Deloitte.

Understanding the role that new communities play in supporting municipal finances

The role of Cost Benefit Studies

September 8, 2014

Table of contents

Executive summary

Background

Like many other communities throughout Canada, the City of Winnipeg (the “City” or “Winnipeg”) is faced with significant costs to renew its aging infrastructure over the coming years. As the City determines the funding sources to renew this existing infrastructure, there has been increased pressure to ensure that both the up-front and long term costs and revenues associated with new real estate developments are understood.

Study objectives

The Manitoba Chapter of the Urban Development Institute (“UDI Manitoba” or “UDI”) retained Deloitte to evaluate whether the Cost Benefit Studies required by the City provide an accurate basis for determining whether the costs of providing municipal services to new communities are fully offset by the various sources of revenue generated by these expansions.

In short, the primary objective of this report is to confirm whether new development pays for itself under the City’s current framework of costs and charges levied on development.

This report therefore describes how the current approach to evaluating financial sustainability through Cost Benefit Studies addresses this issue, both in theory and in practice.

Benchmarking Winnipeg against similar municipalities

- For the purposes of this report we benchmarked Winnipeg against Calgary, Ottawa, Edmonton, Saskatoon and Regina which were deemed similar for their size or geographic proximity; and,
- Comparisons were made regarding the sources of funding, debt levels and property tax rates.

Municipalities to be used for benchmarking		
City	Population (2011 Census)	% change from 2006
Calgary, AB	1,096,833	10.9%
Ottawa, ON	883,391	8.8%
Edmonton, AB	812,201	11.2%
Winnipeg, MB	**663,617**	**4.8%**
Saskatoon, SK	222,189	9.8%
Regina, SK	193,100	7.7%

Source: Statistics Canada

Municipal funding tools

Winnipeg's funding sources and levels of debt were compared to other municipalities to identify potential similarities or differences. The findings included:

- Winnipeg relies on property tax revenue for 47.4% of budgeted operating revenue which is in line with the other comparable municipalities; and,
- Winnipeg funds its capital budget from a relatively balanced combination of sources and has been able to keep the level of debt per capita relatively low compared to the other municipalities but Winnipeg's debt levels are expected to increase as they tackle their infrastructure deficiency.

City	Municipal Tax Rate	Education Tax Rate	Total
Winnipeg*	$6.57	$7.53	$14.10
Saskatoon	$7.08	$5.03	$13.05
Ottawa	$9.61**	$2.12	$11.73
Regina	$6.53**	$3.52	$10.94
Edmonton	$5.29	$2.47***	$7.76
Calgary****	$3.80	$2.53***	$6.33

*Winnipeg also has a Frontage Levy which cannot be shown as a rate per assessed value.

**Municipal library levy has been classified as Municipal for Regina and Saskatoon.

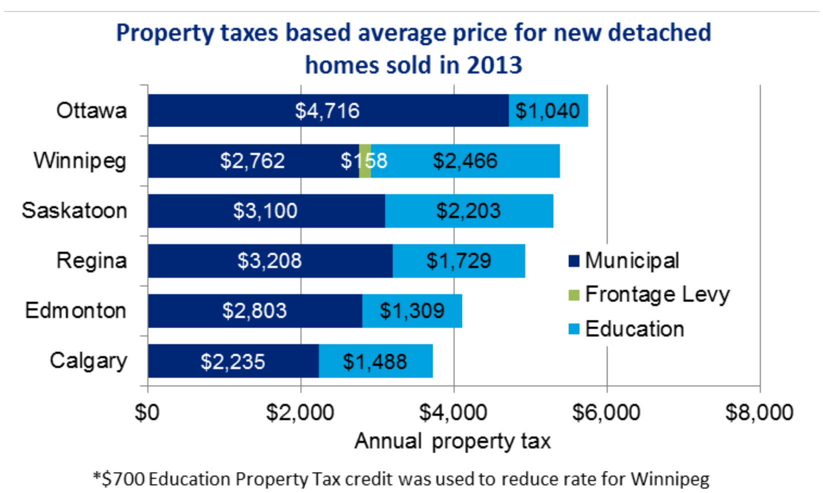
***Provincial tax has been classified as Education for Edmonton and Calgary.

****Calgary charges for local improvements on a case by case basis.

Residential housing prices and property tax rates

Housing prices and property taxes were reviewed for each market to determine if the taxes paid by residential property owners in Winnipeg are in line with what residential property owners pay in other markets. The findings included:

- Winnipeg`s relatively affordable housing prices provide the city with a competitive advantage against other municipalities; and,
- Municipal property taxes in Winnipeg are at the higher end of the range of the other comparable municipalities when the property taxes are applied against average housing prices for new homes.

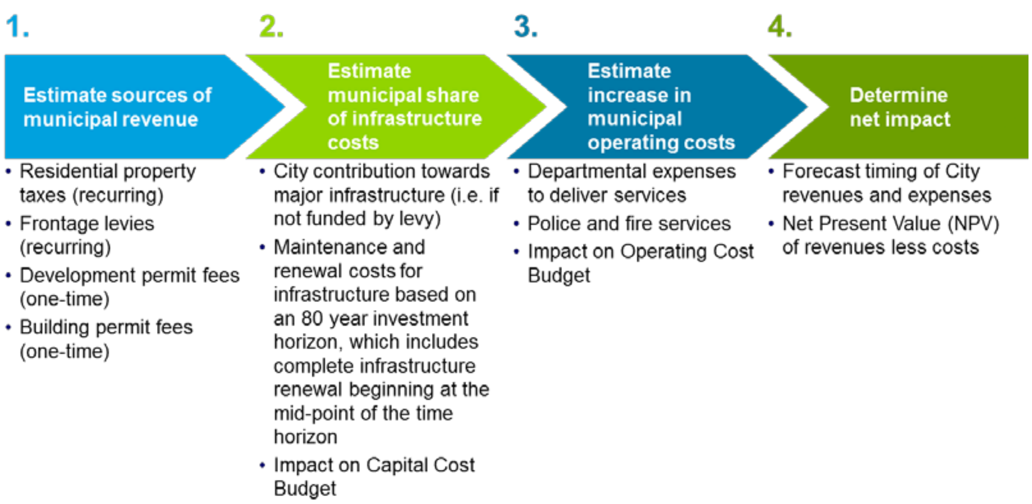


Considerations for Cost Benefit Studies

Cost Benefit Studies assist in ensuring that revenues generated from the development of new communities are adequate to cover up-front and ongoing costs to the City, and provide transparency in identifying gaps in funding up-front costs.

The methodology for Cost Benefit Studies was reviewed in order to identify potential issues

Typical Cost Benefit Study methodology



Estimating residential assessment values in Cost Benefit Studies

A key part of Cost Benefit Studies are the estimates for future property assessment values. Factors that affect real estate assessment values were reviewed and considerations for determining fair estimates were provided. The findings included:

- Winnipeg has the 3rd oldest housing stock of major cities in Canada which contributes to a lower average home price in the market.
- When determining assessed values for the Cost Benefit Study it is necessary to consider comparables from within the immediate area, as using an “average” home metric does not reflect actual values in new communities.
- Using an “average” home metric as an assumption in a Cost Benefit Study when actual prices are higher leads to lower estimates for property tax revenues and reduces the estimated potential net present value to the City.
- The City of Winnipeg’s control of new urban land supply and their role creating and approving land use codes allows them to have a high degree of control over housing prices; and,
- Housing price growth in this market has historically been above inflation which provides an indication of what future long term growth could be estimated at.

Historical growth per annum of new housing prices in Winnipeg

		Average Price	Median Price
Winnipeg	*Total (house and land)*	3.9% (1.0%)	3.5% (0.6%)
	House only	3.5% (0.6%)	3.7% (0.8%)
	Land only	5.4% (2.5%)	3.3% (0.4%)

Figures in brackets reflect inflation adjustment of 2.90% per annum

Source: Statistics Canada

Case studies

A number of Cost Benefit Studies were reviewed in order to show the estimated net benefit that will be provided to the City. The findings included:

- The City of Winnipeg reaps financial benefits from the development of new communities. The most notable example to date has been the Waverley West community which has outperformed original projections due to significant appreciation in densities, absorptions and residential property prices. The original projections in 2003 dollars were for a net present value of $212.9 million but the MMM Group report from 2013 indicated that the net present value to the City would actually be $250.4 million.
- Other recent Cost Benefit Studies completed suggest that the City will continue to benefit from the revenues created by new communities. Specific examples inlcude: Precinct K ($40M NPV) and Ridgewood ($54M NPV).

