economic implications of the proposed Ridgewood Precinct. Key findings include:

- Based on the findings of the Precinct Planning study process that is currently underway the only major off-site servicing cost that is primarily attributable to the development of the Precinct is the extension of the Harstone Trunk Sewer.
- It is anticipated that the City will be required fund \$2.6 million of the \$14.7 million required to undertake the extension of the Harstone Trunk Sewer and other trunk sewer extensions. These capital projects will benefit a broader area extending beyond the immediate Precinct boundaries, providing gravity land drainage capacity for the existing built-up area of Charleswood, located north of the retention drainage boundary.
- The City's \$2.6 million contribution towards the extension of the Harstone Trunk Sewer extension will trigger significant private sector investment in infrastructure, site development and construction exceeding \$1 billion.
- The combined public and private sector investment will generate approximately 4,470 person-years of direct employment and 5,240 person years of indirect employment.
- The findings of our fiscal impact analysis indicate that the Ridgewood Precinct is viable and financially beneficial to the City. The residual cash flows generated by the Precinct will provide the City with \$54.0 in present value terms that can be used to fund other major city projects, including the West Clement Parkway extension and related transportation improvements.

Thank you for retaining us to undertake this work. Please do not hesitate to contact me if you have any questions.

Sincerely,

Richard Olfert  
Partner, Audit

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# Executive summary

Deloitte was retained by Qualico Communities to prepare a financial assessment for a proposed residential community located in the west end of Winnipeg. The proposed community, known as Ridgewood South, is comprised of approximately 821 acres (332 hectares) of gross developable land generally located immediately south of the Harte Trail in South Charleswood. The lands are currently the subject of a Precinct Planning Process which will establish a planning framework for a new residential community (herein referred to as “the Ridgewood Precinct”). The Ridgewood Precinct forms part of a larger area that has been identified as one of the locations for New Communities in the City’s Plan, “Our Winnipeg”.

## Purpose and Objectives

A planning process led by Stantec and Landmark Planning and Design Inc. was initiated in May 2011 to prepare a Precinct Plan for the area. This report responds to Directive #2 in the “*Our Winnipeg: Complete Communities*” direction strategy which states that new communities will be identified through a planning process and identifies documents required to support the planning process for new community precincts. Among the documents identified is a cost/benefit analysis.

The City has experienced increasing population growth in recent years which has fuelled demand for new development and, as CMHC has observed, steady appreciation in new home sale prices. Population projections prepared by the Conference Board, which appear to be in-line with recently released Census data, anticipate an increase in the growth rate (from 0.8% / annum to 1.3% / annum) and a corresponding increase in absolute growth, increasing gradually from 6,000 new residents / annum to 8,800 in the longer-term (2031). Growth is expected to be fuelled by in-migration and, in particular, international migrants. Factors driving in-migration referenced by the Conference Board include sound employment prospects and relative housing affordability.

The focus of this report is to provide an overview of the potential financial benefits and costs to the City associated with the development of the Ridgewood Precinct. Benefits include the ongoing stream of property tax revenue and lot levy revenue, as well as one-time permits and fees related to the development approval phase. Other, broader public benefits include the significant up-front investment by landowners / developers, and the associated economic impact of this investment. Costs to the City include one-time contributions to fund required drainage improvements (including the Harstone Trunk Sewer extension), long-term capital costs associated with infrastructure renewal, and City operating costs associated with the provision of population-related City services.

## Overview of benefits and costs

While the background planning and technical studies required to prepare the Precinct Plan are still underway, a preliminary estimate of the unit yield and mix contemplates 3,076 dwelling units, comprised of 2,676 single-detached homes and 400 higher density units, which we expect would be in the form of semi-detached or townhouse units. Development would also include other amenities, for example, neighbourhood commercial uses and parks. It is our understanding that the Ridgewood Precinct will be served by existing community facilities in the built-up area of Charleswood to the north, including schools, fire and ambulance and police and, as a result, the funding for such facilities within the Ridgewood Precinct will not be required.

We observe that certain of the capital projects considered in this report, including regional transportation linkages and trunk sewer extensions serve a much broader function which will extend well beyond the boundaries of the Ridgewood Community. Specifically, the extension of certain trunk sewers will provide services to the existing neighbourhoods immediately north of the Ridgewood Precinct and will also service the lands south of the Precinct, which will be developed over a much longer time-frame.

The table below illustrates the estimated annual residential property tax revenue and lot levies at build-out, as well as one-time permits and fees generated during the development phase.

## Ongoing and one-time revenue to City and School Division

Classification	Amount
Residential Property Tax	\$8,653,680 / annum
School Division Tax (net of principal residence rebate)	\$5,857,745 / annum
Frontage Levies	\$534,750 / annum
Building Permit Fees	\$1,329,680 (one-time)
Other Construction Permits	\$1,630,990 (one-time)

The contributions of the City and the private sector (landowners / developers) towards funding major infrastructure required to service the Ridgewood Precinct are summarized below. The major infrastructure costs, which reflect proposed solutions identified through the Precinct Planning study process, include construction of the Harstone Trunk Sewer extension to address drainage issues. The total cost of the major Ridgewood land drainage facilities (including the Harstone Trunk extension) is estimated at **\$14,706,800**, of which the majority will be funded by the landowners through a land drainage Trunk Sewer Rate charge.

## Servicing and Development Costs

Classification	City	Landowners	Total
Ridgewood major land drainage facilities (incl. Harstone Drain)	\$2,600,000	\$12,106,800	\$14,706,800
<b>Major External Infrastructure Costs:</b>	<b>\$2,600,000</b>	<b>\$12,106,800</b>	<b>\$14,706,800</b>

Notes:

1. Costs based on current estimates provided by Stantec in September 2012. The Land Drainage TSR charge is estimated at \$18,000 / ac. for all catchments and a net development area of 627.6 ac.

The City's contribution to the funding of the Harstone Trunk Sewer extension will trigger a significant investment by landowners/developers. The total private sector investment in developing the Ridgewood Precinct, including transportation and infrastructure, other development costs and construction costs, are expected to exceed **\$1 billion**. The combined public and private sector investment in the Ridgewood Precinct is expected to generate **4,470 person-years** of direct employment and **5,240 person-years** of indirect employment, with the bulk of employment coming from spending on residential building construction.

## Operating Costs

A per capita approach based on current average operating costs was used to forecast the cost of providing City services and programs to future residents of the Ridgewood Precinct. The City's Corporate Finance department provided an itemized breakdown of city services funded through residential taxes and the corresponding dollar contribution based on a property tax bill for an average house. The total cost of services for an average house is approximately \$1,617, inclusive of property taxes (\$1,429) and Roadway Maintenance and Traffic Services funded by the Frontage Levy (\$188). Comparatively, the average cost per dwelling across the City is approximately \$1,250.

On a per capita basis, the portion of City services funded through residential taxes, including the Frontage Levy, translates to \$516 per capita<sup>1</sup>. Applying this to the anticipated residential population in the Ridgewood Precinct (7,945 residents) produces a cost per unit of \$1,330 per unit. For the purposes of analysis we have estimated the cost of City services on a per capita basis.

This approach is considered conservative as it tends to overstate the actual cost for the following reasons:

<sup>1</sup> Per capita in this case reflects an estimate of the number of persons living in private households, calculated by applying the percentage of total population living in private households calculated from the 2006 Census to the 2011 Census population.