	Waverley West			Precinct K	Ridgewood
	ND LEA (2004)	COW (2004)	MMM (2013)	MMM (2013)	Deloitte (2012)
City of Winnipeg project revenue at 80 years					
Property taxes - single family	1,286,940,000	1,004,409,000	1,780,071,000	475,900,000	
Property taxes - multi family	388,719,000	269,983,000	655,864,000	205,200,000	
Property taxes - commercial[1]	212,614,000	198,961,000	241,337,000	7,100,000	
Total property taxes	**$1,888,273,000**	**$1,473,353,000**	**$2,677,272,000**	**$ 688,200,000**	**$ 623,263,360**
Permits and fees	18,213,000	17,233,000	20,471,000	5,800,000	2,960,680
Frontage levy[2]	-	-	-	30,000,000	38,433,170
Total revenue	**$1,906,486,000**	**$1,490,586,000**	**$2,697,743,000**	**$ 724,000,000**	**$ 664,657,210**
City of Winnipeg project costs at 80 years					
Capital costs	199,550,000	355,684,000	318,722,000	194,500,000	232,341,615
Operating costs	908,248,000	1,017,767,000	1,486,755,000	355,900,000	295,356,970
Total costs	**$1,107,798,000**	**$1,373,451,000**	**$1,805,477,000**	**$ 550,400,000**	**$ 527,698,585**
Summary					
Net financial benefit	**$ 799,000,000**	**$ 117,000,000**	**$ 892,000,000**	**$ 174,000,000**	**$ 137,000,000**
Net present value of benefit	**$ 213,000,000**	**$ 71,000,000**	**$ 250,000,000**	**$ 40,000,000**	**$ 54,000,000**

Notes:

Project revenues, costs, and net financial benefit presented above are undiscounted figures.

1 - Waverley West commercial taxes include estimated business/office municipal and business taxes.

2 - Waverley West frontage levies w ere calculated but not included in the Cost Benefit Analysis.

Conclusions

The role of Cost Benefit Studies

Based on the overview contained in this report, it is a general conclusion that the City's requirement for a Cost Benefit Study provides clarity as to whether the up-front costs funded by the City and future renewal/replacement costs associated with the infrastructure will be offset by revenues from new communities.

The key benefits of this approach include:

- It recognizes that the revenues and costs associated with each urban expansion area are location specific and may differ depending on the nature of external infrastructure improvements required, the level of services the City wishes to offer, the density and unit mix of future development and how efficiently each area can be serviced, internally and externally.
- It provides incentives for developers to identify potential solutions that will mitigate up-front City-funded capital costs and, where costs cannot be mitigated, to identify where funding tools such as levies will be required to ensure that financial sustainability goals are met. This creates a fiscally efficient process as developers are incented to find optimal means to provide quality service.

- It provides greater transparency and accountability in the development process and ensures that new housing can be delivered in a cost effective manner that will ultimately benefit consumers and housing affordability objectives.

Potential initiatives to enhance the usefulness and accuracy of Cost Benefit Studies could include:

- The standardization of methodologies which could be achieved by outlining standard requirements for a Cost Benefit Study,
- Reviews and updates, similar to that prepared for the Waverley West community, which provide an ex-post analysis of actual costs incurred relative to one-time fees and recurring revenue and to assist in learning from and keep improving Cost Benefit Study methodology.

Overview

Background

Like many other communities throughout Canada, the City of Winnipeg (the "City" or "Winnipeg") is faced with significant costs to renew its aging infrastructure over the coming years. As the City determines the funding sources to renew this existing infrastructure, there has been increased pressure to ensure that both the up-front and long term costs and revenues associated with new real estate developments are understood.

UDI Manitoba retained Deloitte to review the City's current approach to evaluating funding costs for new infrastructure required to facilitate the development of new urban communities in Winnipeg. This approach has historically required development proponents to prepare and submit Cost Benefit Studies to demonstrate the up-front and future renewal/replacement costs of the infrastructure on-site or affiliated with the new development. The objective is to ensure that the costs borne by the City are sufficiently offset by the one-time and reoccurring revenue generated as a result of the development.

Under the City's current framework, the up-front costs associated with the construction of infrastructure for new urban communities are funded jointly by developers and the City. Costs are allocated as follows:

- Developers bear all of the up-front costs of constructing local/internal infrastructure, including local and collector roads, parks, water and wastewater piped services, utilities and on-site storm water management. Developers also pay development levies and direct costs associated with regional transportation infrastructure necessary to facilitate development. These include regional land drainage (TSR) levies, oversizing sewer and water services for downstream development, 50% of arterial roads, major intersections, etc., all defined under the **Development Agreement Parameters**.
- The City's contribution to up-front infrastructure costs typically includes 50% of the cost of arterial roadways, future regional expressways, trunk water/sewer extensions (funded through the sewer and water utility), and community services (i.e. community, fire and police facilities).

Over the longer-term, the City bears the cost of life-cycle infrastructure renewal and replacement, including local/internal roadways and piped service which is funded from ongoing property taxes.

Study objectives

The Manitoba Chapter of the Urban Development Institute ("UDI Manitoba" or "UDI") retained Deloitte to evaluate whether Cost Benefit Studies required by the City of Winnipeg provide an accurate basis for determining whether the costs of providing municipal services to new communities are fully offset by the various sources of revenue generated by these expansions.

In short, the primary objective of this report is to confirm whether new development pays for itself under the City's current framework of costs and charges levied on development.

This report therefore describes how the current approach to evaluating financial sustainability through Cost Benefit Studies addresses this issue, both in theory and in practice.

Municipal funding tools

Objective

The objective of this section is to compare Winnipeg's funding sources to other similar municipalities.

Findings

- *Winnipeg relies on property tax revenue for 47.4% of budgeted operating revenue which is in line with the other comparable municipalities;*
- *Winnipeg funds its capital budget from a relatively balanced combination of sources and has been able to keep the level of debt per capita relatively low; and,*
- *Winnipeg`s debt levels are expected to increase as they tackle their infrastructure deficiency.*

Municipal benchmarking

A general comparison of municipalities of similar size to Winnipeg was undertaken in order to compare and contrast their operating and capital budgets, as well as the funding tools used to fund these budgets. The municipalities that are most comparable to Winnipeg in terms of population are Ottawa and Edmonton. We have also included other major western cities including Calgary, Saskatoon and Regina.

Municipalities to be used for benchmarking

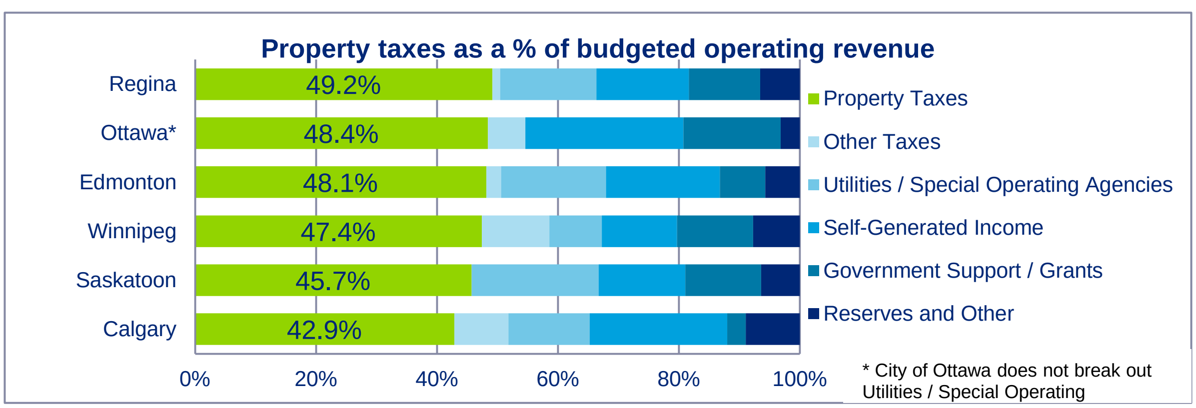
City	Population (2011 Census)	% change from 2006
Calgary, AB	1,096,833	10.9%
Ottawa, ON	883,391	8.8%
Edmonton, AB	812,201	11.2%
Winnipeg, MB	**663,617**	**4.8%**
Saskatoon, SK	222,189	9.8%
Regina, SK	193,100	7.7%

Source: Statistics Canada

Sources of funding

Property tax revenue in Winnipeg provides 47.4% of the funding for its operational budget which is generally consistent with that of the other municipalities which range from a low of 42.9% (Calgary) to a high of 49.2% (Regina).

Municipalities across Canada rely on a variety of funding sources to meet capital and operating budget requirements. Property taxes continue to represent the primary source of recurring revenue used to fund operating budget requirements. A general trend across Canada has been for residential tax rates to



increase as municipalities reduce commercial tax rates to promote business investment and growth.

Unlike other sources of funding, property taxes present the following benefits as a funding source:

- Compared to other sources of funding (e.g. business taxes or grants from other levels of government), they present a stable funding source that generally keeps pace with inflation and is not as sensitive to the economic cycle or Provincial/Federal budgetary decisions; and,
- Municipalities have greater control over this source of revenue and ability to adjust rates based on annual budget planning processes.