- Because they are based on average costs, they do not reflect potential economies of scale that may be realized in delivering certain services.
- Costs associated with Road Maintenance and Traffic Operations, funded through the lot levy, include capital costs associated with infrastructure renewal that have been accounted for separately in our analysis.

## **Fiscal impact**

A fiscal impact assessment was undertaken to determine the financial implications of the Ridgewood Precinct development to the City of Winnipeg over the longer-term. The assessment was based on an 80-year discounted cash flow forecast of the aforementioned revenue and cost items. The time horizon is consistent with the objective of evaluating the life-cycle costs of infrastructure investment and renewal as most classes of infrastructure have a life-cycle of approximately 50-years.

The impact of the development of the Precinct on the City's operating budget has been forecast using a per capita cost approach. Under this approach, the per capita costs of population-related City services are derived by dividing the current residential tax-supported budget by the City's population.

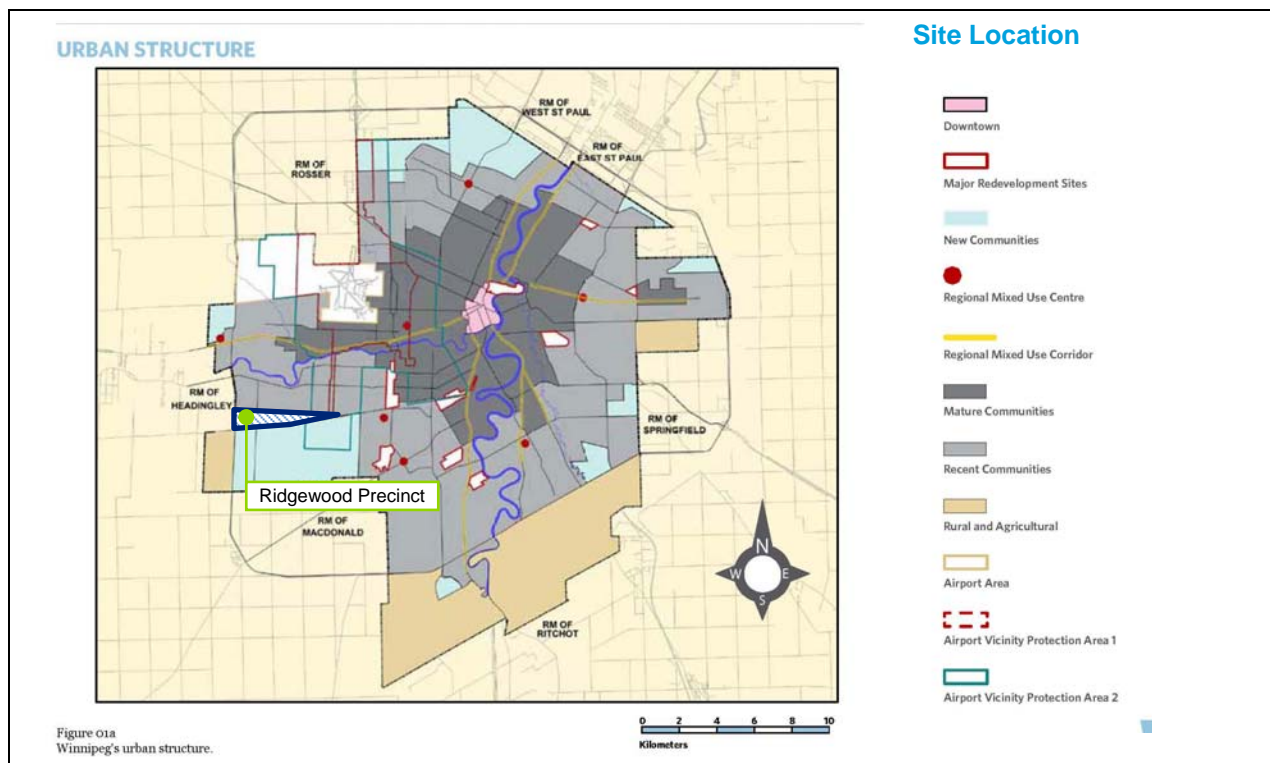
The net present value of **\$54.0 million** indicates that the Ridgewood Precinct is viable and potentially financially beneficial to the City. This residual value reflects potential free cash flow that could contribute to funding the capital cost associated with the Clement Parkway and related transportation improvements, or other City projects and programs. We also note that it does not include the Transportation Levy that will be paid by landowners / developers in the Precinct or contributions that have been collected to date by the City for transportation improvements in Charleswood through the Charleswood Transportation Levy (estimated at approximately \$3 million).

From a broader urban development standpoint, the Ridgewood Precinct, which abuts the existing build-up area and existing services, represents a logical intermediate step that will ultimately facilitate the development of lands south of Wilkes Avenue. These items are identified as a location for future Community uses in the City's Sustainable Communities directive. Phased, sequential development over the longer-term will ensure that the City continues to have serviced land available to support future population and employment growth.

# 1.0 Introduction

Deloitte was retained by Qualico Communities to prepare a cost/benefit analysis for a proposed residential community. The proposed community, known as Ridgewood South, is comprised of approximately 821 acres (332 hectares) of gross developable land<sup>2</sup> and is generally located immediately south of the Harte Trail in South Charleswood. The lands, which abut the existing built-up area of the Charleswood community, are currently the subject of a Precinct Planning Process which will establish a planning framework for a new residential community, herein referred to as “the Ridgewood Precinct”.

The Ridgewood Precinct forms part of a much larger area identified for urban expansion in the City’s 25-year development plan, “Our Winnipeg” (July 12, 2011). The Urban Structure identified in Our Winnipeg, pictured below, identifies the Ridgewood Precinct and the abutting lands south of Wilkes Ave as a location for “New Communities”.



Source: Our Winnipeg, City of Winnipeg, 2011.

The Our Winnipeg development plan is supported by four accompanying documents that set out direction strategies: Complete Communities; Sustainable Transportation; Sustainable Water and Waste; and, Sustainable Winnipeg.

This report responds to a directive in Section 03-4 of the “Complete Communities” direction strategy that pertains to New Community development. Direction #2 states that new communities will be identified through a planning process and identifies documents required to support the planning process for new community precincts, which include a cost/benefit analysis.

<sup>2</sup> This gross developable land area reflects take-outs for certain existing uses, landscape features and reserves, including: the Harte Trail, Varsity View Centre, Fraser View Park, Assiniboine Forest, the future east-west transportation corridor, lakes and impoundments.



The cost/benefit analysis contained in this report provides an evaluation of the fiscal and economic implications to the City of the development of the Ridgewood Precinct. The costs accounted for in the analysis include the ongoing costs of funding city services and periodic capital costs associated with infrastructure maintenance and renewal.

The benefits and costs to the City that we have examined are as follows:

- **Economic impact of private sector investment in infrastructure and residential construction**  
The majority of the up-front development costs will be borne by landowners/developers. Landowner/developer investments include hard municipal infrastructure (water mains, waste water systems, local roads and walkways), other hard and soft development costs, and construction costs. The economic impact of these expenditures will have a beneficial impact on the City's construction sector and other sectors in terms of output and job-creation.
- **One-time revenue from development fees**  
The development process will generate revenue through fees and charges. For the purposes of this report, we have focused on Development Charges and Building Permit fees.
- **Recurring revenue from residential property taxes and frontage levies**  
The proposed residential community will result in a significant increase to the City's tax assessment base and annual tax revenue. While a portion of this revenue will be offset by costs associated with community services which are population driven, the balance may be available to fund other public programs and projects. In addition, revenue from frontage levies will offset infrastructure maintenance and renewal costs.
- **Recurring operational costs to deliver City programs and services**  
Residents of the Ridgewood Precinct will require access to services and programs, including public transit which, in turn, will increase City operating costs.
- **One-time contributions to wastewater and transportation infrastructure capital projects**  
City-funded external servicing costs are required in order to facilitate the development of the Precinct. These costs relate to the construction of the Harstone drain, a land drainage sewer that will run from the boundary of the development retention catchment of Charleswood, north to the existing outfall to the Assiniboine, and regional transportation costs associated with the construction of related external 4-lane east-west connector roads. We have not included the Clement Parkway extension and related transportation improvements due to its broader traffic function, which is more city-/regional-serving in nature, and uncertainty as to its timing and cost.
- **Recurring, periodic infrastructure renewal and replacement costs**  
While the majority of the initial cost of hard infrastructure will be funded by developers, the City will be responsible for the renewal and replacement of roads and piped infrastructure. Periodic renewal and replacement costs based on typical life-cycles for piped infrastructure and transportation have therefore been reflected in the cost/benefit analysis.

In evaluating the benefits and costs, we have examined the overall magnitude of investment and potential economic benefits. In addition, we have considered the longer-term fiscal impact of the community, including municipal revenue that will accrue from the build-out of the development, infrastructure renewal costs, and incremental operating costs attributable to population growth.

The next section provides an overview of the Ridgewood Precinct.

## 2.0 The Ridgewood Precinct

The Ridgewood Precinct boundary encompasses a gross area of approximately 947 acres<sup>3</sup> (383 hectares) of land located in the South Charleswood area of Winnipeg. The Precinct is located immediately south of existing residential development in Charleswood, as illustrated in the following figure. It is generally bounded by the Perimeter Highway to the west, The Harte Trail and Ridgewood Ave to the north, Elmhurst Road to the east and Wilkes Avenue to the South. The Ridgewood Precinct is located within the City's urban boundary and has been identified in the Our Winnipeg Complete Communities Direction Strategy as one of the locations where new communities will be developed.



Ridgewood Precinct\*

\* Approximate boundaries, not to scale

The Precinct presents a logical location for accommodating new community development in the near- to medium-term as it abuts existing urban uses and municipal infrastructure. The servicing of these lands will provide the City with development-ready land to accommodate population growth in the City which, as observed in the City's development plan, is expected to be substantial.

The City's development plan references a growth forecast prepared by the Conference Board of Canada, prepared in June 2007. The forecast anticipates a population of 849,000 residents by 2031, or growth of approximately 183,000 residents over the 2008-2031 period. The population projections anticipate an increase in the growth rate (from 0.8% / annum to 1.3% / annum) and a corresponding increase in absolute growth, increasing gradually from 6,000 new residents / annum to 8,800 in the longer-term (2031). Growth is expected to be fuelled by in-migration and, in particular, international migrants. Factors driving in-migration referenced by the Conference Board include sound employment prospects and relative housing affordability.

The recent release of 2011 Census data suggest that, even with the period of economic uncertainty that followed the release of the Conference Board's forecast, Winnipeg has experienced growth which appears to be in-line with the Conference Board's predictions. Adjusting the census count of 663,617 for net under-coverage<sup>4</sup> yields a post-censal estimate of 683,400, which is in-line with the Conference Board's forecast of 683,600.

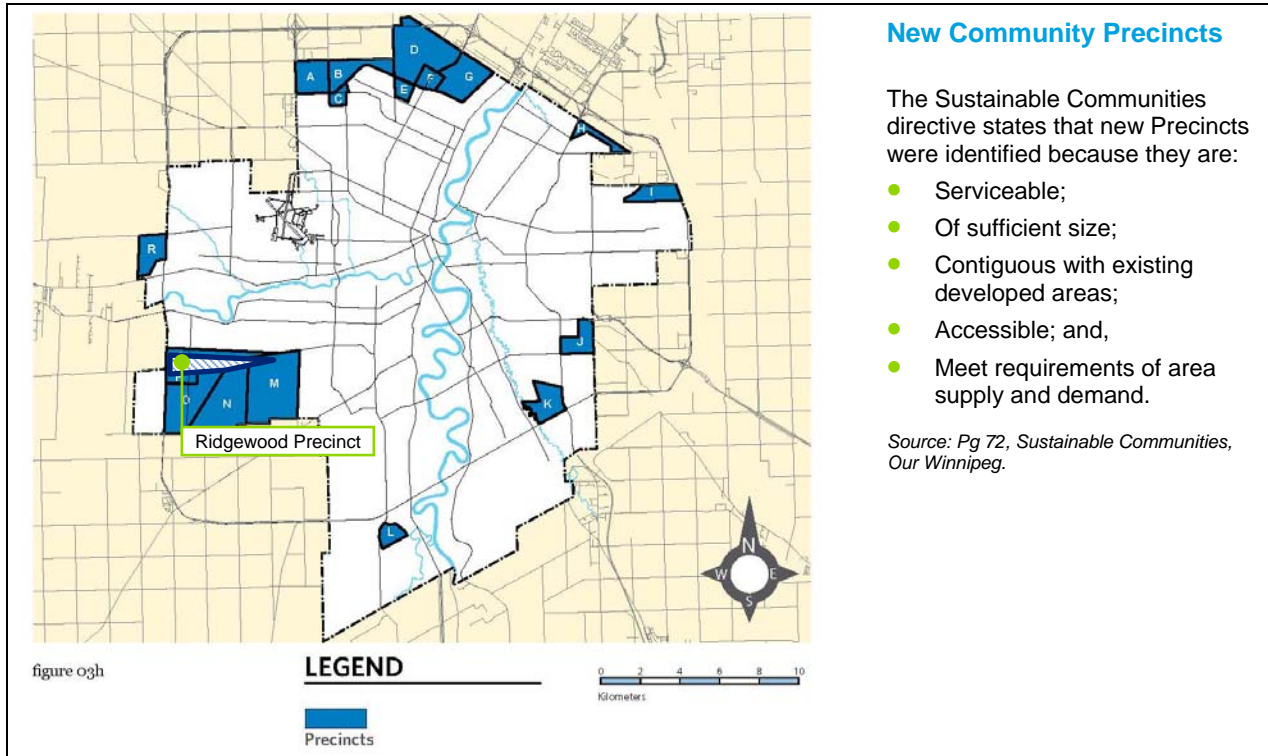
The pressures of population growth have fuelled demand for new homes and the steady appreciation in new home sale prices. The New House Price Index (NHPI), which measures the change in the price of comparable new home sales, was projected to increase by 4.5 percent in 2011 and rise a further 3.9 percent in 2012. The average selling price in the third quarter of 2011 was \$386,012 - an increase of 5.1 percent year-over-year. The houses which have been most quickly absorbed into the market are those priced at \$425,000 and above.

<sup>3</sup> This acreage includes existing uses, landscape features and reserves within the Precinct Boundary.