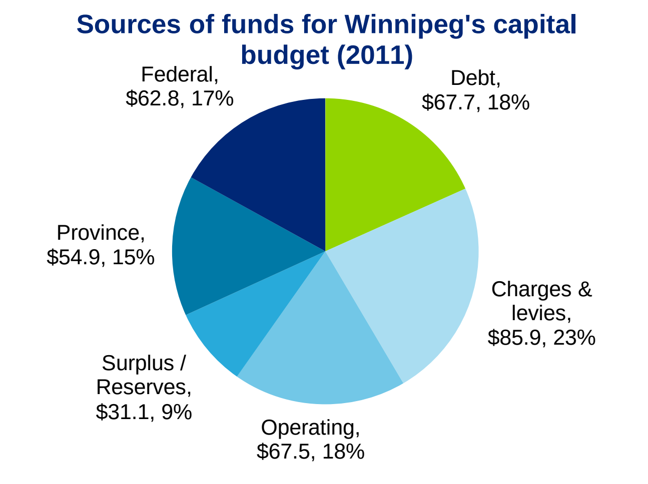
Funding infrastructure to support new growth

Most jurisdictions draw from a range of sources for funding the costs of new infrastructure such as roads, utilities piped services, and other capital costs required to support new urban growth areas.

Sources of funding include:

- Funds from senior levels of government;
- Funds from the operating budget;
- Surplus/reserves from prior years;
- Charges, levies and other fees; and,
- Debt.

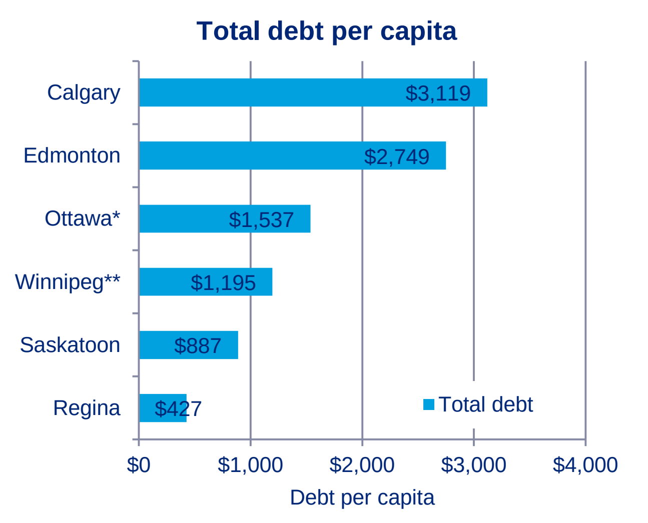
The City's capital budget has historically been funded through a relatively balanced combination of funding sources. The chart opposite provides a breakdown of the capital financing plan for the 2011 adopted capital budget of $370.1 million. Debt financing accounted for roughly 18% of total funding; however, the proportion of debt will increase as the City moves forward with its capital plan.



City of Winnipeg. 2012 Capital Budget Public Consultation.

Compared to other larger municipalities, Winnipeg has less debt per capita.

The chart opposite compares the total and tax supported debt per capita for Winnipeg and the other jurisdictions. The cities of Calgary, Edmonton and Ottawa have significantly higher levels of debt per capita. Of these cities, the City of Saskatoon has the highest credit rating, with an 'AAA' rating from Standard & Poor's ("S&P"). It is followed by Regina and Calgary with ratings of 'AA+'.



* City of Ottawa reflects debt outstanding as at 2013. All others 2012.
** Winnipeg reflects estimates for 2012 from 2014 preliminary budget presentation

With regard to Saskatoon's 'AAA' rating, S&P cites very strong economic fundamentals, rapid growth fueled by the resource sector, strong budgetary balances and excellent liquidity. This is tempered by concerns about the City's large capital expenditures and growing debt burden which is forecast to grow from 23% of consolidated operating revenues in 2011 to 40% over the next two years.

Winnipeg's credit rating reflects strong economic fundamentals and financial management; however, like other cities in the Prairies, its debt burden is expected to increase as a result of its capital plan.

Similarly, S&P indicates that Winnipeg's credit rating reflects strong economic fundamentals and very positive liquidity. S&P expects consolidated debt levels to rise over the next three years as the City pursues its capital plan, with tax supported debt increasing from 60% of consolidated operating revenues to 70-75% by fiscal year-end 2014. They further anticipate that interest costs will remain below 5% of operating revenues. S&P's rating reflects their view that significant infrastructure renewal requirements moderately constrain flexibility as the City faces an infrastructure deficiency of about $3.5 billion, mainly to address aging roads, transit, facilities, buildings and parks.[1]

---

[1] City of Winnipeg 'AA' Ratings Affirmed on Strong Economic Fundamentals and Very Positive Liquidity. Standard & Poor's, November 22, 2013.

Residential housing prices and property tax rates

Objective

The objective of this section is to review housing prices and property taxes in each market to determine if the taxes paid by residential property owners in Winnipeg are in line with what residential property owners pay in other markets.

Findings

- *Winnipeg`s relatively affordable housing prices provide the city with a competitive advantage against other municipalities; and,*
- *Municipal property taxes in Winnipeg are generally in line with the other comparable municipalities in the Prairies when the property taxes are applied against average housing prices.*

Residential housing prices

Both resale and new home prices in Winnipeg are lower than in other centres. This relative affordability provides Winnipeg with a competitive advantage against these other markets.

The table opposite includes measures of housing prices based on resale and new home sales. The average resale price reported by the Multiple Listing Service (MLS), reflecting all unit types is $268,382 – substantially lower than resale prices in the other markets. Comparatively, prices for new single family units in Winnipeg are lower but more consistent with the price of new homes in the other selected markets.

The difference in resale prices in Winnipeg relative to other markets may reflect, in part, differences in the quality and age of existing housing stock.

Most major centres, including Winnipeg, have benefited from growth in the total housing stock and growth in housing prices that have and will continue to increase the assessment base.

Market pricing metrics				
Census Metropolitan Area (CMA)	MLS average resale, all types[1]	Royal LePage average resale, two storey[2]	Royal LePage average resale, bungalow[2]	CMHC average new single family[3]
Calgary	$437,036	$418,686	$381,811	$583,000
Ottawa	$358,876	$398,983	$396,483	$488,000
Edmonton	$344,977	$362,000	$337,804	$520,000
Saskatoon	$332,058	$399,750	$255,000	$427,000
Regina	$312,355	$372,250	$336,500	$475,000
Winnipeg	**$268,382**	**$346,765**	**$307,069**	**$422,500**

Notes:
1. Reflects 2013 average resale values for all property types within the CMA collected by CREA from the Multiple Listings Service (MLS), published by CMHC.
2. Average resale for two storey and bungalows from Royal LePage`s 2013 Home Price survey.
3. Average prices for absorbed new single family homes in 2013 published by CMHC.

Note: the housing prices included are for Census Metropolitan Areas (CMA) which include the subject municipality and some surrounding areas. The pricing for these CMA's generally in line with the pricing in the individual municipality.

Municipal property tax rates

The City's municipal property tax rate (Taxes / $1,000 of assessment) is lower than those in Saskatchewan but higher than those in Alberta.

Based on prevailing rates, residential homeowners pay approximately $6.57 per $1,000 of assessed value, which is generally comparable to Saskatoon, Regina and Edmonton. Calgary residents pay the lowest rate at $3.80 / $1,000 of assessed value.

The City of Winnipeg also charges a Frontage Levy of that is in addition to the municipal property tax rate. The Frontage Levy is currently set at $3.75 per foot of the lot frontage.

City	Municipal Tax Rate*	Education Tax Rate**	Total
Winnipeg	$6.57***	$7.53	$14.10
Saskatoon	$7.08	$5.03	$13.05
Ottawa	$9.61	$2.12	$11.73
Regina	$6.53	$3.52	$10.94
Edmonton	$5.29	$2.47	$7.76
Calgary****	$3.80	$2.53	$6.33

*Municipal library levy has been classified as Municipal for Regina and Saskatoon.

**Provincial tax has been classified as Education for Edmonton and Calgary.

***Winnipeg also has a Frontage Levy which cannot be shown as a rate per assessed value.

****Calgary charges for local improvements on a case by case basis.

Education (Provincial) property tax rates

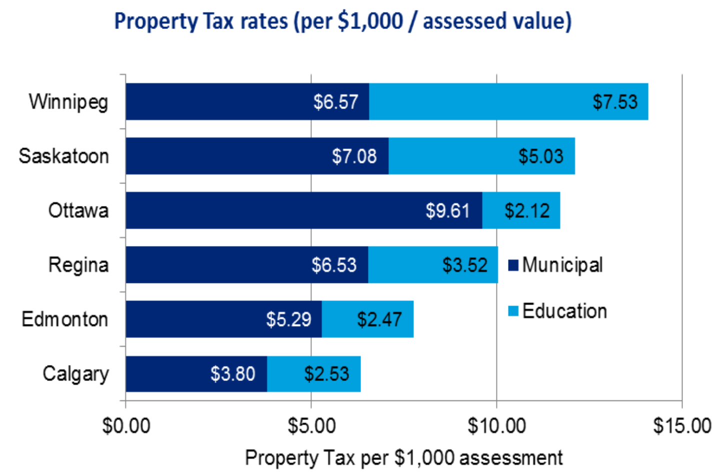
The Education property tax rate in Manitoba is higher than the comparable municipalities but also comes with a sizeable rebate.