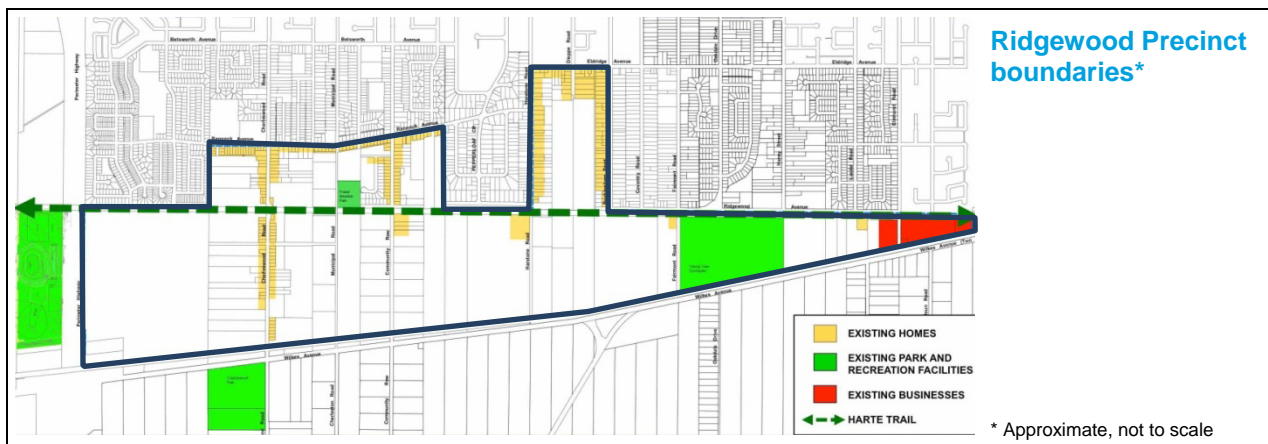
<sup>4</sup> Net undercoverage estimates for the 2011 Census are not yet available. We have assumed a rate of net undercoverage of 2.9%, which is consistent with Stats Canada's estimate for the 2006 Census for the Province of Manitoba.

## 2.1. Planning context

The City's development plan, entitled *Our Winnipeg*, provide a 25-year vision for the City. The plan anticipates that the City will grow by 180,000 residents, or 81,000 households, by 2031. The *Our Winnipeg* development plan and its supporting directive documents were prepared to address growth pressures and guide the location and form of future growth in the City. The following figure, found in the Complete Communities directive, illustrates the location of new community precincts. The Ridgewood Precinct abuts existing urban development and presents a logical location to accommodate growth.



For the purposes of the Precinct Plan studies, the boundaries shown in the preceding figures have been extended to include partially undeveloped land located north of the Harte Trail as illustrated below.



Source: Stantec and Landmark Planning & Design.

These lands, which include the Varsity View Community Centre site and William R. Clement Parkway right-of-way, add approximately 215 acres (87 hectares) north of the Harte Trail, increasing the total size of the Precinct Planning area to 947 gross acres. Vacant developable land within the Precinct accounts for approximately 821 acres (332 hectares). Deducting land impacted by public reserves, transportation reserves, lakes and impoundments, the development area subject to a Trunk Sewer Rate charge is 673

acres (272 hectares). A further 10% deduction to reflect an allowance for public reserve dedication, the general servicing area is reduced to 605 net acres (244 hectares).

A planning process led by Stantec and Landmark Planning and Design Inc. was initiated in May 2011 to prepare a Precinct Plan for the area. While land ownership within the Ridgewood Precinct is relatively fragmented as shown in the following figure, it includes several large landowners, including Qualico Communities.



Source: Stantec and Landmark Planning & Design.

The Precinct Plan is intended to provide a policy framework for the development of a residential community. The residential unit mix is expected to be predominantly single-family residential, complemented by semi-detached, town homes and multi-residential units. Other amenities include neighbourhood commercial, parks and institutional uses.

## 2.2. Residential unit yield and mix assumptions

While the background planning and technical studies required to prepare the Precinct Plan are still underway, we were provided a preliminary estimate of the unit yield and mix. The current expectation is that the Precinct will accommodate 3,076 new dwelling units, comprised of 2,676 single-detached homes and 400 higher density units, which we expect would be in the form of semi-detached or townhouse units.

### Residential Unit Mix and Population

	Number of Units	Average Size (Habitable Area)	Persons Per Unit	Estimated Population
Single Family	2,676	2,100 sf (195m <sup>2</sup> )	2.7	7,225
Semi-Detached / Town Houses	400	1,200 sf (110m <sup>2</sup> )	1.8	720
<b>Total</b>	<b>3,076</b>		<b>2.6</b>	<b>7,945</b>

**Notes:**

1. Unit yield and mix based on estimates provided by the Landowners Group. Persons per unit is a Deloitte estimate, reflecting larger family sizes in new residential areas, which is reflected in the average ppu of 2.6 vs. the City average of 2.42 as of the 2006 Census.

For the purposes of determining the potential impact of the community on municipal operating costs, we have prepared a preliminary estimate of the population at build-out, which is estimated at nearly 8,000 residents. Reflected in this preliminary estimate is the assumption that the average persons per unit tends to be higher in growing, residential areas relative to the overall City-wide average which, in the case of Winnipeg, is approximately 2.42 persons per household as of the 2006 Census.

It is our understanding that the Ridgewood Precinct will be served by existing community facilities, including school, library, fire and police facilities located in the existing community to the north. Consequently, the initial capital investments associated with the Precinct Plan are expected to be limited to the construction costs municipal infrastructure and transportation, the majority of which will be funded by the landowners.

## 3.0 Financial benefits

From a planning perspective, the Ridgewood Precinct will play an important role in addressing the current and future demand for new housing in Winnipeg. This, in turn, will also support the City's broader economic development objectives by providing a greater range of housing opportunities and locations, and in so doing, making the city a more attractive location for labour and employers.

From a municipal finance perspective, the financial benefits associated with the proposed Ridgewood Precinct include the potential streams of revenue that will be created through one-time fees and permits, and the ongoing stream of tax revenue generated from the increase in assessment as the community is built-out. To the extent that the revenue stream exceeds capital and operating costs associated with the delivery of city services, it will provide a source of funding for other municipal projects and programs.

This section focuses on the three primary sources of municipal revenue arising from the proposed development, which include:

- **Recurring residential property tax revenue:** The ongoing stream of tax revenue arising from the increase to the City's tax assessment. The increase in assessment will occur over time as the community is built out; however, in this section, an estimate of total revenue at build-out is presented for illustrative purposes.
- **Recurring frontage levy revenue:** These levies, which are charged in addition to municipal taxes, provide a source of "fenced" funding for the upgrade, repair and renewal of municipal infrastructure.
- **One-time revenue from building permit fees:** One-time fees collected from developers at the stage of building permit issuance.

In addition to the above, developer typically incur other application and fees as part of the development process. These have not been addressed in the analysis.

### 3.1. Contribution to municipal tax assessment base

Based on the development concept described in the preceding section, we have estimated the increase in the City's tax assessment base attributable to the Ridgewood Precinct below. Based on a review of the assessed value of comparable properties in new residential communities (see Appendix A), we anticipate an average assessed value of \$425,000 per unit for single-family units and \$300,000 per unit for semi-detached/townhouse units. Based on these assumptions, the Ridgewood Community's total contribution to the City's tax assessment base is estimated at \$1.3 billion in current dollars. Applying the 2011 rate of 45% identified in the Province's Assessment Portioning Strategy, the taxable portion of the residential assessment is **\$565.8 million** in current dollars.