Education property taxes are levied in addition to the municipal tax rate but in some cases there are provincial rebates available for qualified home owners.

- Manitoba - Education Property Tax Credit is available to all households and provides rebates of up to $700 per year (additional available for seniors)
- Ontario – Ontario Energy and Property Tax Credit available only to moderate income and low income individuals
- Saskatchewan – None available
- Alberta – None available

These rebates are not reflected in the above graph but the Manitoba rebate will be included in the tables below given that it is larger and available to all households.

It is important to note that municipalities do not have the ability to control the Education / Provincial property tax rates.

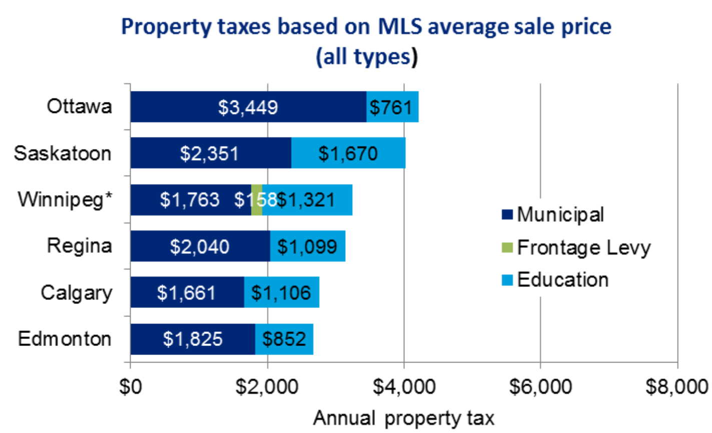


Property taxes payable based on average MLS sale price

Using current average MLS sale prices as a proxy for assessment, the average taxes a Winnipeg homeowner can expect to pay is similar to other centres in the Prairies.

The property tax rates established by municipalities are significantly affected by property values reflected in assessment. The following charts compare the property taxes paid based on the property values in each jurisdiction.

While assessed values tend to trail current market values due to phasing in provisions,



*$700 Education Property Tax credit was used to reduce rate for Winnipeg

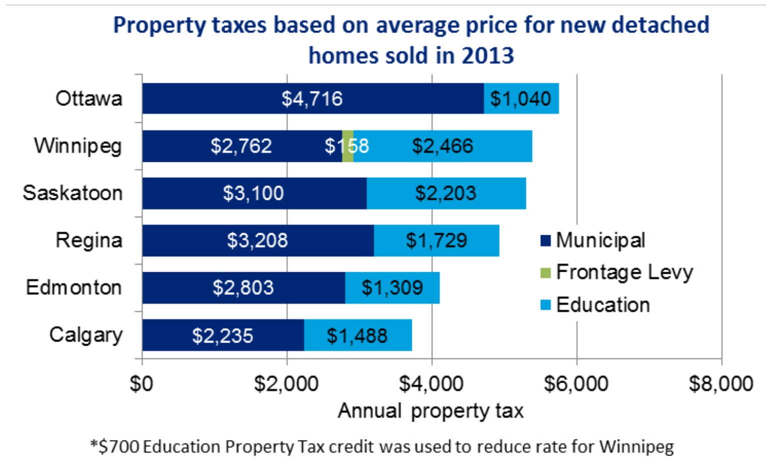
the MLS average resale value provides a basis for comparing average property values among the markets we have identified. Based on prevailing property tax rates, Ottawa homeowners pay the highest in municipal property taxes followed by Saskatoon. With an average resale price of $268,382 as at 2013, Winnipeg homeowners can expect to pay $1,763 in municipal property taxes plus an additional $158 for a Frontage Levy based on current rates.

This measure reflects average resale prices for all unit types in the jurisdiction. As a result, they do not necessarily reflect typical taxes paid in individual neighbourhoods or dwellings in new communities.

Note that MLS sales are comprised primarily of resale homes but do also include some new homes.

Property taxes payable based on average new home price

Municipal property taxes in Winnipeg are at the higher end of the range of the other comparable municipalities when the property taxes are applied against average housing prices for new homes.



While average resale prices provide one measure of the amount of tax paid by homeowners, another consideration is the average property tax paid by residents purchasing new homes. Using this measure, purchasers of new single-family homes in Winnipeg pay the highest average property taxes of the major centres in the Prairies. While the average price for a new single family home in Winnipeg is less than other centres ($420,000 vs. $491,000 in Regina, $530,000 in Edmonton and $588,000 in Calgary), the amount of property tax paid is higher than in the Alberta municipalities.

Considerations for Cost Benefit Studies

Objective

The objective of this section is to review the methodology for Cost Benefit Studies and identify potential issues.

Findings

- *Cost Benefit Studies ensure that forecasted revenues generated from the development of new communities are adequate to cover up-front and ongoing renewal / replacement costs to the City, and provide transparency in identifying gaps in funding up-front costs; and,*
- *At present, the City does not provide a template or guidelines for the required components of a Cost Benefit Study and similarly does not provide support for the required inputs which need to be estimated based on market research. This could lead to situations where the City may not agree with the assumptions provided by the developer and their consultant.*

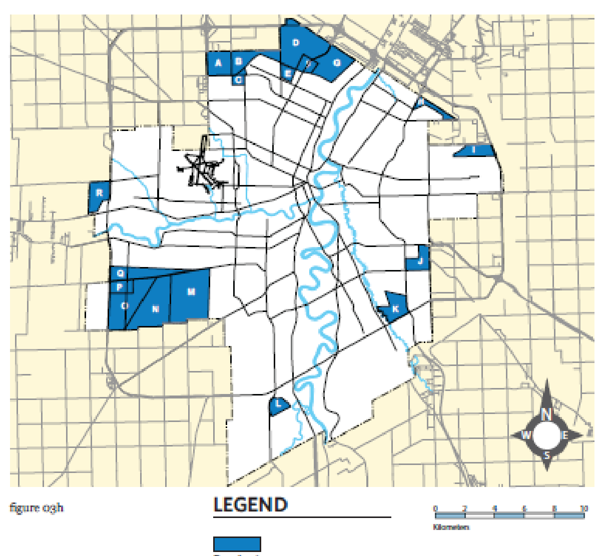
The role of Cost Benefit Studies

The City's current planning framework provides a comprehensive approach to planning for growth and approval of new development.

The City of Winnipeg requires the preparation of a Cost Benefit Study as part of the planning process for new communities. Specifically, Direction #2 in the *"Our Winnipeg: Complete Communities"* direction strategy (herein referred to as "the Complete Communities strategy") states that the development of New Communities will be supported by a planning process and organized within planning precincts, and sets out minimum requirements for the planning process, including a Cost Benefit Analysis.

The Precincts identified in the Complete Communities Strategy, illustrated opposite, are located within the City's municipal boundaries and are generally contiguous with the existing urban envelope. Direction #1 in the Complete Communities strategy sets out planning criteria for the approval of new development, including:

> *"Only approve new development when a full range of municipal services, as defined in Our Winnipeg, can be provided in an environmentally-sound, economical and timely manner;"*



The City's requirement for a Cost Benefit Analysis addresses this criterion. Specifically, it provides an evaluation as to whether a full range of municipal services be required to serve new residents can be provided in an economical manner.

Cost Benefit Analyses are designed in order to ensure that the revenues generated from the development of new communities are adequate to cover up-front and ongoing renewal / replacement costs to the City, and provide transparency in identifying gaps in funding up-front costs.

The City's current process for approving new development ensures that all costs to the City that are incurred due to the new development are fully considered in the planning and approvals process. The benefit of this approach is that it ensures the costs associated with each urban expansion area are fully considered, relative to the projected one-time and recurring revenues associated with development. In situations where projected revenues are not sufficient to cover costs the City can apply an additional levy or rate charges can be put in place to address the shortfall. This ensures a disciplined approach to urban expansion and ensures accountability in identifying and funding gaps in funding for major infrastructure.