#### Development assumptions and contribution to tax assessment base

Category	Number of Units	Assessed value (per unit)	Total Assessment Base	Taxable Portion of Assessment Base
Single Family	2,676	\$425,000	\$1,137,300,000	\$511,785,000
Semi-Detached / Town Houses	400	\$300,000	\$120,000,000	\$54,000,000
<b>Total</b>	<b>3,076</b>		<b>\$1,257,300,000</b>	<b>\$565,785,000</b>

Sources:

1. Number of units based on yield estimates provided by Qualico Communities.
2. Assessed value is based on a review of the assessed values of comparable properties in the Waverley West area, documented in Appendix A.
3. Taxable portion of assessed unit based on a 45% portion rate for residential homes.

### 3.2. Property tax revenue

The ongoing stream of tax revenue includes municipal tax revenue and tax revenue to the school district. From the City's perspective, the municipal property tax revenue is the portion of residential taxes paid by residents that can be used for funding municipal services. The total annual municipal property tax contribution at build-out is estimated at **\$8.7 million / annum**, while the annual contribution to the school division is **\$5.9 million / annum**. Both values are expressed in constant dollars and are based on prevailing mill rates.

#### Annual property taxes

	Taxable portion of assessment base	Tax rate <sup>1</sup>	Total annual contribution
<b>Municipal Property Taxes</b>			
Single Family	\$511,785,000	1.5295%	\$7,827,750
Semi-Detached	\$54,000,000	1.5295%	\$825,930
<b>Total Municipal Property Taxes</b>			<b>\$8,653,680</b>
<b>School Division Tax (Annual)</b>			
Single Family	\$511,785,000	1.4159%	\$7,246,360
Semi-/Town Houses	\$54,000,000	1.4159%	\$764,585
<b>Subtotal</b>			<b>\$8,010,945</b>
Less: Rebate on Principle Residence			<b>(\$2,153,200)</b>
<b>Total School Division Taxes</b>			<b>\$5,857,745</b>

Notes:

- Tax rates based on the following 2011 mill rates:
  - Municipal Mill Rate: 15.295 / \$1,000 assessed portion
  - School Division Mil Rate – Pembina Trails School Division: 14.159 / \$1,000 assessed portion
- Reflects rebate on Principle Residence of \$700 per unit (x 3,076 units).

The above gross revenue figures do not take into account the incremental increase in the cost of municipal services associated with development. The impact of the new population growth on municipal operating costs is addressed in the fiscal impact analysis contained in Section 6.0.

### 3.3. Frontage levy revenue

The frontage levy provides an ongoing source of funding for infrastructure renewal. It is “fenced” funding in the sense that the use of funds collected is limited to the repair and renewal of piped services and lighting, as set out in the City of Winnipeg Charter. The prevailing (2011) frontage levies are set out in the Planning, Development and Building Fees and Charges (By-Law #196/2008 and #77/2009). They are \$0.95 per front foot for water and \$2.80 for sewer, for a total of \$3.75 per front foot. The 2011 rate reflects a recent increase from the previous rate of \$2.55 that was in effect over the 2001-2010 period.

#### Frontage Levy

Section 432(4) of the Winnipeg Charter states that money from a frontage tax may be used for the:

- upgrading, repair, replacement and maintenance of water and sewer mains and streets and sidewalks; and,
- installation, upgrading, repair, replacement and maintenance of lighting in streets and back lanes.

Based on the current prevailing rate, at build-out, the Ridgewood Precinct will generate approximately **\$535,000 / annum** that can be used for the upgrade, renewal and repair of piped services in the City.

### Annual frontage levy revenue

	Number of units	Average frontage (front feet / unit)	Frontage levy rate (per front foot) <sup>2</sup>	Total annual contribution
Single Family	2,676	50 ft.	\$3.75	\$501,750
Semi-/Town Houses	400	22 ft.	\$3.75	\$33,000
<b>Total Frontage Levy Revenue</b>				<b>\$534,750</b>

Notes:

1. Average frontage based on preliminary information provided by Qualico.
2. Frontage levy based on 2011 rates, including:
  - Water: \$0.95 per front foot
  - Sewer \$3.75 per front foot

### 3.4. One-time development fees and permits

The following table contains the combined revenue arising from building permit and development fees, including development permit fees, electrical permit fees and plumbing permit fees. Based on the proposed unit mix and sizes, the Ridgewood Precinct will generate **\$1.3 million** in construction building permit fees, based on the current fee of \$2.35 per m<sup>2</sup>.

#### Building permit fees

	Number of units	Average unit size	Building permit fee <sup>1</sup>	Total building permit fees
Single Family	2,676	2,100 sf (195 m <sup>2</sup> )	\$2.35 per m <sup>2</sup>	\$1,226,280
Semi-/Town Houses	400	1,200 sf (110 m <sup>2</sup> )	\$2.35 per m <sup>2</sup>	\$103,400
<b>Total Building Permit Fees</b>				<b>\$1,329,680</b>

Notes:

1. Part 21 - Housing Building Permits, Section 162, By-law 196 / 2008 & By-law 77 / 2009, City of Winnipeg.

Other development permits charged on a per-unit basis, include development, electrical and plumbing permit fees, will provide another **\$1.6 million** over the development process at current rates.

#### Other permits

	Number of units	Development permit fee <sup>1</sup>	Electrical permit fee	Plumbing permit fee	Total other fees
Single Family	2,676	\$172 / unit	\$181 / unit	\$181 / unit	\$1,428,990
Semi-/Town Houses	400	\$143 / unit	\$181 / unit	\$181 / unit	\$202,000
<b>Total Other Permit Fees</b>					<b>\$1,630,990</b>

Notes:

1. The Planning, Development and Building Fees and Charges By-law #196/2008 and #77/2009, City of Winnipeg, Jan. 2011.
2. Part 22 - Housing Electrical Permits, Section 169, By-law 196 / 2008 & By-law 77 / 2009, City of Winnipeg, Jan. 2011.
3. Part 23 - Housing Plumbing Permits, Section 174, By-law 196 / 2008 & By-law 77 / 2009, City of Winnipeg, Jan. 2011.

Together, these fees will provide **\$2.9 million** in one-time revenue over the development process.

# 4.0 Municipal infrastructure costs

The majority of the initial investment in municipal infrastructure will be funded by landowners / developers who bear the costs of internal site servicing, including Water Mains, Waste Water Systems, Utilities and Rights-of-Way.

Infrastructure capital projects that would require City funding include the following:

- **Harstone trunk sewer:**  
The Harstone trunk sewer is required to address land drainage issues. This drain, which will run between the Ridgewood Precinct lands and the Assiniboine River, is necessary to proceed with a portion of development in the Ridgewood Precinct and would also benefit existing built-up areas of Charleswood to the north.
- **Extension of the Clement Parkway:**  
The extension of the Clement Parkway will extend the highway south from Grant Avenue to Ridgewood. Local connectivity will be provided through the construction of external four lane east-west connector roads. The City's Transportation Plan identifies the Clement Parkway extension as a medium-term project. While it will benefit the Ridgewood Precinct, as a transportation project it will serve a much broader role. Furthermore, the timing and cost of this project remain uncertain. We therefore have not included it in our analysis, but observe that, to the extent that the Ridgewood Precinct provides revenue beyond what is required to fund other capital and incremental operating costs, some portion could be used to fund the extension.