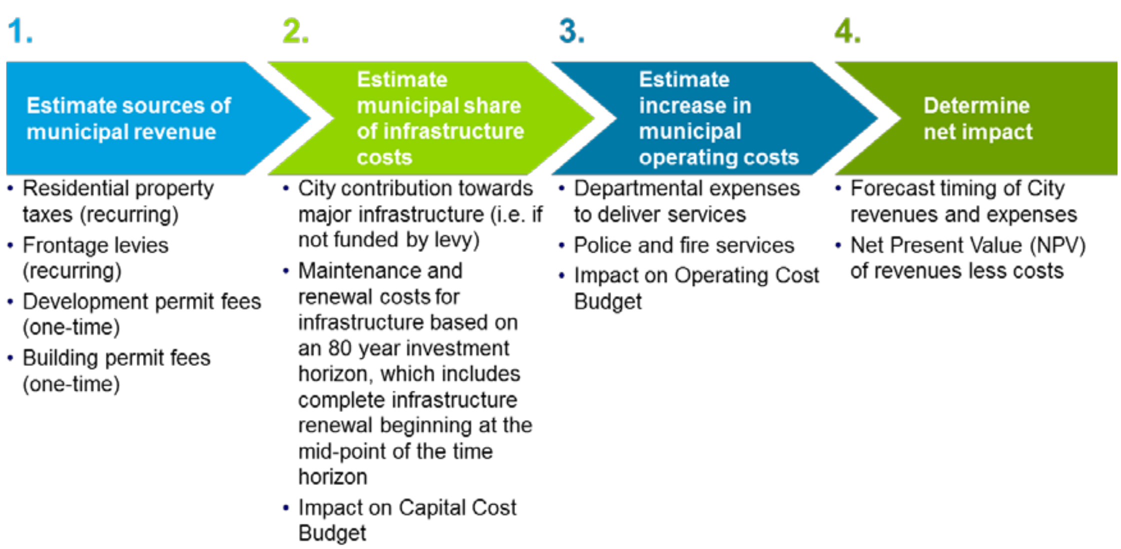
Cost Benefit Study methodology

A Cost Benefit Study weighs the potential revenue that will accrue to the City against the up-front costs to the City to facilitate development (e.g. infrastructure), the ongoing costs associated with delivering City services to future residents, and recurring costs associated with infrastructure life-cycle maintenance and renewal. The Cost Benefit Studies take a long term approach with an 80 year investment horizon, which includes complete infrastructure renewal beginning at the mid-point of the time horizon.

A key consideration in evaluating the potential benefits and costs of development is the nature of the development proposal, including the number and mix of unit types. These planning assumptions are required to understand both the tax assessment that will be generated as a result of the development and the population that will drive demand for municipal services.

The City does not set out a standard required format or methodology for Cost Benefit Studies but typically they incorporate the four steps below.

Typical Cost Benefit Study methodology



Step 1 – Estimate sources of municipal revenue

New development provides the City with both one-time and recurring revenue. Generally, residential property taxes present the most substantial source of revenue to the City. Therefore, market evidence to support estimates of assessment value is an important component (this is discussed in detail in the next section of the report).

Municipal revenue sources tied to real estate	
Revenue Source	**Type**
Residential property taxes	Recurring
Frontage levies (water & sewer)	Recurring
Development permit fees	One-time
Building permits	One-time

Step 2 – Estimate municipal share of infrastructure costs

Up-front costs

Under the current framework, developers fund a large proportion of up-front infrastructure costs. Developers fund infrastructure costs directly in the case of internal infrastructure (i.e. curbs, street lights, traffic lights, landscaping, sidewalks, pathways and parks / greenspace, local and collector roads, water mains, wastewater and storm water management and indirectly through contributions to fund external connections funded through development levies. This framework appears to provide both the City and developers with a strong incentive to identify the most cost efficient design solutions for new infrastructure.

Allocation of infrastructure costs	
Infrastructure Type	**Funding responsibility**
Internal – local and collector roads	Developer
Internal – regional (arterial)	Developer / City
Internal – water mains	Developer
Internal – waste water collection	Developer
Internal –on-site storm water management	Developer
External – Trunk Sewer	City / Developer (levy / rate charge)
External – regional roads / expressway	City

Long term costs

Post-development, the City assumes responsibility for the ongoing repair, maintenance and replacement of both internal and external infrastructure. It is therefore necessary to consider recurring, periodic infrastructure renewal and replacement costs, including roads and piped services when evaluating the potential future costs to the City. It is therefore also necessary that the time horizon used in the Cost Benefit Analysis be sufficient to recognize the impact of life-cycle maintenance and replacement costs.

Funding for these periodic costs is provided through property taxes, utility fees and Frontage Levies paid by residents. Under the Winnipeg Charter, Frontage Levies provide “fenced” funding that may only be used for the upgrading, repair, replacement and maintenance of water and sewer mains, and streets and sidewalks, and the installation, upgrading, repair, replacement and maintenance of lighting in streets and back lanes.

It is important to note that while owners of homes in new communities pay these fees, the revenue collected may be applied elsewhere as the services and infrastructure is new with no need of replacement.

Step 3 – Estimate increase in municipal operating costs

City operating costs are those costs reflected in the City's operating budget and include general departmental costs, police and fire services, and the cost of servicing municipal debt.

A key consideration in forecasting the operating costs attributable to a specific development is how the incremental cost of services is determined. Methodologies used to forecast City operating costs generally fall under one of two categories: average approaches and marginal approaches.

Approaches in estimating increased operating costs	
Approach	**Description**
Average Cost	• Cost of services increase proportional to population change. • Assumes all departments and services sensitive to population/employment. • Generally, the simplest and most transparent approach.
Marginal Cost	• Apply ratio to forecast the marginal cost attributable to an increase in population. • Detailed estimates/costing for changes in specific line items. • Requires complex analysis and/or detailed budget estimates.

Utilizing the average cost per capita approach is the simplest method as it assumes that all City operating costs will increase proportionally with the population. This is generally considered a conservative approach as, in many cases; operating costs are not impacted by changes in population. As an example the cost for services such as street cleaning and garbage collection are incremental and will increase with an increase in the amount of housing. Alternatively some of the most expensive services such as police and fire services which account for just under 50% of the total operating budget are not truly incremental as the costs for these do not increase in a straight line relationship with population or housing growth.

Utilizing the marginal cost approach has the potential to result in a more accurate estimate of the true increase in operating costs related to the addition of the specific development but it is more complex to create and relies on a number of somewhat subjective assumptions.

Step 4 - Determine net impact

The fiscal impact is reflected in the Net Present Value ("NPV") associated with the future stream of revenue and expenses.

Where a Cost Benefit Analysis indicates that the Present Value of the future stream of revenues equals the Present Value of City-funded capital and operating costs (i.e. the NPV equals zero), it can be concluded that a full range of services can be provided in an economical manner.

A positive NPV indicates that, over the long term, the development will generate a surplus that can be used towards other City projects or initiatives (through contribution to general reserves or debt service).

A negative NPV indicates that the Present Value of the future stream of revenues from the development will not be sufficient to offset the Present Value of City-funded capital and operating expenses. In such a situation the development would not be approved or additional developer contributions would be required.

Determining the net impact	
Conclusion	**Implication**
NPV > than $0	• City services can be provided in an economical manner. • Development will result in a surplus that can be used to fund other services/projects.
NPV = $0	• City services can be provided in an economical manner. • Future revenue stream offsets City funded costs.
NPV < than $0	• City services cannot be provided in an economical manner. • Additional developer contributions (levy or rate charge) or value engineering required.

It should be noted that the City requires a NPV of zero or higher in order to ensure that development pays its fair share of costs. In situations where the NPV is positive the developer and/or home owners do not receive a rebate or a lower fee structure and the surplus created goes to fund other services/projects. In situations such as these the new development is effectively subsidizing the City's other operations.

Estimating residential assessment values in Cost Benefit Studies

Objective

The objective of this section is to provide commentary on the factors that affect real estate assessment values and considerations for determining fair estimates for assessments values to be included in Cost Benefit Studies.

Findings

- *When determining assessed values for the Cost Benefit Study it is necessary to consider comparables from within the immediate area as using an "average" home metric does not reflect actual values in new communities.*
- Using an "average" home metric as an assumption in a Cost Benefit Study when actual prices are higher leads to lower estimates for property tax revenues and reduces the estimated potential net present value to the City.
- *The City of Winnipeg's control of new urban land supply and their role creating and approving land use codes allows them to have a high degree of control over housing prices;*
- *Housing price growth in this market has historically been above inflation which provides an indication of what future long term growth could be estimated at.*
- *The City's assumption that assessment values will decline over the long term in aging communities is counter to what historical housing price trends suggest.*

A critical component of the Cost Benefit Studies is estimating the property tax revenues that would be paid during the analysis timeline. This is because property taxes are one of the City`s largest revenue sources. This section provides an overview of factors that drive assessment values and considerations in forecasting assessments over time.

Determining whether there is an "average" home in Winnipeg

A key consideration is whether there is an "average" home in Winnipeg to determine whether an average value can be relied upon in the Cost Benefit Study. To answer this we have reviewed resale market data compiled by Royal LePage relating to specific residential areas within Winnipeg over the period 2009-14. We observe that there is some disparity in housing prices between the various neighbourhoods as would be expected. For the purposes of estimating property tax assessment for a new neighbourhood, average resale values do not provide a useful estimate of property value and, instead, values should focus on similar unit types in neighbourhoods offering housing of similar quality and buyer appeal.

Standard 2-Storey		Q4 2009	Q4 2010	Q4 2011	Q4 2012	Q4 2013	Av. Growth
Charleswood	Average Price	$276,000	$302,000	$311,000	$310,000	$365,000	
	% change in 12mths		9.4%	3.0%	-0.3%	17.7%	7.5%
River Heights	Average Price	$369,000	$399,000	$319,000	$354,917	$336,425	
	% change in 12mths		8.1%	-20.1%	11.3%	-5.2%	-1.5%
Southdale / Windsor Park	Average Price	--	$262,000	$286,000	$289,000	$334,767	
	% change in 12mths			9.2%	1.0%	15.8%	8.7%
Westwood	Average Price	$280,000	$268,000	$295,000	$293,333	$293,000	
	% change in 12mths		-4.3%	10.1%	-0.6%	-0.1%	1.3%
North West	Average Price	$331,000	$378,000	$304,000	$322,000	$312,250	
	% change in 12mths		14.2%	-19.6%	5.9%	-3.0%	-0.6%
North East	Average Price	$280,000	$290,000	$298,000	$313,875	$305,000	
	% change in 12mths		3.6%	2.8%	5.3%	-2.8%	2.2%
South St. Vital	Average Price	$365,000	$390,000	$327,000	$355,180	$365,489	
	% change in 12mths		6.8%	-16.2%	8.6%	2.9%	0.6%
Ft. Richmond	Average Price	$280,000	$298,000	$307,000	$323,500	$320,900	
	% change in 12mths		6.4%	3.0%	5.4%	-0.8%	3.5%

Source: Royal LePage

Factors driving assessment values

Land use controls and physical constraints limiting the expansion of urban areas are contributing factors to price increases observed in certain regional markets in Canada.

Major metropolitan areas across Canada have benefited from relatively steady home price appreciation which has contributed to growth in property tax assessments. Residential home values are driven by a variety of factors, including macro factors such as interest rates and global/national economic conditions, and regional factors such as regional economic growth, land use controls and costs for new residential development.

The implementation of stricter land use controls to curb suburban development is a trend in several major markets. In particular, prices observed for new housing in the Greater Toronto Area and the Greater Vancouver Area have been significantly affected by these constraints, which have the effect of constraining new supply.

In the Greater Toronto Area, Provincial legislation such as the Growth Plan for the Greater Golden Horseshoe and the Greenbelt Plan has led to acute land supply issues which, together with increases in development charges, have led to significant increases in housing costs.

Similarly, housing prices in the Greater Vancouver Area have been impacted by both tight controls on urban expansion and the physical constraints posed by topography.

The major challenge posed by rising home prices is the direct impact on housing affordability, particularly for first time homebuyers. A larger issue is the impact of affordability on economic competitiveness as it becomes more challenging to attract labour.

The City of Winnipeg's role in affecting property prices and assessment values

In Winnipeg, the City has tight control over new urban land supply and also applies the land use controls and therefore exerts a high degree of control over housing prices.

Urban growth in Winnipeg is highly controlled through a combination of planning instruments and the City's involvement in the market for new urban land supply. The result is that the City has a high degree of control over new housing supply and housing prices. A recent report by TD Economics observed that, with respect to the Province's sales to-listings-ratio, *"as most other provincial housing markets have undergone large swings over the past decade, housing activity in (Manitoba) has remained a tower of stability."*[2]

[2] Special Report: Canadian Regional Housing Market Outlook, TD Economics. October 18, 2013.

Forecasting assessment growth

Historically, new home selling prices in Winnipeg have increased at a rate exceeding general inflation. This historical rate of pricing growth provides an indication for future estimates.

In the context of Cost Benefit Studies for new development, a primary consideration is the extent to which the assessed values of new homes will appreciate relative to inflation over a long-term time horizon. While individual neighbourhoods may change over time in terms of their socio-economic profiles, resulting in housing price appreciation (in the case of gentrification) or decline relative to the broader market; the resale market as a whole is primarily driven by the regional economy and, in particular, supply and demand considerations.

Historical growth per annum in new housing prices in Winnipeg

		Average Price	Median Price
Winnipeg	*Total (house and land)*	3.9% (1.0%)	3.5% (0.6%)
	House only	3.5% (0.6%)	3.7% (0.8%)
	Land only	5.4% (2.5%)	3.3% (0.4%)

Figures in brackets reflect inflation adjustment of 2.90% per annum

Source: Statistics Canada

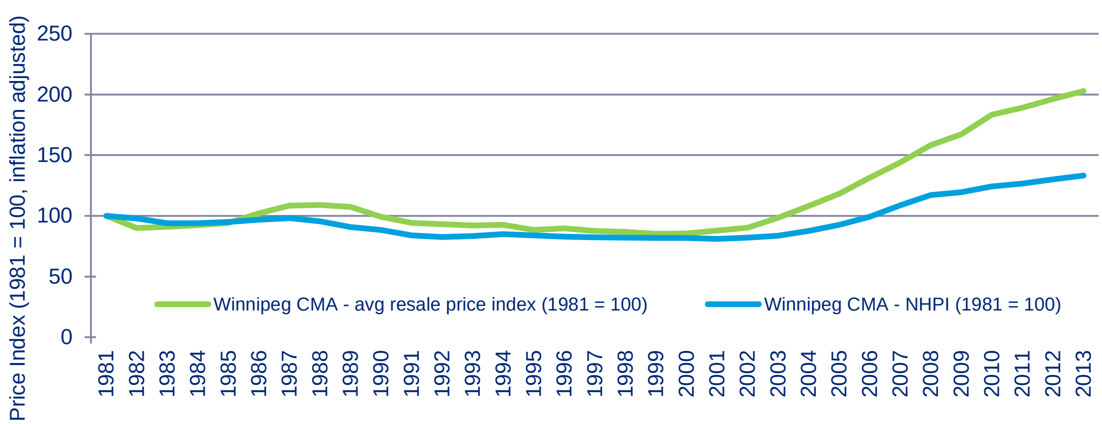
We analyzed the *New Housing Price Index* data from Statistics Canada. This composite index provides a measure of new house pricing over a period from 1981 to present day. With respect to Winnipeg and breaking down the data between houses, land and both, it is apparent that pricing growth in Winnipeg had outpaced the Canadian market as a whole.

		Average	Median	High	Low
Winnipeg, Manitoba	*Total (house and land)*	3.90%	3.50%	11.90%	-0.50%
	House only	3.50%	3.70%	7.90%	-1.10%
	Land only	5.40%	3.30%	24.80%	-1.30%

As can be seen from these figures, home price appreciation has outpaced the Consumer Price Index ("CPI"), which for both Manitoba as a whole and Winnipeg specifically stands at **2.9%** per annum.

The chart below illustrates that both the resale index and the New Home Price Index outpaced inflation over the 1981 to 2013 period. The indexes, which are adjusted to exclude inflation, indicate that home prices declined in real terms at the outset of the recession the early 1990s recession, but have since rebouned strongly, with a marked increase that began around 2001.

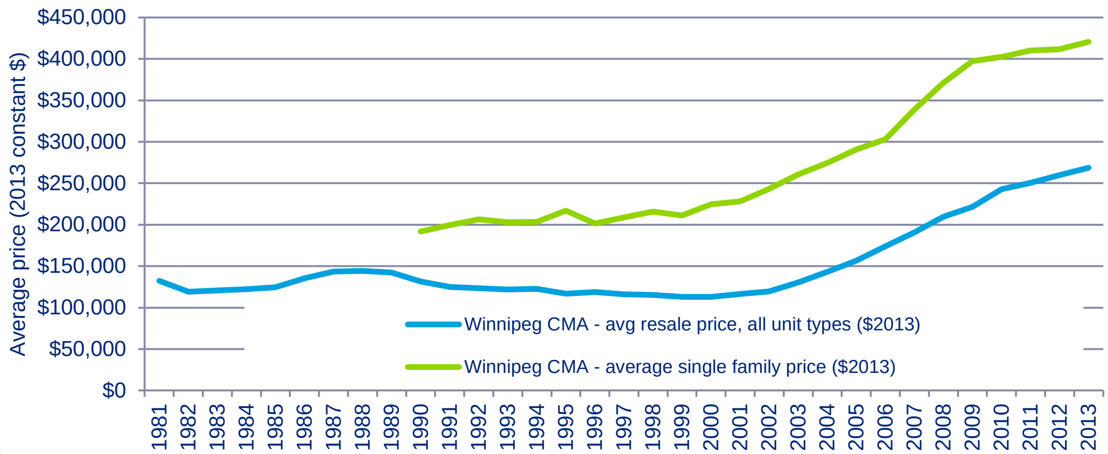
Inflation adjusted pricing increases for new homes and resale homes



Note:
1. Average resale price as per MLS resale data reported by CREA, all unit types.
2. New Home Price Index (NHPI) reflects Statistics Canada esimate in the cost of land and buildings for single- and semi-detached dwellings and townhomes.