## 4.1. Municipal-funded infrastructure

The potential magnitude of costs associated with the construction of the Harstone trunk sewer was examined in a May 2009 report prepared by Landmark Planning & Design Inc. and Stantec Consulting Ltd. for the City of Winnipeg Planning, Property and Development Department (herein referred to as "the Landmark/Stantec report"). This estimate has subsequently been refined based on more recent data from the ongoing Ridgewood Precinct Study. The landowners' contribution would be collected through the Trunk Service Rate. We estimate that the City's share of the cost of the Harstone Trunk Sewer extension will be **\$2.6 million**.

### City-funded servicing and development costs

Category	City contribution
Ridgewood major land drainage facilities (incl. the Harstone Drain) <sup>1</sup>	\$2,600,000
<b>Total City-funded servicing costs</b>	<b>\$2,600,000</b>

Source:

1. *Estimated contribution to the Harstone Trunk Sewer Extension is based on City's funding of gravity portion of the Harstone Outfall Extension to weir in Dieppe south of Eldridge – Modified from 2009 study based on discussions with Stantec, September 2012.*

The Landmark/Stantec report identified the cost of extending the Harstone Trunk Sewer required to connect the outfall to the proposed development as a potential impediment. The cost of this extension was estimated at approximately \$10 million. From the ongoing findings of the Ridgewood Precinct Study, an alternative Harstone drainage option has been developed which would see the extension of the Harstone outfall south in Harstone, east in Eldridge and south in Dieppe to a weir at the north end of a new development retention lake. It is proposed that the outfall sewer extension at an approximate cost of \$2.6 million be funded entirely by the City because it will provide gravity land drainage capacity for the



existing, built-up area of Charleswood north of the retention drainage boundary which will also be serviced by retention lakes.

## 4.2. Landowner-funded infrastructure and investment in development

The total investment by developers / landowners in developing the Ridgewood Precinct is substantial and is expected to surpass **\$1 billion**<sup>5</sup> in total. Contributions towards external off-site servicing costs will include a \$12.1 million levy for Land Drainage Trunk costs and a Transportation Levy for regional transportation costs which has yet to be determined.

### Landowner-funded servicing and development costs

Category	Unit cost	Quantity <sup>1</sup>	Total cost
TSR Land Drainage Trunk Costs	\$18,000 / gross ac.	672.6 ac.	\$12,096,000
Ridgewood Transportation Levy			TBD
<b>Total Contribution to Off-Site Levies</b>			<b>\$12,096,000</b>

Source:

1. Levy contributions and unit costs for servicing based on "Charleswood Do-Ability Study – Final Report", Landmark Planning and Design Inc. and Stantec Consulting Ltd., May 2009. These rates have been modified to reflect the revised concept plan based on discussions with Stantec in September 2012.

## 4.3. Economic impact of development

The economic impact of the Ridgewood Precinct was estimated based on the magnitude of City- and landowner-investment in transportation, infrastructure and housing construction. The development phase of the Ridgewood Precinct will generate **9,710 person-years** of employment, comprised of **4,470 person-years of direct employment** and **5,240 person-years of indirect employment**. The bulk of the employment will be in the residential building construction sector.

### Economic impact of Ridgewood Precinct development

Category	Direct Employment (person-years)	Indirect employment (person-years)	Total employment
Transportation	500	405	905
Water and Sewage & Other Systems	450	370	820
Residential Building Construction	3,520	4,465	7,985
<b>Total</b>	<b>4,470</b>	<b>5,240</b>	<b>9,710</b>

Source:

1. Based on multipliers for the Province of Manitoba published by Statistics Canada.

<sup>5</sup> Based on preliminary estimates of servicing and other development costs provided by Stantec Consulting Ltd., and estimates of typical costs of constructing residential housing using Marshall & Swift's SwiftEstimator.

# 5.0 Development and analytical assumptions

The preceding sections provided an examination of the impact of the Ridgewood Precinct based on total investment in infrastructure and resulting one-time and annual revenue. In addition, a Discounted Cash Flow analysis was undertaken to determine the potential impact on the City's finances. Specifically, it considers the projected timing of initial City-funded capital cost outlays, the potential incremental annual costs associated with community services that will increase with population growth, and the costs associated with the maintenance, repair and replacement of municipal services.

All costs and cash flows are presented in present dollar (i.e. real) terms and, accordingly, discount rates have been adjusted to reflect the real cost of borrowing.

## 5.1. Timing of build-out

The timing of build-out and unit absorption is based on the estimated 2,676 single family homes and 400 multi-family homes and 17 year absorption timeline provided by Qualico. Absorption averages 181 homes per year which appears to be a reasonable expectation of market share given that over the past four years, an average of 351 building permits were issued per year in the Waverley West area.

## 5.2. Tax and permit revenue

Sources of revenue used in the analysis include:

- **Residential property taxes:** residential property taxes provide funding that can be used for general purposes;
- **Frontage Levy fees:** this funding is fenced and restricted to funding future renewal and repairs as per the City of Winnipeg Charter; and,
- **Development permits:** One-time revenue from building and other development permits attributable to the Ridgewood Precinct collected during the development approvals process.

## 5.3. City funded capital costs

The City-funded capital costs include the City's contribution to the Harstone drain as it is essential to facilitate the development of the Precinct and will primarily benefit future residents.

We have not included the costs associated with the extension of the William Clement Parkway south to Wilkes Avenue and the construction of supporting external east-west connector roads as the timing and cost of these projects are relatively uncertain at this time. Furthermore, while it will be important to future residents of the Ridgewood Precinct, it will serve a much broader transportation function.

## 5.4. Infrastructure renewal costs

The majority of development-phase capital project costs will be funded by landowners. Once rights-of-way are conveyed to the City, the ongoing maintenance and repair of piped services and transportation infrastructure will become a City responsibility. Infrastructure replacement costs have been estimated based on current capital costs and typical life-cycle estimates of 50-years. Regional and local roads will also require periodic resurfacing during their life-cycles – these are reflected separately as renewal costs. The following table illustrates the timing and amount of capital project outlays.

## Infrastructure life-cycles and maintenance / renewal cost assumptions

Category	Unit cost (per net acre)	Quantity	Outlay (percent of unit cost)	Periodic outlay	Frequency of outlay
Major Wastewater Services	\$3,800	605.3 net ac.	100%	\$2,300,140	50 years
Major Water Mains	\$2,400	605.3 net ac.	100%	\$1,513,250	50 years
Local U/G Services Renewal	\$79,000	605.3 net ac.	100%	\$47,818,700	50 years
Major Street Renewal	\$25,000	605.3 net ac.	25%	\$3,783,125	10 years
Major Street Replacement	\$25,000	605.3 net ac.	100%	\$15,132,500	50 years
Local Street Renewal	\$82,000	605.3 net ac.	25%	\$12,408,650	10 years
Local Street Replacement	\$82,000	605.3 net ac.	100%	\$49,634,600	50 years

Source:

1. Land areas are as follows: 820.7 ac. gross developable area; 672.6 ac. net, after deducting non-developable areas, lakes and impoundments; 605.3 net developable after adjusting for 10% parkland dedication.
2. Renewal costs and outlays provided by Stantec Consulting Ltd., September 2012.