While the preceding chart expressed price changes as indexes, the chart below illustrates the average resale price in dollar terms over the 1981 to 2013 period and the average price of a new single family home over the 1991 to 2013 period after adjusting for inflation. The two averages are not comparable in that the resale price includes all unit types, whereas the data collected by the Canadian Mortgage Housing Corporation ("CMHC") only reflects pricing for new single family homes. This is reflected in the price differences.

Average pricing for new homes and resale homes



Notes:
Average resale price based on MLS data collected by CREA.
Average absorbed single family new home as published by CMHC. The earliest date for which data iwas available was 1990.

The average absorbed single family price was generally stable throughout the 1990s and escalated beginning in 2001. For comparative purposes, over the 1991 to 2013 period, the average resale price has increased 3.1% / annum in real terms (i.e. after adjusting for inflation) while the average asborbed single family price increased by 3.4% / annum.

Winnipeg's housing market has grown consistently over the 2010 to 2013 period, peaking at 4,600 housing starts last year. The Conference Board of Canada observes that while population growth will be more modest over 2015 to 2018, it is still expected to remain above 1 percent annually, and therefore expected to average 4,400 units per year. The economic outlook for Winnipeg continues to be strong, with the outlook for the City's manufacturing sector beginning to show recovery after the 2009 recession and expectations of higher growth rates going forward as the U.S. economy improves. The Conference Board also predicts higher wholesale and retail trade output as stronger employment growth encourages consumer spending.[3]

Looking towards the future it is considered to be a fair assumption that future price growth over the long term will also average at a level above inflation.

[3] Metropolitan Outlook 1, Economic Insights into 13 Canadian Metropolitan Economies. The Conference Board of Canada. Winter 2014.

Case studies

Objective

The objective of this section is to review Cost Benefit Studies to show the estimated net benefit that will be provided to the City.

Findings

- *The City of Winnipeg reaps financial benefits from the development of new communities. The most notable example to date has been the Waverley West community which has outperformed original projections due to significant appreciation in densities, absorptions and residential property prices. The MMM Group report from 2013 indicated that the net present value to the City would be $250M.*
- *Other recent Cost Benefit Studies completed suggest that the City will continue to benefit from the revenues created by new communities. Specific examples include: Precinct K ($40M NPV) and Ridgewood ($54M NPV).*

	Waverley West			Precinct K	Ridgewood
	ND LEA (2004)	COW (2004)	MMM (2013)	MMM (2013)	Deloitte (2012)
City of Winnipeg project revenue at 80 years					
Property taxes - single family	1,286,940,000	1,004,409,000	1,780,071,000	475,900,000	
Property taxes - multi family	388,719,000	269,983,000	655,864,000	205,200,000	
Property taxes - commercial[1]	212,614,000	198,961,000	241,337,000	7,100,000	
Total property taxes	**$1,888,273,000**	**$1,473,353,000**	**$2,677,272,000**	**$ 688,200,000**	**$ 623,263,360**
Permits and fees	18,213,000	17,233,000	20,471,000	5,800,000	2,960,680
Frontage levy[2]	-	-	-	30,000,000	38,433,170
Total revenue	**$1,906,486,000**	**$1,490,586,000**	**$2,697,743,000**	**$ 724,000,000**	**$ 664,657,210**
City of Winnipeg project costs at 80 years					
Capital costs	199,550,000	355,684,000	318,722,000	194,500,000	232,341,615
Operating costs	908,248,000	1,017,767,000	1,486,755,000	355,900,000	295,356,970
Total costs	**$1,107,798,000**	**$1,373,451,000**	**$1,805,477,000**	**$ 550,400,000**	**$ 527,698,585**
Summary					
Net financial benefit	**$ 799,000,000**	**$ 117,000,000**	**$ 892,000,000**	**$ 174,000,000**	**$ 137,000,000**
Net present value of benefit	**$ 213,000,000**	**$ 71,000,000**	**$ 250,000,000**	**$ 40,000,000**	**$ 54,000,000**

Notes:

Project revenues, costs, and net financial benefit presented above are undiscounted figures.

1 - Waverley West commercial taxes include estimated business/office municipal and business taxes.

2 - Waverley West frontage levies w ere calculated but not included in the Cost Benefit Analysis.

1. Waverley West

Introduction

In order to illustrate how Cost Benefit Studies have been applied in the planning process, this subsection contains an overview of three studies prepared for the community of Waverley West. Waverley West is approximately 2,700 acres of land in South West Winnipeg that has been under development since 2007. Two of the studies were prepared as input to the planning process prior to the approval of the community plan in 2004. The third study contains an update based on the actual home prices, rates of absorption and development costs that have actually occurred as of 2013.

The three studies include:

- An initial study prepared by ND LEA Associates Limited ("ND LEA") for the Manitoba Housing and Renewal Corporation ("MHRC") and Ladco Company Limited ("Ladco") entitled *"Waverley West Plan Winnipeg Amendment, City of Winnipeg Financial Cost-Benefit Analysis"*, July 2004 (Rev. December 2004);
- A study prepared by the City of Winnipeg entitled *"Waverley West Proposed Plan Winnipeg Amendment, City of Winnipeg Financial Impact Analysis, City of Winnipeg"*, December 2004; and
- An update study prepared by MMM Group Limited ("MMM Group") for Ladco Company Limited entitled *"2013 Waverley West Cost-Benefit Update"*, dated December 2013.

The original studies undertaken during the planning process indicated that the costs to the City would be more than offset by potential financial benefits.

The conclusions regarding the Net Present Value of the Waverley West Community are presented opposite. The original study prepared for the MHRC and Ladco by ND LEA concluded that the development of Waverley West Community would result in a Net Present Value to the City of $212.9 million. At the time the ND LEA study was prepared, City Staff prepared an analysis employing more conservative assumptions which estimated the NPV at $70.6 million.

	Net Present Value
ND LEA (2004)[1]	$212.9m
City (2004)[1]	$70.6m
MMM Group (2013)[2]	$250.4m

Notes:
1. *Expressed in 2003 dollars.*
2. *Expressed in 2013 dollars.*

Both the ND LEA study and the City's study concluded that the financial benefits of the Waverley West development in the form of future tax revenue and development fees, more than offset the cost to the City of up-front infrastructure costs and the long-term costs of infrastructure renewal and replacement. From the City's perspective, the Net Present Value reflects an amount that could be used towards financing other City infrastructure investments or programs.

The update study indicates that the Net Present Value is higher than originally anticipated. Contributing factors include greater density, higher than anticipated absorption and increase assessed values.

The update study prepared by MMM Group, which incorporates updated revenue and expense assumptions, concluded that the Net Present Value will be higher than originally anticipated. The difference in findings is primarily due to greater than anticipated densities, higher absorptions, increased assessed values and Federal and Provincial Government funding for the extension of Kenaston Boulevard.

	ND LEA (2004)	MMM Group (2014)
Single Family Units	7,500 units	8,601 units
Avg. value / unit	$180,000	$443,100
Multi-Family Units	4,000 units	6,328 units
Avg. value / unit	$105,333	$235,993

Methodologies and assumptions

The three studies were consistent in terms of the methodology employed in arriving at their NPV estimates. An 80-year cash flow projection was used in order to capture the impact of life-cycle renewal and replacement costs assuming complete infrastructure renewal begins at the mid-point of the time horizon. In all cases, cash flows were projected in real dollars (i.e. excluding price/cost appreciation due to inflation).

	ND LEA (2004)	City of Winnipeg (2004)	MMM Group (2013)
Development Assumptions:			
Residential – Single Family units	7,500	7,500	8,601
Residential – Multi Family units	4,000	4,000	6,328
Commercial (acres)	100	100	100
Office (acres)	100	100	75
Annual Property Tax:			
Residential – Single Family (per unit)	$2,405	$2,405	$2,911
Residential – Multi Family (per unit)	$1,407	$1,227	$1,550
Commercial (per acre)	$14,178	$12,542	$18,980
Office (per acre)	$12,755	$12,755	$18,031
Development Fees:			
Permit – Single Family (per unit)	$1,065	$1,065	$1,065
Permit – Multi Family (per unit)	$1,069	$1,069	$1,069
Permit – Commercial/Office (per acre)	$3,660	$3,660	$3,660
Admin Fee (per acre)	$1,650	$1,650	$1,200
Lot Fee (per lot)	$35.60	$35.60	$35.60
City-Funded Capital Costs:			
Expansion of Waverley St	$4,850,000	$6,880,000	$9,235,477
Improvements to Existing Waverley St	$3,450,000	$1,560,000	$5,447,344
Intersection Improvements (Waverley/Bison)	$360,000	$960,000	$3,250,000
Extension of Bison Drive	$5,300,000	$5,120,000	$9,000,000
Extension of Kenaston Blvd.	$18,800,000	$42,500,000	$9,789,098[2]
Bishop Grandin Extension	--	$10,520,000	--
West boundary (Bishop to Perimeter)	--	$1,320,000	--
Off-site transportation improvements	$20,800,000	$31,224,800	$35,100,000
Fire and paramedic services	$11,000,000	$5,000,000	$18,600,000
Police	$2,500,000	$1,000,000	$4,200,000
Community services	$23,340,000	$20,500,000	$39,400,000
Misc. capital contingency	$15,000,000	$5,000,000	$25,300,000
Total costs	**$105,400,000**	**$131,584,800**	**$159,321,919**
Plus: Life-cycle renewal	$94,200,000	$224,098,888	$159,400,000
Total City-funded capital costs:	**$199,600,000**	**$355,683,668**	**$318,721,919**
Operating Budget:			
Residential – Per Household	$960	$911	$1,330
Commercial/Business/Office	10% of residential	10% of residential	10% of residential
Annual Transit Subsidy (annual, at build-out)	$4,350,000	$5,800,000	$5,869,450
Discount Rate (real, net of inflation):	4.0%	4.0%	4.0%
Net Present Value:	$212,868,907	$70,645,179	$250,412,789

Notes:

1. Analyses do not include water and wastewater infrastructure renewal costs, which would be renewed by the public utility through user fees and the frontage levy. The analyses also do not include the frontage levy which in 2003 was directed to the public utility. The frontage levy is now directed toward street and sidewalk renewal, and would represent an additional $23.8M in NPV.
2. Reflects Federal and Provincial government contributions to Kenaston Boulevard.

The major differences in the methodology and assumptions are as follows:

- The **development assumptions** in the MMM Group update are based on actual development plans and are higher, reflecting higher unit yields and, therefore, higher tax assessment.
- The annual property tax assumptions in the MMM Group update reflect higher assessment values as a result of appreciation in home prices between 2004 and 2013. While the City's estimates were generally similar to those used in the ND LEA report, the City's projections reflect the assumption that property taxation revenues accruing to the City will decrease over time as homes in the development age. The City's projections assumed that assessed values would decline by 0.5% per annum, which has a significant impact over an 80-year projection. **The City's assertion that, "all other factors being equal, an older home is worth less than an identically built home" is a simplification that may be true in areas experiencing socio-economic shifts that result in urban decline and/or under the assumption that homeowners do not invest in maintenance or renovations in their property. The reality in other metropolitan areas and other areas of Winnipeg is that there is little correlation between the age of homes and property values, and that other factors such as socio-economic characteristics in individual neighbourhoods play a significant role.**
- **Development fee** assumptions are generally constant across all studies, with the exception of the administration fee, has been reduced from $1,650 / ac. to $1,200 / ac. This is due to the fact that the administration fee was expected to increase but never did.
- Estimates of **City-funded capital costs** vary between the studies. The MMM Group report updated the hard costs from the 2004 ND LEA study to reflect actual costs where work was completed or increases due to construction inflation between 2004 and 2013, which averaged 6% per annum. The higher total capital cost in the City's study reflects much higher estimates for renewal and replacement of regional and local streets and buildings/parks whose construction was triggered by the Waverley West development which are based upon pavement management processes and life-cycle pavement renewal practices employed by the City's Public Works Department.
- The **estimated operating cost per household** in the MMM Group report has been updated to reflect an average cost method compared to the ND LEA report which was based on an estimate of the incremental cost to the City. The use of the average cost method is conservative as it ignores economies of scale that the City may achieve in delivering services to a larger number of constituents.

Conclusion

The MMM Group report indicates that the magnitude of financial benefits to the city to date have been above the original projections. This is due to the significant appreciation in density, absorptions and residential property prices. While growth in property prices is expected to stabilize, our review of the housing market indicates that over the long-term, resale values will tend to keep pace with general inflation.

2. Precinct K

Introduction

Cost benefit analysis for Precinct K was prepared by MMM Group Limited for Genstar in April 2014.

Precinct K is approximately 547 acres in size and located in southeast Winnipeg, bounded by the Island Lakes and Royalwood neighbourhoods to the north, Lagimodiere Boulevard to the east, Perimeter Highway to the south and Seine River to the west.

A precinct plan has been prepared as a planning and policy framework for the development of this area. The purpose of the plan is to ensure that the growth and development of Precinct K occurs in a logical, integrated manner that pursues the goals the City of Winnipeg's development plan.

The proposed development within Precinct K will be a mix of uses including lower density residential, multi-family residential, and commercial. Supporting infrastructures include local streets, sidewalks, public transit stops, parks as well as municipal water distribution, stormwater and wastewater collection.

Phase 1 of Precinct K ("Fraipont Lands") is estimated to be complete by 2025, with full build out of the remaining lands by 2040.

Methodology

The analysis uses known and estimated values to compare the financial costs and benefits associated with the anticipated development. Proposed residential and commercial mixes and densities are based on the vision and policies outlined in the precinct plan. Information regarding municipal taxation and servicing costs are obtained from the City and the 2011 Census. The analysis considers the development to be completely built out at 20 years and projects the costs and benefits over an 80 year life cycle.

Cost benefit summary

City of Winnipeg project revenue at 80 years		
Property taxes - single family	$	475,900,000
Property taxes - multi family		205,200,000
Property taxes - commercial		7,100,000
Permits and fees		5,800,000
Frontage levy		30,000,000
Total	**$**	**724,000,000**
City of Winnipeg project costs at 80 years		
Capital costs		194,500,000
Operating costs		355,900,000
Total	**$**	**550,400,000**
Summary		
Net financial benefit	**$**	**174,000,000**
Net present value of benefit	**$**	**40,000,000**

Note:

Project revenues, costs, and net financial benefit presented above are undiscounted figures.

Conclusion

The analysis determines that this new community will provide an NPV benefit of **$40 million**, indicating that the development of Precinct K will provide a net financial benefit to the City of Winnipeg.

3. Ridgewood community

Introduction

Cost benefit analysis for the proposed Ridgewood residential community was prepared by Deloitte for Qualico Communities in September 2012.

The proposed community, known as Ridgewood South, is comprised of approximately 821 acres of gross developable land and is located immediately south of Harte Trail in South Charleswood.

The plan for the community include 3,076 dwelling units, comprised of 2,676 single detached homes and 400 higher density units, which are expected to be in the form of semi-detached or townhome units. It is assumed that the Ridgewood community 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 plan are expected to be limited to the construction costs for municipal infrastructure and transportation, majority of which will be funded by the landowners.

Methodology

The analysis uses known and estimated values to compare the financial costs and benefits associated with the anticipated development. Proposed densities are based on the vision and policies outlined in the plan. 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 community. The analysis was based on an 80 year discounted cash flow forecast of the revenue and cost items.

Cost benefit summary

City of Winnipeg project revenue at 80 years		
Property taxes	$	623,263,360
Permits and fees		2,960,680
Frontage levy		38,433,170
Total revenue	**$**	**664,657,210**
City of Winnipeg project costs at 80 years		
Capital costs		232,341,615
Operating costs		295,356,970
Total	**$**	**527,698,585**
Summary		
Net financial benefit	**$**	**137,000,000**
Net present value of benefit	**$**	**54,000,000**

Note:
Project revenues, costs, and net financial benefit presented above are undiscounted figures.

Conclusion

The findings of this analysis indicate that the Ridgewood community is viable and financially beneficial to the City of Winnipeg. The residual cash flows generated by the community will provide the City with **$54 million** in present value terms.

Cost Benefit Study findings

The role of Cost Benefit Studies

Cost Benefit Studies required by the City are an effective way of ensuring that new development pays for itself through existing fees, charges, frontage levies and increased property tax revenues.

Based on the overview contained in this report, it is a general conclusion that the City's requirement for a Cost Benefit Study provides clarity as to whether the up-front costs funded by the City and future renewal/replacement costs associated with the infrastructure will be offset by revenues from new communities.

The key benefits of this approach include:

- It recognizes that the revenues and costs associated with each urban expansion area are location specific and may differ depending on the nature of external infrastructure improvements required, the level of services the City wishes to offer, the density and unit mix of future development and how efficiently each area can be serviced, internally and externally.
- It provides incentives for developers to identify potential solutions that will mitigate up-front City-funded capital costs and, where costs cannot be mitigated, to identify where funding tools such as levies will be required to ensure that financial sustainability goals are met. This creates a fiscally efficient process as developers are incented to find optimal means to provide quality service.
- It provides greater transparency and accountability in the development process and ensures that new housing can be delivered in a cost effective manner that will ultimately benefit consumers and housing affordability objectives.

Potential initiatives to enhance the usefulness and accuracy of Cost Benefit Studies could include:

- The standardization of methodologies which could be achieved by outlining standard requirements for a Cost Benefit Study,
- Reviews and updates, similar to that prepared for the Waverley West community, which provide an ex-post analysis of actual costs incurred relative to one-time fees and recurring revenue and to assist in learning from and keep improving Cost Benefit Study methodology.