### 5.5. City operating costs

A per capita approach reflecting current average operating costs was used to forecast the annual cost of providing City services to future residents of the Ridgewood Precinct. To estimate these costs, the City's Corporate Finance department provided an itemized breakdown of city services funded through residential taxes and the corresponding dollar contribution based on a property tax bill for an average house. The total cost of residential tax funded services for an average house is approximately **\$1,617 per house**, inclusive of property taxes (\$1,429) and Roadway Maintenance and Traffic Services funded through the Frontage Levy (\$188). Comparatively, total residential tax revenue pooled across all residential dwelling units in the City is approximately \$1,250 per unit.

On a per capita basis, the portion of City services funded through residential taxes, including the Frontage Levy, translates to **\$516.30 per capita**<sup>6</sup>. Applying this to the anticipated residential population in the Ridgewood Precinct (7,945 residents), produces a cost per dwelling unit of **\$1,330 per unit**.

### Estimate of incremental operating costs

Category	Average House <sup>1</sup>	Percent of Total	Funding from Res. Property Taxes (2011)	Per Capita <sup>2</sup>
Police service	\$388.17	27.2%	\$82,413,495	\$126.50
Fire service	\$210.46	14.7%	\$44,683,551	\$68.50
Parks and recreation	\$196.24	13.7%	\$41,665,627	\$64.00
Infrastructure debt payments	\$141.36	9.9%	\$30,013,878	\$46.00
Public transit subsidy	\$99.18	6.9%	\$21,057,006	\$32.50
Corporate, administration, assessment and 311	\$97.78	6.8%	\$20,761,246	\$32.00
Snow removal and ice control	\$66.47	4.7%	\$14,113,122	\$21.50
Libraries	\$51.57	3.6%	\$10,948,739	\$17.00
Solid waste collection and land drainage	\$46.19	3.2%	\$9,806,482	\$15.00
Arts, entertainment and culture	\$37.06	2.6%	\$7,869,054	\$12.00
Corporate (grants and other)	\$31.08	2.2%	\$6,597,744	\$10.00
City planning / building permits / housing / comm. health	\$27.79	1.9%	\$5,900,831	\$9.00
Council services	\$23.82	1.7%	\$5,057,503	\$8.00
Medical response	\$11.83	0.8%	\$2,510,723	\$4.00
<b>Cost of residential property tax funded services</b>	<b>\$1,429.00</b>	<b>100.0%</b>	<b>\$303,399,000</b>	<b>\$466.00</b>
Plus: Road Maint. & Traffic Operations (Frontage Levy)	\$188.00		\$32,800,000	\$50.30
<b>Total cost of residential funded city services</b>	<b>\$1,617.00</b>		<b>\$336,199,000</b>	<b>\$516.30</b>

Notes:

1. City services included in a property tax bill for an "average house" provided by the City's Corporate Finance Department.
2. Per capita estimate based on total persons living in private households. This has been calculated by applying the ratio of persons in private households to total population from the 2006 Census (98.3%) to the 2011 population (663,617 persons).

<sup>6</sup> Per capita in this case reflects an estimate of the number of persons living in private households, calculated by applying the percentage of total population living in private households calculated from the 2006 Census to the 2011 Census population.

For the purposes of analyzing the fiscal impact of the Ridgewood Precinct we have tested a range of operating costs, with the per capita approach at the low-end and the “average house” for the high end. We observe that both approaches may tend to overstate the actual marginal costs associated with the provision of services to residents of the Ridgewood Precinct for the following reasons:

- Average costs that are based on the current operating budget would not reflect potential economies of scale that may be realized in delivering certain services and programs, particularly finance and administrative departmental functions.
- Costs associated with Road Maintenance and Traffic Operations, funded through the lot levy, include capital costs associated with infrastructure renewal that have been accounted for separately in our analysis.

## **5.6. Municipal borrowing costs**

For the purposes of discounting cash flows, the cost of capital for municipal government is best reflected in its borrowing costs. The City’s cost of borrowing has decreased in recent years. This is due, in part, to improvements in its credit rating, which has increased steadily since 2001 as the City has reduced its debt burden. This is reflected in Moody’s ratings which increased from A1 in 1999 to Aa1. Another factor affecting rates on debt instruments has been the low interest rate environment and the expectation that the Bank of Canada will keep rates low for some time.

The forecasting methodology used in this analysis is in present dollar terms. For the purposes of estimating the City’s borrowing costs in real terms, market quotes for the City’s debentures maturing in February 2029 were used to calculate a nominal rate. The implied nominal discount rate based on the coupon and current market price is 3.6% / annum. Recognizing the low interest rate expectations built into this cost, we have adopted a rate of 3.0% to reflect a longer-term real rate.

With the improvement in the City’s debt ratings, we observe that the City can fund capital projects with long-term debt instruments at attractive rates.

# 6.0 Fiscal impact

The fiscal impact of the Ridgewood Precinct has been estimated based on an 80-year horizon. Given the typical life-cycles of major infrastructure that have been factored into this analysis, the 80-year horizon is considered appropriate to capture the investment and renewal cycle in its entirety.

Other assumptions in addition those identified in the previous section include:

- No change in residential assessment values in real terms (i.e. above inflation). We believe this assumption is appropriate as a base case. Property values can generally be expected to appreciate in-pace with inflation over the long-term. While improvements to property may depreciate, the extent to which they do depends on the owner’s commitment to maintaining and reinvesting in the property.
- No changes in residential property tax mill rates.
- Other fees, operating and capital costs keep pace with general inflation.

The following table summarizes the Present Value of major revenue and cost items based on the revenue and cost assumptions described in the previous section. We anticipate that the Ridgewood Precinct will provide the City with a surplus (in present value terms) of **\$54.0 million**.

## Present value revenues and costs

Calculation of annual tax-funded city services:	
Residential property taxes	\$202,783,800
Frontage levies	\$12,467,500
One-time fees	\$2,960,700
<b>Total Revenue</b>	<b>\$218,212,000</b>
Harstone trunk sewer extension (City share @ 50%)	(\$2,600,000)
Underground / piped services renewal (periodic)	(\$11,777,600)
Major / local street renewal (periodic)	(\$53,736,400)
Annual Cost of City services <sup>1</sup>	(\$96,056,100)
<b>Total Costs</b>	<b>(\$164,170,100)</b>
<b>Net Present Value</b>	<b>\$54,041,900</b>

Source:

1. See Appendix B.

The large majority of revenue is associated with residential tax revenue, with a present value of \$202.8 million, followed by frontage levies of \$12.5 million. The most substantial costs are the recurring annual operating costs of \$96.1 million in present value terms, followed by local infrastructure renewal and maintenance costs of approximately \$65.5 million.

Based on the preceding, we conclude that the Ridgewood Precinct is both viable and potentially financially beneficial from the City’s standpoint. The Net Present Value residual of \$54.0 million reflects a stream of future cash flows that could contribute toward funding the Clement Parkway extension and supporting east-west connector roads, as well as other city projects. Furthermore, we have not included the Transportation Levy that will be paid by the landowners / developers or the contributions that have been collected to date by the City for transportation improvements in Charleswood through the Charleswood Transportation Levy (estimated at approximately \$3 million).

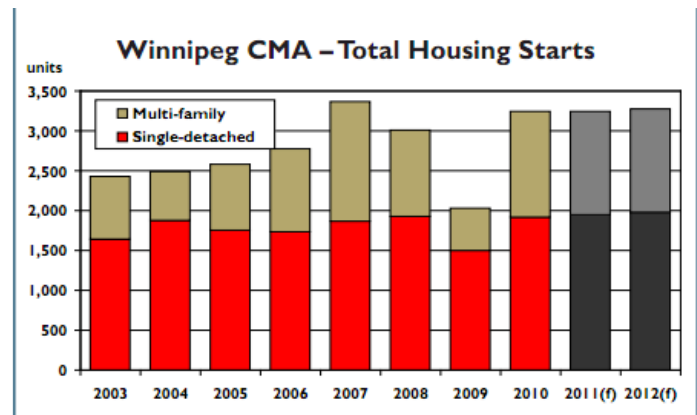
From a planning standpoint, the development of the Ridgewood Precinct reflects a prudent, measured approach to urban expansion and infrastructure investment. Specifically, the Precinct will address the immediate demand for housing and facilitate servicing of the lands south of Wilkes Avenue over the longer-term, which have also been identified in the City’s Sustainable Communities directive as a source of urban land to support future population and employment growth.



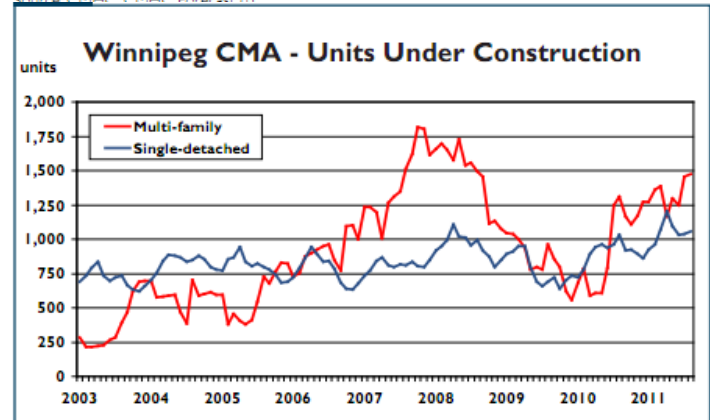
# Appendix A: Residential real estate market overview and comparables

## Winnipeg real estate market overview

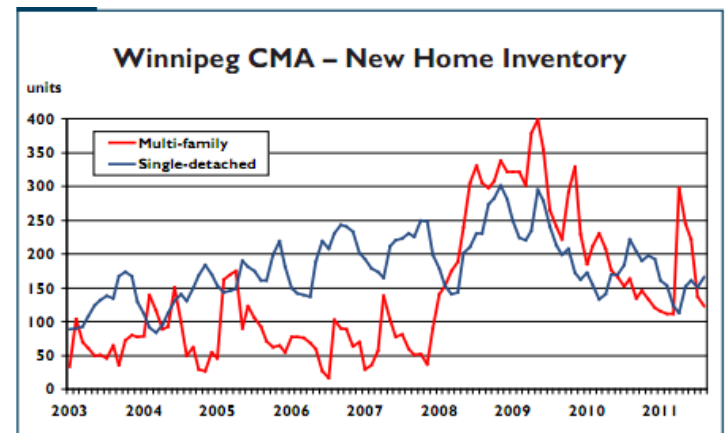
- The Winnipeg real estate market is currently considered to be relatively healthy, with demand being driven by employment and population growth.
- While there was a decrease in development activity in 2009, activity is now back to levels similar to before the economic downturn.
- 2011 housing starts in Winnipeg CMA totalled 2,751 units by the end of October. This represented a very similar level of activity as compared to the same period last year.
- CMHC forecasts that total housing starts for the year will reach 3,250 homes, similar to the 3,244 homes started in 2010.
- YTD single-detached starts have totalled 1,656 units, which was the highest January to October level since 1990.
- The total supply of single-detached homes which includes homes under construction and unsold inventory totalled 1,168 units, which was 4.6 percent higher than at the same time in 2010.
- YTD multi-family starts have totalled 1,095 units.
- Unsold multi-family inventory at the end of October was only 114, which was 22 percent lower than October 2010.
- The total supply of multi-family which includes homes under construction and unsold inventory totalled 1,601 units, which was 28 percent higher than the same time in 2010.
- Total housing starts are expected to remain consistent in 2012.
- Current construction levels are slightly elevated as compared to the levels experienced since 2003.



Source: CMHC, CMHC Forecast (f)



Source: CMHC



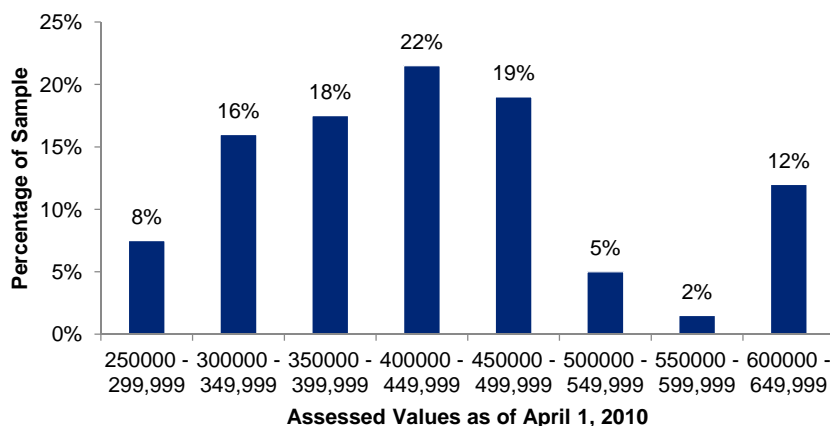
Source: CMHC

## Assessed values for newly built homes

- The areas adjacent to the South Ridgewood area consist primarily of established single family neighbourhoods.
- Waverley West, also located in the south west area of the City provides the best comparables given the large amount of new single family home construction in recent years.
- Waverley West is expected to accommodate more than 11,000 new homes over a 20 year period; approximately 1,500 homes have been built since 2008 or are currently under construction.
- There are three neighbourhoods in Waverley West that are currently being built out, Bridgwater Lakes at the north east end of the property, South Pointe at the South end of the property and most recently Bridgwater Lakes at the North West end of the property.
- To date, no building permits have been issued for homes at Bridgwater Lakes but since starting in 2008, a total of 828 single-detached permits have been issued in Bridgwater Forest and an additional 575 single-detached permits have been issued at South Pointe.
- A survey of the assessed values of 200 of the homes built to date in Bridgwater Forest was conducted. The median assessed value was \$425,000, while the average assessed value was \$454,000.

Single family building permits issued					
Neighbourhood	2008	2009	2010	2011	Total
Bridgwater Forest	82	150	264	332	<b>828</b>
South Pointe	4	114	224	233	<b>575</b>

### Assessed Market Values in Bridgwater Forest



City of Winnipeg Historical Construction of Dwelling Units											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Singles	898	937	1212	1319	1489	1474	1,360	1,357	1,409	1,194	1,524
Semis	6	30	14	55	32	88	41	14	47	15	36
Rows	21	36	5	41	20	100	152	117	101	55	160
Apartment	119	287	220	793	794	515	1,736	1,579	1,089	547	1017
<b>TOTAL</b>	<b>1044</b>	<b>1290</b>	<b>1451</b>	<b>2208</b>	<b>2335</b>	<b>2177</b>	<b>3,289</b>	<b>3,067</b>	<b>2,646</b>	<b>1,811</b>	<b>2,737</b>

Source: City of Winnipeg



# Appendix B: Fiscal impact analysis

## *Residential tax funded city services and local infrastructure renewal costs*







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